

MX5 (S.N. 030000 -)
MX6 (S.N. 050000 -)
MX7 (S.N. 020500 -)
HX6 (S.N. 000001 -)
HX7 (S.N. 000001 -)



JOHN DEERE

OPERATOR'S MANUAL

MX5, MX6, MX7, HX6 & HX7 Single-Spindle Rotary Cutters

OMFH337984 ISSUE F8 (ENGLISH)



CALIFORNIA
Proposition 65 Warning
Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

If this product contains a gasoline engine:

⚠ WARNING
The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

The State of California requires the above two warnings.
Additional Proposition 65 Warnings can be found in this manual.

John Deere Mexico
North America Edition
PRINTED IN U.S.A.



Introduction

Foreword

READ THIS 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 manual and safety signs on your machine may also be available in other languages. (See your John Deere dealer to order.)

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

MEASUREMENTS in this manual are given in both metric and customary U.S. unit equivalents. Use only correct replacement parts and fasteners. 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.

WRITE PRODUCT IDENTIFICATION NUMBERS (P.I. N.) in the Specification section. Accurately record all the numbers to help in tracing the machine should it be stolen. Your dealer also needs these numbers when you order parts. File the identification numbers in a secure place off the machine.

WARRANTY is provided as part of John Deere's support

program for customers who operate and maintain their equipment as described in this manual. The warranty is explained on the warranty certificate or statement which you should have received from your dealer

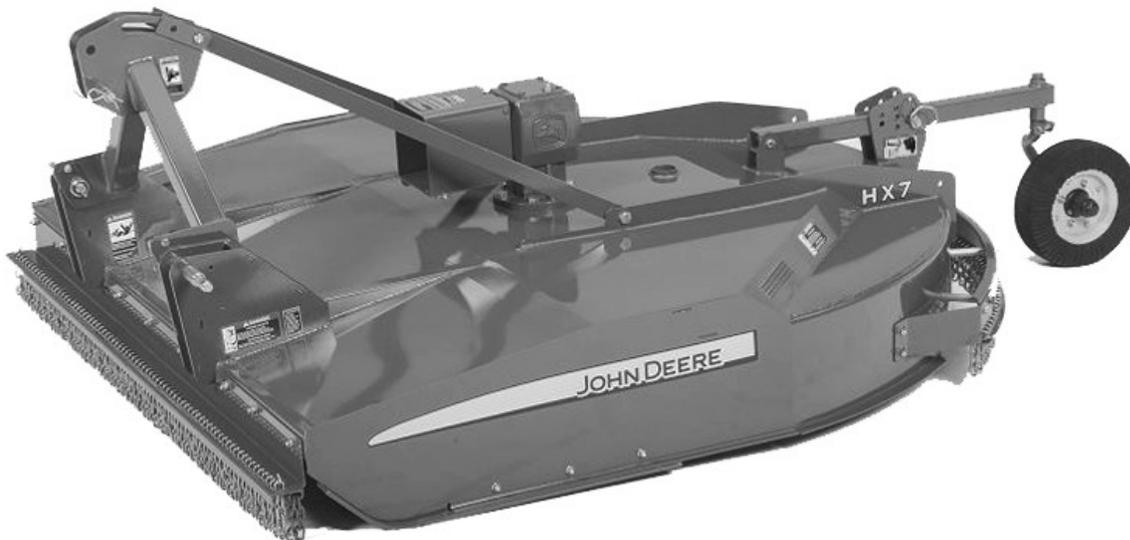
This warranty provides you the assurance that John Deere will back its products where defects appear within the warranty period. In some circumstances, John Deere also provides field improvements, often without charge to the customer, even if the product is out of warranty. Should the equipment be abused, or modified to change its performance beyond the original factory specifications, the warranty will become void and field improvements may be denied. Setting fuel delivery above specifications or otherwise overpowering machines will result in such action.

THE TIRE MANUFACTURER'S warranty applicable to your machine may not apply outside the U.S.

If you are not the original owner of this machine, it is in your interest to contact your local John Deere dealer to inform them of this unit's serial number. This will help John Deere notify you of any issues or product improvements.

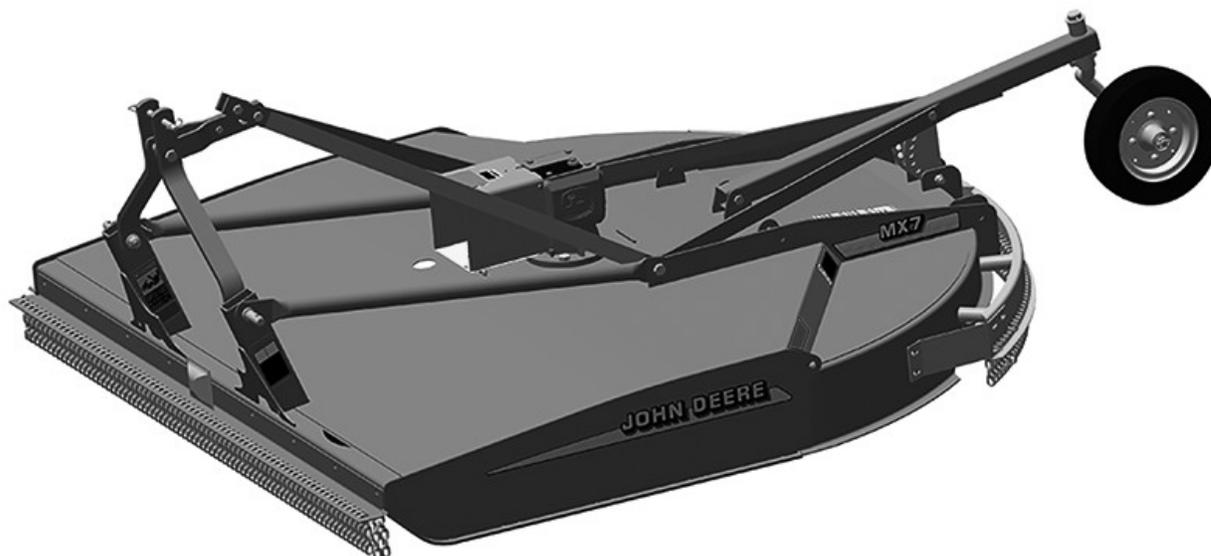
DX,IFC2-19-03APR09

Machine Identification



HX7 Rotary Cutter Shown

P16651—UN—06DEC12



MX7 Rotary Cutter

PY29400—UN—27MAY16

RD91939,000022A-19-17JAN18

Trademarks

Trademarks	
GREASE-GARD™	Trademark of Deere & Company
SERVICEGARD™	Trademark of Deere & Company
TEFLON®	Trademark of DuPont Company
Torq-Gard™	Trademark of Deere & Company
John Deere™	Trademark of Deere & Company

RD91939,000022B-19-18JAN18

Glossary of Terms

ITEM	ABBREVIATION	DESCRIPTION
Performance classification	GC-LB	Express high-quality, multipurpose grease
National Lubricating Grease Institute	NLGI	Expresses a measure of the relative hardness of a grease used for lubrication
Gallons per Minute	gal/min	Amount of fluid displaced over a period of one minute
Right-Hand	RH or R-H	Abbreviation
Left-Hand	LH or L-H	Abbreviation
Gear Lubricant	GL	Abbreviation
inch	in	Abbreviation
Pounds-inch	lb·in	Abbreviation
Pound-foot	lb·ft	Abbreviation
Newton-meter	N·m	Abbreviation

ITEM	ABBREVIATION	DESCRIPTION
US gallon	US gal	Abbreviation
Liter	L	Abbreviation
Millimeter	mm	Abbreviation
US quart	qt	Abbreviation
Kilowatt	kW	Abbreviation
Outside Diameter	OD	Abbreviation
Revolutions per minute	rpm	Abbreviation
Kilometer per hour	km/h	Abbreviation
Miles per hour	mph	Abbreviation
American Petroleum Institute	API	Automotive Motor Oils Classification
Horse Power	hp	Abbreviation
Power take-off	PTO	Abbreviation
Revolutions per Minute	rpm	Abbreviation
Slow Moving Vehicle	SMV	Warning sign on the rear of the tractor
Society of Automotive Engineers	SAE	Engineering Standards Organization
American Society of Agricultural Engineers	ASAE	Engineering Standards Organization
Without	W/O	Abbreviation
Heavy Duty	HD	Abbreviation

RD91939,000022C-19-18JAN18

Introduction

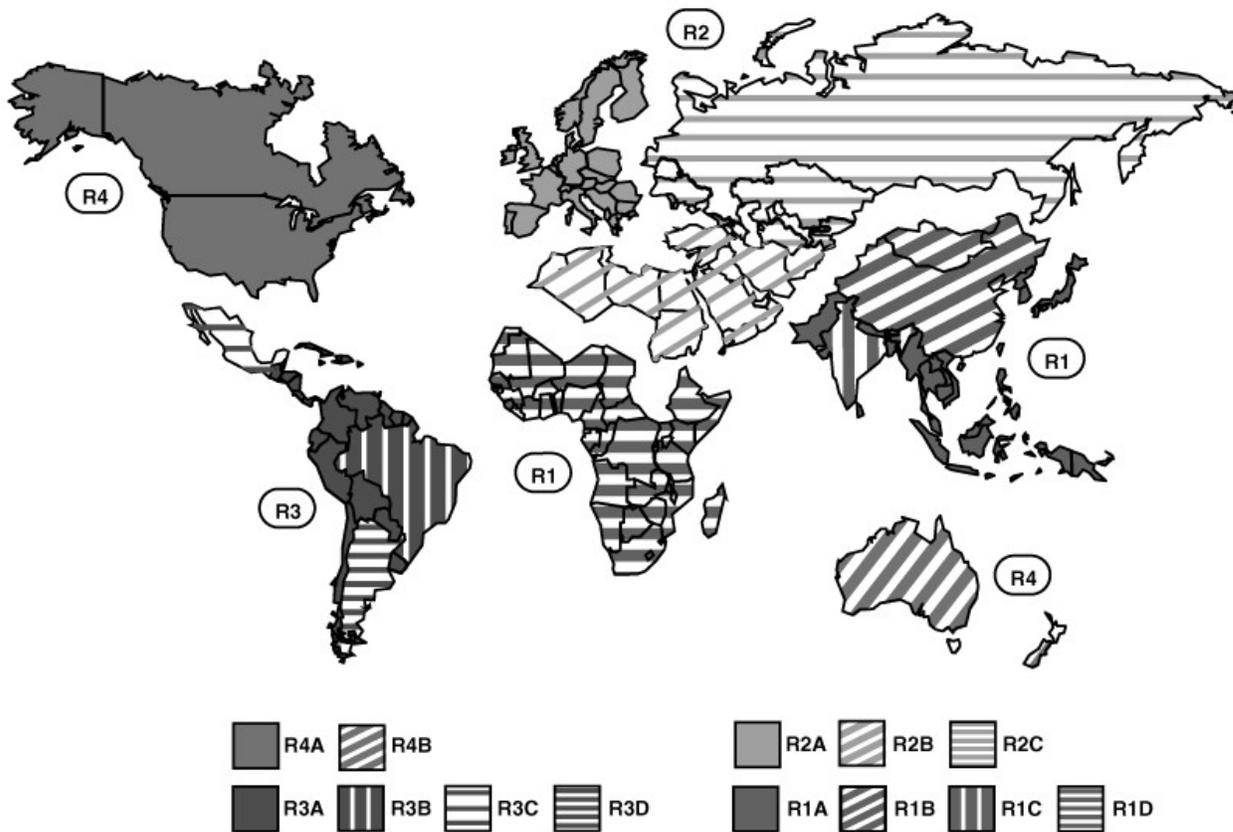
Preliminary Checks

To inspect items before operation, use the following list

as a reminder. Detailed operation and service information is available in other sections.

	Check and Inspect Equipment	OK / Not OK	
After final assembly, adjustment, lubrication, and before machine use; conduct inspections.	All safety shields and guards are in place.		
	Review manual and machine for safety signs.		
	Review manual for proper operation, adjustment, and service.		
	Fill gear case with oil. (See Assembly section.)		
	Check gear case for leaks.		
	Check gear case level and lubrication points. (See Lubrication and Maintenance section.)		
	All moving parts work freely.		
	Machine is assembled according to instructions (All hardware tightened properly.)		
	Decals intact and legible.		
	Check machine for damage. Touch up any scratches.		
	Review recommended procedures for attaching / detaching Machine.		
	Free slip clutch (See Lubrication and Maintenance.)		
	Grease Driveline before delivering to customer (See Lubrication and Maintenance Section.)		
	Review information on how to prepare the cutter. (See Preparing the Cutter section.)		
	Operate Cutter for about one minute and check for excessive vibration or unusual gear case noises.		
	During the first season of operation; inspect proper operating conditions.	Review manual for lighting and devices available when transporting machine (If equipped.)	
		Review manual for attachment / connection process to tractor and control devices (hitch, hydraulic, and electrical) when applicable.	
Review additional documentation (instructions, warranty, serial numbers.)			
Safe and correct operation and service.			
Check entire machine for loose or missing hardware (replace or retorque as necessary.)			
Check entire machine for broken, damaged, or missing parts (repair as necessary.)			
Review manual for proper safety, operation, lubrication, and service of machine.			
Set front and rear wheels accordingly, on tractors having adjustable tread width. (See Preparing the Tractor section.)			
Recommended transporting information. (See Transporting section.)			
Review equipment protection feature (slip clutch.)			
Daily inspect machine lubrication and operation.		Review cutter operation. (See Operating the Cutter section.)	
	Recommended machine storage.		
	Freeing of Clutch is recommended every 6 months or in the start of every season (See Lubrication and Maintenance Section.)		
	First oil change in gear case is recommended after the end of each season and / or once per year at minimum.		
	Contact John Dealer for assistance (checks, inspections, operation, lubrication, service, or additional equipment.)		
	All safety shields are in place.		
	Recommended lubricants. (See Lubrication and Maintenance section.)		
Review service intervals and lubrication points. (See Lubrication and Maintenance section.)			
Review all adjustments. (See Service section.)			
Check for loose, missing hardware or damaged parts.			
Check machine connections to tractor (hitch, hydraulic and electrical.)			
Check machine and tractor operating controls.			
If possible, run the cutter to see if it is functioning properly before daily operation.			

Regions and Country Versions



RXA0150915—UN—01FEB16

R1—Asia and Sub-Saharan Africa
 R1A—Far East, Sri Lanka, and Pakistan
 R1B—China
 R1C—India
 R1D—Sub-Saharan Africa
 R2—Europe, North Africa, Mid East, CIS
 R2A—European Union (EU 28+)
 R2B—North Africa and North Middle East (NANME)
 R2C—Common Wealth of Independent States (CIS)

R3—Central and South America
 R3A—Latin America (JDLA)
 R3B—Brazil
 R3C—Mexico
 R3D—Argentina
 R4—North America
 R4A—USA and Canada
 R4B—Oceania (Australia and New Zealand)

Regions 1, 2 and 3 equipment is traditionally manufactured with Economic Commission for Europe (ECE) features or systems.	Region 4 equipment is traditionally manufactured with Society of Automotive Engineers (SAE) features or systems.
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NOTE: The difference between ECE and SAE electrical systems is the drive and signal lighting, traffic signs, safety signs, and braking features. For example, Text-Free (pictorial only) safety signs are used for ECE while Texts with Picture safety signs are used on SAE.

The turn-signal lights operate in different ways. With SAE, the turn signal flashes on the side selected, while the light on the opposite side comes on but will not FLASH. With ECE, all that happens is that the turn signal flashes on the side selected.

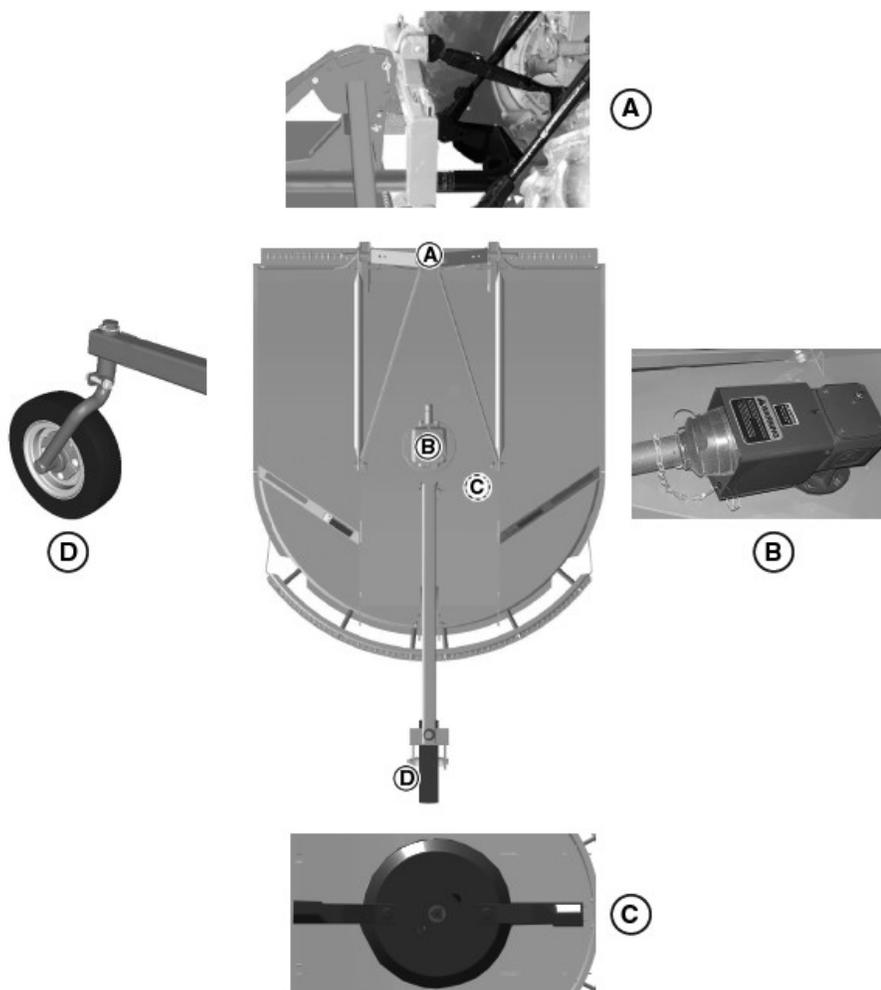
Refer to this information, if equipment information gets identified by regions, countries, trade federations, industry standards, or governmental regulations.

NOTE: Australia and New Zealand (R4B) are available as either region 4 and/or region 2 configurations, only using text-free safety signs.

Machine Overview

IMPORTANT: READ THIS 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 manual and safety signs on your machine may available in other languages. See your John Deere dealer for specific language requirements and to place an order.

Review manual Controls and Transporting sections before operation.



A—Hitch with PTO Driveline
B—Heavy-Duty Gearbox

C—Cutting Blades
D—Tailwheel

PY45128—UN—12APR18

Operating the Machine Introduction:

See relevant section in the operator manual for operating procedures.

- Controls
- Transporting
- Operating Rotary Cutter
- Specifications

Preliminary Overview

Inspect the machine before operation, use the following list as a reminder. Detailed operation and service information is available in this operator manual.

- Review manual and machine for safety information and safety signs.
- Review manual for proper operation, adjustment, and service.
- Review manual for control devices (hydraulic and electrical).
- Review manual for regular lubrication points and intervals.

- Check machine mechanical, hydraulic, and electrical connection points.
- Check for visual signs of leaks, damage, and failures.
- Perform machine daily maintenance.

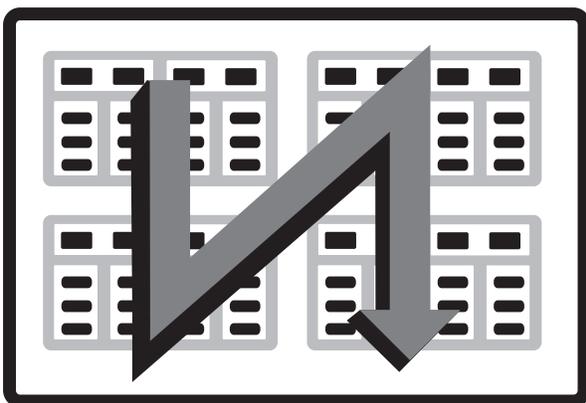
Using this Manual:

The information provided in this manual is divided into sections. The sections are organized with the typical machine features or functional systems together. These sections are identified at the top of each page. Specific information within each section is organized into modules. These modules are enclosed in boxes and the main modules are identified with a heading at the top left. Page numbers identify the section as well as the number of the page in the section.

By reviewing this manual frequently you learn which section to turn to for specific information. For example, the safety information is covered at the beginning, the operation of all features and systems is covered in the first half of the manual. Maintenance intervals are in the middle of the manual, the maintenance of all the features and systems is covered in the second half of the manual. The specifications are covered at the end.

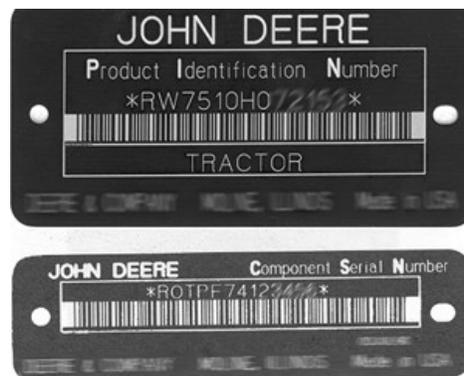
A detailed table of contents appears before safety information and there is an alphabetical index at the very end of the manual.

The Operator's Manual content flows as sequential reading down one column of text and graphic then over to the top of the next column as shown.



W28329—UN—18OCT17
RD91939,0000373-19-07MAY18

Keep Proof of Ownership

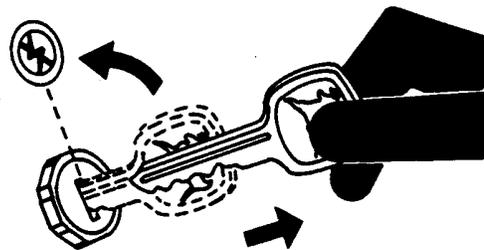


TS1680—UN—09DEC03

1. Maintain in a secure location an up-to-date inventory of all product and component serial numbers.
2. Regularly verify that identification plates have not been removed. Report any evidence of tampering to law enforcement agencies and order duplicate plates.
3. Other steps you can take:
 - Mark your machine with your own numbering system
 - Take color photographs from several angles of each machine

DX,SECURE1-19-18NOV03

Keep Machines Secure



TS230—UN—24MAY89

1. Install vandal-proof devices.
2. When machine is in storage:
 - Lower equipment to the ground
 - Set wheels to widest position to make loading more difficult
 - Remove any keys and batteries
3. When parking indoors, put large equipment in front of exits and lock your storage buildings.
4. When parking outdoors, store in a well-lighted and fenced area.
5. Make note of suspicious activity and report any thefts immediately to law enforcement agencies.

6. Notify your John Deere dealer of any losses.

DX,SECURE2-19-18NOV03

Record Rotary Cutter Serial Number



W22642—UN—20AUG12

Each machine has an identification label. The letters and numbers identify a component or assembly. ALL these characters are needed when ordering parts or identifying a machine for any John Deere product support program. When ordering parts, always furnish model and serial number as given on the serial number label. It allows your John Deere dealer to provide you prompt and efficient service. If the cutter is ever stolen, they are needed by law enforcement to trace your machine .

The serial number label for the rotary cutter is inside the right-hand mast.

ACCURATELY record these characters in the space provided here.

Serial Number:

RD91939,0000254-19-22,JAN18

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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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Safety

Recognize Safety Information



T81389—UN—28JUN13

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.

DX,ALERT-19-29SEP98

Follow Safety Instructions



TS201—UN—15APR13

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 John Deere dealer.

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

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 John Deere dealer.

DX,READ-19-16JUN09

Understand Signal Words



▲ WARNING

▲ CAUTION

TS187—19—30SEP88

DANGER; The signal word DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

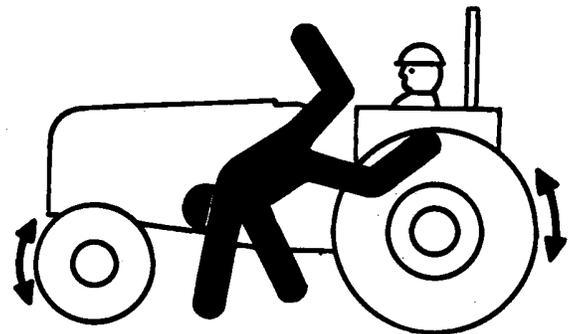
WARNING; The signal word WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION; The signal word CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury. CAUTION may also be used to alert against unsafe practices associated with events which could lead to personal injury.

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.

DX,SIGNAL-19-05OCT16

Keep Riders Off Machine



TS290—UN—23AUG88

Only allow the operator on the machine. Keep riders off.

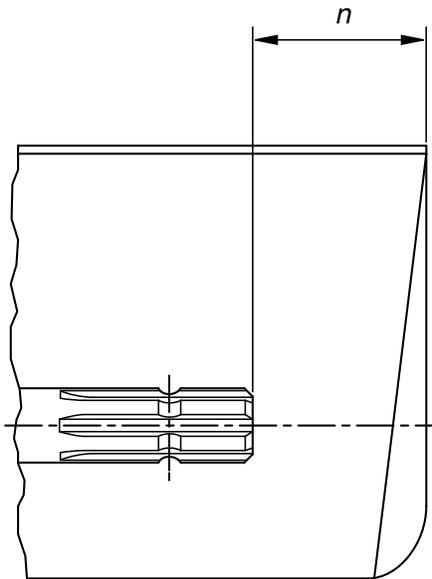
Riders on machine are subject to injury such as being struck by foreign objects and being thrown off of the machine. Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner.

DX,RIDER-19-03MAR93

Stay Clear of Rotating Drivelines



TS1644—UN—22AUG95



H96219—UN—29APR10

Entanglement in rotating driveline can cause serious injury or death.

Keep tractor master shield and driveline shields in place at all times. Make sure rotating shields turn freely.

Only use power take-off driveshafts with adequate guards and shields.

Wear close fitting clothing. Stop the engine and be sure that PTO driveline is stopped before making adjustments, connections, or cleaning out PTO driven equipment.

Do not install any adapter device between the tractor and the primary implement PTO driveshaft that will allow a 1000 rpm tractor shaft to power a 540 rpm implement at speeds higher than 540 rpm.

Do not install any adapter device that results in a portion of the rotating implement shaft, tractor shaft, or the adapter to be unguarded. The tractor master shield shall overlap the end of the splined shaft and the added adaptor device as outlined in the table.

The angle at which the primary implement PTO driveshaft can be inclined may be reduced depending on

the shape and size of the tractor master shield and the shape and size of the guard of the primary implement PTO driveshaft.

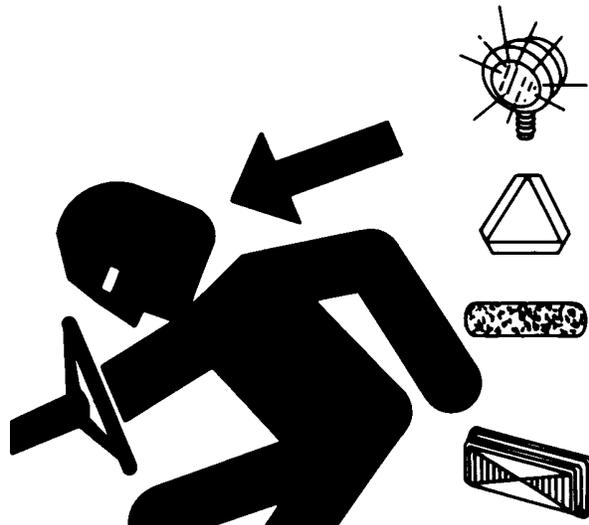
Do not raise implements high enough to damage the tractor master shield or guard of primary implement PTO driveshaft. Detach the PTO driveline shaft if it is necessary to increase implement height. (See Attching/ Detaching PTO Driveline)

When using Type 3/4 PTO, inclination and turning angles may be reduced depending on type of PTO master shield and coupling rails.

PTO Type	Diameter	Splines	n ± 5 mm (0.20 in.)
1	35 mm (1.378 in.)	6	85 mm (3.35 in.)
2	35 mm (1.378 in.)	21	85 mm (3.35 in.)
3	45 mm (1.772 in.)	20	100 mm (4.00 in.)
4	57.5 mm (2.264 in.)	22	100 mm (4.00 in.)

DX,PTO-19-28FEB17

Use Safety Lights and Devices



TS951—UN—12APR90

Prevent collisions between other road users, slow moving tractors with attachments or towed equipment, and self-propelled machines on public roads. Frequently check for traffic from the rear, especially in turns, and use turn signal lights.

Use headlights, flashing warning lights, and turn signals day and night. Follow local regulations for equipment lighting and marking. Keep lighting and marking visible, clean, and in good working order. Replace or repair lighting and marking that has been damaged or lost. An

implement safety lighting kit is available from your John Deere dealer.

DX,FLASH-19-07JUL99

Store Attachments Safely



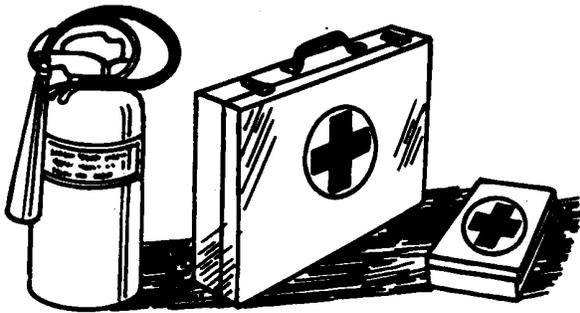
TS219—UN—23AUG88

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.

DX,STORE-19-03MAR93

Prepare for Emergencies



TS291—UN—15APR13

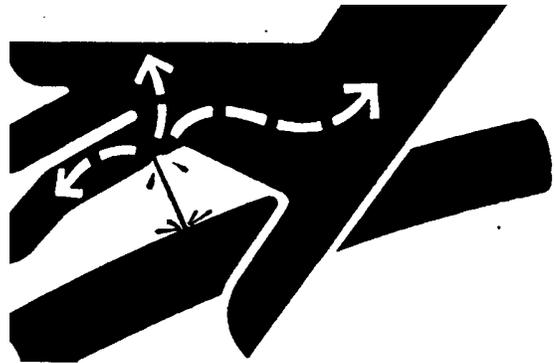
Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

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

DX,FIRE2-19-03MAR93

Avoid High-Pressure Fluids



X9811—UN—23AUG88

Inspect hydraulic hoses periodically – at least once per year – for leakage, kinking, cuts, cracks, abrasion, blisters, corrosion, exposed wire braid or any other signs of wear or damage.

Replace worn or damaged hose assemblies immediately with John Deere approved replacement parts.

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

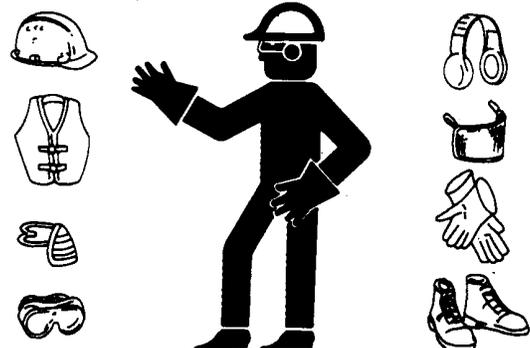
Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. 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. Such information is available in English from Deere & Company Medical Department in Moline, Illinois, U.S.A., by calling 1-800-822-8262 or +1 309-748-5636.

DX,FLUID-19-12OCT11

Wear Protective Clothing



TS206—UN—15APR13

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.

DX,WEAR-19-10SEP90

Practice Safe Maintenance



TS218—UN—23AUG88

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 away 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.

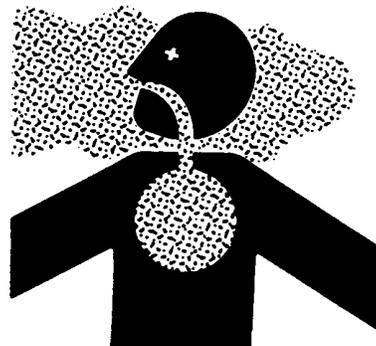
On self-propelled equipment, disconnect battery ground cable (-) before making adjustments on electrical systems or welding on machine.

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

Falling while cleaning or working at height can cause serious injury. Use a ladder or platform to easily reach each location. Use sturdy and secure footholds and handholds.

DX,SERV-19-28FEB17

Remove Paint Before Welding or Heating



TS220—UN—15APR13

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.

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

Protect Bystanders



TS265—UN—23AUG88

Never operate the cutter near people. Debris can be thrown hundreds of feet.

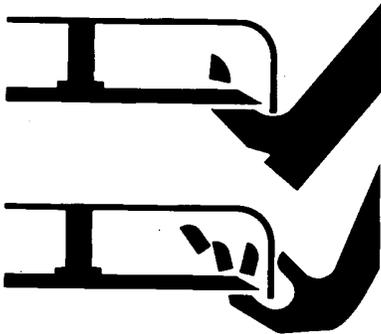
Use both front and rear safety shields to reduce the possibility of objects thrown by the blades.

DO NOT allow children to operate the tractor or the cutter.

Operate the cutter from the tractor seat only.

RD91939,000022F-19-22JAN18

Stay Clear of Rotating Blades

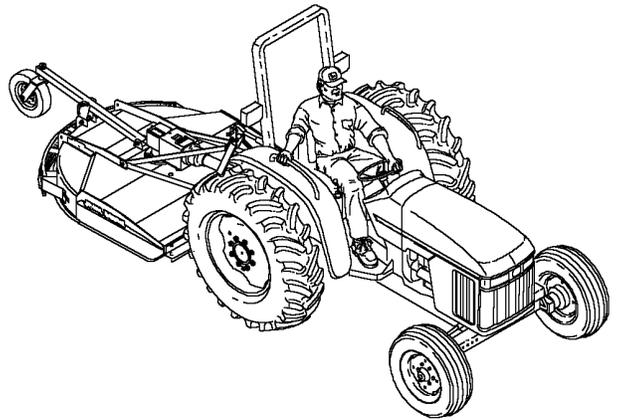


TS273—UN—23AUG88

Rotating blades can cut or dismember, causing personal injury or death. Keep hands and feet from under the cutter deck.

RD91939,0000230-19-18JAN18

Operate Tractor and Cutter Safely



W03731—UN—21FEB00

All rotary cutters are potentially dangerous machines. This rotary cutter has been designed to minimize the chance of accidents but there is no substitute for a careful operator.

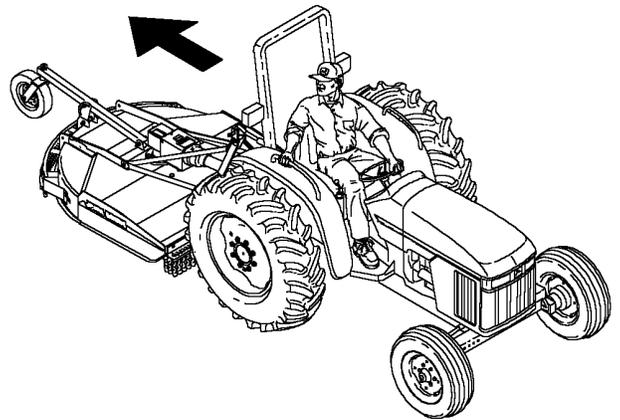
Flywheel effect of blade holder drives tractors with transmission drive PTO forward, even when tractor clutch is disengaged. Travel slowly near ditches, trees, or large objects. To stop, slow engine speed and apply brakes before disengaging clutch.

Become familiar with all controls.

Keep deck free from debris.

RD91939,0000231-19-18JAN18

Back up Safely



W03734—UN—21FEB00

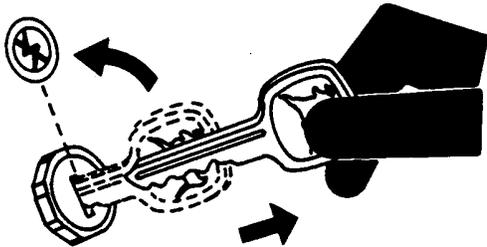
Do not operate the cutter in reverse otherwise, only if necessary. First, look carefully behind the cutter.

Be careful when you back the tractor with the PTO engaged. Material can be discharged from the front of

the cutter. It increases the risk of injury to the operator from thrown objects.

RD91939,0000232-19-18JAN18

Park Machine Safely



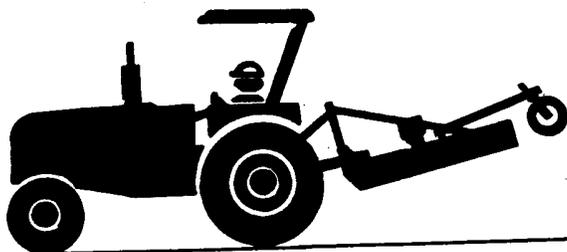
TS230—UN—24MAY89

Before working on the machine:

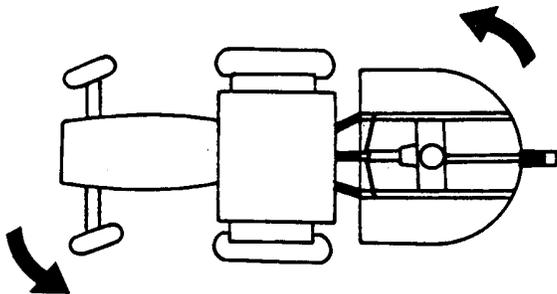
- Lower all equipment to the ground.
- Stop the engine and remove the key.
- Disconnect the battery ground strap.
- Hang a "DO NOT OPERATE" tag in operator station.

DX,PARK-19-04JUN90

Transport Cutter Safely



W14592—UN—05OCT88



W14593—UN—05OCT88

Always disengage PTO.

Slow moving vehicle (SMV) emblem and reflectors must be clean, in good condition, and visible from the rear.

Beware of oncoming traffic and roadside obstructions.

Transport Cutter in fully raised position.

When possible, lock rockshaft control lever in raised position to help prevent accidental lowering.

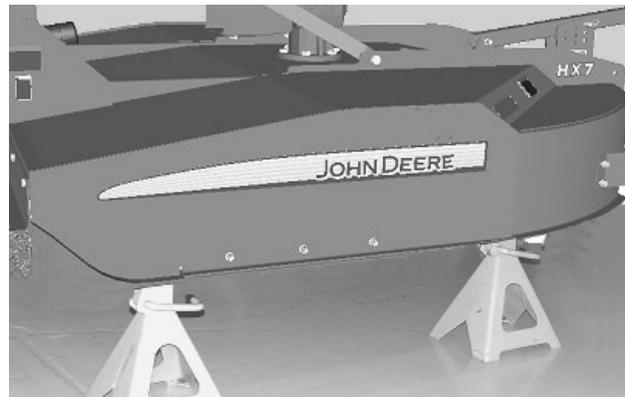
Travel slowly over rough terrain.

Overall widths of Cutters are approximately:

- **MX5:** 1.62 m (5 ft 3 in)
- **MX6:** 1.91 m (6 ft 3 in)
- **MX7:** 2.24 m (7 ft 3 in)
- **HX6:** 1.83 m (6 ft)
- **HX7:** 2.13 m (7 ft)

RD91939,0000233-19-18JAN18

Avoid Serious Injury or Death from Accidental Lowering of Cutter



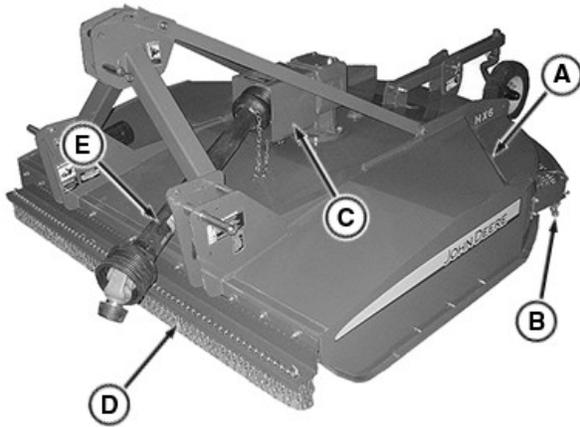
W22315—UN—13APR12

The blades and the blade holder rotate for several minutes after the PTO is shutoff. Look and listen for rotating driveline to stop before working on the cutter.

Always support the cutter with safety stands before servicing or performing maintenance under the cutter. Do not position safety stands under axle or wheel supports because these components can rotate.

RD91939,0000234-19-18JAN18

Safety Features



HX6 Shown

PY45066—UN—18JAN18

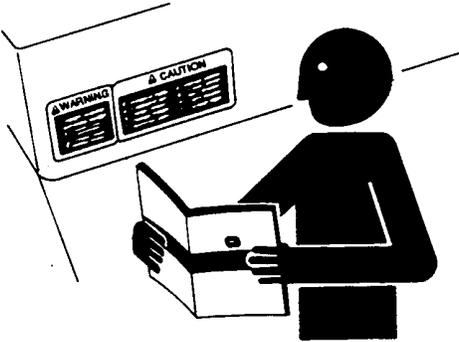
1. **Reflective Material (A)** enhances visibility during road transport.
2. **Rear Chain Safety Shield (B)** helps to contain thrown objects.
3. **Hinged Shielding (C)** covers drive component areas. Locks in position for convenient opening and closing for service access.
4. **Front Chain Safety Shield (D)** helps to contain thrown objects.
5. **Fully Shielded Power Take-off Drive Shaft (E)**

Remember, the **operator** is the key safety feature of any machine.

RD91939,0000235-19-18JAN18

Safety Signs

Replace Safety Signs



TS201—UN—15APR13

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.

DX,SIGNS-19-18AUG09



PTO Driveline

W06212—UN—20MAY03

Safety Signs—Drivelines



W03407—19—09AUG05



W03423—19—09AUG05



W03561—UN—30JUN99
PTO Driveline Half-to-Cutter (Without Shield)

RD91939,0000236-19-22JAN18

Safety Signs—Driveline Shield



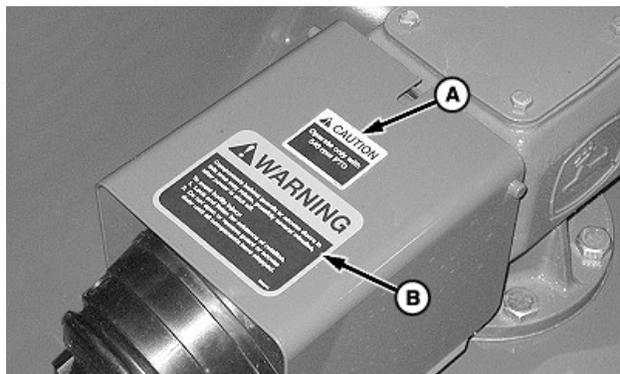
(A)

E39575—19—13NOV95



(B)

W03414—19—14JUN99

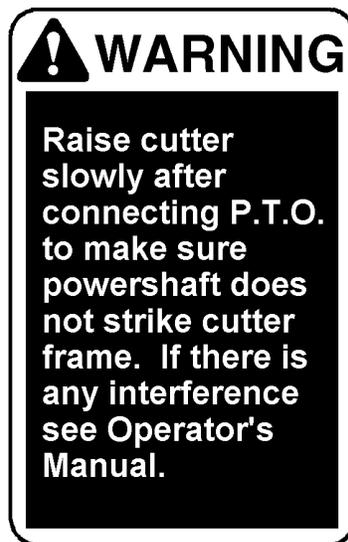


PTO Shield

W22405—UN—17APR12

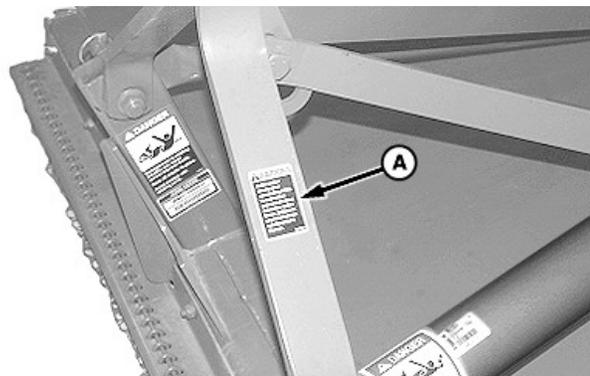
RD91939,0000237-19-22JAN18

Safety Signs—Hitch (MX5, MX6 & MX7)



(A)

W03409—19—12AUG99



Hitch

W06217—UN—20MAY03



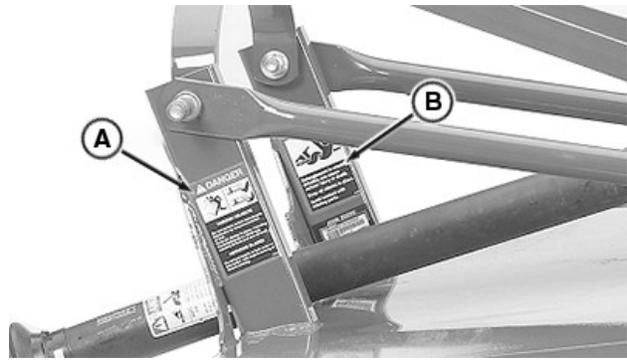
P15597—19—02SEP09

(A)



W03699—19—22FEB00

(B)



PY45067—UN—22JAN18

Masts

NOTE: Decal (A) is on the side of both masts.

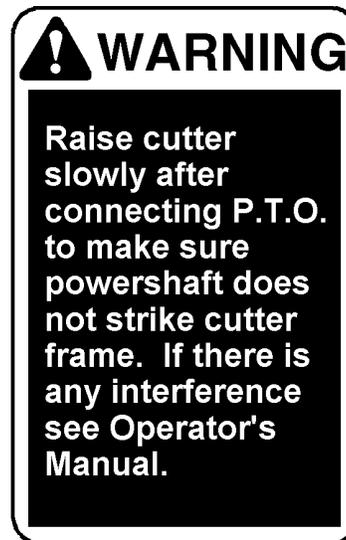
RD91939,0000238-19-22JAN18

Safety Signs—Hitch (HX6 & HX7)



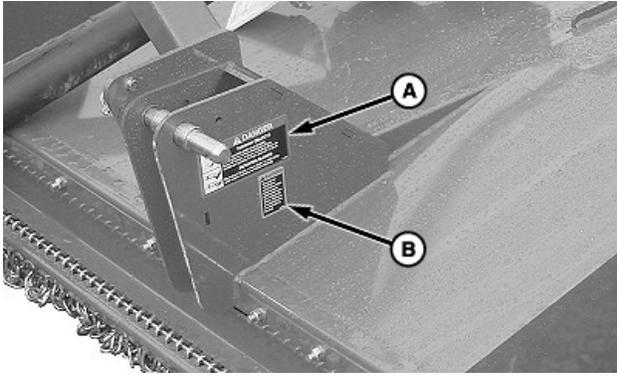
PY45068—19—18JAN18

(A)



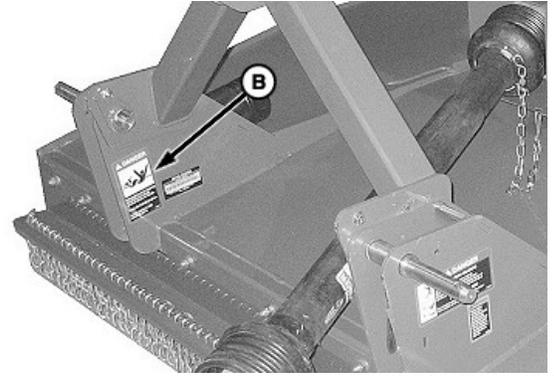
W03409—19—12AUG99

(B)



W22409—UN—18APR12

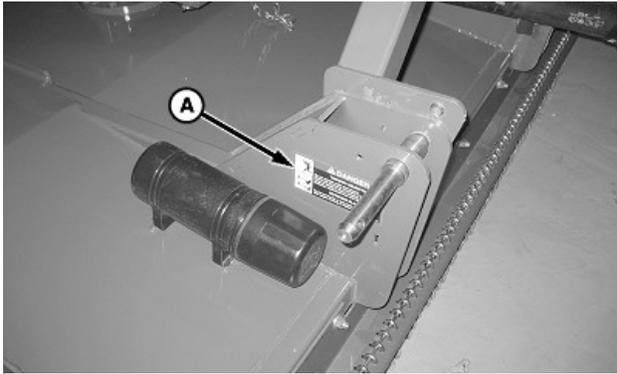
Hitch



W22622—UN—05JUN12

Mast

NOTE: Decal (A) is on the side of both masts.



W22623—UN—05JUN12

Mast



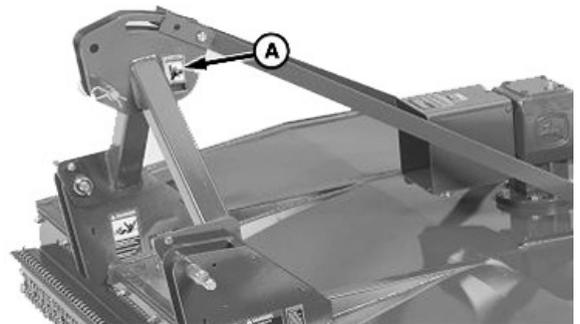
P16654—19—06DEC12

(A)



W03699—19—22FEB00

(C)



P16653—UN—06DEC12

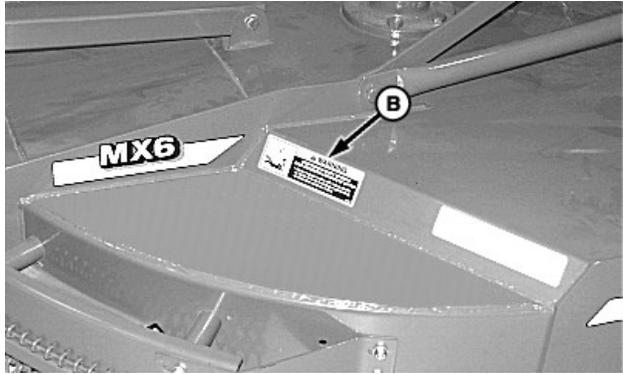
Hitch

Safety Signs—Deck



PY45068—19—18JAN18

A



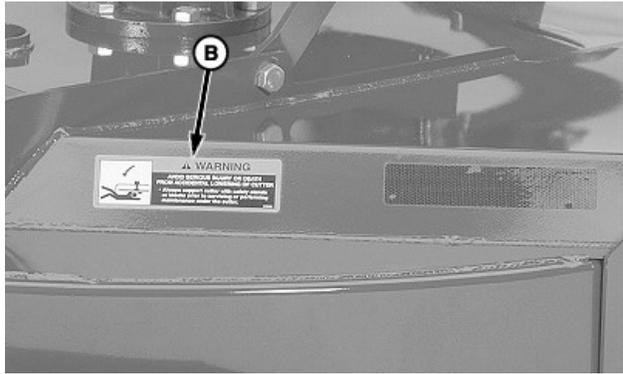
W03667—UN—16NOV99

Right-Hand Side (MX Models)



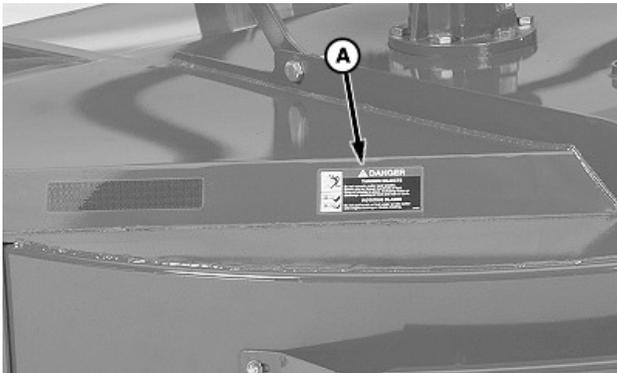
W03666—UN—16NOV99

Left-Hand Side (MX Models)



W22625—UN—20AUG12

Right-Hand Side (HX Models)



W22624—UN—20AUG12

Left-Hand Side (HX Models)

RD91939,000023A-19-22JAN18



PY45069—19—22JAN18

B

Preparing the Tractor

Selecting Tractor Size

CAUTION: To help prevent personal injury caused by loss of steering control, be sure that tractor is equipped with the proper amount of ballast. (See DETERMINING FRONT BALLAST in this section.)

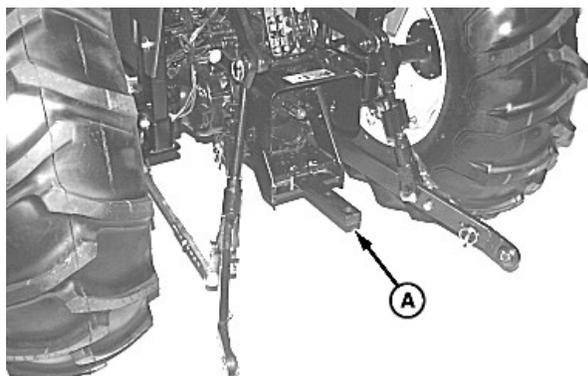
Model	Hitch Configuration	Minimum PTO Rating kW (hp)
MX5	Category 1, Adaptable to Category 2 ^a 3-point hitch Category 1 Quick Coupler ^a Category 2 Quick Coupler ^a	18.6 (25)
MX6	Category 1, Adaptable to Category 2 ^a 3-point hitch Category 1 Quick Coupler ^a Category 2 Quick Coupler ^a	22.4 (30)
MX7	Category 2 Category 2 Quick Coupler ^a Category 3N Quick Coupler ^a	37 (50)

^aSpecial adapter bushings are available. See your John Deere dealer.

HX6	Category 2 and 3N	30 (40)
HX7	Category 2 and 3N	34 (45)

RD91939,000023B-19-18JAN18

Positioning Tractor Drawbar



W03702—UN—19JAN00
John Deere 4000 Series Tractor Shown

A—Drawbar

CAUTION: To avoid personal injury, use locking pins to hold drawbar stationary when operating PTO driven implements.

IMPORTANT: Failure to reposition the drawbar can result in serious powerline damage.

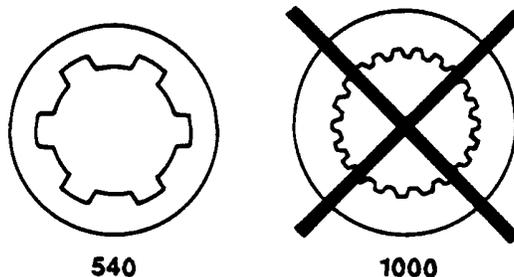
1. Slide drawbar (A) toward the front of tractor as far as possible.
2. Remove locking pins and move drawbar (A) to either

side of hitch support. Keep away from center position.

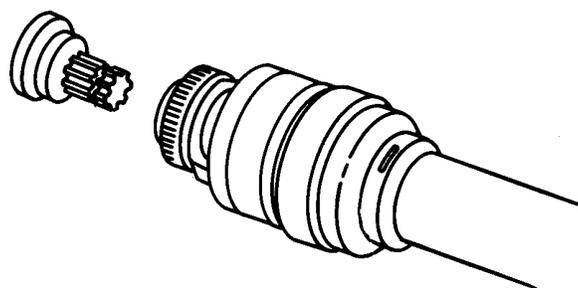
3. Install locking pins.
4. Remove drawbar (A) if necessary.

RD91939,000023C-19-18JAN18

Selecting Tractor PTO Speed



W11155—UN—05OCT88



W02538—UN—22APR96

IMPORTANT: Never operate a cutter equipped for 540 rpm PTO drive with a tractor equipped with 1000 rpm PTO.

Always run tractor at rated PTO speed. Overspeed damages the drive system.

To change PTO stub shaft, if necessary, refer the tractor Operator's Manual.

RD91939,000023D-19-18JAN18

Adjusting Tractor Hitch

Refer to tractor Operator's Manual to adjust the following:

- **Side Sway:** Adjust sway chains, hitch locks, or hitch blocks to minimize side movement at all hitch positions.
- **Lateral Float:** Place lift link pins in the float position.
- **Center Link:** Place center link in correct position for proper draft-sensing sensitivity.

- **Rate of Drop:** Allow at least two seconds for the machine to lower from full height to ground.

RD91939,000023E-19-18JAN18

Checking Ballast, Wheel Spacing, and Tire Inflation

Provide sufficient weight to stabilize tractor when operating on hilly land or other adverse conditions. (See your tractor Operator's Manual).

To insure proper stability, adjust ballast, wheel spacing, and tire inflation according to tractor Operator's Manual.

RD91939,000023F-19-18JAN18

Determining Front Ballast

CAUTION: To help prevent personal injury caused by loss of steering control, be sure that tractor is equipped with the proper amount of front ballast.

John Deere engineers have developed an implement code to determine how much front ballast is needed on the tractor for stability and steering control.

The cutter is approved for use on tractors that meet or exceed the implement codes. Tractor stability is necessary for safe operation. (See your tractor Operator's manual for complete ballasting information.)

Determine required ballast by using information in chart.

IMPORTANT: If the total implement code exceeds the maximum implement code for your tractor, the attachment is not recommended.

Model	Code
MX5	59
MX6	82
MX7 (single tailwheel)	119
MX7 (dual tailwheels)	130

HX6	85 ^a
HX7	107 ^a

^aImplement code includes front and rear chain shields.

NOTE: Implement codes include front and rear chain shields.

To determine amount of front ballast, see your tractor Operator's Manual

RD91939,0000240-19-18JAN18

Preparing the Machine

Prestarting Checklist

Perform the following procedures before operating the cutter:

- Gear Case
 - Check oil level. (See EVERY 8 HOURS OR DAILY in Lubrication and Maintenance section.)
 - Check hardware torque. (See EVERY 50 HOURS in Lubrication and Maintenance section.)
 - Remove any material wound on gear case shafts.
 - Check oil seals for leakage.
- Blades and Blade Holder
 - Inspect blades for wear or damage. (See CHECKING BLADE WEAR in Service section.)
 - Check blade hardware torque. (See REPLACING BLADES in the Service section.)
 - Check the torque for the blade holder hardware. (See EVERY 50 HOURS in Lubrication and Maintenance section.)
- Tailwheel
 - Tighten tailwheel nuts. (See EVERY 24 HOURS in Lubrication and Maintenance section.)
- Hitch Pins
 - Check the torque for the lock nuts on the hitch pin. (See AS REQUIRED in Lubrication and Maintenance section.)
- Driveline Shield
 - Check if driveline shield spins freely. (See AS REQUIRED in Lubrication and Maintenance section.)
- Lubricating the Cutter
 - Lubricate cutter and drivelines. (See Lubrication and Maintenance section.)
- Slip Clutch
 - Check if clutch is not seized (See Lubrication and Maintenance Section.)

RD91939,0000241-19-22JAN18

Preparing Hitch Pins (MX5, MX6 & MX7)

MX5 and MX6: Category 1 adaptable to category 2, 3-Point hitch.

NOTE: This adapting only works on tractor hitches that can be spread to category 2 width. (See your John Deere dealer for adapter kits.)

- For category 2, a category 2 conversion kit is needed.
- For category 1 and 2 Quick Couplers, adapter bushings are needed.

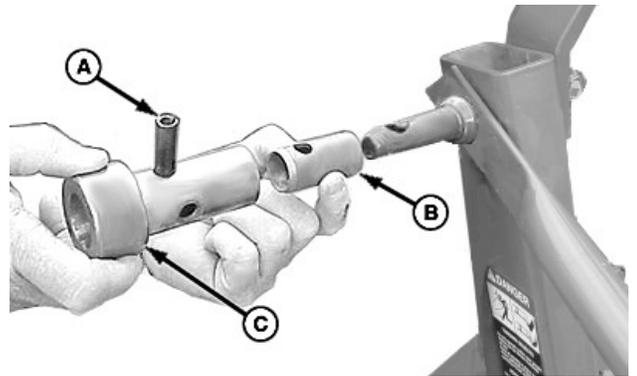
MX7: Category 2 adaptable to category 3N, 3-Point hitch.

- For category 3N, adapter bushings are needed.
- For category 2 and 3N Quick Couplers, adapter bushings are needed.

RD91939,0000242-19-22JAN18

Install Hitch Pin Bushings for Quick Coupler Hitch (MX5, MX6 & MX7)

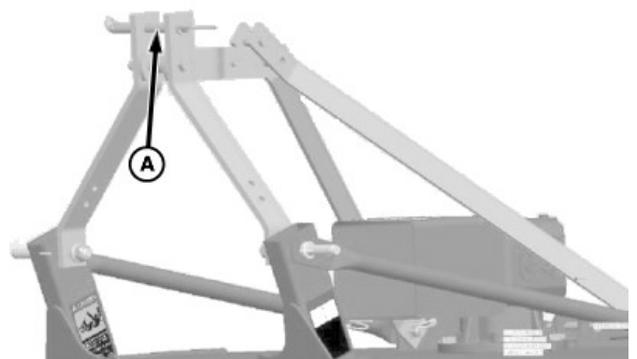
NOTE: Install bushings on both hitch pins. Left-hand side shown.



W05671—UN—27AUG02

A—Spring Pin
B—Bushing
C—Bushing

1. Install bushing (B) over the hitch pin with the cross hole as shown.
2. Install bushing (C) as shown.
3. Align holes in bushings with the hole in hitch pin and install spring pin (A).



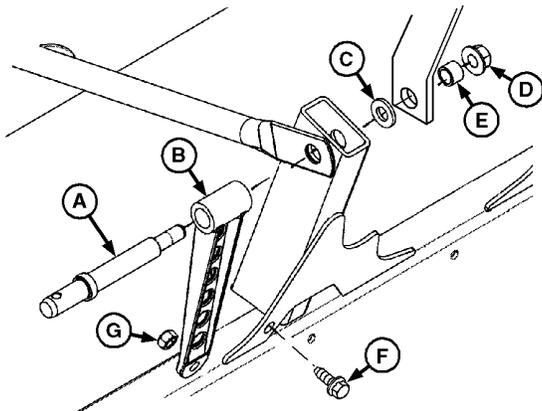
P15605—UN—22SEP09

A—Bushing

4. Install bushings (A) on the top center link.

RD91939,0000243-19-22JAN18

Installing Category 2 Hitch Pin Conversion Kit (MX5 and MX6)



W05687—UN—09SEP02

- A—Hitch Pin
- B—Bracket
- C—Washer
- D—Flange Nut
- E—Bushing
- F—Flange-Head Cap Screw, M16 x 45
- G—Lock Nut, M16

1. Remove existing lock nut and hitch pin from masts.

IMPORTANT: During assembly, make sure bracket (B) is positioned correctly so it sits flatly at lower attaching point.

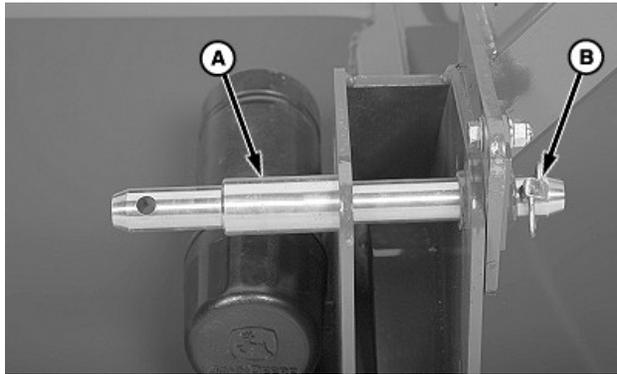
2. Assemble category 2 hitch pin (A) through the hole in top of bracket (B). Fasten to mast using hardware (C—E). Leave loose.
3. Attach bottom of the bracket to mast support using M16 x 45 flange-head cap screw (F) and lock nut (G).
4. Tighten all hardware to specifications.

Specification

Hitch Pin Nut (D)—Torque..... 350 Nm
(258 lb·ft)

RD91939,0000244-19-22JAN18

Hitch Pins—Category 2, 3-Point Hitch (HX6 & HX7)



W22626—UN—20AUG12

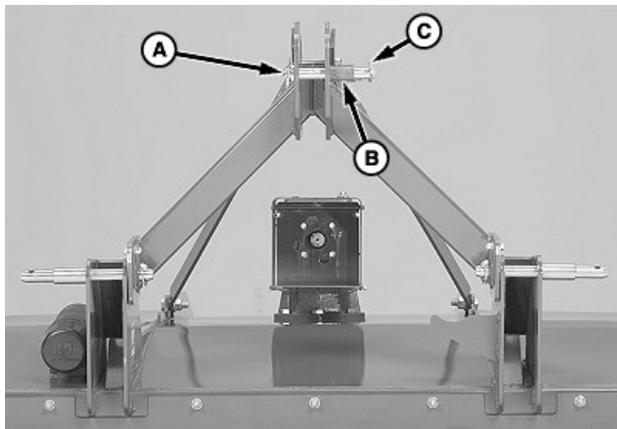
Right-Hand Side

- A—Hitch Pin (2 used)
- B—Locking Pin (2 used)

For category 2, 3-point hitches, hitch pin (A) is installed as shown. Remove locking pin (B) and turn around the hitch pin if necessary. Repeat for the left-hand side hitch pin.

NOTE: No adapters or bushings are required.

If the open-end center link is used, install over F2680 hitch ball with the pin in the upper hole.



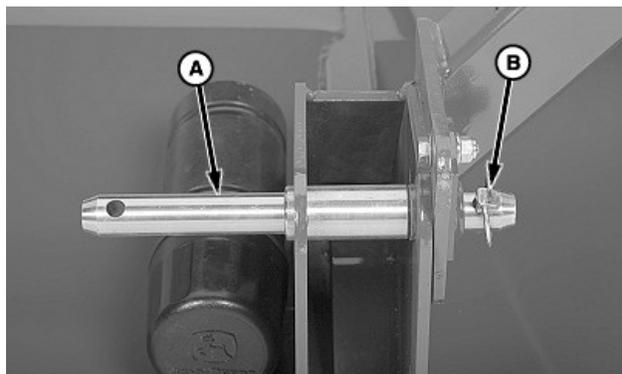
W22627—UN—13SEP12

- A—Pin
- B—Spacer
- C—Spring Pin

Pin (A), spacer (B), and spring pin (C) are placed in the upper hole of upper link as shown, placing spacer (B) outside the links.

RD91939,0000245-19-22JAN18

Hitch Pins—Category 3N, 3-Point Hitch (HX6 & HX7)



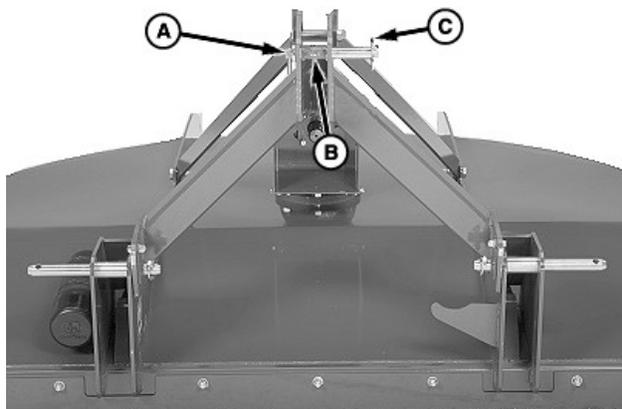
Right-Hand Side

W22628—UN—20AUG12

- A—Hitch Pin (2 used)
- B—Locking Pin (2 used)

For category 3N, 3-point hitches, hitch pin (A) is installed as shown. Remove locking pin (B) and turn around the hitch pin if necessary. Repeat for the left-hand side hitch pin.

NOTE: No adapters or bushings are required.



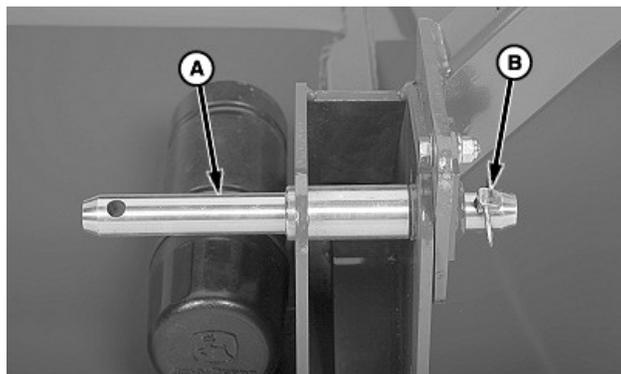
W22629—UN—13SEP12

- A—Pin
- B—Spacer
- C—Spring Pin

Pin (A), spacer (B), and spring pin (C) are placed in the upper hole of upper link as shown, placing spacer (B) inside links.

RD91939,0000246-19-22JAN18

Hitch Pins—Category 2 Quick-Coupler (HX6 & HX7)

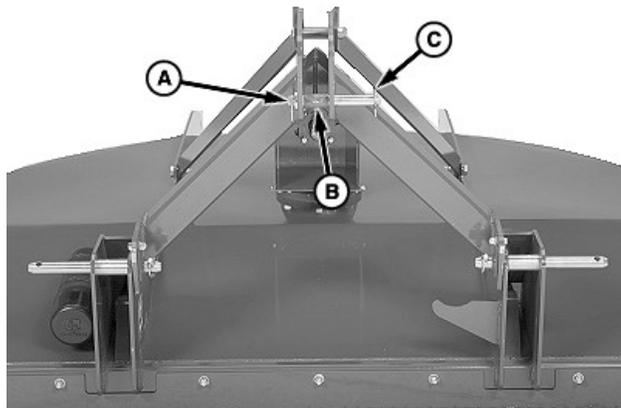


Right-Hand Side

W22628—UN—20AUG12

- A—Hitch Pin (2 used)
- B—Locking Pin (2 used)

For category 2 quick coupler, hitch pin (A) must be installed as shown. Remove locking pin (B) and turn around the hitch pin if necessary. Repeat for the left-hand side hitch pin.



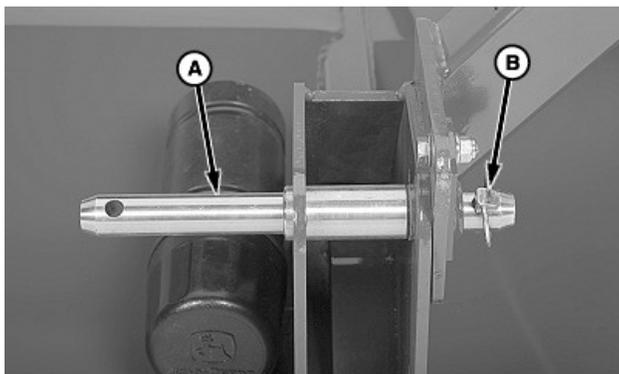
W23064—UN—20SEP12

- A—Pin
- B—Spacer
- C—Spring Pin

Pin (A), spacer (B), and spring pin (C) are placed in the lower hole of upper link as shown, placing spacer (B) inside links.

RD91939,0000247-19-22JAN18

Hitch Pins—Category 3N Quick-Coupler (HX6 & HX7)

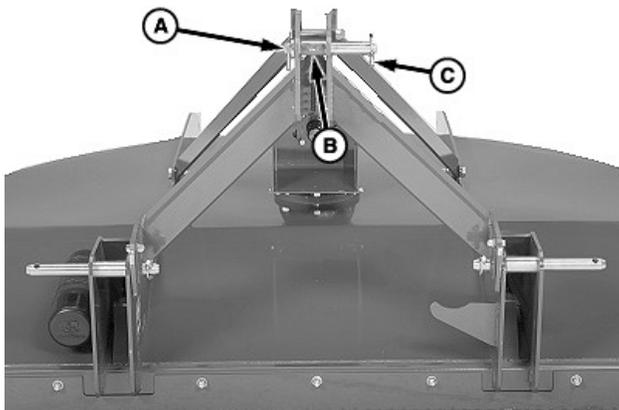


Right-Hand Side

W22628—UN—20AUG12

- A—Hitch Pin (2 used)
- B—Locking Pin (2 used)

For category 3N quick coupler, hitch pin (A) must be installed as shown. Remove locking pin (B) and turn around the hitch pin if necessary. Repeat for the left-hand side hitch pin.



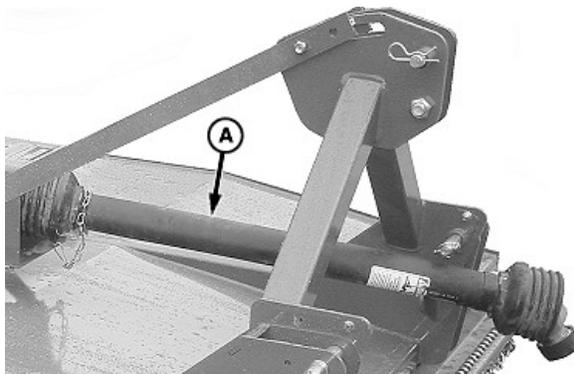
W22630—UN—20AUG12

- A—Pin
- B—Spacer
- C—Spring Pin

Pin (A), spacer (B), and spring pin (C) are placed in the upper hole of upper link as shown, placing spacer (B) inside links.

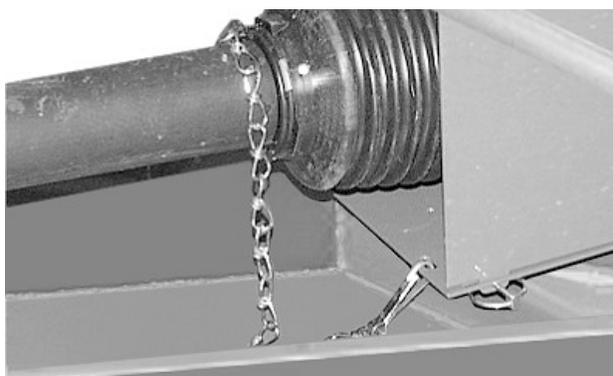
RD91939,0000248-19-22JAN18

Checking Driveline Shields



HX Models

W22386—UN—16APR12



Gear Case Shield (HX6 & HX7)

W08355—UN—16JAN07

A—Driveline Shield

CAUTION: Entanglement in the rotating driveline can cause serious injury or death. Disengage PTO, engage park brake or place transmission in "PARK", shut off tractor, and remove key before working near driveline.

Check driveline shields (A) by making sure that they rotate freely. Lubricate or repair if necessary. (See DISASSEMBLING AND ASSEMBLING DRIVELINE SHIELDS in Service section.)

Make sure that the chains of the driveline safety shield are attached.

RD91939,0000249-19-22JAN18

Attaching and Detaching

Attaching Cutter to Tractor with Quick Coupler Hitch (HX6 & HX7)

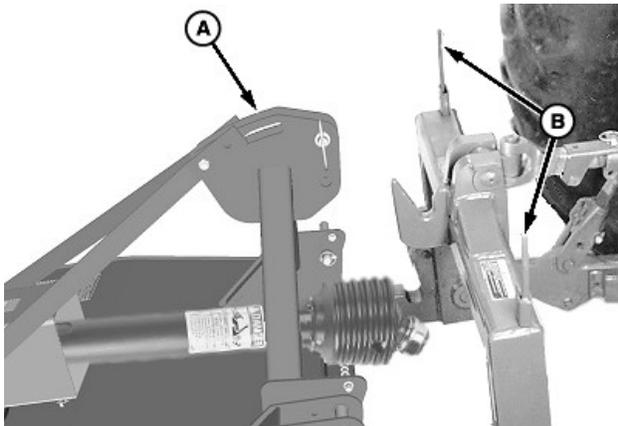
CAUTION: To avoid bodily injury or machine damage whenever an implement is attached, put transmission in **PARK** position and check the full range of hitch for interference, binding, or PTO separation.

Do not stand between tractor and implement.

NOTE: Upper hitch can pivot while attaching or detaching.

NOTE: Category 3N quick-hitch hitch is shown.

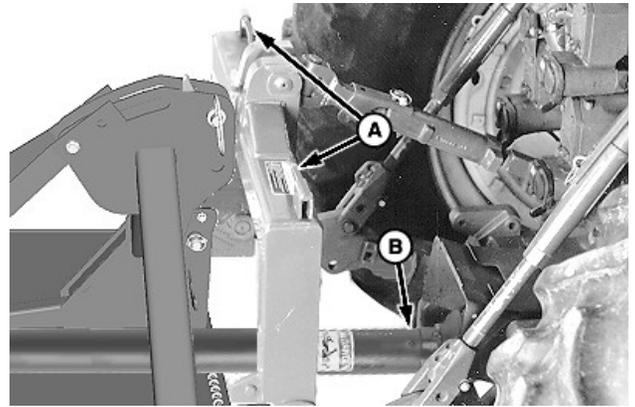
IMPORTANT: Contacting cutter hitch pins with the levers in the locked position results in damage to the latch mechanism.



W22634—UN—06JUN12

A—Hitch
B—Quick Coupler Latch Handles

1. Pull up on quick coupler latch handles (B).
2. Start tractor engine and lower hitch until quick coupler hooks are lower than cutter hitch pins.
3. Back up the tractor to the cutter hitch (A).
4. Raise hitch high enough to engage cutter hitch pins in hooks.
5. Engage tractor park brake and place transmission in **PARK**.
6. Shut off engine and remove ignition key.



W22632—UN—06JUN12

A—Quick -Hitch Latch Handles
B—Driveline

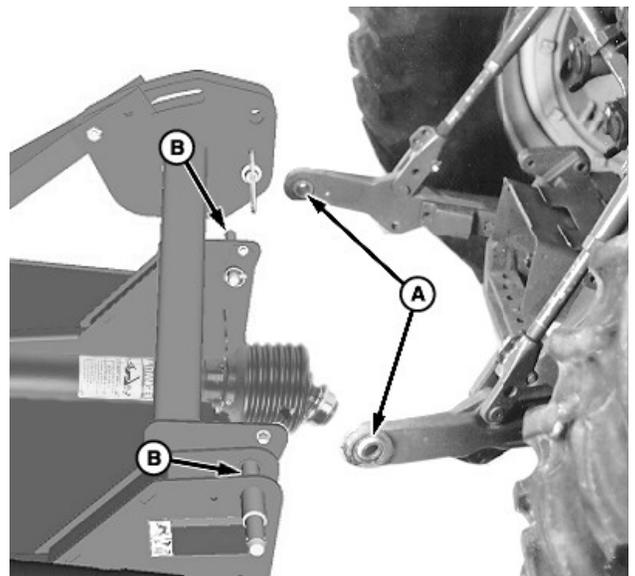
7. Push quick coupler latch handles (A) down to lock cutter to quick-hitch hitch.
8. Attach PTO driveline (B). (See procedure in this section.)
9. Check driveline clearance. (See procedure in this section.)

RD91939.000024A-19-22JAN18

Attaching Cutter to Tractor with Three-Point Hitch (HX6 & HX7)

CAUTION: To avoid bodily injury or machine damage whenever an implement is attached, put transmission in **PARK** position and check the full range of hitch for interference, binding, or PTO separation.

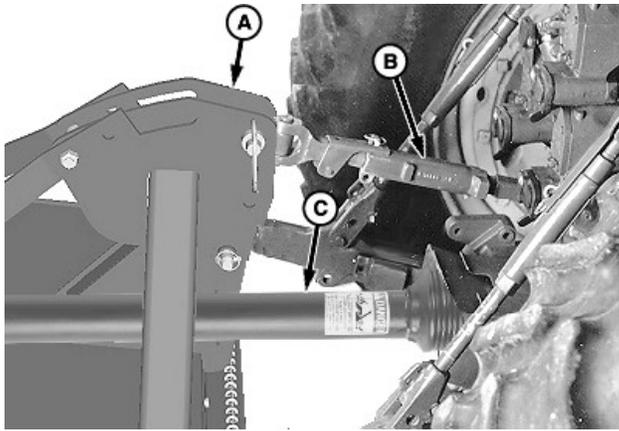
Do not stand between tractor and implement.



W22633—UN—06JUN12

A—Draft Links
B—Hitch Pins

1. Back up the tractor and align the draft links (A) and cutter hitch pins (B).
2. Engage tractor park brake and/or place transmission in **PARK**.
3. Shut off engine and remove ignition key.



W22635—UN—06JUN12

A—Center Link
B—Hitch
C—Driveline

4. Attach draft links. Secure with quick-lock pins.
5. Attach center link (A) to hitch (B). Secure with the quick-lock pin.
6. Attach PTO driveline (C). (See procedure in this section.)
7. Check driveline clearance. (See procedure in this section.)

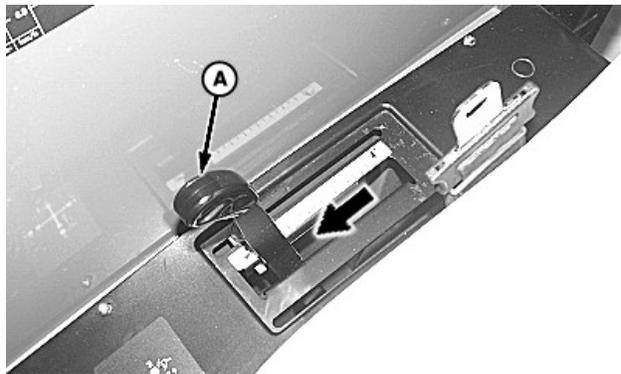
RD91939,000024B-19-22JAN18

Attach Cutter to Tractor with Quick Coupler (MX5, MX6 & MX7)

⚠ CAUTION: Avoid bodily injury or machine damage. When an implement is being attached, put tractor in **PARK** and check the full range of hitch motion for interference, binding, or PTO separation.

Do not stand between tractor and implement.

NOTE: John Deere 4000 Series tractor is shown throughout the procedure.



W03719—UN—08FEB00



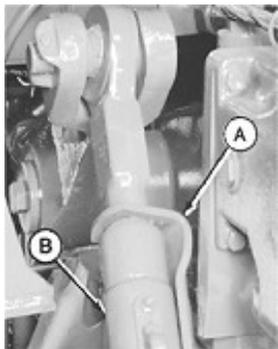
P15606—UN—22SEP09

Quick Coupler Hitch

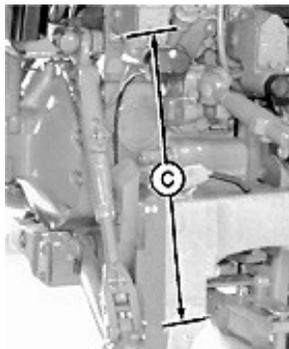
A—Hitch Control Lever

1. Slowly push hitch control lever (A) to lower hitch until quick coupler hooks are lower than cutter hitch pins.
2. Back tractor up to the cutter hitch.
3. Raise hitch high enough to engage cutter hitch pins in hooks.
4. Engage tractor park brake and place transmission in "Park".
5. Shut off engine and remove ignition key.
6. Attach PTO driveline. (See procedures in this section.)
7. Start tractor engine.

Leveling the Rotary Cutter (HX6 & HX7)



RW7154—UN—15DEC88

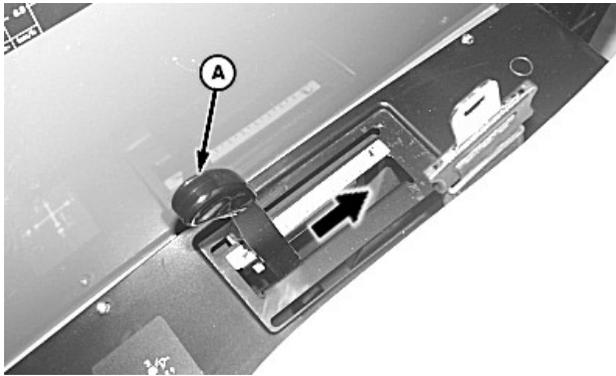


RW7155—UN—15DEC88

A—Lock
B—Lift Link
C—Centers of Attaching Pins

Adjust lift links to level the rotary cutter side-to-side. (See your tractor Operator's Manual.)

RD91939,000024C-19-22JAN18



W03701—UN—14JAN00

A—Hitch Control Lever

8. Slowly pull hitch control lever (A) to raise the cutter. Check for interference. Lower cutter to ground and adjust if necessary.

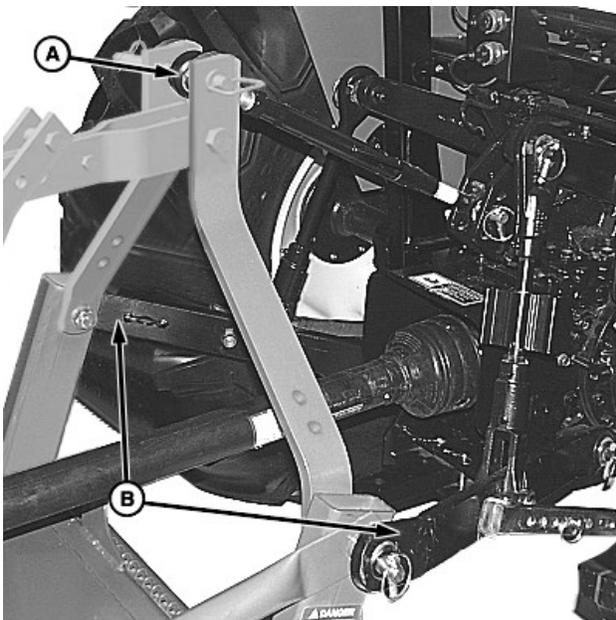
RD91939,000024D-19-22JAN18

Attach Cutter to Tractor with Three-Point Hitch (MX5, MX6 & MX7)

⚠ CAUTION: Avoid bodily injury or machine damage. Whenever an implement is attached, put transmission in PARK position and check the full range of hitch for interference, binding, or PTO separation.

Do not stand between tractor and implement.

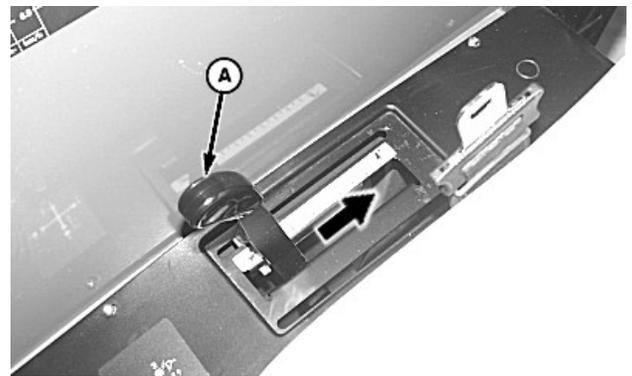
NOTE: John Deere 4000 Series tractor is shown throughout the procedure.



P15608—UN—25SEP09

A—Tractor Center Link
B—Tractor Draft Links

1. Back up the tractor to cutter with hitch points approximately in alignment.
2. Engage tractor park brake and/or place transmission in "Park".
3. Shut off engine and remove ignition key.
4. Remove center link mounting hardware and hitch pin assemblies at both hitch masts.
5. Align tractor draft links (B) with hitch masts and install hitch pin assemblies according to the tractor hitch category. (See PREPARING HITCH PINS in Preparing the Cutter section.)
6. Align center link (A) with the cutter pivot plate and install the center link mounting hardware.
7. Start tractor engine.



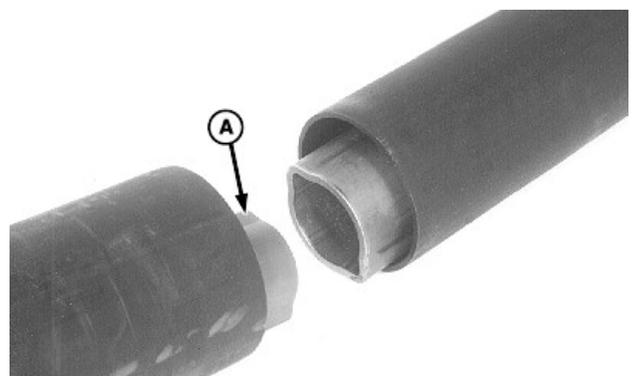
W03701—UN—14JAN00

A—Hitch Control Lever

8. Slowly pull hitch control lever (A) to raise the cutter. Check for interference. Lower hitch to ground and adjust center link and/or lift links if necessary. (See procedures in your tractor Operator's manual.)

RD91939,000024E-19-22JAN18

Assembling Main PTO Driveline Telescoping Members (If Necessary)



W07851—UN—25MAY06

A—Inner Driveline Tube

1. Apply multipurpose grease around the outside surface of the inner driveline tube (A).

- Align driveline halves and assemble telescoping members together.
- Apply multipurpose grease, or equivalent, to all lubrication fittings before operating. (See Lubrication and Maintenance section.)

RD91939,000024F-19-22JAN18

Attach PTO Driveline

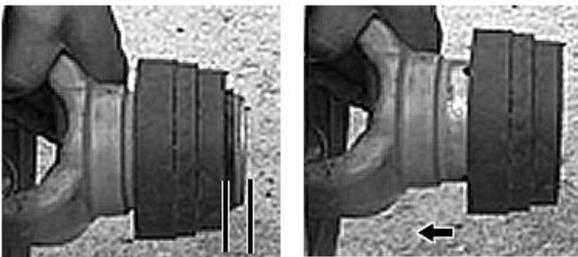


TS1644—UN—22AUG95

CAUTION: Shut off tractor engine before attaching PTO driveline. Entanglement in the rotating driveline can cause serious injury or death.

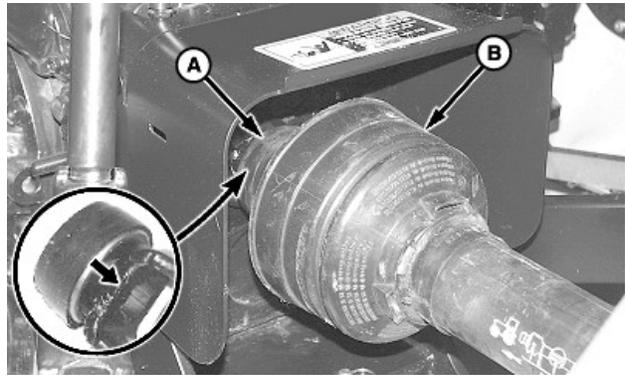
IMPORTANT: Keep driveline and power shaft splines clean of paint, dirt, and chaff. Apply John Deere SD POLYUREA grease or equivalent on tractor PTO shaft before attaching PTO driveline.

- Shut off tractor engine.
- Raise tractor PTO shield, if equipped.



Locking Collar

W21412—UN—10JAN11

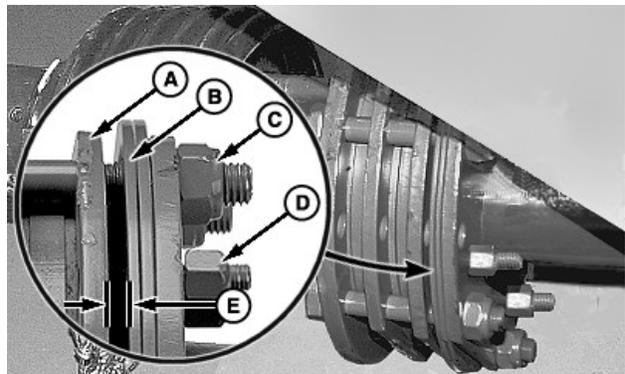


W06204—UN—19MAY03

IMPORTANT: Do not use plastic shield (B) to lift driveline into position. Damage to shield can occur.

- Support driveline by hand.
- Pull collar (A) back toward cutter until locked in open position.
- Align splines by rotating rotary cutter driveline.
- Push driveline onto tractor PTO shaft until collar snaps into place.
- To verify that driveline is locked, pull back on the shield (B). Do not pull collar. The latch releases.
- Lower tractor PTO shield, if equipped.
- Attach PTO driveline shield chain to a fixed point on tractor.

IMPORTANT: Slip clutch components must be free to rotate when necessary. Clutch disk linings can bond to metal parts during non-use, especially in damp or humid conditions. To avoid machine damage, verify that slip clutch is operating correctly. (See Freeing Slip Clutch procedure in Lubrication and Maintenance section.)



W21431—UN—17JAN11

- A—Clutch Plate
- B—Belleville Spring
- C—Lock Nut (6 used)
- D—M8 Adjuster Nut (4 used)
- E—Gap

10. If cutter is being returned to service from seasonal storage,

- To apply spring load to clutch, tighten six lock nuts (C) evenly on the slip clutch.
- Verify that gap (E) between clutch plate (A) and disk spring (B) is at specification. Adjust four adjuster nuts (D) until the gap is in specification.

Specification

Clutch to Spring Gap - Distance. 6.00 mm
(0.236 in)

IMPORTANT: DO NOT set the Clutch Gap less than 5.0 mm with run-in Plate

If cutter is being used regularly,

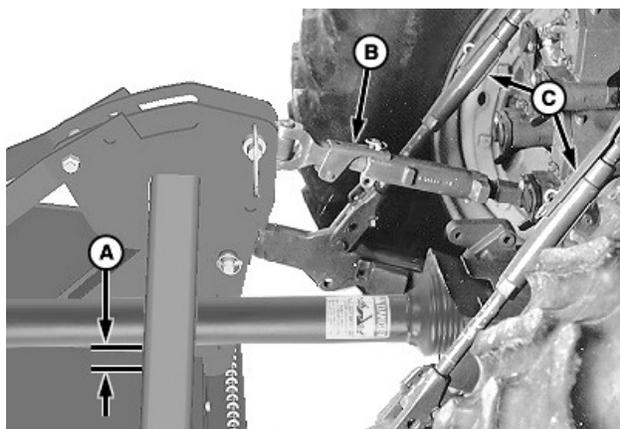
- Verify that slip clutch is free to rotate as needed.
- If the clutch has seized, free slip clutch and adjust spring load. (See Freeing Slip Clutch procedure in Lubrication and Maintenance section.)

RD91939,0000250-19-23JAN18

Checking Driveline Clearance (HX6 & HX7)

IMPORTANT: Prevent damage to driveline from contact with frame. Raise cutter slowly and check for interference. Shorten center link or lengthen lift links to provide clearance to full lift height.

If attaching to tractor that has not been previously used to operate cutter, check driveline length at this time. (See DRIVELINE LENGTHS in Service section.)



W22636—UN—06JUN12

A—Clearance
B—Center Link
C—Lift Links

1. Raise cutter slowly, checking for clearance (A) between driveline and frame.
2. Provide clearance by either shortening center link (B)

or lengthening lift links (C). (See your tractor Operator's Manual.)

3. Be sure that cutter can be raised fully without driveline bottoming out.

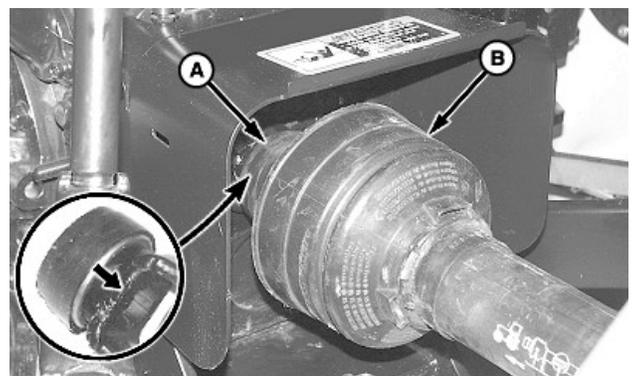
NOTE: Final adjustments are to be made before operating the cutter. (See ADJUSTING CUTTING HEIGHT AND ANGLE in Operating the Cutter section.)

RD91939,0000251-19-22JAN18

Detach Cutter from Tractor (HX6 & HX7)



TS1644—UN—22AUG95



W06204—UN—19MAY03

A—Collar
B—Shield

CAUTION: Avoid injury caused by unexpected machine movement.

1. Park cutter on a level surface or block tailwheel so machine cannot roll after detaching from the tractor.
2. Lower Cutter:

Tractor with Quick Coupler Hitch: Lower cutters close to the ground.

Tractor with Three-Point Hitch: Lower cutter to the ground.

3. Engage tractor park brake and place transmission in "Park".

- Disengage PTO.

CAUTION: Shut off tractor engine before detaching PTO driveline. Entanglement in the rotating driveline can cause serious injury or death.

- Shut off engine and remove ignition key.
 - Raise tractor PTO shield (if equipped).
- IMPORTANT:** Do not use plastic shield (B) on driveline to hold driveline in position. Damage to shield can occur.
- Support driveline by hand.
 - Pull collar (A) back toward cutter and slide driveline off tractor shaft.
 - Support and collapse driveline completely and lower onto the front sill.
 - Lower tractor PTO shield (if equipped).

- Start tractor engine.
- Lower cutter to the ground. Continue lowering quick coupler until hooks clear cutter hitch pins.
- Carefully drive the tractor away.

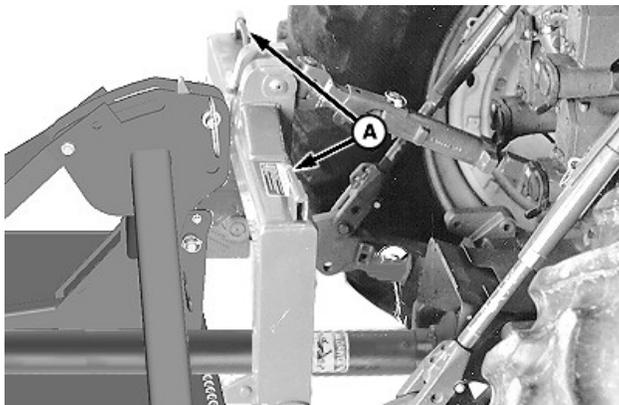
Tractor with Three-Point Hitch:

- Lower cutter to the ground.
- Remove draft link pins (C) from draft links. Store pins on cutter.
- Disconnect center link from pin (B). Position tractor center link in transport location. Reinstall center link hardware.
- Carefully drive the tractor away.

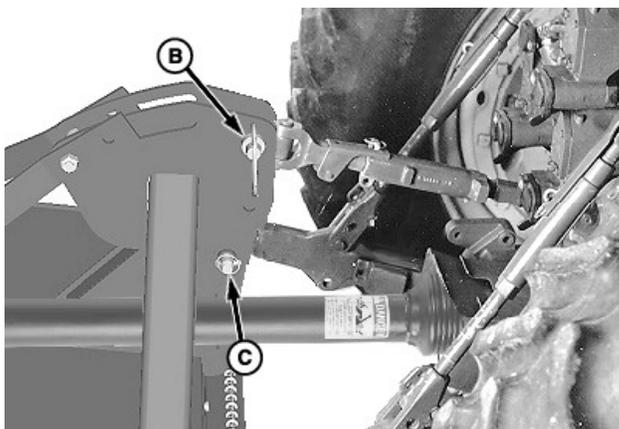
IMPORTANT: During seasonal storage or idle periods in damp conditions, linings of slip clutch can bond to metal parts. Relieve spring load on clutch before storage to reduce this problem.

- If cutter is being stored, relieve spring load from clutch disks. (See USING SLIP CLUTCH STORAGE FEATURE in Service section.)

RD91939,0000252-19-22JAN18



W22637—UN—06JUN12



W22638—UN—06JUN12

A—Quick Coupler Latch Handles
 B—Center Link Pin
 C—Draft Link Pin (1 each side)

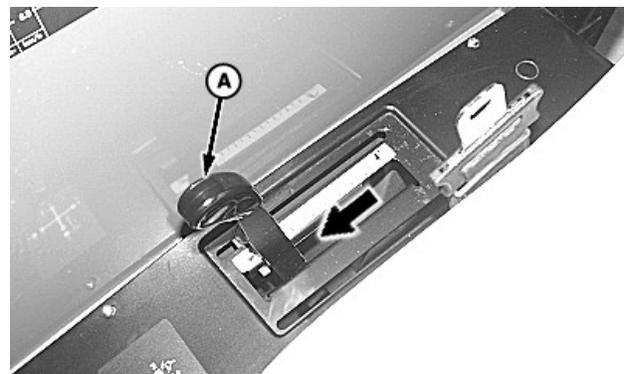
- Detach Cutter:

Tractor with Quick Coupler Hitch:

- Raise both quick coupler latch handles (A).

Detach Cutter from Tractor (MX5, MX6 & MX7)

CAUTION: Avoid injury caused by unexpected machine movement.



W03719—UN—08FEB00

A—Hitch Control Lever

- Park cutter on a level surface.
- Lower Cutter:

Tractor with Quick Coupler Hitch: Slowly push hitch control lever (A) to lower the cutter close to the ground.

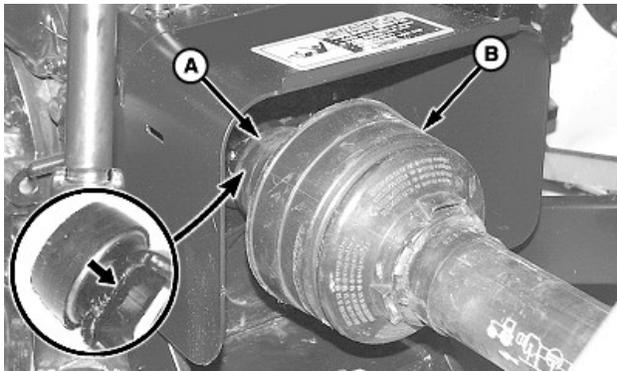
Tractor with Three-Point Hitch: Slowly push hitch control lever (A) to lower the cutter to the ground.

3. Engage tractor park brake and place transmission in "Park".
4. Disengage PTO.

⚠ CAUTION: Avoid serious injury or death from driveline entanglement. Shut off tractor engine before detaching PTO driveline.



TS1644—UN—22AUG95



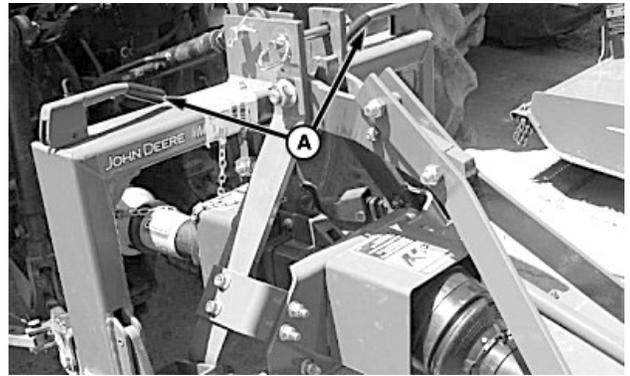
W06204—UN—19MAY03

A—Collar
B—Plastic Shield

5. Shut off engine and remove ignition key.
6. Block tailwheels so machine cannot roll after detaching from the tractor.
7. Raise tractor PTO shield (if equipped).

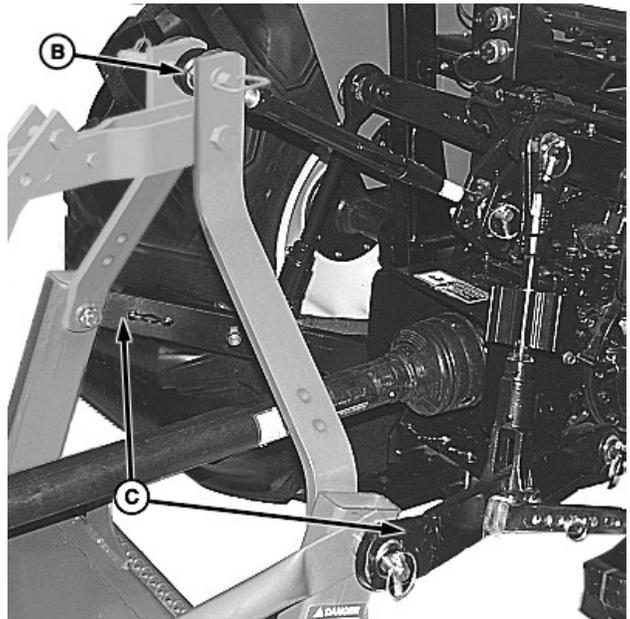
IMPORTANT: Do not use plastic shield (B) to hold driveline in position. Damage to shielding can occur.

8. Pull collar (A) back toward cutter and slide driveline off tractor shaft.
9. Lower tractor PTO shield (if equipped).



P15607—UN—22SEP09

Quick Coupler Hitch



P15609—UN—25SEP09

Three-Point Hitch

A—Latch Levers
B—Tractor Center Link
C—Tractor Draft Links

10. Detach Cutter:

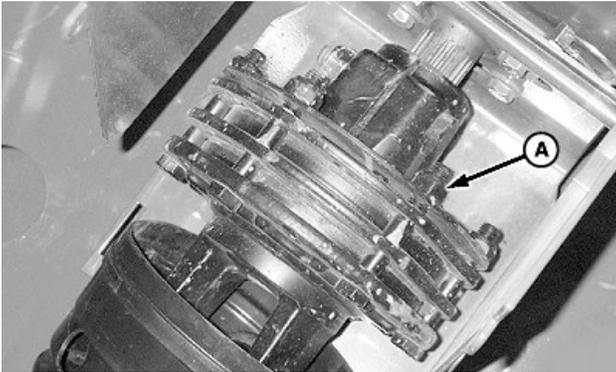
Tractor with Quick Coupler Hitch:

1. Raise both latch levers (A) on the quick coupler.
2. Start tractor engine.
3. Lower cutter to the ground. Continue lowering quick coupler until hooks clear cutter hitch pins.
4. Carefully drive the tractor away.

Tractor with Three-Point Hitch:

1. Remove hitch pin assemblies from tractor draft links (C).
2. Lower tractor draft links.
3. Reinstall hitch pin assemblies at both hitch masts.
4. Disconnect center link (B) from the pivot plate.

- Position tractor center link in transport location.
Reinstall center link hardware in cutter pivot plate.
5. Carefully drive the tractor away.



W08988—UN—13SEP07

MX7 Clutch Shown

A—Lock Nut (6 used)

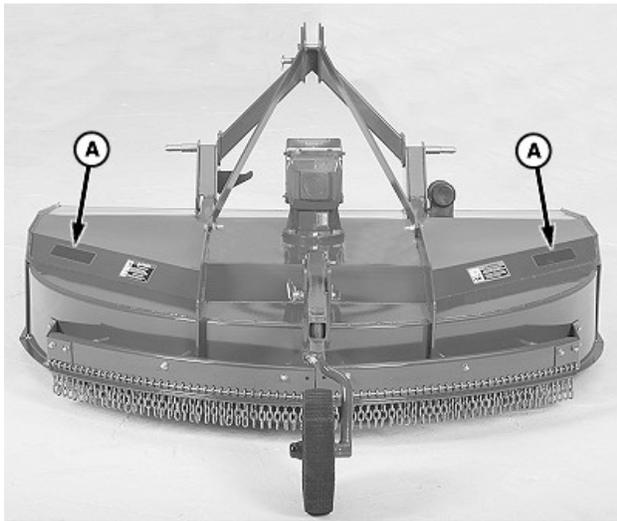
IMPORTANT: During long periods of humid or damp conditions, linings of slip clutch rust and bond to metal parts. Relieve spring load on disks before storage to reduce this problem.

11. If the cutter is not used frequently (before it is stored), loosen six lock nuts (A) on slip clutch to relieve spring load from clutch disks.

RD91939,0000253-19-22,JAN18

Transporting

Preparing Cutter for Transport



A—Reflectors

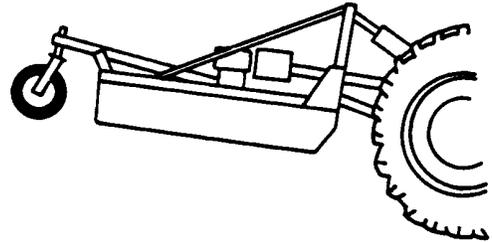
CAUTION: Prevent collisions between the other road users, slow moving tractors with attachments or towed equipment, and self-propelled machines on public roads. Frequently check for traffic from the rear, especially in turns, and use turn signal lights.

Use headlights, flashing warning lights, and turn signals day and night. Follow local regulations for the equipment lighting and marking. Keep lighting and marking visible, clean, and in good working order. Replace or repair lighting and marking that has been damaged or lost.

1. Make sure reflectors (A) and tractor SMV sign are clean and visible.

CAUTION: To prevent bodily injury from rotating blades, be sure to disengage tractor PTO before transporting cutter.

2. Disengage tractor PTO.



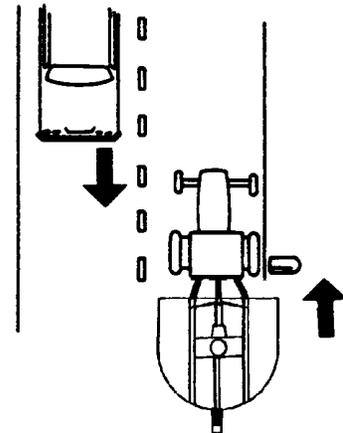
Raised Position

W03689—UN—01FEB00

3. Raise cutter to fully raised position using tractor hitch or rockshaft control. Set tractor hitch or rockshaft control lever (if equipped) in transport lock position. (See your tractor Operator's Manual.)

RD91939,0000255-19-23JAN18

Follow Safe Transport Procedures



W03741—UN—21FEB00

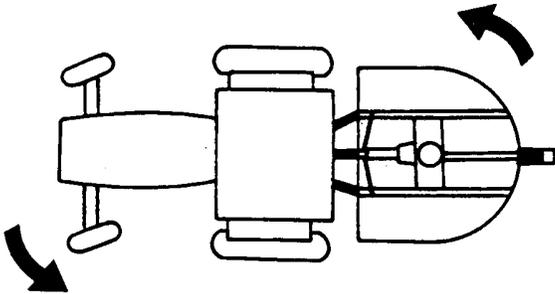
CAUTION: To help prevent severe injury or death to you or someone else, follow recommended transport procedures:

- Beware of oncoming traffic and roadside obstructions.
- Travel at a reasonable and safe speed. (See your tractor Operator's Manual.) Reduce speed considerably when traveling over rough ground.

- Stop slowly.
- Sound tractor horn before backing up cutter.
- Avoid possible loss of control or tractor overturn. Tow only with correctly ballasted tractor.

RD91939,0000256-19-23JAN18

Making Turns

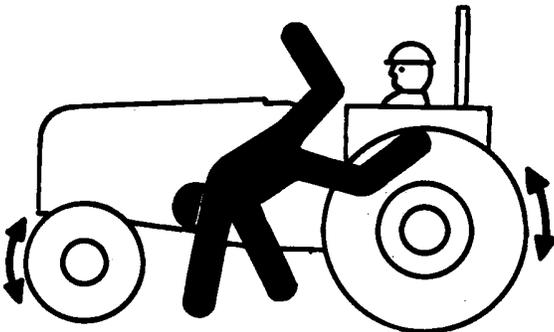


W14593—UN—05OCT88

IMPORTANT: To prevent damage to the cutter caused by striking objects while turning, reduce ground speed. The cutter makes a large arc while turning.

RD91939,0000257-19-23JAN18

Keep Riders Off Machine



TS290—UN—23AUG88

Only allow the operator on the machine. Keep riders off.

Riders on machine are subject to injury such as being struck by foreign objects and being thrown off of the machine. Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner.

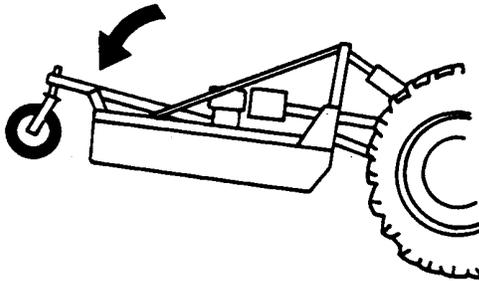
DX,RIDER-19-03MAR93

Operating the Machine

Preparing Cutter for Operation



TS261—UN—23AUG88



W03718—UN—04FEB00

CAUTION: To help prevent severe injury or death to you or someone else:

- Do not engage tractor PTO when the cutter is in fully raised position (transport position).
- Keep all persons away from machine when raising and lowering cutter.

IMPORTANT: To avoid damaging the machine from the impact on ground when lowering, adjust rate at which hitch lowers.

1. Adjust tractor rockshaft rate-of-drop. Allow at least three seconds for the machine to lower from full lift height to the ground. (See your tractor Operator's Manual.)
2. If equipped, disengage the tractor hitch or rockshaft control lever from transport lock position and lower cutter to the ground. (See your tractor Operator's Manual.)
3. Adjust tractor lift links to level machine side-to-side. (See your tractor Operator's Manual.)
4. Adjust cutting height and tailwheel position. (See ADJUSTING CUTTING HEIGHT AND TAILWHEEL POSITION in this section.)

RD91939,0000258-19-23JAN18

Adjust Cut Height and Tailwheel Position (MX5, MX6 & MX7)

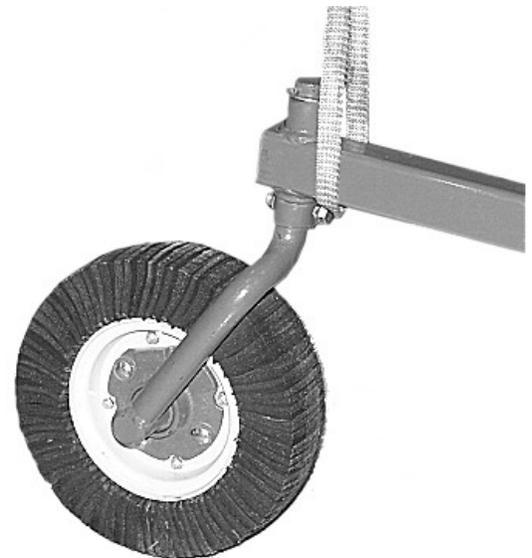
1. Position machine on flat level ground.
2. Raise cutter.



W03693—UN—10JAN00

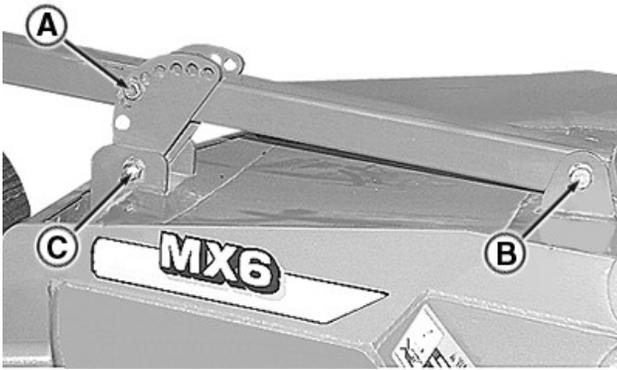
CAUTION: Be sure to support cutter frame at all four corner locations with the safety shop stands to prevent accidental lowering. Do not position safety stands under axle or wheel supports because these components can rotate.

3. Place safety shop stands under cutter.
4. Lower cutter onto stands.



W03716—UN—07FEB00

5. Wrap a lifting strap around the axle support tube and attach to a hoist.



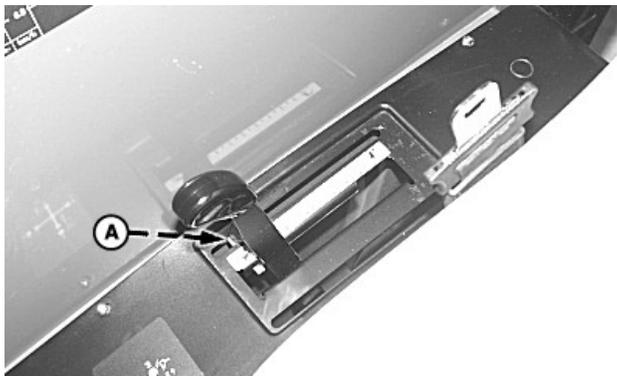
PY45070—UN—23JAN18

- A—Cap Screw and Lock Nut
- B—Cap Screw and Lock Nut
- C—Cap Screw and Lock Nut (2 used)

6. Loosen lock nut and cap screw (B).
7. Loosen two cap screws and lock nuts (C).
8. Remove lock nut and cap screw (A).
9. Raise or lower axle support tube to desired cutting height position.
10. Reinstall cap screw and lock nut (A). Tighten all lock nuts.

NOTE: MX7: Repeat steps (5—10) on the second tailwheel (if equipped).

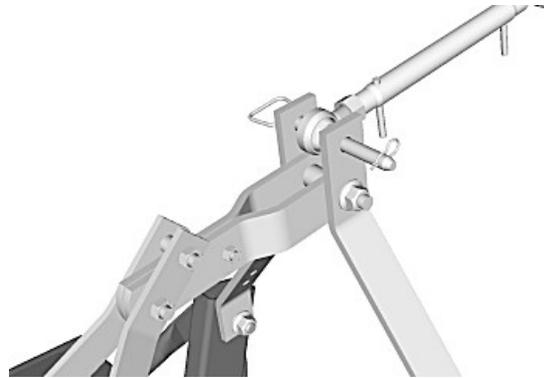
11. Raise cutter and remove safety stands.
12. Using the control lever, lower cutter until skid shoe is parallel to ground and rear wheel touches the ground.



W03700—UN—26JAN00

- A—Depth Stop

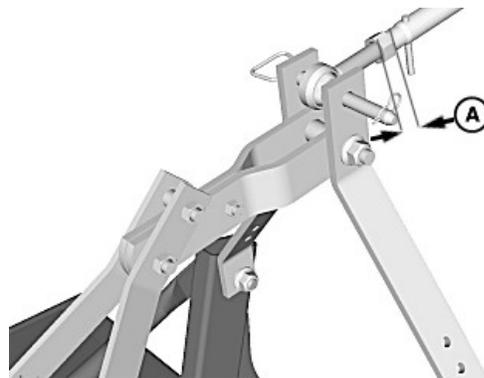
13. Adjust depth stop (A). (See your tractor Operator's Manual.)



P15610—UN—25SEP09

NOTE: The tailwheel supports the rear of the machine and the draft links support the front to allow the cutter to follow the ground contour.

14. Adjust center link to take all slack out of connection.



P15611—UN—25SEP09

- A—Distance
- B—Links

IMPORTANT: Loosening the center link can allow the driveline to contact the cutter frame or tractor tires to contact the chain shield. Raise the cutter slowly and check for interference. Lengthen tractor lift links to provide clearance to full height.

NOTE: Lift height can also be limited by installing stops on the control lever bracket for the rockshaft .

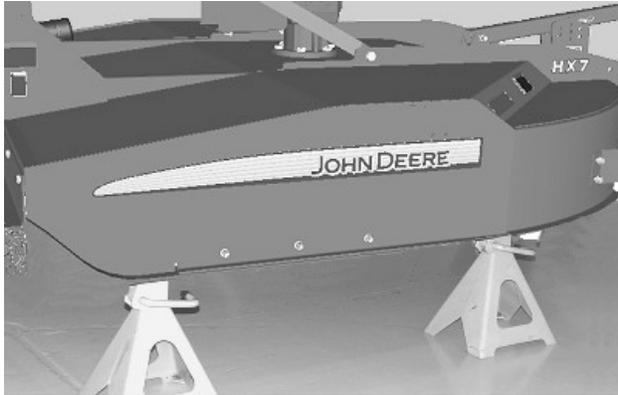
15. Lengthen center link so distance (A) is according to specifications, allowing links (B) to swing free. It allows the rear of cutter to float over obstructions.

Specification

Center Link—Distance.	12 mm (1/2 in)
-------------------------------	-------------------

Adjust Cut Height and Tailwheel Position (HX6 & HX7)

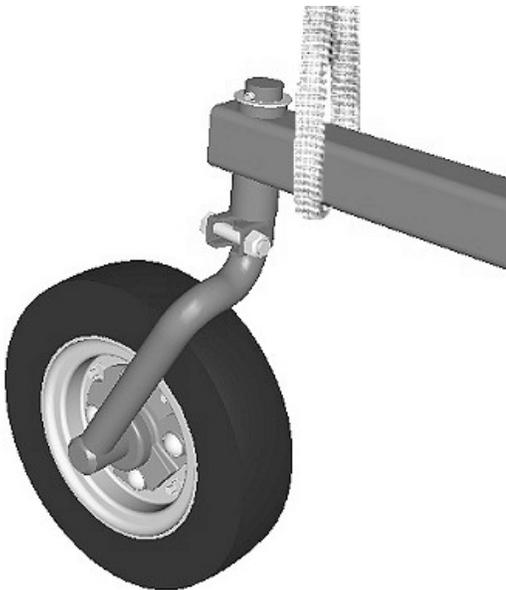
1. Position machine on flat level ground.
2. Raise cutter.



W22315—UN—13APR12

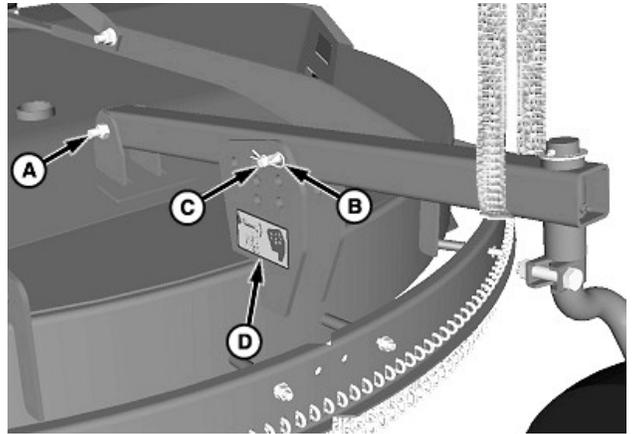
CAUTION: Be sure to support cutter frame at all four corner locations with the safety shop stands to prevent accidental lowering. Do not position safety stands under axle or wheel supports because these components can rotate.

3. Place safety shop stands under cutter.
4. Lower cutter onto stands.

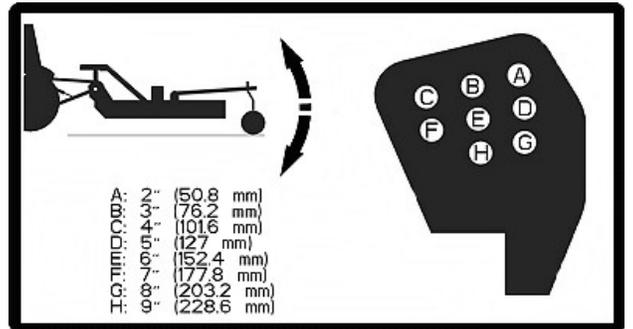


W22314—UN—12APR12

5. Wrap a lifting strap around the axle support tube and attach to a hoist.



W22791—UN—18JUL12

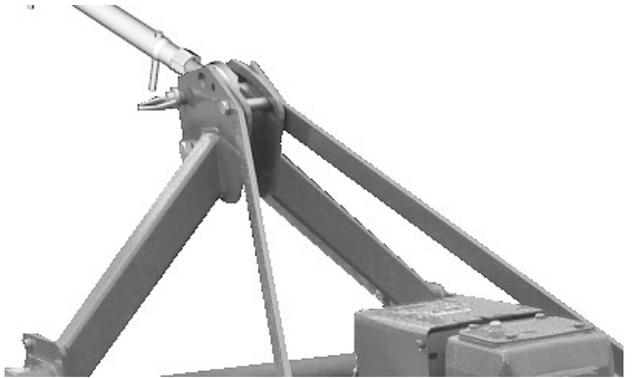


W22792—UN—18JUL12

(D)

- A—Cap Screw and Lock Nut
- B—Spring Pin
- C—Pin
- D—Decal

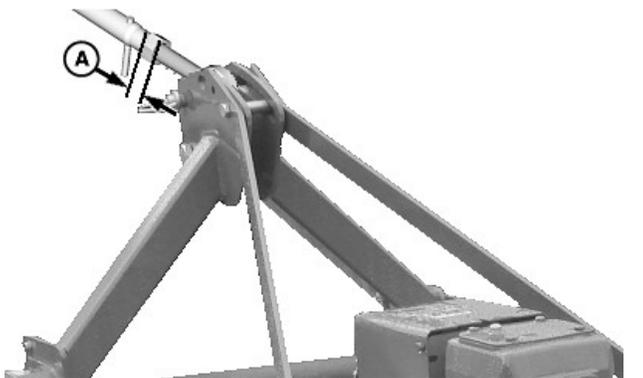
6. Loosen lock nut and cap screw (A).
7. Remove and retain the spring pin (B).
8. Remove and retain the pin (C).
9. Raise or lower axle support tube to desired cutting height position. Refer to decal (D) for cutting height information.
10. Reinstall pin (C) and spring pin (B).
11. Tighten lock nut and cap screw (A).
12. Raise cutter and remove safety stands.
13. Using the control lever (rock shaft), lower cutter until skid shoe is parallel to ground and the tailwheel touches the ground.
14. Adjust depth stop. (See your tractor Operator's Manual.)



W22396—UN—17APR12

NOTE: The tailwheel supports the rear of the machine and the draft links support the front to allow the cutter to follow the ground contour.

15. Adjust center link to take all slack out of connection.



W22397—UN—17APR12

A—Distance

IMPORTANT: Loosening the center link can allow the driveline to contact the cutter frame or tractor tires to contact the chain shield. Raise the cutter slowly and check for interference. Lengthen tractor lift links to provide clearance to full height.

NOTE: Lift height can also be limited by installing stops on the control lever bracket of the rockshaft.

16. Lengthen center link so distance (A) is according to specifications, allowing links to swing free. It allows the rear of cutter to float over obstructions.

Specification

Center Link—Distance. 12 mm
(1/2 in)

RD91939,000025A-19-25JAN18

Keep Riders off Machine



W14591—UN—05OCT88

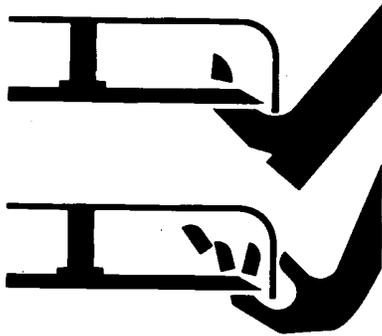
CAUTION: Keep off riders. Riders are subject to injury or death such as getting struck by foreign objects and being thrown off the machine. Riders can also fall off and run over by machine. Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner.

RD91939,000025B-19-23JAN18

Follow Safe Operating Procedures



TS265—UN—23AUG88



TS273—UN—23AUG88

⚠ CAUTION: To help prevent severe injury or death to you or someone else:

- Never operate the cutter when other people are in the vicinity. Debris can be thrown hundreds of feet. Keep all shields in place. Including the ones on discharge opening at front and rear of deck.
- Before starting machine, lower to the ground. Engage tractor PTO and gradually increase the speed.
- Operate tractor at rated PTO speed. If engine speed is too slow or too fast, machine cannot perform properly.
- Where conditions make it necessary to slow ground speed, shift to a lower gear rather than reducing engine speed. The engine maintains rated speed and keep cutter running at optimum cutting speed.
- Operate machine from tractor seat only.
- Never adjust machine while in motion.
- Slow down when turning or traveling over rough ground.
- Avoid holes when operating on hillsides. Tractor roll-over could result.
- Shut off tractor engine and engage tractor park brake and/or place transmission in "Park" when leaving tractor. Remove key when leaving tractor unattended.
- Components behind shields will rotate

several minutes after power is shutoff. Look and listen for evidence of rotation before removing shielding.

RD91939,000025C-19-28JAN18

Operating the Cutter for Best Performance

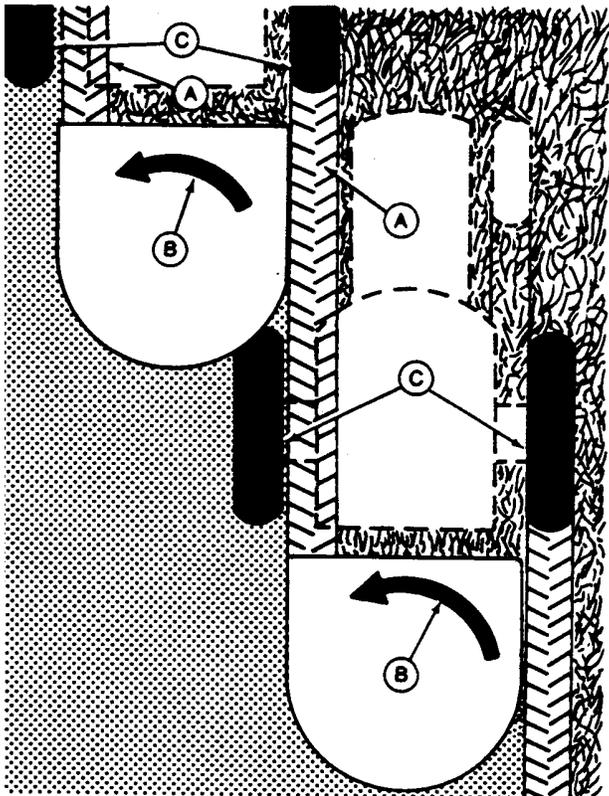


W07928—UN—30JUN06

- Operate the cutter at full PTO rated speed.
- Slower ground speeds, less than 8 km/h (5 mph), results in better cut quality.
- For best results, set cutting height as low as possible (less than 100 mm (4 in)).
- For most conditions, adjust the cutter so that skid (wear) shoes are parallel to the ground.
- Blades must be sharp. Be sure that suction blades are installed for the correct rotation. (See REPLACING BLADES in the Service section.)

RD91939,000025D-19-23JAN18

Cutting Technique



W14653—UN—05OCT88

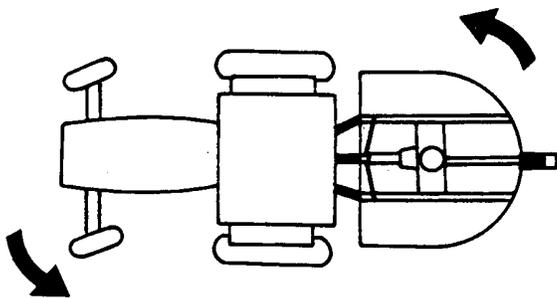
- A—Downed Grass (Previous Cut)
- B—Blade Rotation
- C—Tractor Tires (Uncut Material on Right)

Adjust tractor rear tread so inside dimension between tires is equal to width of cutter. If this width is not possible, set tread to maximum width.

Due to direction of blade rotation, the cutter must be operated with uncut portion to the right-hand side. It allows grass knocked down by tractor tires on the previous cut to be picked up and cut on the next pass.

RD91939,000025E-19-23JAN18

Turning Cutter



W14593—UN—05OCT88

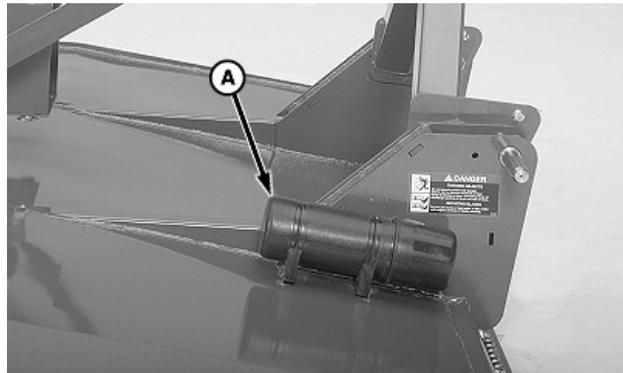
IMPORTANT: To help prevent damage to the side skirts or tailwheel, raise the cutter when turning if headland is rough or uneven.

Avoid hitting objects such as trees or fences, the cutter makes a large arc when turning. Reduce ground speed.

If ground speed is reduced and headland is flat, it is not necessary to raise the cutter when turning.

RD91939,000025F-19-23JAN18

Operator's Manual Storage Location (HX6 & HX7)



W22641—UN—06JUN12

A—Container

Rotary cutter Operator's Manual can be stored on the machine in container (A).

RD91939,0000260-19-23JAN18

Attachments Available

A variety of attachments approved for use with the rotary cutter are available. To purchase approved attachments, see your John Deere dealer .

NOTE: When ordering attachment bundle, make sure to request the installation instructions and operating information from your John Deere dealer.

Installation instructions are available online to John Deere dealers.

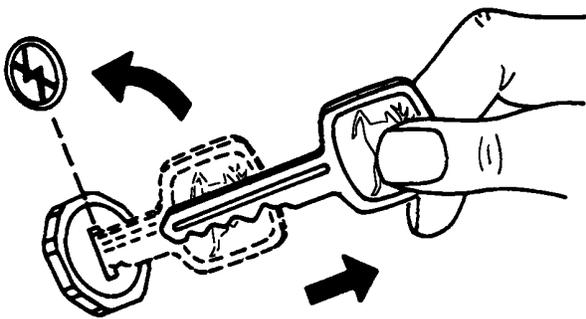
RD91939,0000261-19-23JAN18

Lubrication and Maintenance

Lubricating and Maintaining Machine Safely



TS1644—UN—22AUG95

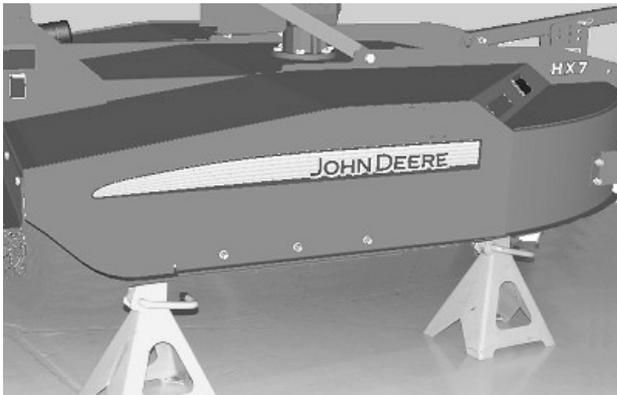


E50093—UN—08AUG01

CAUTION: Help prevent bodily injury or death caused by entanglement in rotating driveline or blades. Entanglement in rotating driveline or getting struck by blades can cause serious injury or death.

Components will be hot after operation. Let all components cool before servicing.

Replace all shields after lubricating or servicing.



W22315—UN—13APR12

CAUTION: To help prevent personal injury caused by unexpected movement, be sure to service machine on a level surface.

The blades and blade holder rotates for several minutes after the PTO is shutoff. Look and listen for rotating driveline to stop before working on the cutter.

When checking the torque of the gear case and blade holder hardware, it is necessary to work underneath cutter. Be sure to support cutter frame at all four corner locations with the safety shop stands to prevent accidental lowering. Do not position safety stands under axle or wheel supports because these components can rotate.

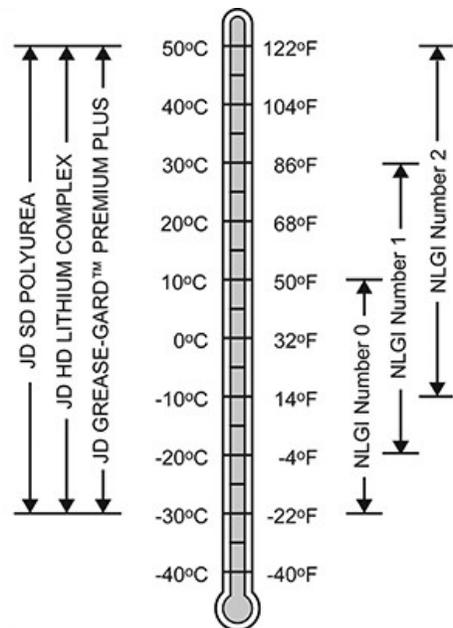
Before servicing, adjusting or lubricating machine connected to a tractor:

1. Lower machine to the ground.
2. Engage tractor park brake and place transmission in "Park".
3. Disengage PTO.
4. Shut off engine and remove ignition key.
5. Wait until all moving parts have stopped.
6. Disconnect PTO driveline from tractor.

RD91939,0000262-19-23JAN18

Multipurpose Extreme Pressure (EP) Grease

IMPORTANT: For automated lubrication systems different ambient air temperatures need to be considered.



RG30199—UN—08MAR18

Greases for Air Temperature Ranges

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

John Deere SD Polyurea Grease is preferred.

The following greases are also recommended:

- John Deere HD Lithium Complex Grease
- John Deere Grease-Gard™ Premium Plus

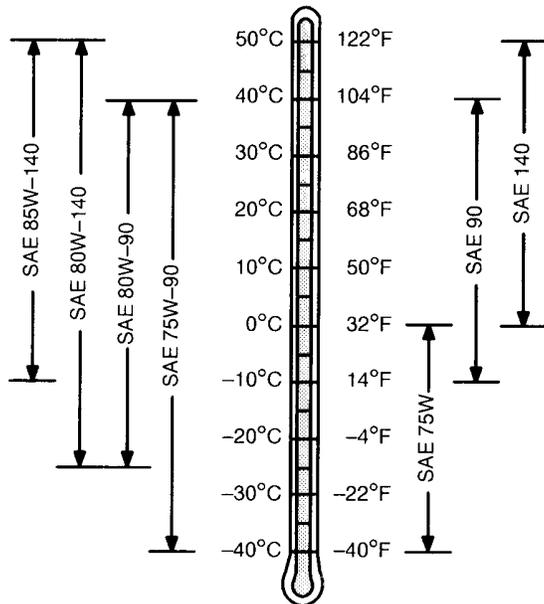
Other greases may be used if they meet the following:

- NLGI Performance Classification GC-LB
- ISO-L-X-BDHB 2 or DIN KP 2 N-10 Lithium Complex, Non-Synthetic Base Oil (100 to 220 mm²/s @ 40°C)

IMPORTANT: Some types of thickeners, base oils, and additives used in greases are not compatible with others. Mixing greases should be avoided. Consult your grease supplier before mixing different types of grease.

DX,GREA1-19-13JAN18

Gear Case Oil



TS1653—UN—14MAR96

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

The following oils are preferred:

Grease-Gard is a trademark of Deere & Company

- John Deere GL-5 GEAR LUBRICANT
- John Deere

If other oils meet API Service Classification GL-5, it can be used.

RD91939,0000263-19-23JAN18

Alternative and Synthetic Lubricants

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

Some John Deere brand coolants and lubricants may not be available in your location.

Consult your John Deere 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 John Deere branded fluids or fluids that have been tested and/or approved for use in John Deere equipment.

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

DX,ALTER-19-13JAN18

Mixing of 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 John Deere dealer to obtain specific information and recommendations.

DX,LUBMIX-19-18MAR96

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.

Observe Lubrication Symbols

DX,LUBST-19-11APR11

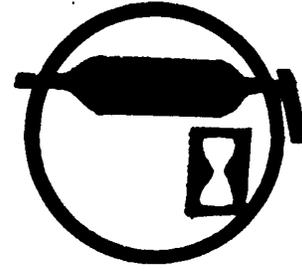
Perform Lubrication and Maintenance

CAUTION: Do not clean, lubricate, or adjust machine while it is in motion.

IMPORTANT: The recommended service intervals are based on normal conditions. Severe or unusual conditions require more frequent lubrication.

Perform each lubrication and service illustrated in this section at the beginning of the season and at the end of the season.

Clean grease fittings before lubricating. Replace lost or broken fittings immediately. If a new fitting fails to take grease, remove and check for failure of adjoining parts.



W11368—UN—07OCT88

Lubricate with John Deere SD POLYUREA GREASE or an equivalent SAE multipurpose-type grease (unless otherwise specified) at hourly intervals indicated on the symbols.

RD91939,0000265-19-23JAN18

RD91939,0000264-19-23JAN18

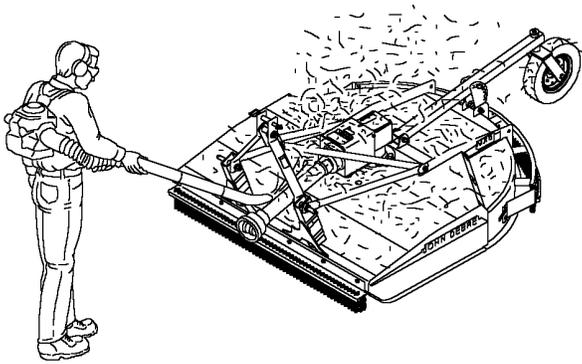
Service Intervals Chart

	Daily	Every 30 Hr.	Every 50 Hr.	Annually	As Required
Keeping Cutter Clean	X				
Tailwheel Bearings	X				
Checking Gear Case Oil Level	X				
PTO Driveline	X				
Checking Tailwheel Nut Torque		X			
Tailwheel Spindles			X		
Tightening Gear Case Mounting Hardware			X		
Tightening Blade Holder Hardware			X		
Check Blade Hardware Torque			X		
Changing Gear Case Oil Level				X	
Check Driveline Shields					X
Checking Hitch Pin Torque					X
Free Slip Clutch (HX6 & HX7)					X
Free Slip Clutch (MX5, MX6 & MX7)					X

Maintenance Intervals Chart

RD91939,0000266-19-07MAY18

Keeping Cutter Clean

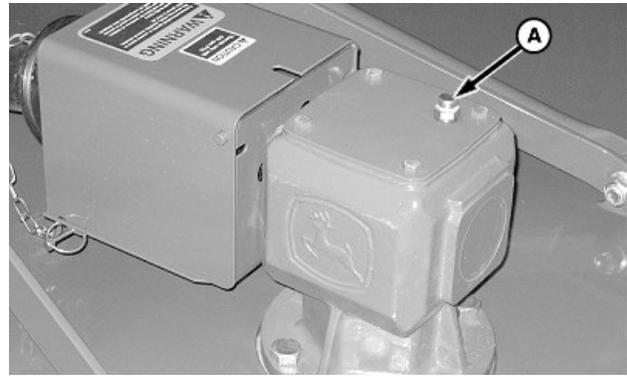


W03738—UN—22FEB00

IMPORTANT: Avoid machine damage due to buildup of debris, if any, on the cutter deck. Clean cuttings from deck **DAILY** or more often if necessary.

Material buildup interferes with the driveline, causing overheating of gear case, resulting in component damage or deck corrosion due to moisture in the material.

RD91939,0000267-19-23JAN18



W08908—UN—13SEP07



W08913—UN—23AUG07

Remove dipstick/vent (A). Verify that the oil level is between the lines (B). Add John Deere GL-5 GEAR LUBRICANT, or equivalent, if necessary.

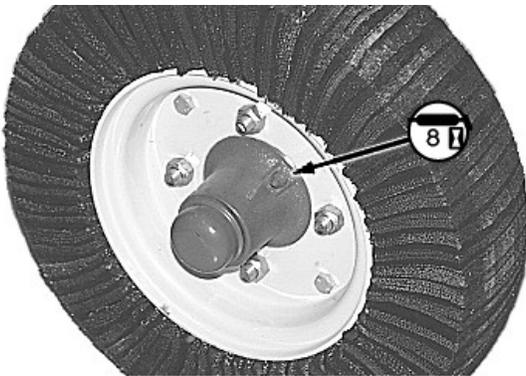
Install dipstick/vent. Apply torque.

Specification

Dipstick—Torque. 10 N·m
(88 lb·in)

RD91939,0000269-19-23JAN18

Tailwheel Bearings

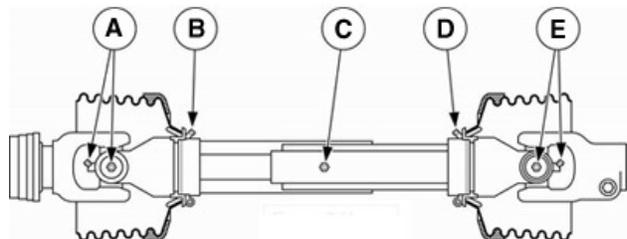


W05657—UN—19AUG02
RD91939,0000268-19-23JAN18

Checking Gear Case Oil Level

CAUTION: Before servicing machine refer to **LUBRICATING AND MAINTAINING MACHINE SAFELY** at the beginning of this section.

PTO Driveline



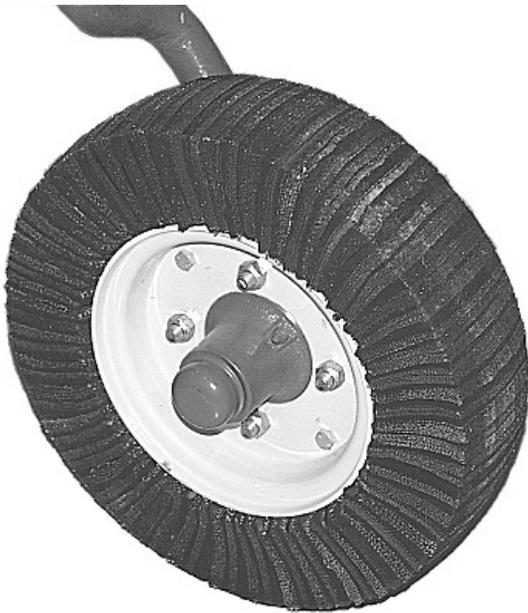
P17749—UN—03JUL15

- A—15 g
- B—6 g
- C—15 g
- D—6 g
- E—15 g

Lubricate each grease point as required.

RD91939,000026A-19-23JAN18

Checking Tailwheel Nut Torque



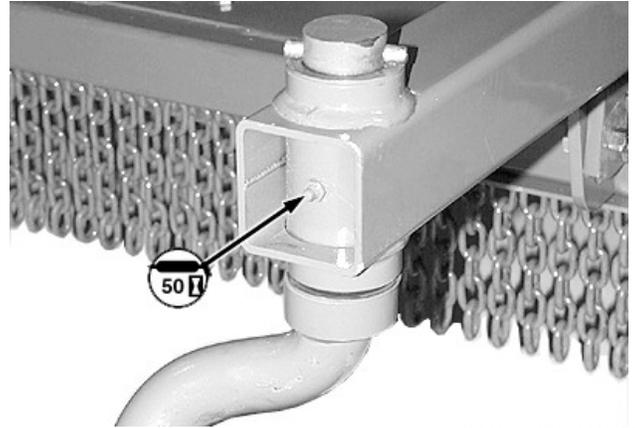
W03714—UN—02FEB00

Tighten tailwheel hardware to specifications.

Specification

Tailwheel Nuts—Torque. 110 N·m
(80 lb·ft)

RD91939.000026B-19-23JAN18

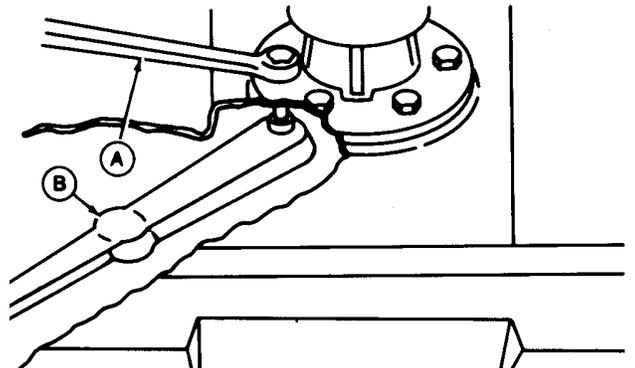


MX7

W03657—UN—09AUG99

RD91939.000026C-19-23JAN18

Tightening Gear Case Mounting Hardware



W15390—UN—11APR90

A—Wrench
B—Torque Wrench

CAUTION: Before servicing machine refer to **LUBRICATING AND MAINTAINING MACHINE SAFELY** at the beginning of this section.

IMPORTANT: To help prevent structural damage caused by loose hardware, tighten gear case hardware as specified. Check torque after first 8 hours of use and every 50 hours thereafter.

NOTE: Use an assistant to aid in tightening procedure.
Access holes are provided in bottom of blade holder pan. To align the holes with gear case mounting hardware, manually rotate the blade holder.

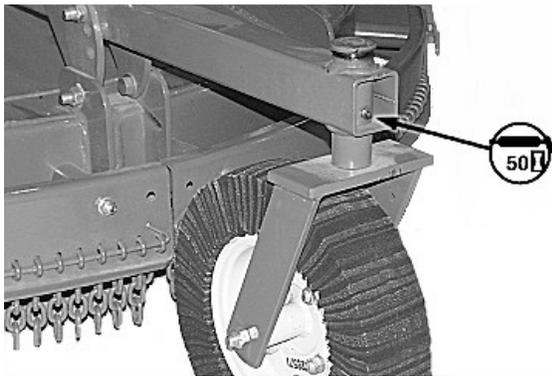
Tighten gear case mounting hardware to specifications using a wrench (A), torque wrench (B), and a torque multiplier if necessary.

Specification

Gear Case Mounting
Hardware—Torque. 350 N·m
(258 lb·ft)

RD91939.000026D-19-23JAN18

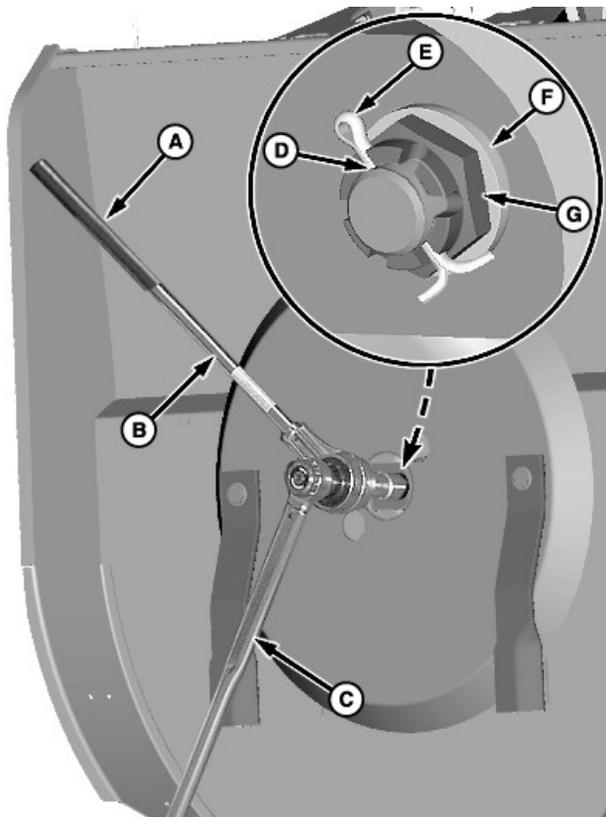
Tailwheel Spindle



MX5 and MX6

W03672—UN—18NOV99

Tightening Blade Holder Hardware



W08909—UN—18SEP07

- A—Piece of Pipe
- B—Torque Multiplier
- C—Torque Wrench
- D—Hole
- E—Cotter Pin
- F—Washer, 31 x 56 x 6
- G—Nut, M30

Before servicing machine refer to LUBRICATING AND MAINTAINING MACHINE SAFELY at the beginning of this section.

IMPORTANT: Operating with a loose blade holder damages the splined connection. To ensure proper seating between the blade holder and output shaft, two initial tightenings are required. Retighten after 1 hour and again after the first day of operation. In severe cutting conditions, recheck torque every 50 hours.

1. Remove and discard the existing cotter pin.
2. Make sure the washer (F) and M30 nut (G) are installed as shown. Tighten nut to specification using a torque wrench (C), torque multiplier (B), and a long piece of pipe (A). Position pipe into a corner of the machine.

Specification

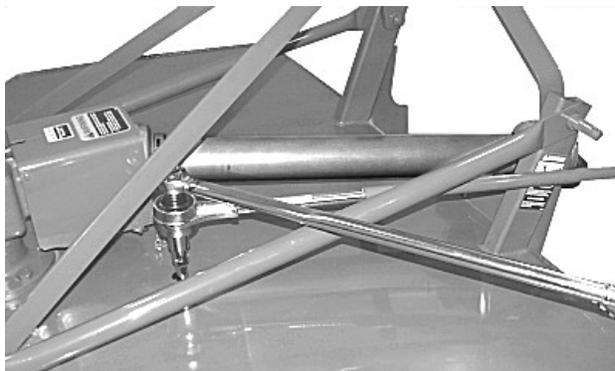
Nut—Torque. 610 N•m
(450 lb•ft)

NOTE: Make sure slots in nut (G) are aligned with hole (D) in shaft after tightening to specified torque. If necessary, tighten the nut slightly more to align slots with the hole.

3. Install NEW cotter pin (E).

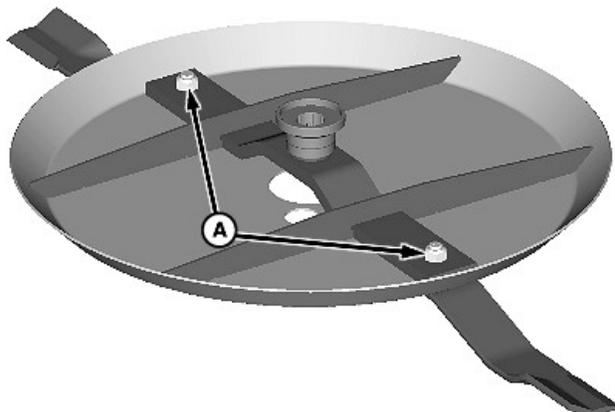
RD91939,000026E-19-23JAN18

Check Blade Hardware Torque



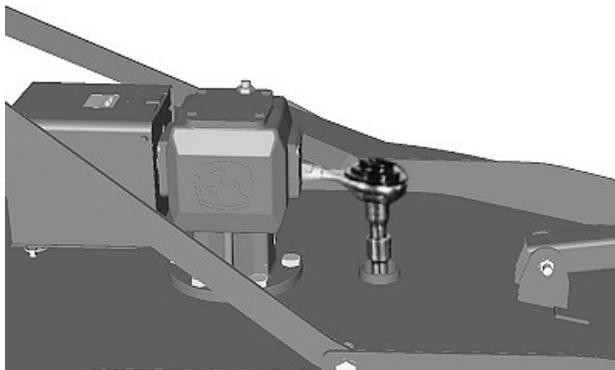
MX Model Shown

W06208—UN—19MAY03



A—Lock Nuts

W08969—UN—18SEP07



HX Model Shown

W22403—UN—17APR12

CAUTION: Before servicing machine refer to **LUBRICATING AND MAINTAINING MACHINE SAFELY** at the beginning of this section.

Manually rotate driveline to align each lock nut (A) with the access hole in top of deck. Position torque multiplier, as shown.

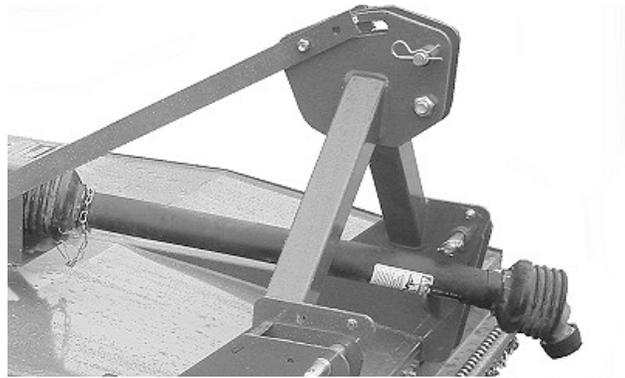
Tighten lock nuts (A) according to specification.

Specification

Lock Nut—Torque. 850 N·m
(627 lb·ft)

RD91939,000026F-19-23JAN18

Check Driveline Shields



W22399—UN—17APR12

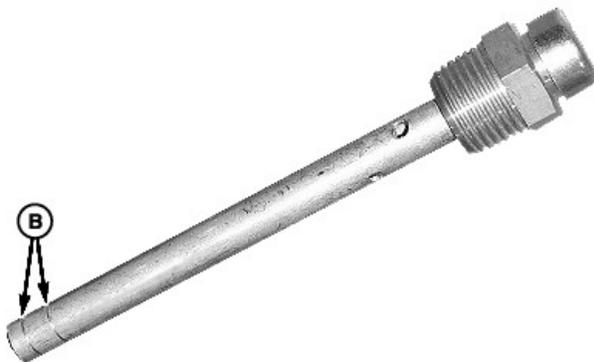
HX Model Shown

Changing Gear Case Oil Level

CAUTION: Before servicing machine refer to **LUBRICATING AND MAINTAINING MACHINE SAFELY** at the beginning of this section.



W08908—UN—13SEP07



W08913—UN—23AUG07

A—Dipstick/Vent
B—Lines

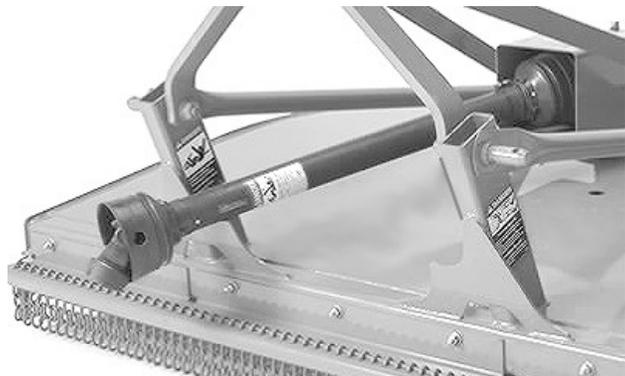
Remove dipstick/vent (A). Verify that the oil level is between the lines (B). Add John Deere GL-5 GEAR LUBRICANT, or equivalent, if necessary.

Install dipstick/vent. Apply torque.

Specification

Dipstick—Torque. 10 N·m
(88 lb·in)

RD91939,0000270-19-23JAN18



W07852—UN—25MAY06

MX Model Shown

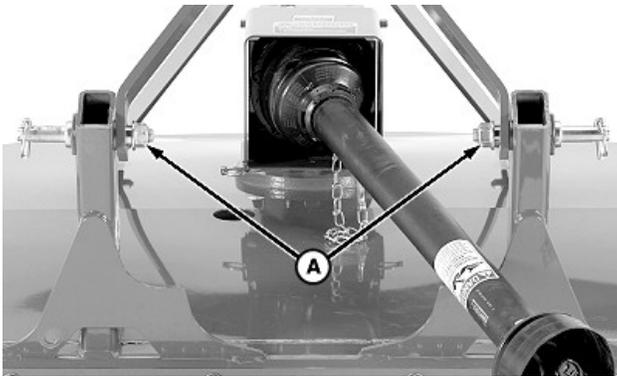
CAUTION: Before servicing machine refer to **LUBRICATING AND MAINTAINING MACHINE SAFELY** at the beginning of this section.

Avoid bodily injury or death from entanglement in rotating drivelines, replace any missing or damaged shielding. Shield the machine before operating.

Check that driveline shields rotate freely. Lubricate or replace if necessary. (See your John Deere dealer.)

RD91939,0000271-19-23JAN18

Checking Hitch Pin Torque



W08972—UN—12SEP07

A—Lock Nuts

1. Check lock nuts (hitch pin) (A) periodically to be sure that they are tight.
2. Tighten to specification.

Specification

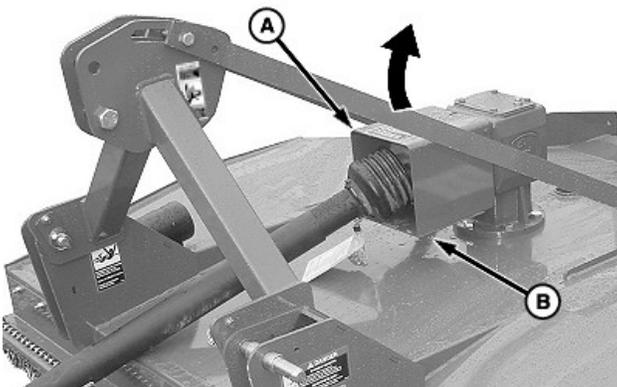
Hitch Pin Lock Nut—Torque..... 350 N·m
(258 lb·ft)

RD91939,0000272-19-23JAN18

How to Free a Seized Slip Clutch (HX6 & HX7)



TS1644—UN—22AUG95



W23147—UN—11OCT12

A—PTO Shield
B—Quick Lock Pin (1 each side)

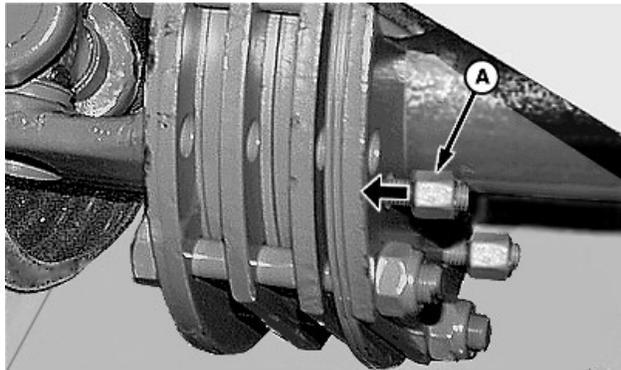
CAUTION: Avoid bodily injury or death caused by unexpected tractor movement or entanglement in rotating driveline.

- Disengage PTO.
- Engage park brake and place transmission in PARK.
- Shut off engine and remove ignition key.

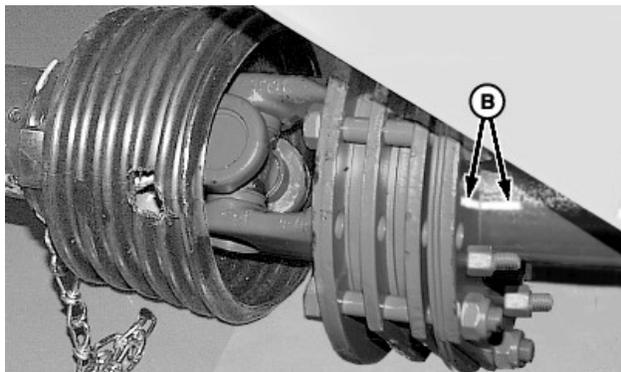
IMPORTANT: Friction type clutches seize if left unused for a period, especially in humid, or damp conditions. If the clutch does not slip for a long period (more than six months), the slipping torque goes up to the effects of corrosion. If the clutch slips too frequently or for too long of a duration, the linings fail. If the clutch slips too infrequently without performing the run in process, the clutch. Slip the clutch using the following procedure.

Perform the following steps with the cutter attached to tractor. (See attach procedure in Attach and Detach section.)

1. Remove two quick lock pins (B) and raise PTO shield (A).



W08434—UN—16JAN07

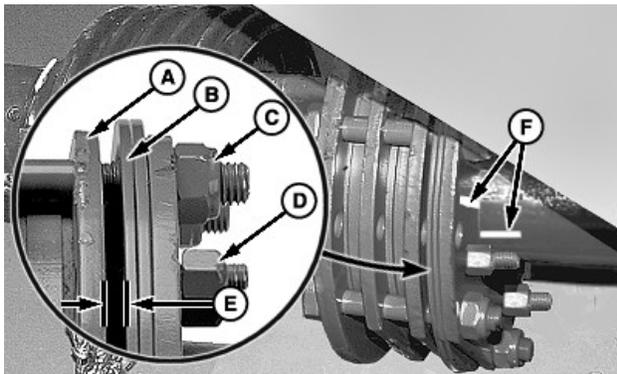


W08435—UN—08JAN07

A—Nuts, M8
B—Chalk Mark

IMPORTANT: Avoid driveline damage, DO NOT overtighten cap screws and lock nuts. A gap must be left between clutch plate and disk springs.

2. Tighten four M8 nuts (A) to remove pressure from clutch disks.
3. Place chalk marks (B) across backup plate and hub.
4. Start tractor engine and run at low rpm. Check clutch slippage:
 - a. Engage PTO for 2—3 seconds to allow the clutch to slip.
 - b. Disengage the PTO.
 - c. Repeat Steps a and b at least three times.
 - d. Disengage PTO, shut off the tractor engine, remove key, and allow components to stop rotating.



W08615—UN—18MAY07

- A—Clutch Plate
- B—Belleville Springs
- C—Lock Nut (6 used)
- D—Nut, M8 (4 used)
- E—Gap

- e. Check alignment of chalk marks:

If marks are still aligned, clutch DID NOT slip:
 Disassemble and inspect for wear or damage.
 (See DISASSEMBLE AND INSPECT SLIP CLUTCH in Service section.)

If marks are not aligned, clutch has slipped:

1. Loosen (turn counterclockwise) four M8 nuts (D) applying spring pressure to the friction disks.
2. Measure gap (E) between clutch plate (A) and disk spring (B). If the gap is not within specification, evenly adjust six lock nuts (C) until gap is to specification.

Specification

Clutch to Spring Gap -	
Distance—HX6 & HX7.	6.00 mm (0.236 in)

IMPORTANT: DO NOT set the Clutch Gap less than 5.0 mm with run-in Plate

⚠ CAUTION: Avoid bodily injury or death from entanglement in rotating drivelines. Replace all shielding removed and replace any missing or damaged shielding. Shield the machine before operating.

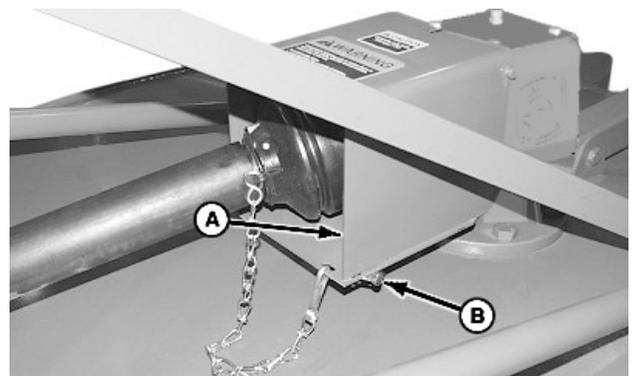
5. Close and fasten PTO shield.

RD91939,0000273-19-23JAN18

Freeing Slip Clutch (MX5, MX6 & MX7)



TS1644—UN—22AUG95



W08910—UN—23AUG07

- A—PTO Shield
- B—Quick Lock Pin (1 each side)

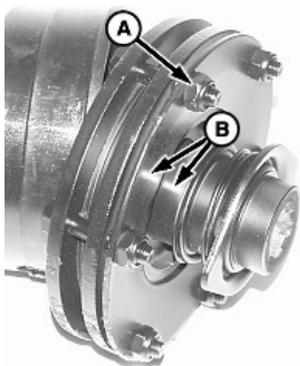
⚠ CAUTION: Help prevent bodily injury or death caused by unexpected tractor movement or entanglement in rotating driveline.

- Disengage PTO.
- Engage park brake or place transmission in PARK.
- Shut off engine and remove ignition key.

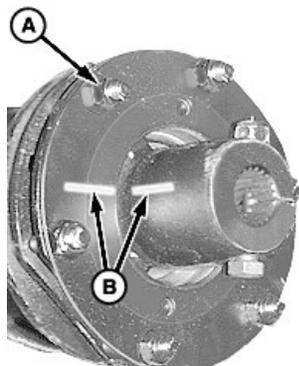
IMPORTANT: Friction type clutches seize if left unused for a period, especially in humid, or damp conditions. If the clutch does not slip for a long period (more than six months), the slipping torque goes up to the effects of corrosion. If the clutch slips too frequently or for too long of a duration, the linings fail. If the clutch slips too infrequently without performing the run in process, the clutch. Slip the clutch using the following procedure.

Perform the following steps using the tractor that operates the cutter. (See attaching procedures in Attaching and Detaching section.)

1. Remove two quick lock pins (B) and raise PTO shield (A).



W08637—UN—18MAY07
MX5 and MX6



W08638—UN—18MAY07
MX7

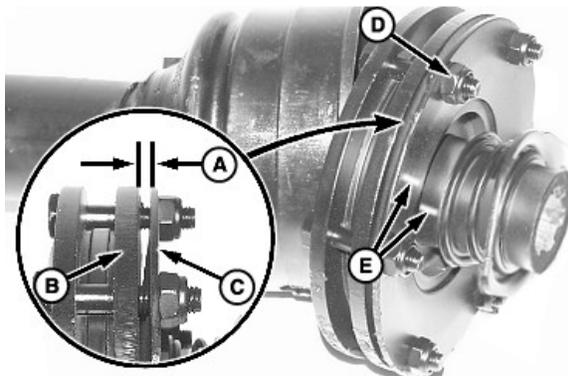
A—Lock Nut (6 used)
B—Chalk Mark

NOTE: Drivelines removed for illustration purposes.

2. Loosen six lock nuts (A) progressively leaving some tension on disk spring.
3. Place chalk mark (B) across disk spring and hub.

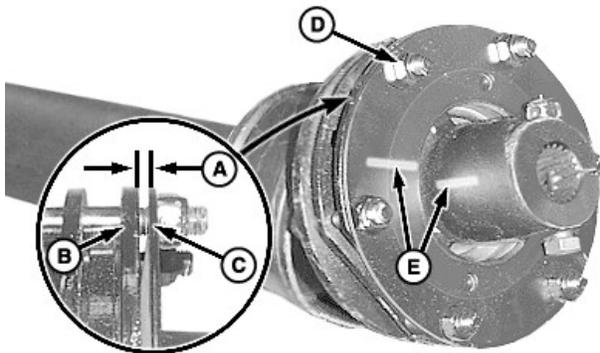
CAUTION: Help prevent personal injury to bystanders from thrown objects. Be sure no one is near the cutter when adjusting.

4. Start tractor and run at low rpm. Check clutch slippage:
 - a. Engage PTO for 2—3 seconds to slip the clutch.
 - b. Disengage the PTO.
 - c. Repeat Steps a and b at least three times.
 - d. Disengage PTO, shut off the tractor engine, remove key and allow components to stop rotating.



MX5 and MX6

W08636—UN—18MAY07



MX7

W08619—UN—18MAY07

A—Gap
B—Clutch Plate
C—Belleville Spring
D—Lock Nut (6 used)
E—Chalk Mark

- e. Check alignment of chalk marks (E):

If marks are still aligned, clutch DID NOT slip: Disassemble and inspect for wear or damage. (See DISASSEMBLING AND INSPECTING SLIP CLUTCH in Service section.)

If marks are not aligned, clutch has slipped:

IMPORTANT: To avoid driveline damage, DO NOT overtighten lock nuts. A gap must be left between the clutch plate (B) and disk spring (C).

1. To apply spring pressure to clutch disks, tighten six lock nuts (D).
2. Measure gap (A) between the clutch plate (B) and disk spring (C). If the gap is not within specification, evenly adjust six lock nuts until gap is to specification.

Specification

Clutch to Spring Gap -	
Distance—MX5 & MX6	5.00 mm (0.196 in)
MX7	6.00 - 6.50 mm (0.236 - 0.255 in)

IMPORTANT: DO NOT set the Clutch Gap less than 5.0 mm (MX5 & MX6) and 5.5 mm (MX7), No Run-in Plate.

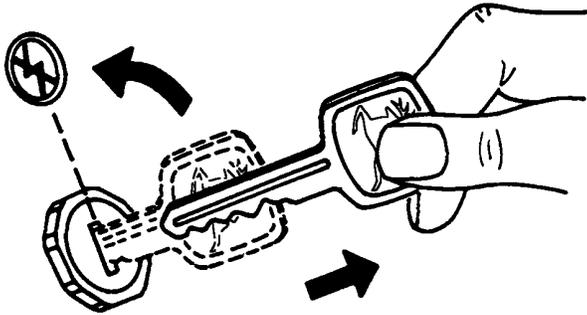
 CAUTION: To help prevent bodily injury or death from entanglement in rotating drivelines, replace all shielding removed and replace any missing or damaged shielding. Shield the machine before operating.

5. Close and fasten PTO shield.

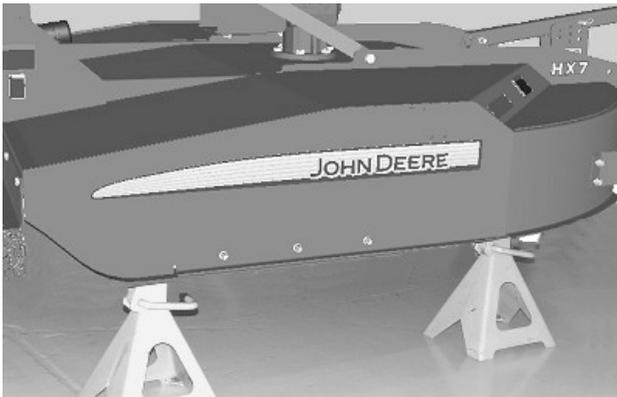
RD91939,0000274-19-23JAN18

Service

Practice Safe Service Procedures



E50093—UN—08AUG01



W22315—UN—13APR12

⚠ CAUTION: To help prevent personal injury caused by unexpected movement, be sure to service machine on a level surface.

The blades and blade holder rotates for several minutes after the PTO is shutoff. Look and listen for rotating driveline to stop before working on the cutter.

When servicing blades or blade holder, it is necessary to work underneath cutter. Be sure to support cutter frame at all four corner locations with the safety shop stands to prevent accidental lowering. Do not position safety stands under axle or wheel support because these components can rotate.

Before servicing or adjusting machine connected to a tractor:

1. Lower machine to the ground.
2. Engage tractor park brake and place transmission in "Park".
3. Disengage PTO.
4. Shut off engine and remove ignition key.
5. Wait until all moving parts have stopped.
6. Disconnect PTO driveline from tractor.

RD91939,0000275-19-24JAN18

Keep Service Area Clean



TS218—UN—23AUG88

⚠ CAUTION: To help prevent personal injury, keep the service area clean and dry. Wet or oily floors are slippery. Wet spots can be dangerous when working with electrical equipment.

Be sure that all electrical outlets and tools are properly grounded.

Use adequate light for the job at hand.

Never lubricate or service machine while it is moving. Keep hands, feet, and clothing away from power-driven parts. To relieve the system pressure disengage all power and operate the hydraulic controls.

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

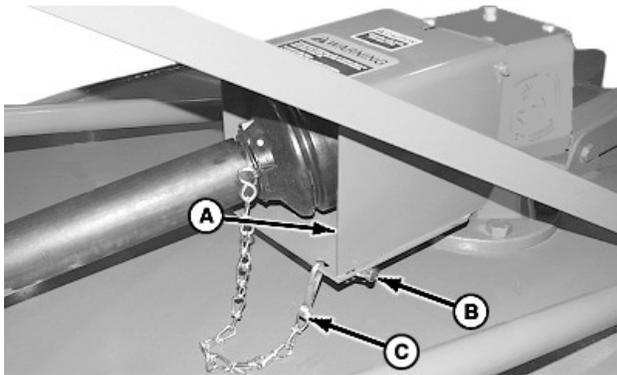
Understand service procedure before doing work.

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.

Disconnect tractor battery ground (—) cable before doing any adjustments or welding on the machine.

RD91939,0000276-19-24JAN18

Removing and Installing PTO Driveline—MX5 and MX6



W08911—UN—23AUG07

A—PTO Shield
B—Quick-Lock Pin (2 used)
C—Chain

1. Disconnect chain (C).
2. Remove two quick-lock pins (B) and raise PTO shield (A).

NOTE: Driveline removed for illustration purposes.



W03709—UN—26JAN00

A—Locking Collar

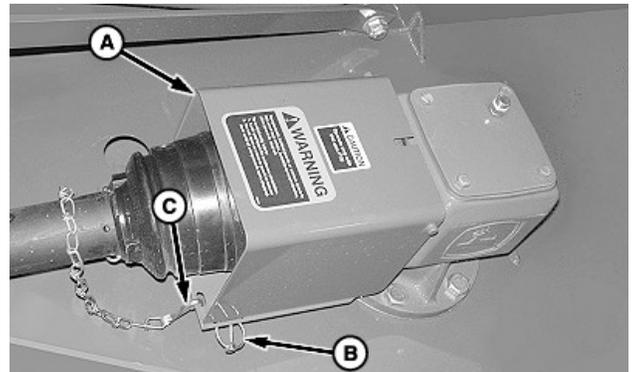
3. Pull locking collar (A) toward slip clutch.
4. Remove driveline assembly from the input shaft of the gear case.
5. Make repairs as necessary:
 - Slip clutch service—See **DISASSEMBLING AND INSPECTING SLIP CLUTCH—MX5 AND MX6** in this section.
 - Driveline repair—See your John Deere dealer.

IMPORTANT: Apply multipurpose grease on the input shaft of gear case .

6. Install in reverse order of removal.

RD91939,0000277-19-24JAN18

Removing and Installing PTO Driveline—MX7



W08912—UN—13SEP07

A—PTO Shield
B—Quick-Lock Pin (2 used)
C—Chain

1. Disconnect chain (C).
2. Remove two quick-lock pins (B) and raise PTO shield (A).

NOTE: Driveline removed for illustration purposes.



W07524—UN—19AUG05

A—Lock Nut
B—Cap Screw

3. Remove lock nut (A) and cap screw (B).
4. Remove driveline assembly from the input shaft of the gear case.
5. Make repairs as necessary:
 - Slip clutch service—See **DISASSEMBLING AND INSPECTING SLIP CLUTCH—MX7** in this section.
 - Driveline repair—See your John Deere dealer.
6. Install in reverse order of removal following these special instructions:

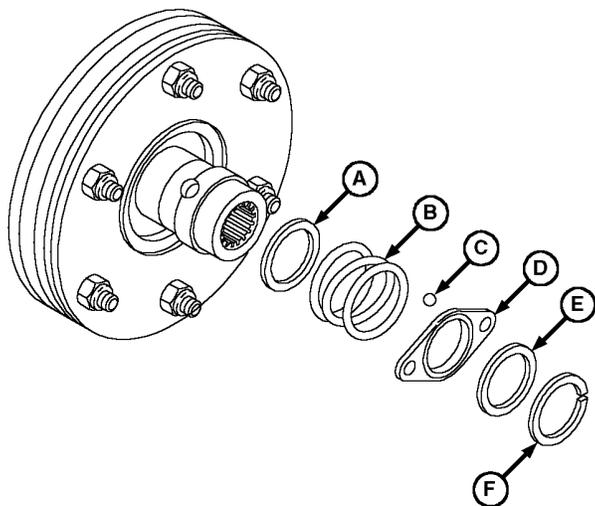
- Apply multipurpose grease on the input shaft of the gear case.
- Align hole in the hub with the groove in the input shaft and install cap screw and lock nut. Tighten lock nut to specification.

Specification

Cap Screw and Lock Nut—Torque 220 N·m
(160 lb·ft)

RD91939,0000278-19-24JAN18

**Disassembling and Inspecting Slip Clutch
—MX5 and MX6**



W03717—UN—15FEB00

- A—Ring
- B—Compression Spring
- C—Ball (3 used)
- D—Locking Collar
- E—Ring
- F—Snap Ring

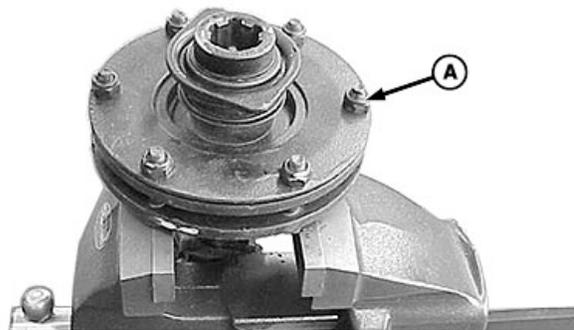
1. Remove PTO driveline. (See procedure in this section.)

NOTE: Parts (A—F) are replaced as a kit.

2. Remove locking collar assembly as follows:

- a. Pull back on locking collar (D).
- b. Remove snap ring (F).
- c. Remove parts (A—E).

NOTE: Disk springs, which are part of the clutch, keep tension on all components. When disassembling, release tension by loosening hardware progressively.

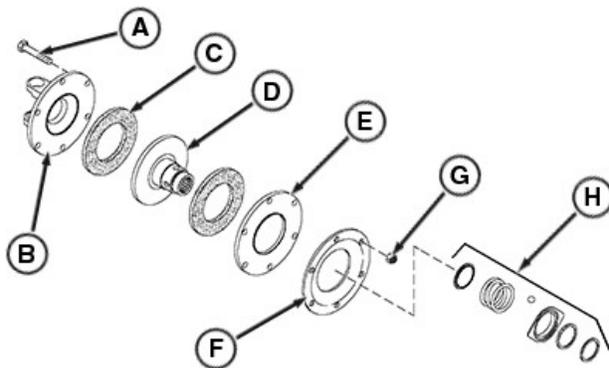


W04861—UN—25OCT01

A—Cap Screws and Lock Nuts

3. Place clutch in vise and remove cap screws and lock nuts (A) until tension is relieved.

NOTE: Friction disks appear to be part of the hub or yoke. Tap disks lightly on the edge to separate.



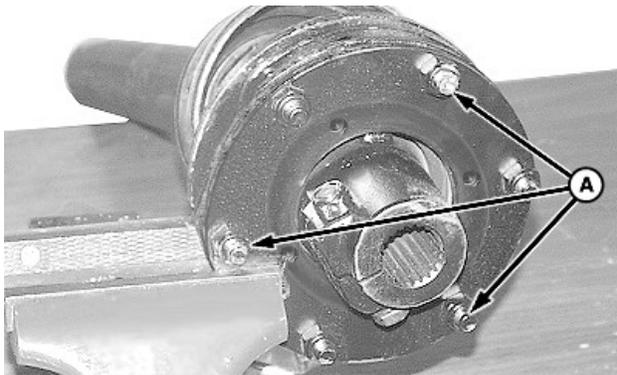
PY45071—UN—24JAN18

- A—Cap Screw (6 used)
- B—Yoke
- C—Friction Disk (2 used)
- D—Hub
- E—Clutch Plate
- F—Belleville Spring
- G—Lock Nut (6 used)
- H—Locking Collar

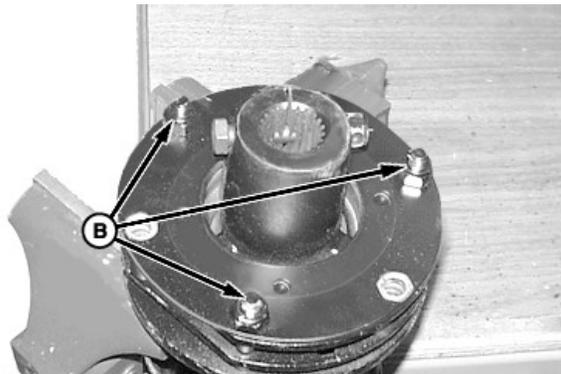
4. Inspect clutch components for wear or damage. Repair or replace parts as necessary.

RD91939,0000279-19-24JAN18

Disassembling and Inspecting Slip Clutch —MX7



W07520—UN—18AUG05



W07521—UN—18AUG05

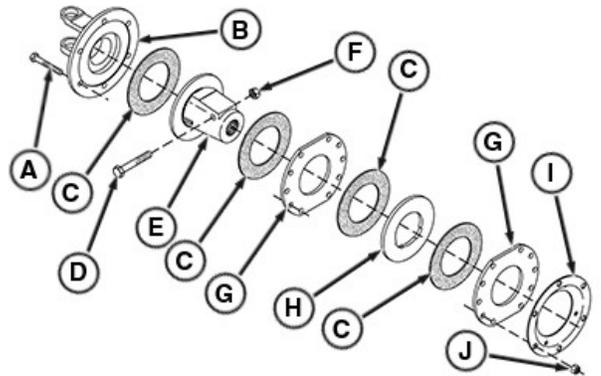
A—Cap Screws and Lock Nuts
B—Cap Screws and Lock Nuts

1. Remove PTO driveline. (See procedure in this section.)

NOTE: Disk springs, which are part of the clutch, keep tension on all components. When disassembling, release tension by loosening hardware progressively.

2. Place clutch in vise and remove cap screws and lock nuts (A) only.
3. Reposition clutch in vise and loosen cap screws and lock nuts (B) progressively until tension is relieved.

NOTE: Friction disks appear to be part of the hub or yoke. Tap disks lightly on the edge to separate.



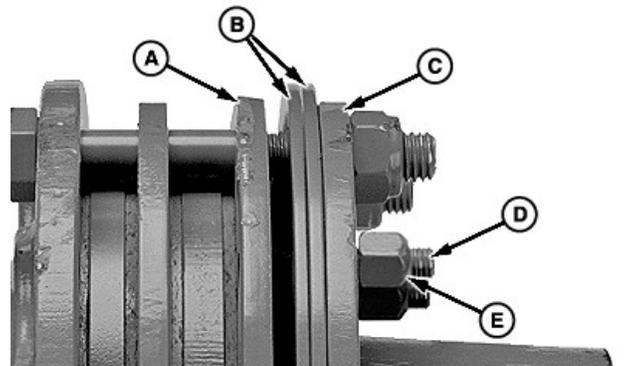
PY45072—UN—24JAN18

A—Cap Screw, M12 x 85 (6 used)
B—Flange Yoke
C—Friction Disks
D—Cap Screw, M14 x 80
E—Hub
F—Lock Nut, M14
G—Drive Plates
H—Drive Plate
I—Belleville Spring
J—Lock Nut, M12 (6 used)

4. Inspect clutch components for wear or damage. Repair or replace parts as necessary.

RD91939,000027A-19-24JAN18

Using Slip Clutch Storage Feature (HX6 & HX7)



W08626—UN—15MAY07

A—Thrust Plate
B—Belleville Springs
C—Backup Plate
D—Threaded Stud, M8 (4 used)
E—Lock Nut, M8 (4 used)

Friction type clutches seize if left unused for a period, especially in humid, or damp conditions.

Slip clutch has a feature to release spring tension on the internal parts. It prevents the friction disks from bonding to the steel clutch disks during storage.

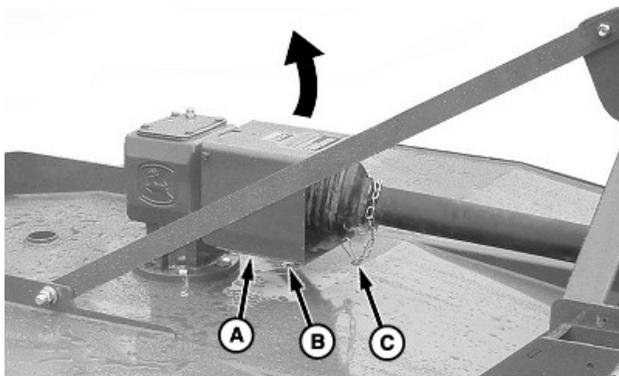
Tighten all four M8 lock nuts (E) onto threaded studs (D) until thrust plate (A) compresses disk springs (B) against backup plate (C). It relieves pressure on the friction disks.

To return the clutch to service, it is important to make

sure that the clutch slips. (See AS REQUIRED in Lubrication and Maintenance section.)

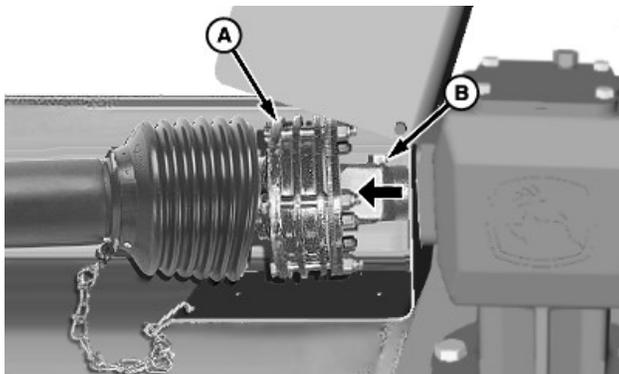
RD91939,000027B-19-24JAN18

Removing and Installing PTO Driveline (HX6 & HX7)



W22401—UN—17APR12

1. Disconnect chain (C).
2. Remove quick-lock pins (B) and raise PTO shield (A).



W09192—UN—28NOV07

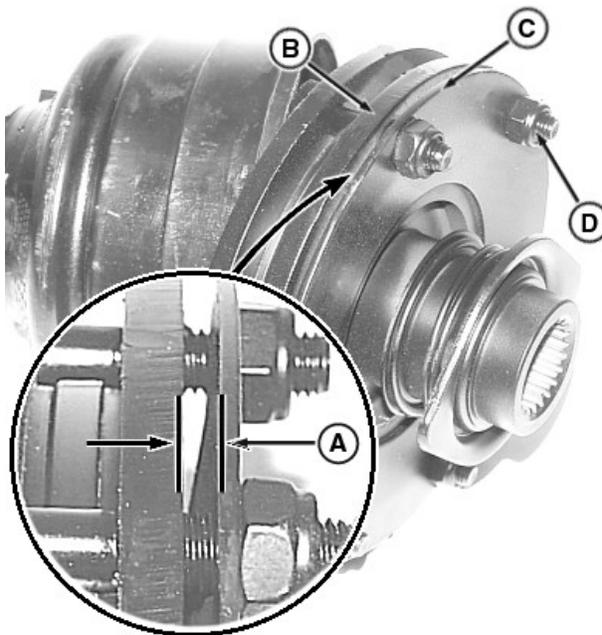
3. Remove locking screw (B) from the clutch hub.
4. Remove driveline and clutch assembly (A) from the input shaft of the gear case.
5. Make repairs as necessary:
 - Slip clutch service—See DISASSEMBLING AND INSPECTING SLIP CLUTCH in this section.
 - Driveline repair—See your John Deere dealer.
6. Install in reverse order of removal following these special instructions:
 - Apply multipurpose grease on the input shaft of gear case.
 - Align hole in the hub with the groove in the input shaft and install locking screw. Tighten screw to specification.

Specification

Locking Screw—Torque 150 N·m
(110 lb·ft)

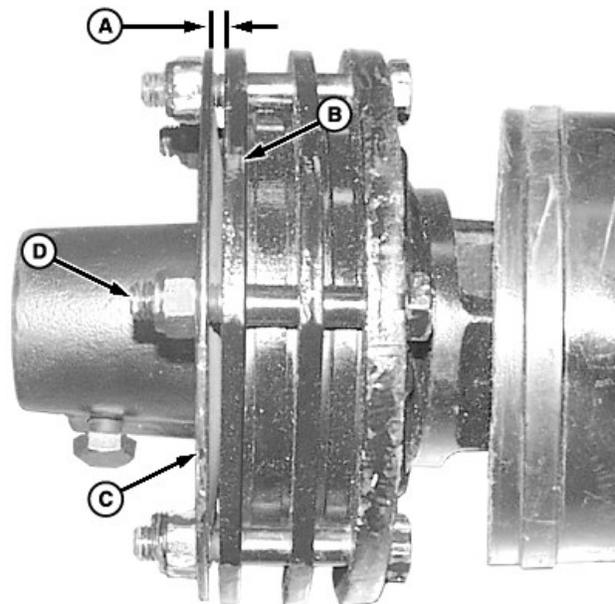
RD91939,000027C-19-25JAN18

Assembling Slip Clutch (MX5, MX6 & MX7)



MX5 and MX6 Clutch

PY45078—UN—25JAN18



MX7 Clutch

W07519—UN—17AUG05

- A—Gap
- B—Clutch Plate
- C—Belleville Spring
- D—Cap Screw and Lock Nut (6 used)

Assemble slip clutch in reverse order of disassembly using the following instructions:

- Install disk spring (C) with the concave side facing away from yoke end.

IMPORTANT: To avoid driveline damage, DO NOT overtighten cap screws and lock nuts. A gap must be left between the clutch plate (B) and disk spring (C).

- Tighten cap screws and lock nuts (D) leaving a gap (A) between clutch plate (B) and spring (C) according to specifications.

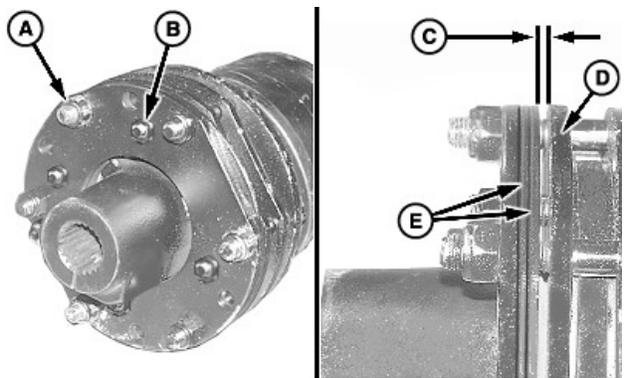
Specification

Clutch to Spring Gap -	
Distance—MX5 & MX6	5.00 mm (0.196 in)
MX7	6.00 - 6.50 mm (0.236 - 0.255 in)

IMPORTANT: DO NOT set the Clutch Gap less than 5.0 mm (MX5 & MX6) and 5.5 mm (MX7), No Run-in Plate.

RD91939,000027D-19-25JAN18

Assembling Slip Clutch (HX6 & HX7)



W08431—UN—04JAN07

- A—Cap Screw and Lock Nut (8 used)
- B—Nut, M8 (4 used)
- C—Gap
- D—Thrust Plate
- E—Belleville Springs

Assemble slip clutch in reverse order of disassembly using the following instructions:

- Install disk springs (E) with the concave side facing away from yoke end.

IMPORTANT: To avoid driveline damage, DO NOT overtighten cap screws and lock nuts. A gap (C) must be left between the thrust plate (D) and disk springs (E).

Make sure four M8 nuts (B) are loosened before setting gap.

- Tighten cap screws and lock nuts (A) leaving a gap (C) between the thrust plate (D) and disk springs (E) according to specifications:

Specification

Clutch to Spring Gap -	
Distance—HX6 & HX7	6.00 mm (0.236 in)

IMPORTANT: DO NOT set the Clutch Gap less than 5.0 mm with run-in Plate

RD91939,000027E-19-24JAN18

Checking Blade Wear



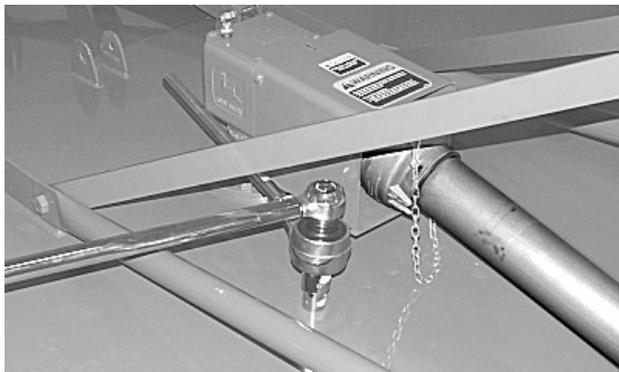
W08971—UN—11SEP07

IMPORTANT: Operating with blades that are not alike causes vibration. Always replace worn or broken blades, in pairs. Never replace a single blade.

Check blades regularly for wear or breakage.

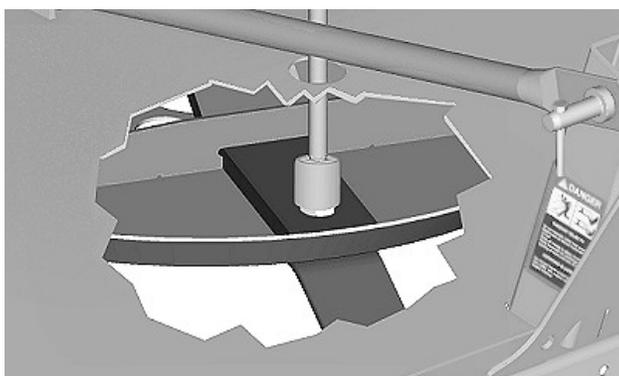
RD91939,000027F-19-24JAN18

Replacing Blades (MX5, MX6 & MX7)



Position to Loosen

W06207—UN—19MAY03

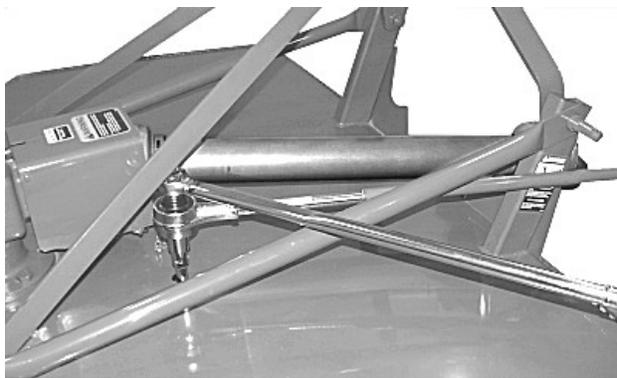


W09003—UN—19SEP07

IMPORTANT: Operating with loose blade hardware damages the blade holder and blades. Whenever the blades have been removed or replaced, blade hardware **MUST** also be replaced. Always use genuine John Deere parts. Check blade hardware torque after an hour of operation and every 50 hours thereafter.

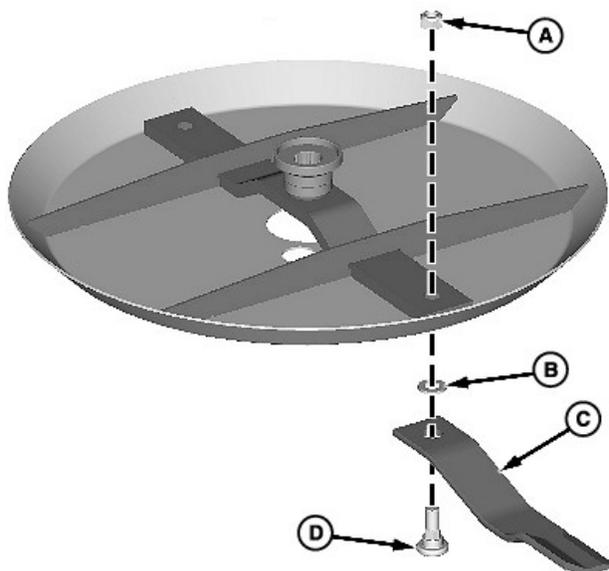
NOTE: Suction blades have cutting edge on one side only. Note blade rotation when installing blades. (See **DIRECTION OF BLADE ROTATION** in this section.)

Manually rotate driveline to align each lock nut with the access hole in top of deck. Position the torque wrench and the torque multiplier as shown, to loosen blade hardware. **Discard blade and mounting hardware.**



Position to Tighten

W06208—UN—19MAY03



W08970—UN—18SEP07

- A—Lock Nut
- B—Washer
- C—Blade
- D—Blade Bolt

Install new blade and mounting hardware (A—D) as shown. Tighten lock nut (A) to specification using torque wrench and torque multiplier positioned as shown.

Specification

Blade Hardware—Torque. 850 N·m
(627 lb·ft)

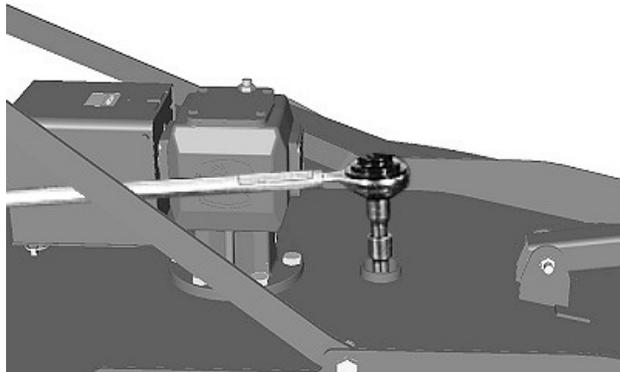
RD91939,0000280-19-25JAN18

Replacing Blades (HX6 & HX7)

CAUTION: Before servicing machine, refer to **PRACTICE SAFE SERVICE PROCEDURES** at the beginning of this section.

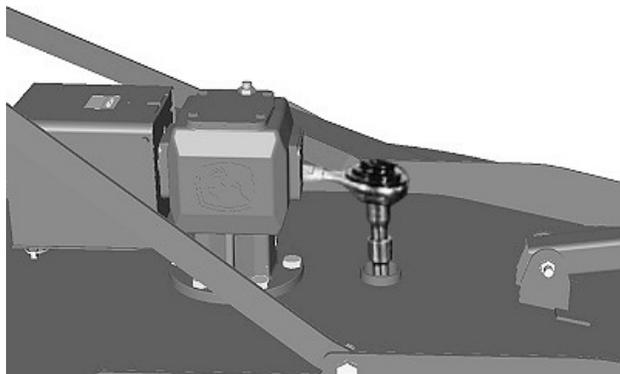
IMPORTANT: Operating with loose blade hardware damages the blade holder and blades. Whenever the blades have been removed or replaced, blade hardware MUST also be replaced. Always use genuine John Deere parts. Check blade hardware torque after the first 8 hours of operation.

NOTE: Blade bolt loosening requires 1-1/2 in. Socket with extension and a torque multiplier.



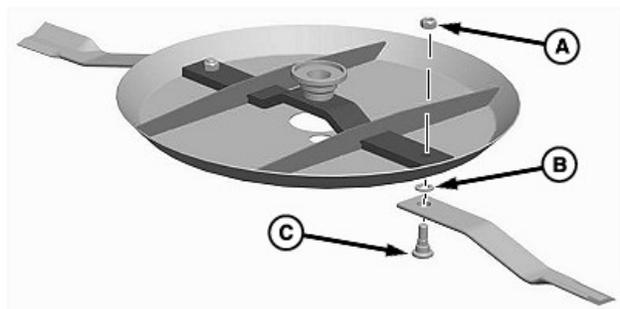
Position to Loosen

W22402—UN—17APR12



Position to Tighten

W22403—UN—17APR12



W22948—UN—13SEP12

A—Lock Nut
B—Washer
C—Blade Bolt

1. Manually rotate driveline to align blade hardware with the access hole in top of deck. Position torque multiplier, as shown, to replace blades. **Discard mounting hardware.**

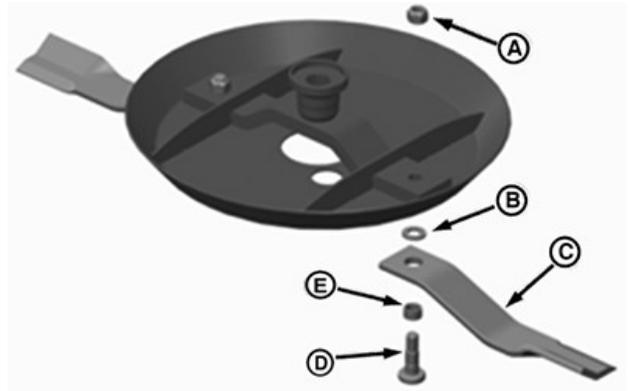
2. Install new hardware and tighten lock nut to specification.

Specification

Blade Bolt Lock Nut—Torque. 850 N·m
(627 lb·ft)

RD91939,0000281-19-24JAN18

Installing Blades (Blade Bolt and Bushing Hardware Equipped Only)



P17214—UN—14JAN14

Blade and Mounting Hardware with Bushing (Australia Only)

A—Lock Nut
B—Washer
C—Blade
D—Blade Bolt
E—Hardened Bushing

IMPORTANT: The following procedure shows how to install new blades with mounting hardware for Rotary Cutters equipped with bushing (Used in Australia only)

Install new blades and mounting hardware (A—E) as shown. Tighten lock nut (A) to specification using torque wrench and torque multiplier positioned as shown.

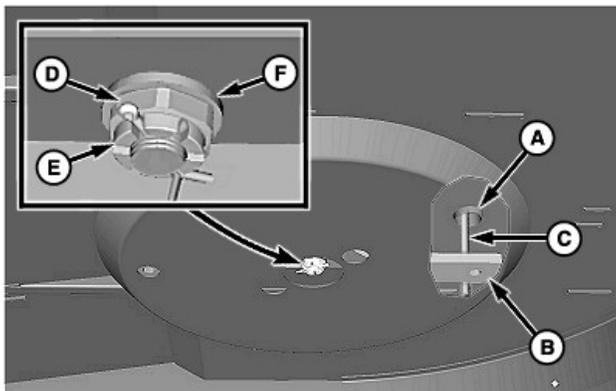
CAUTION: To avoid serious injury or machine damage caused by rotating blades, always install the hardened bushing (E) when replacing blades.

Specification

Blade Hardware—Torque. 850 N·m
(627 lb·ft)

RD91939,0000282-19-24JAN18

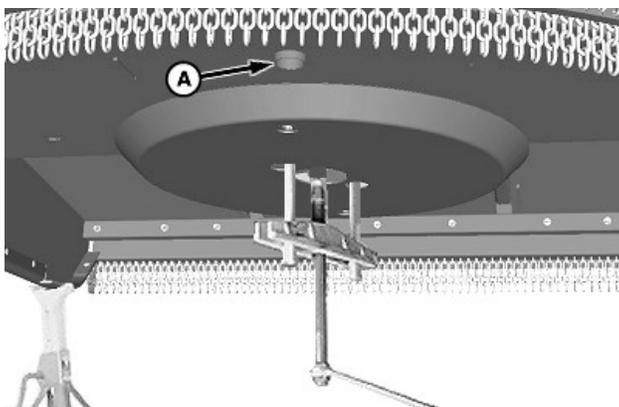
Replacing Blade Holder



W22764—UN—10JUL12

- A—Access Hole
- B—Blade Holder
- C—Pipe
- D—Cotter Pin
- E—Nut
- F—Washer

1. Remove blades. (See REPLACING BLADES in this section.)
2. Insert large pry bar or pipe (C) through the access hole (A) to stop blade holder from rotating.
3. Remove and discard the cotter pin (D).
4. Remove nut (E), washer (F), and blade holder (B).



W22790—UN—18JUL12

- A—Hole

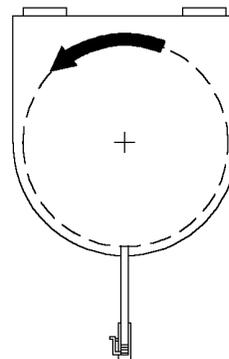
5. Remove blade holder using a puller (shown). If a puller is not available, strike down on blade holder ends from above through hole (A) using a large pry bar or pipe.
6. Install blade holder, nut, and NEW cotter pin in reverse order as removed.
7. Tighten nut to specification. (See procedure in Tightening Blade Holder Hardware in EVERY 50 HOURS in Lubrication and Maintenance section.)

IMPORTANT: Operating with a loose blade holder damages the blade holder and shaft. Retighten hardware after an hour of operation and again after the first day. Check torque every 50 hours thereafter.

8. Install blades. (See REPLACING BLADES in this section.)

RD91939,0000283-19-24JAN18

Direction of Blade Rotation



W03861—UN—24MAY00

IMPORTANT: Cutter shown is viewed from the top. Take special note of blade rotation shown by the arrow.

RD91939,0000284-19-24JAN18

Replacing Skid Shoes (MX5, MX6 & MX7)



TS261—UN—23AUG88

CAUTION: When servicing skid shoes, it is necessary to work underneath cutter. Before servicing cutter, refer to **PRACTICE SAFE SERVICE PROCEDURES** at the beginning of this section.

Avoid potentially toxic fumes and dust. Hazardous fumes can be generated when paint gets heated due to welding, soldering, grinding, or using a torch. Refer to REMOVE PAINT BEFORE WELDING OR HEATING in Safety section.



W07918—UN—29JUN06

Skid Shoe—Right-Hand Side Shown

A—Skid Shoe

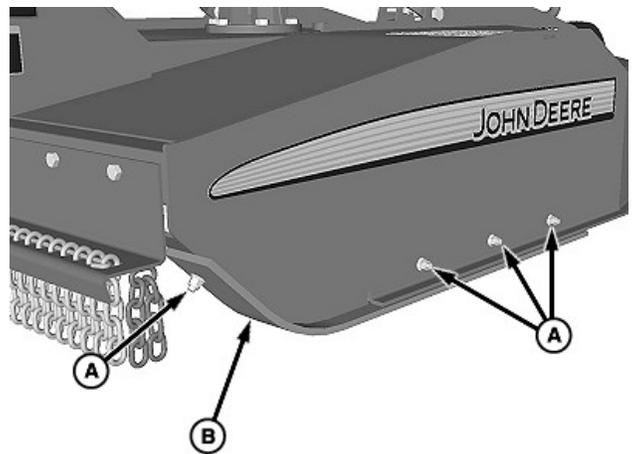
1. Lower cutter onto the safety shop stands.

NOTE: Skid shoes (A) are welded on.

2. Remove existing skid shoe with a grinder.
3. Weld on a new skid shoe.
4. Paint all exposed areas.
5. Raise cutter and remove safety stands.
6. Lower cutter to the ground.

RD91939,0000285-19-24JAN18

CAUTION: When servicing skid shoes, it is necessary to work underneath cutter. Before servicing cutter, refer to PRACTICE SAFE SERVICE PROCEDURES at the beginning of this section.



W22414—UN—19APR12

**A—M10 x 35 mm, Flange Lock Nut, and Round Head Bolt (8 used)
B—Skid Shoe (2 used)**

1. Lower cutter onto the safety shop stands.
2. Remove and retain flange lock nuts and round head bolts (A).
3. Remove and discard skid shoes (B).
4. Install new skid shoes and hardware. Tighten flange lock nuts.
5. Raise cutter and remove safety stands.
6. Lower cutter to the ground.

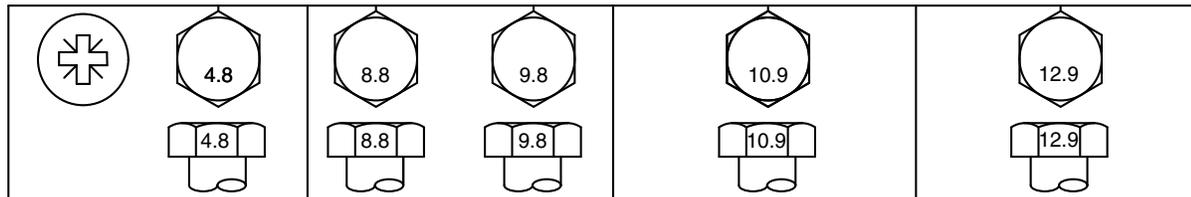
RD91939,0000286-19-24JAN18

Replacing Skid Shoes (HX6 & HX7)



TS261—UN—23AUG88

Metric Bolt and Screw Torque Values



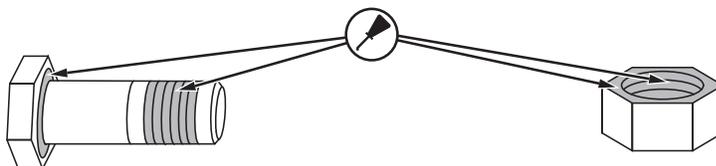
TS1742—UN—31MAY18

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												
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.



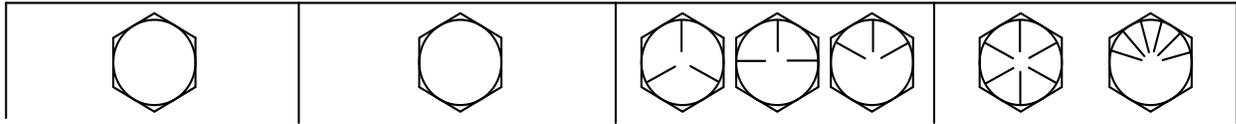
TS1741—UN—22MAY18

^aHex head column values are valid for ISO 4014 and ISO 4017 hex head, ISO 4162 hex socket head, and ISO 4032 hex nuts.

^bHex flange column values are valid for ASME B18.2.3.9M, ISO 4161, or EN 1665 hex flange products.

DX,TORQ2-19-30MAY18

Unified Inch Bolt and Screw Torque Values



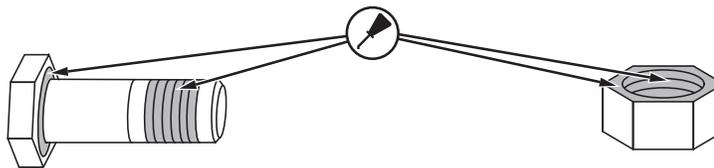
TS1671—UN—01MAY03

Bolt or Screw Size	SAE Grade 1 ^a				SAE Grade 2 ^b				SAE Grade 5, 5.1 or 5.2				SAE Grade 8 or 8.2			
	Hex Head ^c		Flange Head ^d		Hex Head ^c		Flange Head ^d		Hex Head ^c		Flange Head ^d		Hex Head ^c		Flange Head ^d	
	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
1/4	3.1	27.3	3.2	28.4	5.1	45.5	5.3	47.3	7.9	70.2	8.3	73.1	11.2	99.2	11.6	103
5/16	6.1	54.1	6.5	57.7	10.2	90.2	10.9	96.2	15.7	139	16.8	149	22.2	16.4	23.7	17.5
3/8	10.5	93.6	11.5	102	17.6	156	19.2	170	27.3	20.1	29.7	21.9	38.5	28.4	41.9	30.9
7/16	16.7	148	18.4	163	27.8	20.5	30.6	22.6	43	31.7	47.3	34.9	60.6	44.7	66.8	49.3
1/2	25.9	19.1	28.2	20.8	43.1	31.8	47	34.7	66.6	49.1	72.8	53.7	94	69.3	103	75.8
9/16	36.7	27.1	40.5	29.9	61.1	45.1	67.5	49.8	94.6	69.8	104	77	134	98.5	148	109
5/8	51	37.6	55.9	41.2	85	62.7	93.1	68.7	131	96.9	144	106	186	137	203	150
3/4	89.5	66	98	72.3	149	110	164	121	230	170	252	186	325	240	357	263
7/8	144	106	157	116	144	106	157	116	370	273	405	299	522	385	572	422
1	216	159	236	174	216	159	236	174	556	410	609	449	785	579	860	634
1-1/8	305	225	335	247	305	225	335	247	685	505	751	554	1110	819	1218	898
1-1/4	427	315	469	346	427	315	469	346	957	706	1051	775	1552	1145	1703	1256
1-3/8	564	416	618	456	564	416	618	456	1264	932	1386	1022	2050	1512	2248	1658
1-1/2	743	548	815	601	743	548	815	601	1665	1228	1826	1347	2699	1991	2962	2185

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

^aGrade 1 applies for hex cap screws over 6 in (152 mm) long, and for all other types of bolts and screws of any length.

^bGrade 2 applies for hex cap screws (not hex bolts) up to 6 in (152 mm) long.

^cHex head column values are valid for ISO 4014 and ISO 4017 hex head, ISO 4162 hex socket head, and ISO 4032 hex nuts.

^dHex flange column values are valid for ASME B18.2.3.9M, ISO 4161, or EN 1665 hex flange products.

Assembly

Perform Predelivery Service Safely



TS1644—UN—22AUG95

CAUTION: Understand the predelivery procedure before doing the work.

During the assembly, test, and adjustment procedures, it is necessary to operate drives and hydraulic systems. Stay clear of machine elements when raising or lowering machine and during operation of drivelines.

Practice good communication with other service technicians. Be aware of their actions and alert them to potential hazards.

Never lubricate, service, or adjust machine while it is running. Keep hands, feet, and clothing away from power-driven or hydraulically operated parts. If it is necessary to inspect the machine while it is in operation, be alert to moving parts in the immediate area.

RD91939,0000287-19-25JAN18

Install Optional Equipment or Attachments

For bundles that do not contain printed (paper) Installation Instructions or for the latest information, go to mypathways.deere.com and type Installation Instructions within the Search field. Select the desired site and follow the information shown.

Bundle and Installation Instruction numbers are listed on packing list or bill of materials. View, download, or print as necessary.

If unable to locate an Installation Instruction online, contact your John Deere dealer for assistance.

RD91939,0000288-19-25JAN18

Remove Shipping Dunnage and Parts



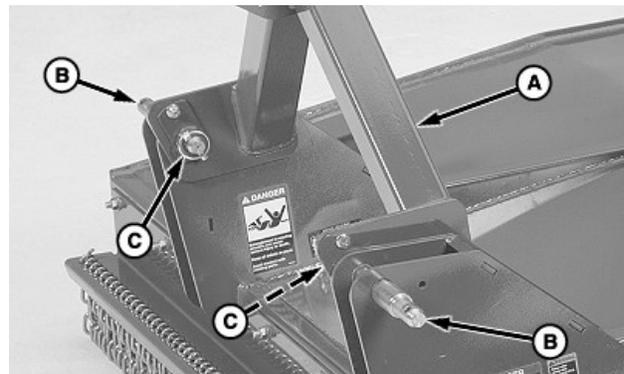
TS219—UN—23AUG88

CAUTION: To help prevent bodily injury from accidental lowering of the cutter, attach a lifting strap or chains to the rear support frame and a hoist .

1. Wrap lifting strap or chains around the rear support frame and attach to a hoist. Raise machine and rest on level ground in vertical position.
2. Remove all shipping bands, wires, and loose parts from around the machine.
3. Lower machine onto safety stands.
4. Remove metal stands from the front and top of cutter.

RD91939,0000289-19-25JAN18

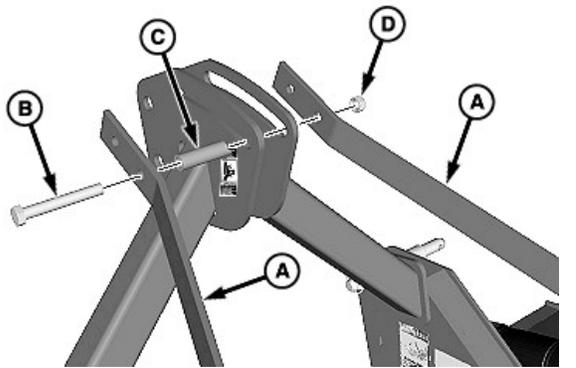
Install Hitch (HX6 & HX7)



W22644—UN—20AUG12

- A—Hitch
- B—Hitch Pin (2 used)
- C—Spring Pin (2 used)

1. Remove hitch from shipping position. Position hitch (A) on the cutter as shown, insert hitch pins (B) and secure with spring pins (C).



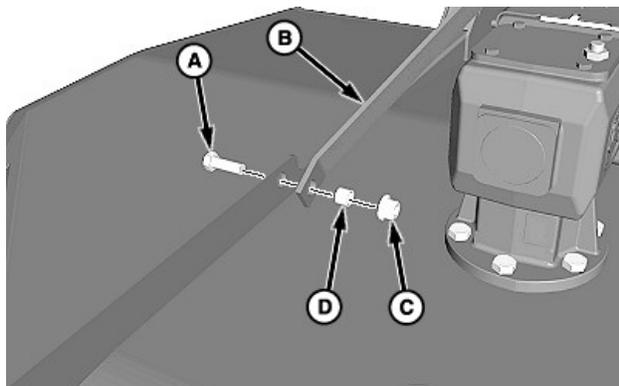
W23149—UN—11OCT12

- A—Brace (2 used)
- B—M16 x 110 mm, Cap Screw
- C—Bushing
- D—M16, Lock Nut

2. Remove braces from shipping position. Install braces (A) on the outside of upper hitch as shown. Install cap screw (B), bushing (C), and lock nut (D). Tighten lock nut to specification.

Specification

Lock Nut—Torque..... 100 N·m
(74 lb·ft)



W22649—UN—06JUN12

- A—Cap Screw, M20 x 60
- B—Brace
- C—Flange Lock Nut, M20
- D—Bushing

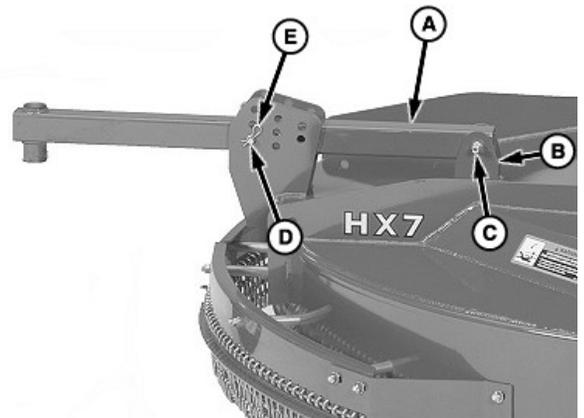
3. Attach each brace (B) to frame using cap screw (A), bushing (D), and flange lock nut (C). Tighten flange lock nut to specification.

Specification

Flange Lock Nut—Torque..... 190 N·m
(140 lb·ft)

RD91939,000028A-19-25JAN18

Install Axle Support Tube (HX6 & HX7)



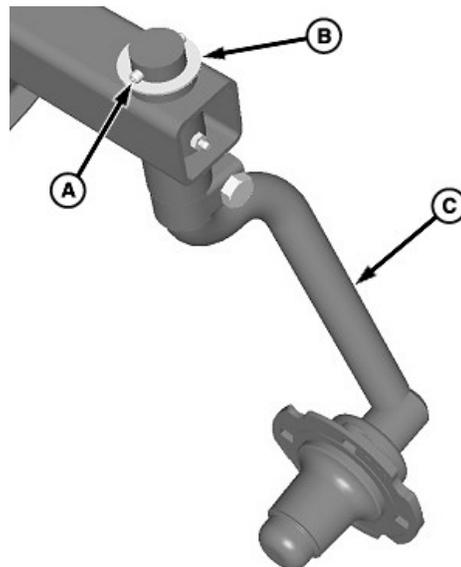
W22761—UN—21AUG12

- A—Axle Support Tube
- B—Mounting Bracket
- C—M16 x 110 mm, Cap Screw and Lock Nut
- D—Pin
- E—Spring Pin

1. Install axle support tube (A) into mounting bracket (B) as shown.
2. Install cap screw and lock nut (C) and tighten.
3. Select desired cutting height and install pin (D) and spring pin (E).

RD91939,000028B-19-25JAN18

Install Tailwheel (HX6 & HX7)

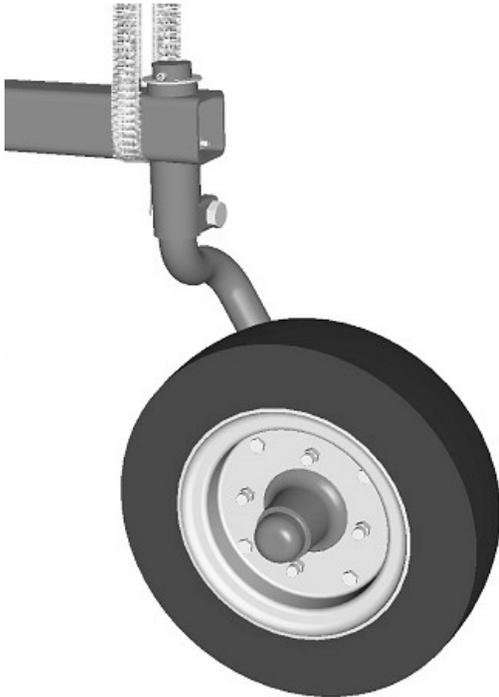


W22316—UN—13APR12

- A—Spring Pin, 8 x 50 mm
- B—Washer, 1-33/64 x 2-1/4 x 0.075 in.
- C—Spindle

1. Apply multipurpose grease to pivoting surface of spindle (C).

2. Install spindle (C), one 1-33/64 x 2-1/4 x 0.075 in washer (B) and 8 x 50 mm spring pin (A).



W22317—UN—21AUG12

3. Install tailwheel with four 1/2 x 1-1/2 in. Round-head bolts and lock nuts. Install lock nuts on the opposite side of the spindle hub. Tighten lock nuts to specification.

Specification

Lock Nuts—Torque. 110 N·m
(90 lb·ft)

RD91939.000028C-19-25JAN18

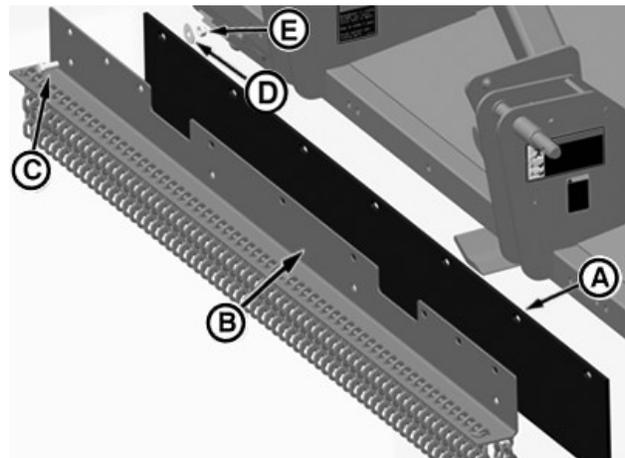
- A—Shield Assembly
- B—Cap Screw, M12 x 90 (9 used)
- C—Washer, 13 x 24 x 2.5 mm (9 used)
- D—Lock Nut, M12 (9 used)

Tighten all mounting hardware AFTER shield assembly is installed.

RD91939.000028D-19-25JAN18

Install Front Rubber Deflectors (HX6 & HX7)

NOTE: This Procedure shows how to install Front Rubber Deflectors on HX6 and HX7 Models available for the Australian Market only.



P17244—UN—12FEB14

Install Front Rubber Deflectors on HX6 and HX7 models

- A— Front Rubber Deflector
- B— Front Chain Guard
- C— Bolt (M10X30)
- D— Washer
- E— Nut (M10)

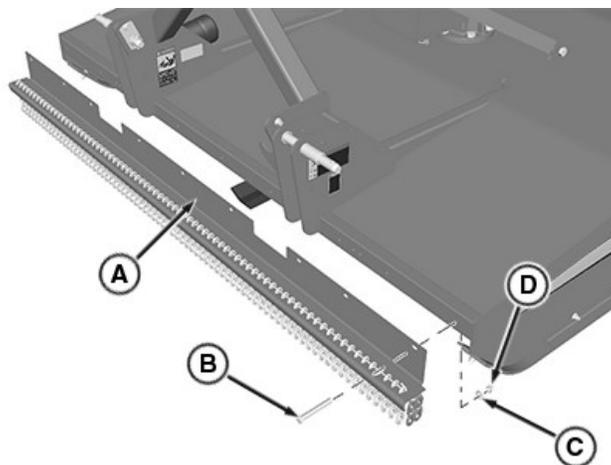
1. Install front rubber deflectors (A) to the front chain guard (B) using bolts (C), washers (D), and nuts (E) as shown.
2. Tighten hardware according to specification.

Specification

Hardware—Torque. 101 N·m
(75 lb·ft)

RD91939.000028E-19-25JAN18

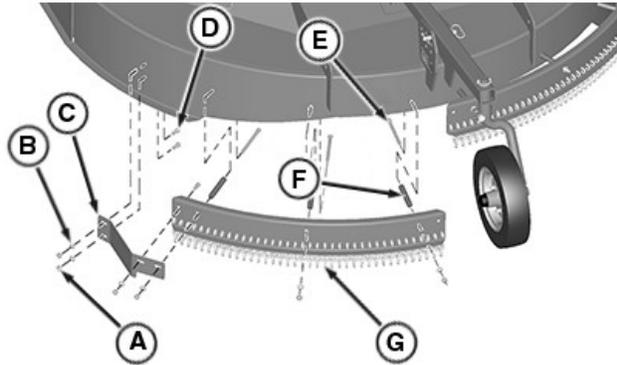
Install Front Safety Shield (Chain), (HX6 & HX7)



PY45074—UN—24JAN18

HX7 Rotary Cutter Shown

Install Rear Safety Shield (Chain) - HX6 & HX7



PY45075—UN—24JAN18
HX7 Rotary Cutter Shown (Left-Hand Side)

- A—Lock Nut, M12 (6 used)
- B—Washer, 13 x 24 x 2.5 mm (6 used)
- C—Support
- D—Cap Screw, M12 x 25 (3 used)
- E—Cap Screw, M12 x 150 (3 used)
- F—Spacer (3 used)
- G—Shield Assembly

Tighten all mounting hardware AFTER all shields have been installed.

RD91939,000028F-19-25JAN18

using bolts (D) and the nuts as shown. Dispose the current Chain Guard Bolts.

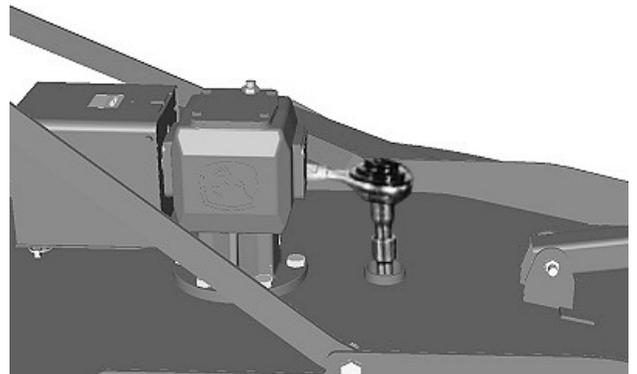
2. Repeat Step 1 for the right-hand side.
3. Tighten hardware according to specification.

Specification

Hardware—Torque. 101 N·m
(75 lb·ft)

RD91939,0000290-19-25JAN18

Check Blade Hardware Torque

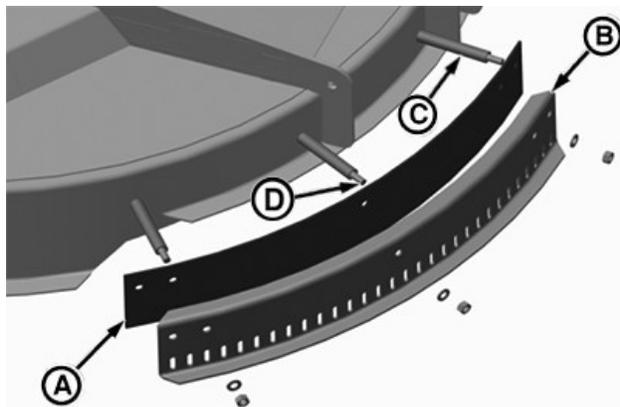


Position to Tighten

W22403—UN—17APR12

Install Rear Rubber Deflectors (HX6 & HX7)

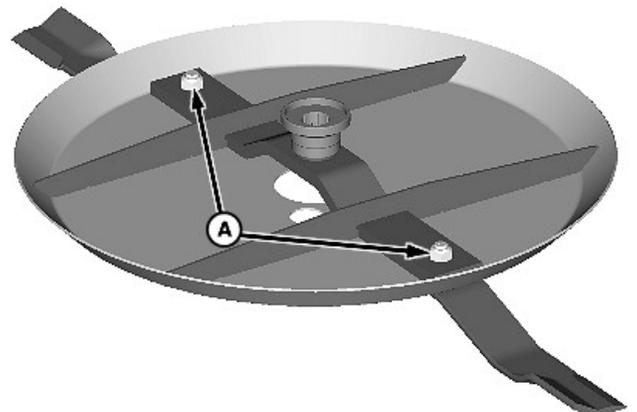
NOTE: This Procedure shows how to install Rear Rubber Deflectors on HX6 and HX7 Models available for the Australian Market only.



P17230—UN—12FEB14
Install Rear Rubber Deflectors (left-hand side shown)

- A—Rear Rubber Deflector
- B—Rear Chain Guard
- C—Bushing
- D—Bolt (M12X160)

1. Install rear left-hand rubber deflector (A) between the rear left-hand chain guard (B) and bolt bushings (C)



W08969—UN—18SEP07

A—Lock Nuts

Manually rotate driveline to align each lock nut (A) with the access hole in top of deck. Position torque multiplier, as shown.

Tighten lock nuts (A) according to specification.

Specification

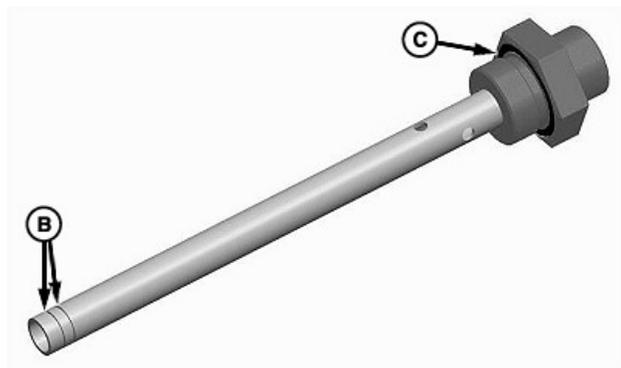
Lock Nut—Torque. 850 N·m
(627 lb·ft)

RD91939,0000291-19-25JAN18

Fill Gear Case



W08908—UN—13SEP07



W22945—UN—20AUG12

- A—Dipstick
- B—Lines
- C—O-ring

IMPORTANT: Cutter is shipped without the gear case lubricant. DO NOT operate the cutter without filling gear case with the specified amount of lubricant listed, or gear case can be damaged.

1. Remove and discard shipping plug-in top of gear case.
2. Fill gear case according to initial fill specifications with John Deere GL-5 GEAR LUBRICANT, or equivalent. (See Lubrication and Maintenance section.)

Specification

Gear Case—Capacity. 2.7 L
(3.0 qt)

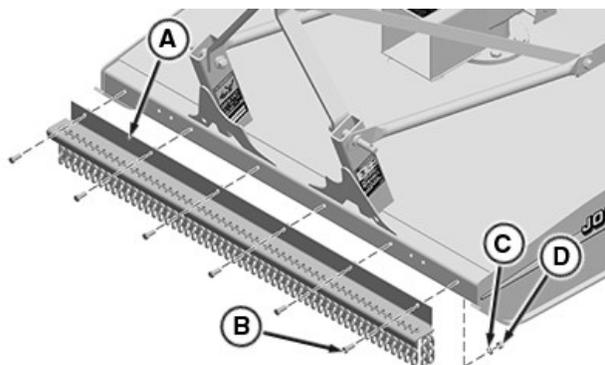
IMPORTANT: Oil moves into lower cavity of gear case during initial operation. Check oil level after 30 minute break-in period, and every 8 hours, or daily, thereafter.

3. Install dipstick (A) and screw in fully, then remove. Verify oil level to be between lines (B). Add oil, as necessary.
4. When checking the oil level in the gear case, verify the O-ring (C) is in good condition, under the dipstick cap.

5. Install dipstick.

RD91939,0000292-19-25JAN18

Install Front Safety Shield (Chain), (MX5, MX6 & MX7)



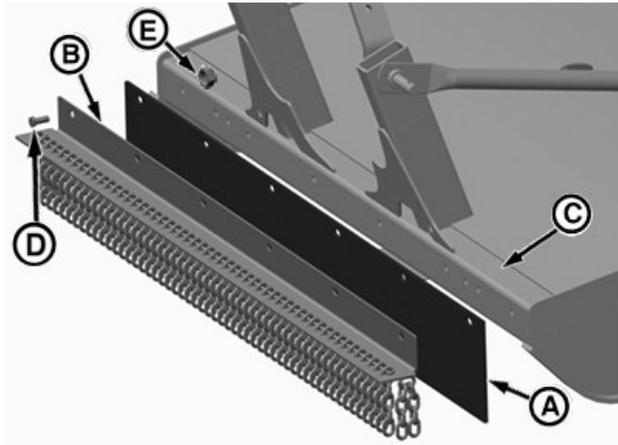
PY45076—UN—24JAN18

- A—Shield Assembly
- B—Cap Screw, M12 x 30
MX5—(5 used)
MX6—(7 used)
MX7—(9 used)
- C—Washer, 13 x 24 x 2.5 mm
MX5—(5 used)
MX6—(7 used)
MX7—(9 used)
- D—Lock Nut, M12
MX5—(5 used)
MX6—(7 used)
MX7—(9 used)

Tighten all mounting hardware AFTER shield assembly is installed.

RD91939,0000293-19-25JAN18

Install Front Rubber Deflectors (MX5, MX6 & MX7)



P17229—UN—12FEB14
 Front Rubber Deflectors on MX5, MX6, and MX7 Models
 (Australia Only)

- A—Front Rubber Deflector
- B—Front Chain Guard
- C—Frame
- D—Bolt
- E—Nut

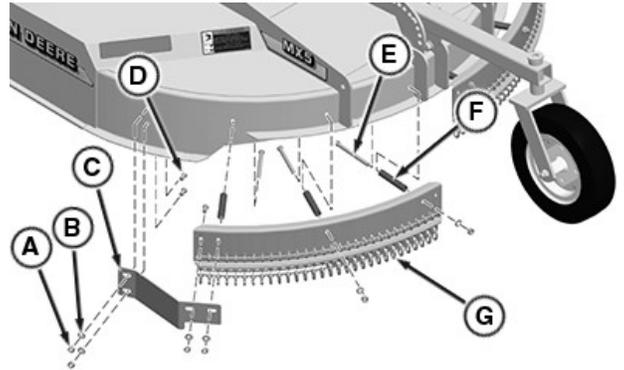
NOTE: This Procedure shows how to install Rubber Deflectors on MX5, MX6, and MX7 Models available for the Australian Market only.

1. Install front rubber deflectors (A) between the front chain guard (B) and the frame (C) as shown. Reuse the bolts (D) and nuts (E) currently attached to the chain guard.
2. Tighten hardware according to specification.

	Specification
Hardware—Torque	101 N·m (75 lb·ft)

RD91939.0000294-19-25JAN18

Install Rear Safety Shield (Chain), (MX5, MX6 & MX7)



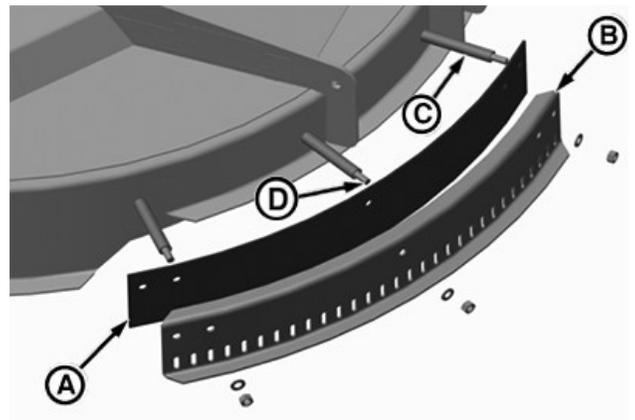
PY45077—UN—24JAN18
 MX5 Shown (Left-Hand Side)

- A—Lock Nut, M12 (6 used)
- B—Washer, 13 x 24 x 2.5 mm (6 used)
- C—Support
- D—Cap Screw, M12 x 25 (3 used)
- E—Cap Screw, M12 x 150 (3 used)
- F—Spacer (3 used)
- G—Shield Assembly

Tighten all mounting hardware AFTER all shields have been installed.

RD91939.0000295-19-25JAN18

Install Rear Rubber Deflectors (MX5, MX6 & MX7)



P17230—UN—12FEB14
 Rear Rubber Deflectors on MX5, MX6, and MX7 Models
 (Australia Only)

- A—Rear Rubber Deflector
- B—Rear Chain Guard
- C—Bushing
- D—Bolt (M12 X 160)

NOTE: This Procedure shows how to install Rubber Deflectors on MX5, MX6, and MX7 Models available for the Australian Market only.

1. Install the Rear left-hand Rubber Deflector (A)

between the Rear left-hand Chain guard (B) and the Bolt Bushings (C) as shown. Use current nuts and new Bolts (D) contained in the hardware kit (Dispose the current Chain Guard Bolts)

2. Repeat Step 1 for the right-hand Rubber Deflector.
3. Tighten hardware according to specification.

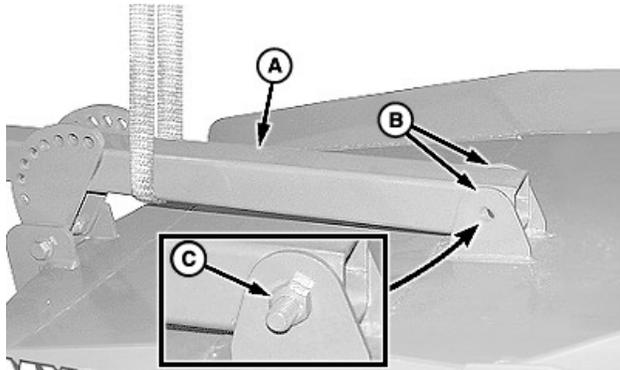
Specification

Hardware—Torque. 101 N·m
(75 lb·ft)

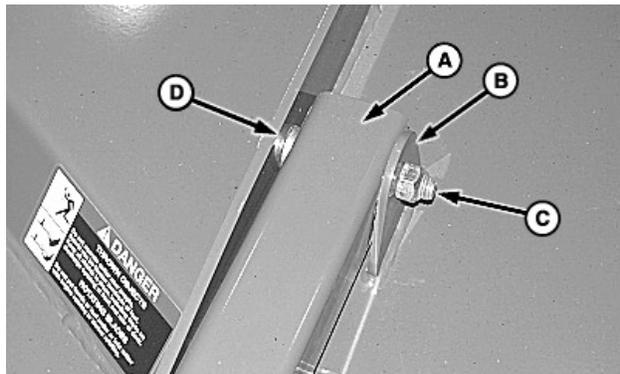
RD91939,0000296-19-25JAN18

Install Axle Support, Spindle, and Tailwheel If Required—MX5, MX6, MX7

NOTE: If machine is equipped with two tailwheel supports, follow the following procedures on both the tailwheel supports unless noted otherwise.

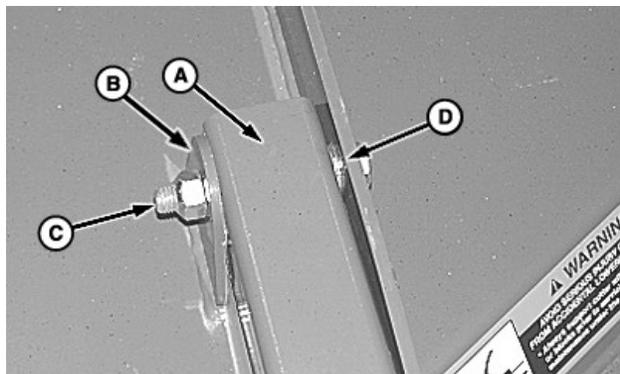


P15588—UN—01SEP09



P15589—UN—01SEP09

Left-Hand Side (Dual Wheel)



P15590—UN—01SEP09

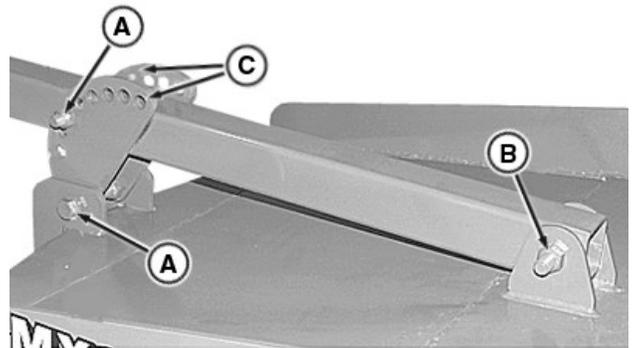
Right-Hand Side (Dual Wheel)

- A—Axle Support Tube
- B—Mounting Flanges
- C—Cap Screw and Lock Nut, M16 x 110
- D—Washer, 17 x 30 x 3 mm (3 used)

1. Wrap a lifting strap around the axle support tube (A) and attach to a hoist.
2. Insert end of the axle support tube (A) between mounting flanges (B) at top, rear of cutter.

3. Align holes in the tube with holes in mounting flanges and install M16 x 110 cap screw and lock nut (C). Leave lock nut loose.

NOTE: For Dual Tailwheel: Install three 17 x 30 x 3 mm washers (D) at locations shown before installing cap screw.



PY45073—UN—25JAN18

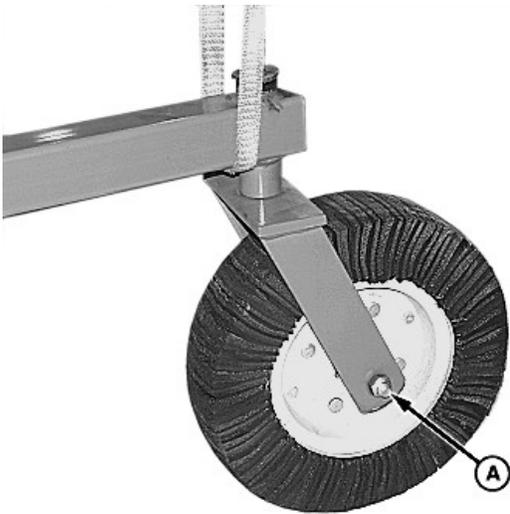
- A—Cap Screw and Lock Nut, M16 x 45 (2)
- B—Cap Screw and Lock Nut, M16 x 110
- C—Plate (2)

NOTE: Plates (C) are installed in location shown for the initial setup. Reposition plates according to desired cutting height. (See ADJUSTING CUTTING HEIGHT/TAILWHEEL POSITION in Operating the Cutter section.)

4. Install plates (C), using two M16 x 45 cap screw and lock nut at (A). Install M16 x 110 cap screw and lock nut at (B).
5. Tighten lock nut (B).
6. Lower tailwheel and remove the lifting strap.

RD91939,0000297-19-25JAN18

Install Tailwheel—MX5 and MX6



W03725—UN—22FEB00

1. Wrap a lifting strap around the axle support tube and attach to a hoist.
2. Install tailwheel using M16 x 180 cap screw, 16.26 x 25.4 x 137 mm spacer and M16 lock nut (A). Tighten lock nut to specifications.

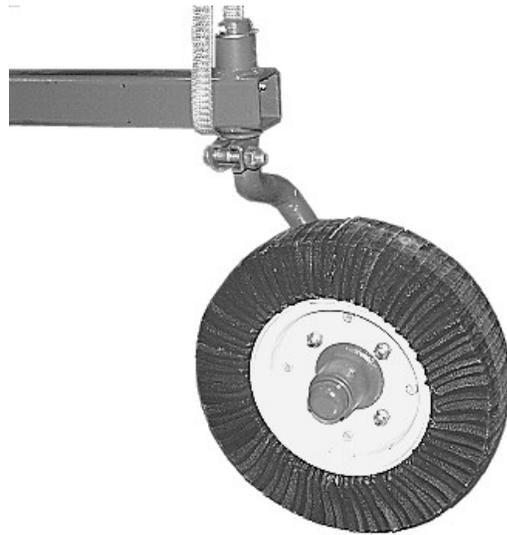
Specification

Tailwheel Lock Nut—Torque. 240 N·m
(177 lb·ft)

3. Lower tailwheel and remove the lifting strap.

RD91939,0000298-19-25JAN18

2. Install spindle (C), one 1-33/64 x 2-1/4 x 0.075 in washer (B) and 8 x 50 mm spring pin (A).



W03726—UN—15FEB00

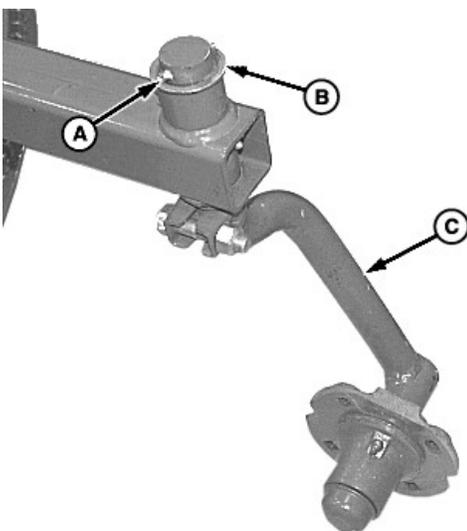
3. Install tailwheel with four 1/2 x 1-1/2 in. Round-head bolts and lock nuts. Install lock nuts on the opposite side of the spindle hub. Tighten lock nuts to specification.

Specification

Lock Nuts—Torque. 110 N·m
(90 lb·ft)

RD91939,0000299-19-25JAN18

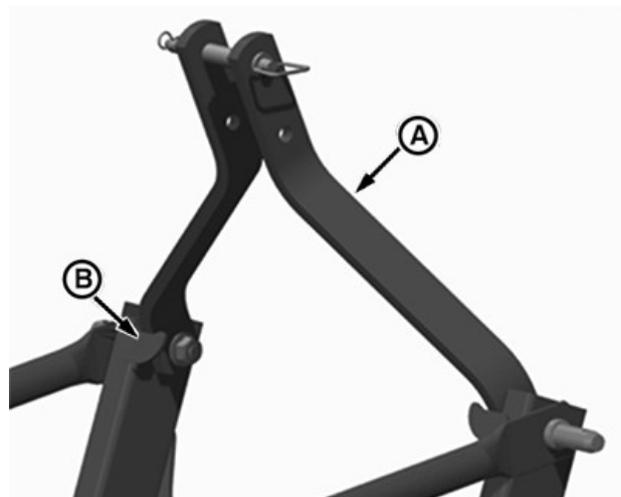
Install Tailwheel—MX7



W03729—UN—21FEB00

1. Apply multipurpose grease to pivoting surface of spindle (C).

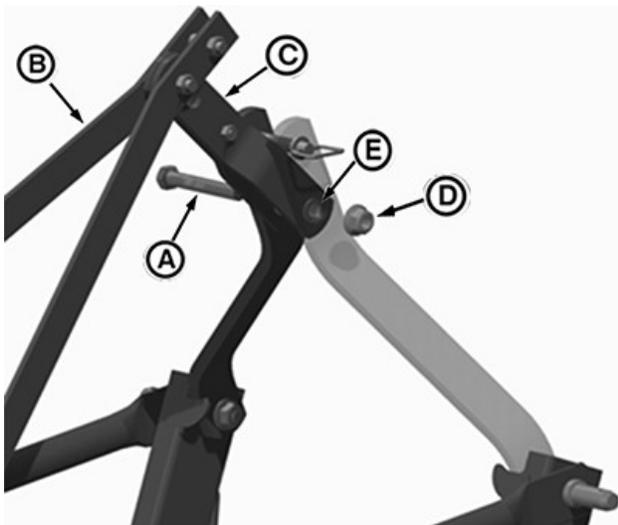
Install Hitch (MX5, MX6 & MX7)



P17174—UN—01NOV13

MX5 MX6 and MX7

1. Rotate Hitch Masts (A) upward until rested on Hitch Stops (B) .



MX5 MX6 and MX7

P17175—UN—01NOV13

- A—Screw, M20 X 140
- B—Braces
- C—Supports
- D—Lock Nut, M20
- E—Bushing

2. Lift braces upward until aligned with Hitch.
3. Attach supports to Hitch.

RD91939,000029A-19-25JAN18

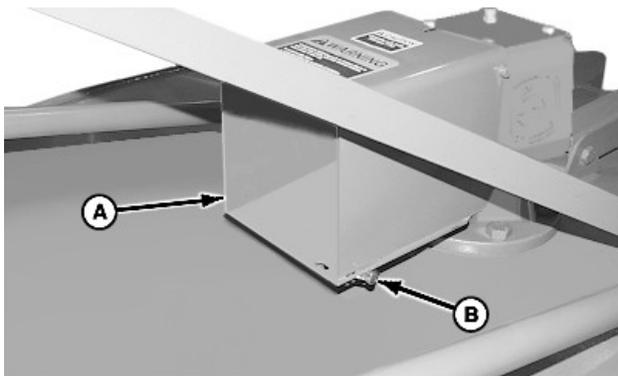


W03709—UN—26JAN00

A—Locking Collar

4. Pull locking collar (A) toward slip clutch.
5. Align splines of the slip clutch hub with the input shaft and slide hub onto shaft until locking collar snaps into place.
6. Lower PTO shield and install quick-lock pins.

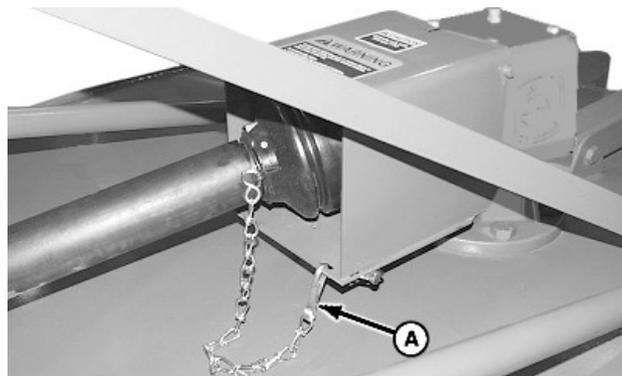
Install PTO Driveline—MX5 and MX6



W08916—UN—23AUG07

- A—PTO Shield
- B—Quick Lock Pin (2 used)

1. Remove two quick-lock pins (B) and raise PTO shield (A).
2. Remove paint from the input shaft using a wire brush.
3. Apply multipurpose grease on the input shaft.

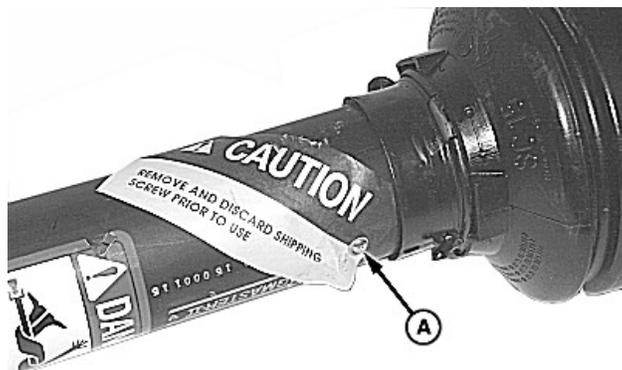


W08917—UN—23AUG07

MX5 Shown

A—Chain

7. Attach chain (A) at location shown.



A—Screw

W03713—UN—11FEB00

NOTE: Driveline is shipped with a screw (A) installed to prevent the driveline from extending.

8. Remove screw and tag.

RD91939,000029B-19-25JAN18

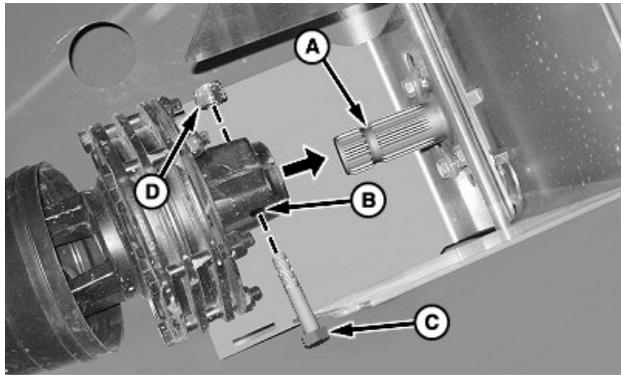
Install PTO Driveline—MX7



A—Lock Nut
B—Cap Screw

W07524—UN—19AUG05

1. Remove lock nut (A) and cap screw (B) from the slip clutch hub.



W08987—UN—14SEP07

A—Groove
B—Hole
C—Cap Screw
D—Lock Nut

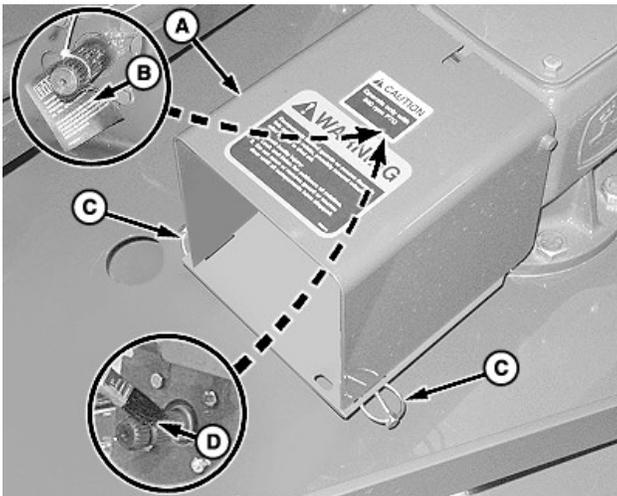
5. Align splines of the slip clutch hub with the input shaft and slide the hub onto shaft.

6. Align hole (B) in the hub with groove (A) in the input shaft and install cap screw (C) and lock nut (D). Tighten cap screw and lock nut to specification.

Specification

Cap Screw and Lock Nut—Torque..... 220 N·m
(160 lb-ft)

7. Lower PTO shield and install quick-lock pins.



W08936—UN—14SEP07

A—PTO Shield
B—Tag
C—Quick Lock Pins
D—Grease, Multipurpose

2. Remove two quick-lock pins (C) and raise PTO shield (A).

3. Remove tag (B) from the input shaft.

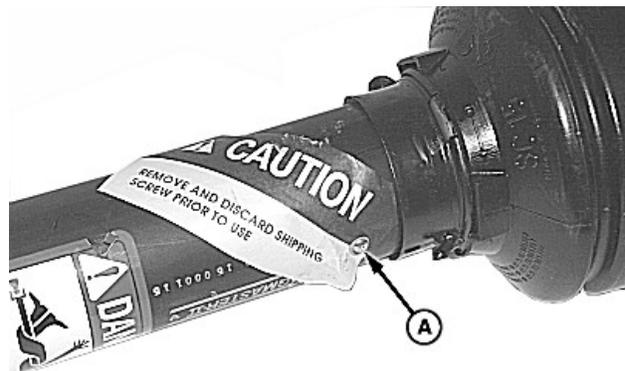
4. Remove any paint or corrosion from the input shaft using a wire brush and apply multipurpose grease.



W08938—UN—13SEP07

A—Chain

8. Attach chain (A) at location shown.



W03713—UN—11FEB00

A—Screw

NOTE: Driveline is shipped with a screw (A) installed to prevent the driveline from extending.

9. Remove screw and tag.

RD91939,000029C-19-25JAN18

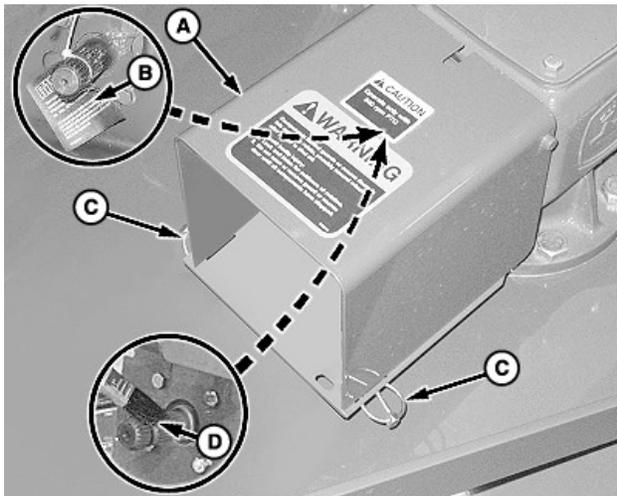
Install PTO Driveline (HX6 & HX7)



W07524—UN—19AUG05

A—Lock Nut
B—Cap Screw

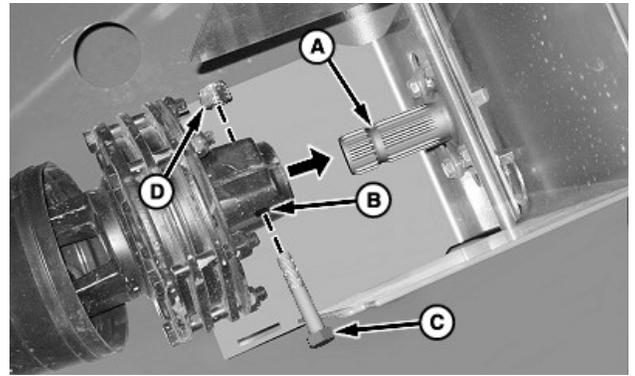
1. Remove lock nut (A) and cap screw (B) from the slip clutch hub.



W22406—UN—17APR12

A—PTO Shield
B—Tag
C—Quick Lock Pins
D—Grease, Multipurpose

2. Remove two quick-lock pins (C) and raise PTO shield (A).
3. Remove tag (B) from the input shaft.
4. Remove any paint or corrosion from shaft using a wire brush and apply multipurpose grease on the input shaft.



W08987—UN—14SEP07

A—Groove
B—Hole
C—Cap Screw
D—Lock Nut

5. Align splines of the slip clutch hub with the input shaft and slide hub onto shaft.
6. Align hole (B) in the hub with groove (A) in the input shaft and install cap screw (C) and lock nut (D). Tighten cap screw and lock nut to specification.

Specification

Cap Screw and Lock	
Nut—Torque	220 N·m (160 lb·ft)

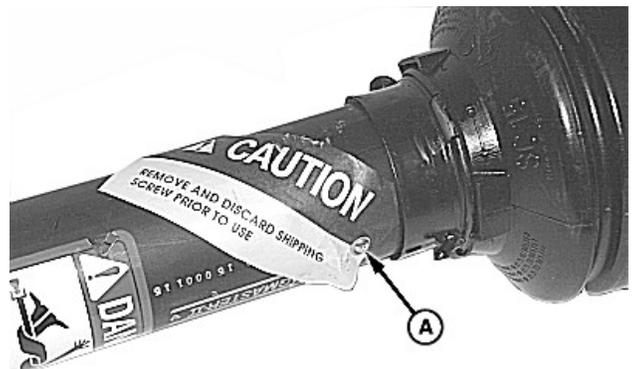
7. Lower PTO shield and install quick-lock pins.



W22407—UN—17APR12

A—Chain

8. Attach chain (A) at location shown.



W03713—UN—11FEB00

A—Screw

NOTE: Driveline could be shipped with a screw (A) installed to prevent the driveline from extending.

9. If it applies, remove the screw and tag.

RD91939,000029D-19-25JAN18

Final Inspection and Adjustments

IMPORTANT: Blade hardware MUST be checked after the first hour and every 50 hours thereafter.

Check blade hardware torque. Retighten hardware after an hour of operation and every 50 hours thereafter. (See EVERY 50 HOURS, TIGHTENING BLADE HARDWARE in Lubrication and Maintenance section.)

RD91939,000029E-19-25JAN18

Specifications

MX5 Specifications

MANUFACTURER	John Deere
MODEL	MX5
Capacity	
Cutting Width, mm (in.)	1524 (60)
Cutting Height, mm (in.)	25—241 (1 to 9.5)
Cutting Diameter of Material, mm (in.)	51 (2)
Cutting Chamber Depth, mm (in.)	216 (8.5)
Tractor Compatibility	
Tractor PTO kW (hp) Range	Minimum 19 (25)
Tractor PTO rpm	540
Hitch	
Type	Lift-Type
Category	1, or convert to 2
Dimensions	
Transport Width, mm (in.)	1651 (65)
Overall Width, mm (in.)	1651 (65)
Overall Length, mm (in.)	2591 (102)
Deck Shape	Domed
Deck Type	Double Deck
Deck Thickness, mm (in.) (gauge)	
—Upper	3 (0.118) (11)
—Lower	3 (0.118) (11)
Side Skirt Thickness, mm (in.) (gauge)	6 (0.25) (3)
Approximate Weight, kg (lb)	374 (823)
Drivelines	
Size	
—Main Driveline	ASAE Category 3
—Connecting Driveline	—
Protection Type	
—Main Driveline	Self-adjusting slip clutch
—Connecting Driveline	—
Gear cases	
Quantity	1
kW (hp) Rating	
—Transfer gear case	—
—Center gear case	56 (75) Continuous 67 (90) Peak
—Outer gear case	—
Blades	
Thickness, mm (in.)	13 (0.5)
Width, mm (in.)	102 (4)
Type	Suction
Overlap, mm (in.)	—
Material Flow System	Max Flow
Holder	Round Stump jumper
Blade Tip Speed	
540 rpm	71.7 m/s (14 121 ft/min) 257.7 km/h (160.1 mph)
1000 rpm	—
Wheels	

MANUFACTURER	John Deere
MODEL	MX5
Type	Puncture Proof Laminated
Row Width Adjustment	No
Shielding	
Front	Chain
Rear	Chain

Specifications are based on published information at the time of publication. Specifications are subject to change without notice. Contact your local John Deere™ dealer for more information.

RD91939,000029F-19-25JAN18

MX6 Specifications

MANUFACTURER	John Deere
MODEL	MX6
Capacity	
Cutting Width, mm (in.)	1830 (72)
Cutting Height, mm (in.)	25—241 (1 to 9.5)
Cutting Diameter of Material, mm (in.)	50 (2)
Cutting Chamber Depth, mm (in.)	216 (8.5)
Tractor Compatibility	
Tractor PTO kW (hp) Range	Minimum 22 (30)
Tractor PTO rpm	540
Hitch	
Type	Lift-Type
Category	1, or convert to 2
Dimensions	
Transport Width, mm (in.)	1910 (75)
Overall Width, mm (in.)	1910 (75)
Overall Length, mm (in.)	2882 (114)
Deck Shape	Domed
Deck Type	Double Deck
Deck Thickness, mm (in.) (gauge)	
—Upper	3.5 (0.138) (10)
—Lower	3.5 (0.138) (10)
Side Skirt Thickness, mm (in.) (gauge)	6 (0.25) (3)
Approximate Weight, kg (lb)	472 (1041)
Drivelines	
Size	
—Main Driveline	ASAE Category 3
—Connecting Driveline	—
Protection Type	
—Main Driveline	Self-adjusting slip clutch
—Connecting Driveline	—
Gear cases	
Quantity	1

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Specifications

MANUFACTURER	John Deere
MODEL	MX6
kW (hp) Rating	
—Transfer gear case	—
—Center gear case	56 (75) Continuous 67 (90) Peak
—Outer gear case	—
Blades	
Thickness, mm (in.)	13 (0.5)
Width, mm (in.)	102 (4)
Type	Suction
Overlap, mm (in.)	—
Material Flow System	Max Flow
Holder	Round Stump jumper
Blade Tip Speed	
540 rpm	88.5 m/s (17 416 ft/min) 319 km/h (198 mph)
1000 rpm	—
Wheels	
Type	Puncture Proof Laminated
Row Width Adjustment	No
Shielding	
Front	Chain
Rear	Chain

Specifications are based on published information at the time of publication. Specifications are subject to change without notice. Contact your local John Deere™ dealer for more information.

RD91939,00002A0-19-25JAN18

MX7 Specifications

MANUFACTURER	John Deere
MODEL	MX7
Capacity	
Cutting Width, mm (in.)	2130 (84)
Cutting Height, mm (in.)	25—241 (1 to 9.5)
Cutting Diameter of Material, mm (in.)	50 (2)
Cutting Chamber Depth, mm (in.)	216 (8.5)
Tractor Compatibility	
Tractor PTO kW (hp) Range	Minimum 37 (50)
Tractor PTO rpm	540
Hitch	
Type	Lift-Type
Category	2, 3N
Dimensions	
Transport Width, mm (in.)	2242 (88)
Overall Width, mm (in.)	2242 (88)
Overall Length, mm (in.)	3210 (126)
Deck Shape	Domed

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MANUFACTURER	John Deere
MODEL	MX7
Deck Type	Double Deck
Deck Thickness, mm (in.) (gauge)	
—Upper	3.5 (0.138) (10)
—Lower	3.5 (0.138) (10)
Side Skirt Thickness, mm (in.) (gauge)	6 (0.25) (3)
Approximate Weight, kg (lb)	605 (1332)
Drivelines	
Size	
—Main Driveline	ASAE Category 4
—Connecting Driveline	—
Protection Type	
—Main Driveline	Self-adjusting slip clutch
—Connecting Driveline	—
Gear cases	
Quantity	1
kW (hp) Rating	
—Transfer gear case	—
—Center gear case	56 (75) Continuous 75 (100) Peak
—Outer gear case	—
Blades	
Thickness, mm (in.)	13 (0.5)
Width, mm (in.)	102 (4)
Type	Suction
Overlap, mm (in.)	—
Material Flow System	Max Flow
Holder	Round Stump jumper
Blade Tip Speed	
540 rpm	82.2 m/s (16 182 ft/min) 296 km/h (184 mph)
1000 rpm	—
Wheels	
Type	Puncture Proof Laminated Optional Dual Tail Wheels
Row Width Adjustment	No
Shielding	
Front	Chain
Rear	Chain

Specifications are based on published information at the time of publication. Specifications are subject to change without notice. Contact your local John Deere™ dealer for more information.

RD91939,00002A1-19-25JAN18

HX6 Specifications

MANUFACTURER	John Deere
MODEL	HX6
Capacity	
Cutting Width, mm (in.)	1830 (72)

Specifications

MANUFACTURER	John Deere
MODEL	HX6
Cutting Height, mm (in.)	51—229 (2 to 9)
Cutting Diameter of Material, mm (in.)	76.2 (3)
Cutting Chamber Depth, mm (in.)	296 (11.6)
Tractor Compatibility	
Tractor PTO kW (hp) Range	Minimum 29.8 (40)
Tractor PTO rpm	540
Hitch	
Type	Lift-Type
Category	2, 3N
Dimensions	
Transport Width, mm (in.)	1930 (76)
Overall Width, mm (in.)	1930 (76)
Overall Length, mm (in.)	2933 (115.5)
Deck Shape	Domed
Deck Type	Double Deck
Deck Thickness, mm (in.)	
—Upper	3.0 (0.118)
—Lower	3.5 (0.137)
Side Skirt Thickness, mm (in.) (gauge)	6 (0.25) (3)
Approximate Weight, kg (lb)	542 (1195)
Drivelines	
Size	
—Main Driveline	ASAE Category 4
—Connecting Driveline	—
Protection Type	
—Main Driveline	Self-adjusting slip clutch
—Connecting Driveline	—
Gear cases	
Quantity	1
kW (hp) Rating	
—Transfer gear case	—
—Center gear case	111.9 (150) Continuous 152.9 (205) Peak
—Outer gear case	—
Blades	
Thickness, mm (in.)	13 (0.5)
Width, mm (in.)	102 (4)
Type	Suction
Overlap, mm (in.)	—
Material Flow System	Max Flow
Holder	Round Stump jumper
Blade Tip Speed	
540 rpm	69 m/s (13 600 ft/min) 248.5 km/h (154.5 mph)
1000 rpm	—
Wheels	
Type	Puncture Proof Laminated
Row Width Adjustment	No
Shielding	
Front	Chain

MANUFACTURER	John Deere
MODEL	HX6
Rear	Chain

Specifications are based on published information at the time of publication. Specifications are subject to change without notice. Contact your local John Deere™ dealer for more information.

RD91939,00002A2-19-25JAN18

HX7 Specifications

MANUFACTURER	John Deere
MODEL	HX7
Capacity	
Cutting Width, mm (in.)	2130 (84)
Cutting Height, mm (in.)	51—229 (2 to 9)
Cutting Diameter of Material, mm (in.)	76.2 (3)
Cutting Chamber Depth, mm (in.)	304 (12)
Tractor Compatibility	
Tractor PTO kW (hp) Range	Minimum 33.6 (45)
Tractor PTO rpm	540
Hitch	
Type	Lift-Type
Category	2, 3N
Dimensions	
Transport Width, mm (in.)	2260 (89)
Overall Width, mm (in.)	2260 (89)
Overall Length, mm (in.)	3247 (128)
Deck Shape	Domed
Deck Type	Double Deck
Deck Thickness, mm (in.)	
—Upper	3.0 (0.118)
—Lower	3.5 (0.137)
Side Skirt Thickness, mm (in.) (gauge)	6 (0.25) (3)
Approximate Weight, kg (lb)	633 (1396)
Drivelines	
Size	
—Main Driveline	ASAE Category 4
—Connecting Driveline	—
Protection Type	
—Main Driveline	Self-adjusting slip clutch
—Connecting Driveline	—
Gear cases	
Quantity	1
kW (hp) Rating	
—Transfer gear case	—
—Center gear case	111.9 (150) Continuous 152.9 (205) Peak
—Outer gear case	—

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Specifications

MANUFACTURER	John Deere
MODEL	HX7
Blades	
Thickness, mm (in.)	13 (0.5)
Width, mm (in.)	102 (4)
Type	Suction
Overlap, mm (in.)	—
Material Flow System	Max Flow
Holder	Round Stump jumper
Blade Tip Speed	
540 rpm	81.5 m/s (16 046 ft/min) 293.4 km/h (182.4 mph)
1000 rpm	—
Wheels	
Type	Puncture Proof Laminated
Row Width Adjustment	No
Shielding	
Front	Chain
Rear	Chain

Specifications are based on published information at the time of publication. Specifications are subject to change without notice. Contact your local John Deere™ dealer for more information.

RD91939,00002A3-19-25JAN18

Technical Information

Technical information can be purchased from John Deere. Publications are available in print or CD-ROM format.

Orders can be made using one of the following:

- John Deere Technical Information Store: **www.JohnDeere.com/TechInfoStore**
- Call 1-800-522-7448
- Contact your John Deere dealer

Available information includes:



TS189—UN—17JAN89

PARTS CATALOGS list service parts available for your machine with exploded view illustrations to help you

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identify the correct parts. It is also useful in assembling and disassembling.



TS191—UN—02DEC88

OPERATOR'S MANUALS providing safety, operating, maintenance, and service information.



TS224—UN—17JAN89

TECHNICAL MANUALS outlining service information for your machine. Included are specifications, illustrated assembly and disassembly procedures, hydraulic oil flow diagrams, and wiring diagrams. Some products have separate manuals for repair and diagnostic information. Some components, such as engines, are available in a separate component technical manual.



TS1663—UN—10OCT97

EDUCATIONAL CURRICULUM including five comprehensive series of books detailing basic information regardless of manufacturer:

- Agricultural Primer series covers technology in farming and ranching.
- Farm Business Management series examines “real-

world” problems and offers practical solutions in the areas of marketing, financing, equipment selection, and compliance.

- Fundamentals of Services manuals show you how to repair and maintain off-road equipment.
- Fundamentals of Machine Operation manuals explain machine capacities and adjustments, how to improve machine performance, and how to eliminate unnecessary field operations.
- Fundamentals of Compact Equipment manuals provide instruction in servicing and maintaining equipment up to 40 PTO horsepower.

3. If unable to resolve, explain problem to dealership manager and request assistance.

4. If you have a persistent problem your dealership is unable to resolve, ask your dealer to contact John Deere for assistance. Or contact the Ag Customer Assistance Center at 1-866-99DEERE (866-993-3373) or e-mail us at www.deere.com/en_US/ag/contactus/.

DX,IBC,2-19-02APR02

DX,SERVLIT-19-07DEC16

John Deere Is At Your Service



TS201—UN—15APR13

CUSTOMER SATISFACTION is important to John Deere.

Our dealers strive to provide you with prompt, efficient parts and service:

- Maintenance and service parts to support your equipment.
- Trained service technicians and the necessary diagnostic and repair tools to service your equipment.

CUSTOMER SATISFACTION PROBLEM RESOLUTION PROCESS

Your John Deere dealer is dedicated to supporting your equipment and resolving any problem you may experience.

1. When contacting your dealer, be prepared with the following information:

- Machine model and product identification number
- Date of purchase
- Nature of problem

2. Discuss problem with dealer service manager.

