

AutoConnect™ Mid-Mount Mower 54D and 60D (European)



OPERATOR'S MANUAL AutoConnect Mid-Mount Mower 54D and 60D

OMTR122750 ISSUE A2 (ENGLISH)

John Deere Augusta Works

European Edition
PRINTED IN U.S.A.



Introduction

Foreword

THANK YOU for purchasing a John Deere product.

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 machine or implement will travel when going forward.

WRITE PRODUCT IDENTIFICATION NUMBERS (P.I.N.) in the Specification or Identification Numbers section. Accurately record all the numbers to help in tracing the machine should it be stolen. Your distributor 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 distributor.

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.

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,IFC10A -19-03APR09-1/1

Contents

	Page		Page
Product Identification			
Product Compatibility.....	00-1	Setting Height of Cut	30-2
Record Identification Numbers	00-1	Engaging Mower.....	30-2
		Unplugging Mower.....	30-2
Safety		Transporting Mower on Machine	30-3
Read Safety in Machine Operator's Manual.....	05-1	Transporting Machine on Trailer.....	30-3
Follow Safety Instructions.....	05-1		
Prepare for Emergencies.....	05-1	Removal and Storage	
Understand Signal Words.....	05-2	Remove Mower	35-1
Recognize Safety Information	05-2	Storing Mower	35-3
Operator Training Required.....	05-2		
Avoid Backover Accidents	05-3	Service	
Preparation	05-3	Service Intervals	40-1
Operating Safely	05-4	Grease.....	40-1
Park Machine Safely.....	05-4	Gear Oil	40-1
Avoid High-Pressure Fluids	05-5	Remove Belt Shield	40-1
Checking Mowing Area	05-5	Lubricating Mower	40-2
Rotating Blades are Dangerous	05-5	Servicing Gearbox	40-3
Protect Children.....	05-6	Servicing Mower Belt.....	40-3
Stay Clear of Rotating Drivelines.....	05-6	Check for Bent Mower Blades	40-4
Avoid Tipping.....	05-7	Remove and Install Mower Blades	40-4
Wear Protective Clothing.....	05-7	Sharpen Blades.....	40-5
Protect Against Noise	05-7	Balance Blades.....	40-5
Store Attachments Safely	05-8	Replacing Wheels.....	40-6
Maintenance and Storage	05-8	Replace Sheaves	40-6
Safety Labels		Troubleshooting	
Replace Safety Signs	10-1	Use Troubleshooting Chart.....	45-1
Safety Labels.....	10-1	Mower Deck Troubleshooting	45-1
		Connecting Mower Deck Troubleshooting.....	45-2
Assembly			
Required Equipment.....	15-1	Specifications	
Install Wheels	15-1	Mower Deck Specifications	50-1
Install Discharge Chute	15-1		
		Get Quality Service	
Install Mower		Service Literature	55-1
Install Mower	20-1	Parts	55-1
Connect Hydraulic Hose for Mower Lift.....	20-4	Order Service Parts Online.....	55-1
		John Deere Quality Continues with	
Adjust Mower		Quality Service	55-1
Preparing Machine	25-1		
Adjusting Mower Level (Side-to-Side)	25-1	Declaration of Conformity	
Adjusting Mower Level (Front-to-Rear)	25-3	EU Declaration of Conformity	60-1
Adjusting Deck Height	25-6	UK Declaration of Conformity	60-2
Adjusting Mower Wheels.....	25-9	EU and UK Certification and	
		Specification Label	60-3
Operate Mower			
Raise and Lower Mower.....	30-1		

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.

COPYRIGHT © 2022
DEERE & COMPANY
Moline, Illinois
All rights reserved.
A John Deere ILLUSTRATION™ Manual
Previous Editions
Copyright © 2021

Product Identification

Product Compatibility

The 54D and 60D AutoConnect mowers are designed for use with compact utility tractor models:

1023E, 1025R, 1026R Serial No. (LL100001-)

2025R, 2026R Serial No.(HH100001-)

Before operating the mower, the following equipment must be installed on the machine. See your John Deere dealer.

- Mower Lift Kit
- Independent Hydraulic Lift Kit (Optional)

UP00731,0000A12 -19-09JAN20-1/1

Record Identification Numbers

AutoConnect Mower

Mowers for 1023E, 1025R, 1026R:

For tractor Serial No. (LL100001-)

Mowers for 2025R, 2026R:

For tractor Serial No. (HL100001-)

If you need to contact an Authorized Service Center for information on servicing, always provide the product model and serial number.

You will need to locate the model and serial numbers for the mower deck and record the information in the spaces provided below.

DATE OF PURCHASE:

DEALER NAME:

DEALER PHONE:

PRODUCT SERIAL NUMBER:

UP00731,0000A11 -19-09JAN20-1/1

Safety

Read Safety in Machine Operator's Manual

Read the general safety operating precautions in your machine operator's manual for additional safety information.

UP00731,0000095 -19-04SEP13-1/1

Follow Safety Instructions

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



TS201 —UN—15APR13

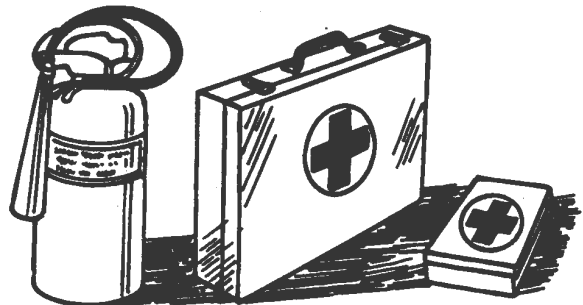
DX,READ -19-16JUN09-1/1

Prepare for Emergencies

Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

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



TS201 —UN—15APR13

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

Understand Signal Words

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.

 **DANGER**

 **WARNING**

 **CAUTION**

TS187 —19—30SEP88

DX,SIGNAL -19-05OCT16-1/1

Recognize Safety Information

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

Follow recommended precautions and safe operating practices.



T81389 —UN—28JUN13

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

Operator Training Required

- Read the operator's manual and other training material. If the operator or mechanic cannot read English, it is the owner's responsibility to explain this material to them. This publication is available in other languages.
- Become familiar with the safe operation of the equipment, operator controls, and safety signs.
- All operators and mechanics should be trained. The owner of the machine is responsible for training the users.

- Never let children or untrained people operate or service the equipment. Local regulations may restrict the age of the operator.
- The owner/user can prevent and is responsible for accidents or injuries occurring to themselves, other people, or property.
- Operate the machine in an open, unobstructed area under the direction of an experienced operator.

WS68074,0000547 -19-31MAR21-1/1

Avoid Backover Accidents

Before moving machine, be sure that all persons are clear of machine path. Turn around and look directly for best visibility. Use a signal person when backing if view is obstructed or when in close quarters.

Do not rely on a camera to determine if personnel or obstacles are behind the machine. The system can be limited by many factors including maintenance practices, environmental conditions, and operating range.



PC10857XW —UN—15APR13

DX,AVOID,BACKOVER,ACCIDENTS -19-30AUG10-1/1

Preparation

- Evaluate the terrain to determine what accessories and attachments are needed to properly and safely perform the job. Only use accessories and attachments approved by the manufacturer.
- Wear appropriate clothing including hard hat, safety glasses and hearing protection. Long hair, loose clothing or jewelry may get tangled in moving parts.
- Inspect the area where the equipment is to be used and remove all objects such as rocks, toys and wire which can be thrown by the machine.
- Before using, always visually inspect to see that the blades, blade bolts and cutter assembly are not worn or damaged. Replace worn or damaged blades and bolts in sets to preserve balance.
- On multi-bladed machines, take care as rotating one blade can cause other blades to rotate.
- Use extra care when handling gasoline and other fuels. They are flammable and vapors are explosive.
 - Use only an approved container.
 - Never remove gas cap or add fuel when engine is running. Do not smoke.
 - Never refuel or drain the machine indoors.
- Check that the operator's presence controls, safety switches and shields are attached and functioning properly. Do not operate unless they are functioning properly.

WS68074,0000548 -19-31MAR21-1/1

Operating Safely

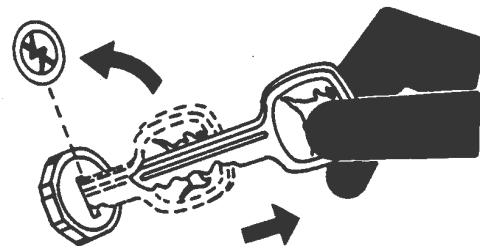
- Never run an engine in an enclosed area where dangerous carbon monoxide fumes can collect. •Only operate in good light, keeping away from holes and hidden hazards.
- Be sure all drives are in neutral and parking brake is engaged before starting engine. Only start engine from the operator's position. Use seat belts if provided.
- Slow down and use extra care on hillsides. Be sure to travel in the recommended direction on hillsides. For this machine, drive up and down hillsides, not across. Turf conditions can affect the machine's stability. Use caution while operating near drop-offs.
- Slow down and use caution when making turns and when changing directions on slopes.
- Never raise deck with the blades running
- Never operate with the PTO shield, or other guards, not securely in place. Be sure all interlocks are attached, adjusted properly, and functioning properly.
- Never operate with the discharge deflector raised, removed or altered, unless using a grasscatcher. Do not operate mower without discharge chute or entire grasscatcher in place.
- Do not change the engine governor setting or overspeed the engine. Operating the engine at excessive speed can increase the hazard of personal injury.
- Stop on level ground, lower implements, disengage drives, engage parking brake, and shut off engine before leaving the operator's position for any reason including emptying the grasscatchers or unclogging the chute.
- Stop equipment and inspect blades after striking objects or if an abnormal vibration occurs. Make necessary repairs before resuming operations.
- Keep hands and feet away from the cutting units.
- Look behind and down before backing up to be sure of a clear path.
- Never carry passengers and keep pets and bystanders away.
- Slow down and use caution when making turns and crossing roads and sidewalks. Stop blades if not mowing. Watch for traffic when operating near or crossing roadways.
- Be aware of the mower discharge direction and do not point it at anyone.
- Do not operate the machine while under the influence of alcohol or drugs.
- Use care when loading or unloading the machine into or off of a trailer or truck.
- Use care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.
- Inspect machine before you operate. Be sure hardware is tight. Repair or replace damaged, badly worn, or missing parts. Be sure guards and shields are in good condition and fastened in place. Make any necessary adjustments before you operate.
- Before using, always visually inspect to see that the blades, blade bolts and the mower assembly are not worn and damaged. Replace worn and damaged blades and bolts in sets to preserve balance.
- Keep safety labels visible when installing accessories and attachments.
- Do not wear radio or music headphones. Safe service and operation require your full attention.
- When machine is left unattended, stored, or parked, lower the mower deck unless a positive mechanical lock is used.
- Mow only in daylight or in good artificial light.

WS68074,0000549 -19-31MAR21-1/1

Park Machine Safely

Before working on the machine:

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



TS230 —UN—24MAY89

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

Avoid High-Pressure Fluids

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.

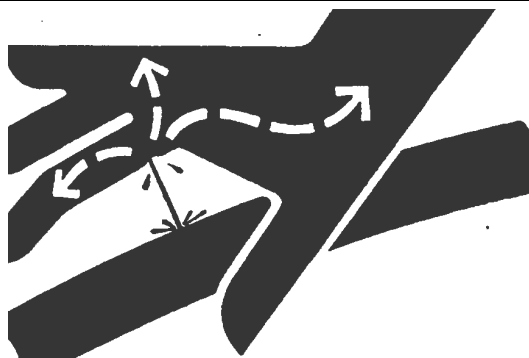
Replace worn or damaged hose assemblies immediately with John Deere approved replacement parts.

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



X9811 —UN—23AUG88

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 -19-12OCT11-1/1

Checking Mowing Area

TCAL41689 —UN—08APR13

- Clear mowing area of objects that might be thrown. Keep people and pets out of mowing area.
- Low-hanging branches and similar obstacles can injure the operator or interfere with mowing operation. Before mowing, identify potential obstacles such as low-hanging branches, and trim or remove those obstacles.
- Study mowing area. Set up a safe mowing pattern. Do not mow where traction or stability is doubtful.
- Test drive area with mower lowered but not running. Slow down when you travel over rough ground.



AP43109,000028C -19-15APR13-1/1

Rotating Blades are Dangerous

TCAL43410 —UN—15MAR13

HELP PREVENT SERIOUS OR FATAL ACCIDENTS:

- Rotating blades can cut off arms and legs, and throw objects. Failure to observe safety instructions could result in serious injury or death.
- Keep hands, feet and clothing away from mower deck when engine is running.
- Be alert at all times, drive forward and in reverse carefully. People, especially children can move quickly into the mowing area before you know it.
- Before backing up, stop mower blades or attachments and look down and behind the machine carefully, especially for children.



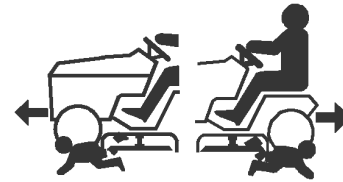
- Do not mow in reverse.
- Shut off blades when you are not mowing.
- Park machine safely before leaving the operator's station for any reason including emptying the grasscatchers or unplugging the chute.

UP00731,000009E -19-04SEP13-1/1

Protect Children

MXAL41929 —UN—18FEB13

- Death or serious injury can occur when young children associate having fun with a lawn mowing machine simply because someone has given them a ride on a machine.
- Children are attracted to lawn mowing machines and mowing activities. They don't understand the dangers of rotating blades or the fact that the operator is unaware of their presence.
- Children who have been given rides in the past may suddenly appear in the mowing area for another ride and be run over or backed over by the machine.
- Tragic accidents with children can occur if the operator is not alert to the presence of children, especially when a child approaches a machine from behind. Before and while backing up, stop mower blades and look down and behind the machine carefully, especially for children.
- Never carry children on a machine or attachment, even with the blades off. Do not tow children in a cart or trailer. They can fall off and be seriously injured or interfere with safe machine operation.
- Never use the machine as a recreational vehicle or to entertain children.



- Never allow children or an untrained person operate the machine. Instruct all operators not to give children a ride on the machine or in an attachment.
- Keep children indoors, out of the mowing area, and in the watchful eye of a responsible adult, other than the operator, when a mower is being operated.
- Stay alert to the presence of children. Never assume that children will remain where you last saw them. Turn the machine off if a child enters the work area.
- Use extreme care when approaching blind corners, shrubs, trees, or other objects that may block your view of a child.

OUO1023,0000037 -19-21FEB13-1/1

Stay Clear of Rotating Drivelines

Entanglement in rotating driveline can cause serious injury or death.

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

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



TS1644 —UN—22AUG95

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

Avoid Tipping

TCAL47141 —UN—12APR13



- Slopes are a major factor related to loss-of-control and tip-over accidents, which can result in severe injury or death. Operation on all slopes requires extra caution.
- Be aware that mechanical front wheel drive (MFWD) can improve access to dangerously sloped terrain, thereby increasing the possibility of a tipover.
- Drive up and down a hill - not across.
- Watch for holes, ruts, bumps, rocks, or other hidden objects. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
- Do not mow or operate machine on wet grass. Tires may lose traction. Tires may lose traction on slopes even though the brakes are functioning properly.
- Choose a low ground speed so you will not have to stop or shift while on a slope.
- Always keep the machine in gear when going down slopes. Do not shift to neutral and coast downhill.
- Avoid starting, stopping or turning on a slope. If the tires lose traction, disengage the blades and proceed slowly, straight down the slope.

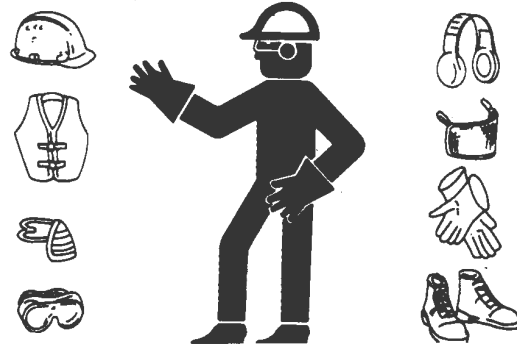
- Keep all movement on slopes slow and gradual. Do not make sudden changes in speed or direction, which could cause the machine to roll over.
- Do not operate machine near drop-offs, ditches, embankments, or bodies of water. The machine could suddenly roll over if a wheel goes over the edge or the edge caves in. Leave a safety area between the machine and any hazard.
- Danger of tipping is increased greatly with tires in narrow tread setting and driving at high speed.
- Follow the manufacturer's recommendations for wheel weights or counterweights for added stability when operating on slopes or using front or rear mounted attachments. Remove weights when not required.

UP00731,000009B -19-04SEP13-1/1

Wear Protective Clothing

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

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



TS206 —UN—15APR13

DX,WEAR2 -19-03MAR93-1/1

Protect Against Noise

There are many variables that affect the sound level range, including machine configuration, condition and maintenance level of the machine, ground surface, operating environmental, duty cycles, ambient noise, and attachments.

Exposure to loud noise can cause impairment or loss of hearing.

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



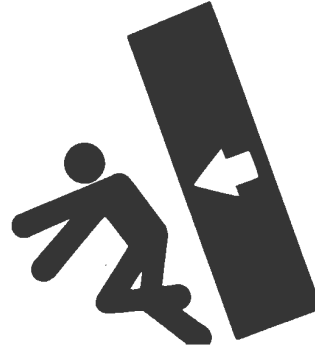
TS207 —UN—23AUG88

DX,NOISE -19-03OCT17-1/1

Store Attachments Safely

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

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



TS219 —JUN—23AUG88

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

Maintenance and Storage

- Never operate machine in a closed area where dangerous carbon monoxide fumes can collect.
- When machine is to be parked, stored or left unattended, lower the cutting means unless a positive mechanical lock is used.
- Disengage drives, lower implement, lock parking brake, stop engine and remove key or disconnect spark plug (for gas engines). Wait for all movement to stop before adjusting, cleaning or repairing.
- Clean grass and debris from cutting units, drives, mufflers, and engine to help prevent fires. Clean up oil or fuel spillage.
- Let engine cool before storing and do not store near flame.
- Shut off fuel while storing or transporting. Do not store fuel near flames or drain indoors.
- Park machine on level ground. Never allow untrained personnel to service machine. Understand service procedure before doing work.
- Use jack stands or lock service latches to support components when required. Securely support any machine elements that must be raised for service work.
- Before servicing machine or attachment, carefully release pressure from any components with stored energy, such as hydraulic components or springs.
- Release hydraulic pressure by lowering attachment or cutting units to the ground or to a mechanical stop and move hydraulic control levers back and forth.
- Disconnect battery or remove spark plug (for gas engines) before making any repairs. Disconnect the negative terminal first and the positive last. Reconnect positive first and negative last.
- Use care when checking blades. Wrap the blades or wear gloves, and use caution when servicing them. Only replace blades. Never straighten or weld them.
- Keep hands, feet, clothing, jewelry and long hair away from moving parts. If possible, do not make adjustments with the engine running.
- Charge batteries in an open well ventilated area, away from spark and flames. Unplug charger before connecting or disconnecting from battery. Wear protective clothing and use insulated tools.
- Keep all parts in good working condition and all hardware tightened. Replace all worn or damaged decals.
- Check grasscatcher components and the discharge guard frequently and replace with manufacturer's recommended parts, when necessary. Grasscatcher components are subject to wear, damage, and deterioration which could expose moving parts or allow objects to be thrown.
- Keep all nuts and bolts tight, especially blade attachment bolts, to be sure the equipment is in safe working condition.
- Check brake operation frequently. Adjust and service as required.
- On multi-bladed machines, take care as rotating one blade can cause other blades to rotate.

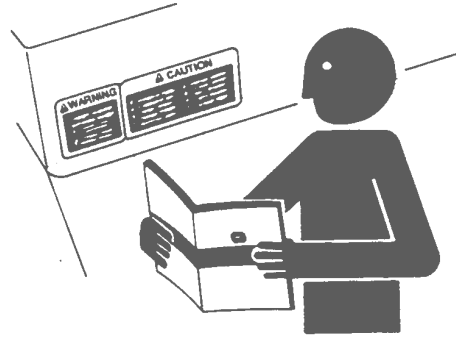
WS68074,000054A -19-31MAR21-1/1

Safety Labels

Replace Safety Signs

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

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



TS201 —UN—15APR13

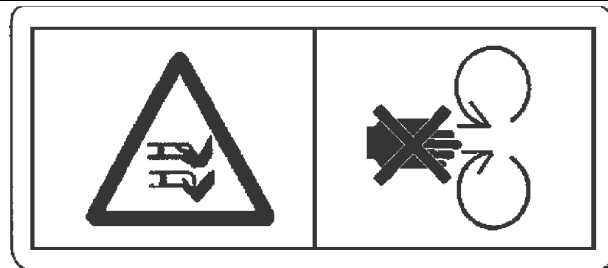
DX,SIGNS -19-18AUG09-1/1

Safety Labels

DANGER

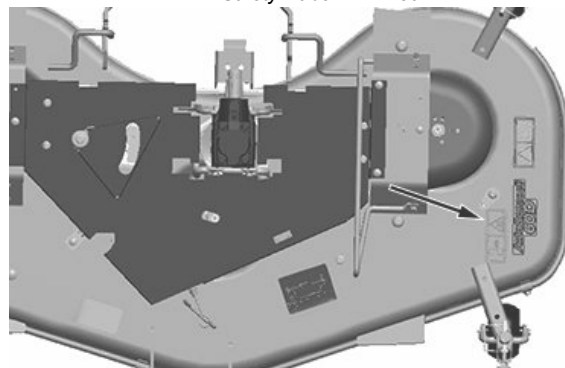
ROTATING BLADE

Do not put hands or feet under or into mower when the engine is running.



MXT009108 —UN—21SEP13

Safety Label - M118041



LVP12158 —UN—21DEC21

60 inch mower deck shown, 54 inch is similar

Continued on next page

AL61114,0000762 -19-21DEC21-1/4

DANGER

To avoid injury from rotating blades and thrown objects:

Keep hands and feet away from rotating blades.

Keep bystanders a safe distance away. Do not operate the mower without discharge chute or entire grass catcher in place.



Safety Label - M138631



60 mower deck shown, 54 is similar

AL61114,0000762 -19-21DEC21-2/4

LV25389 —UN—17MAY16

LV27158 —UN—04JAN17

DANGER

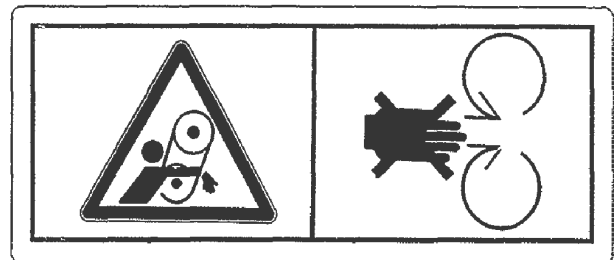
ROTATING BLADE

Do not put hands or feet under or into mower when the engine is running.

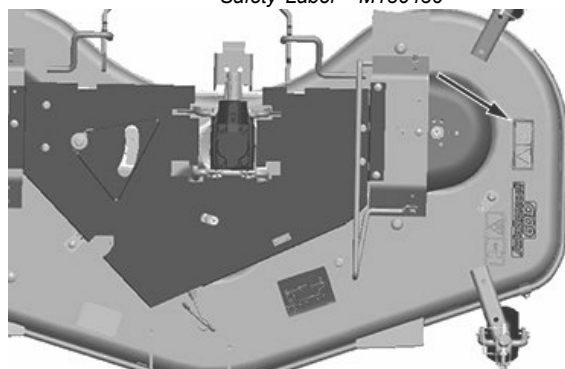
THROWN OBJECTS

Before mowing, clear area of objects that is thrown by blade.

Do not operate the mower without discharge chute or entire grass catcher in place.



Safety Label - M136436



60 inch mower deck shown, 54 inch is similar

Continued on next page

AL61114,0000762 -19-21DEC21-3/4

MXT009107 —UN—21SEP13

LVP12159 —UN—21DEC21

DANGER

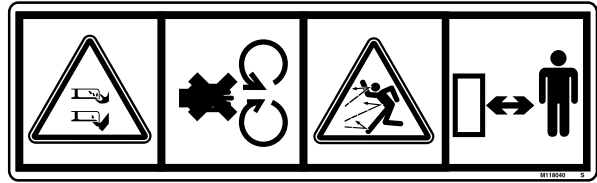
ROTATING BLADE

Do not put hands or feet under or into mower when the engine is running.

THROWN OBJECTS

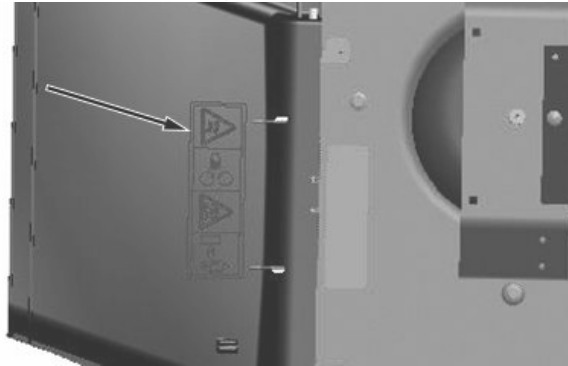
Before mowing, clear area of objects that is thrown by blade.

Do not operate the mower without discharge chute or entire grass catcher in place.



LV18938 —UN—28AUG13

Safety Label - M118040



LV27152 —UN—04JAN17

60 mower deck shown, 54 is similar

AL61114,0000762 -19-21DEC21-4/4

Assembly

Required Equipment

Before installing the mower, the following equipment must be installed on the machine. See your John Deere dealer for ordering information.

- Mower Lift Kit

- Independent Hydraulic Lift Kit (Optional)

CAUTION: Machine component or attachment is heavy. Use a safe lifting device with correct load capacity rating to lift, install or remove component or attachment.

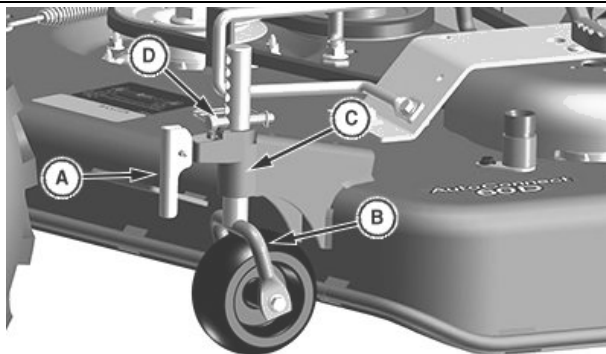
UP00731,000011F -19-03JAN17-1/1

Install Wheels

1. Remove mower from crate using chain hoist or other suitable device.
2. Install wheels (A) by sliding wheel shaft up through wheel bracket (B).
3. Press downward on handles (C) to lock wheels. Wheels must be in the unlocked position before installing mower on tractor.
4. Install spring pin (D) in each wheel shaft.

A—Wheel
B—Wheel Bracket

C—Handle
D—Spring Pin



LV27150—UN—21DEC16

UP00731,0000120 -19-21DEC16-1/1

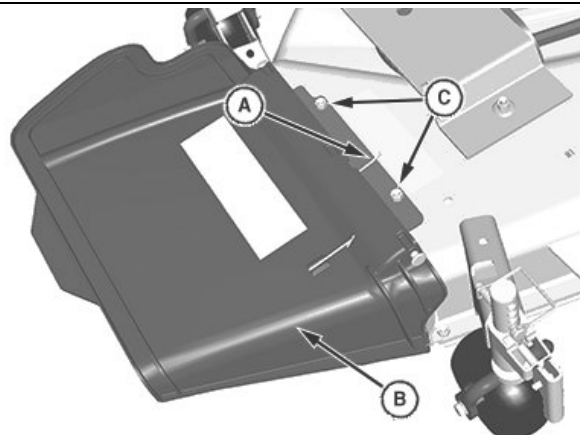
Install Discharge Chute

Install Discharge Chute (54D)

1. Ensure correct placement of spring (A).
2. Position the discharge chute assembly (B) on the mower and secure with two M8x16 carriage head bolts and two M8 locknuts (C).

A—Spring
B—Chute Assembly

C—Locknuts (M8)



Discharge Chute (54D)

LV23983—UN—04AUG15

Continued on next page

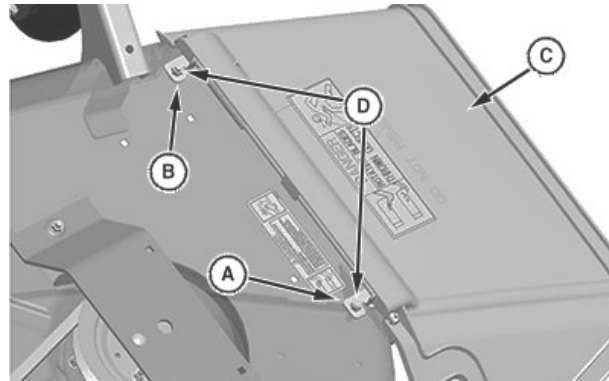
UP00731,000036C -19-28JUL15-1/2

Install Discharge Chute (60D)

1. Attach rear hinge (A) to deck with nut. Do not tighten.
2. Pre-load spring with one hand and attach front hinge (B) to deck with nut. Do not tighten.
3. Pull discharge chute assembly (C) away from deck as nuts (D) are tightened to help align hinges.

A—Rear Hinge
B—Front Hinge

C—Chute Assembly
D—Nuts



Discharge Chute (60D)

LV23984—UN—04AUG15

UP00731,000036C -19-28JUL15-2/2

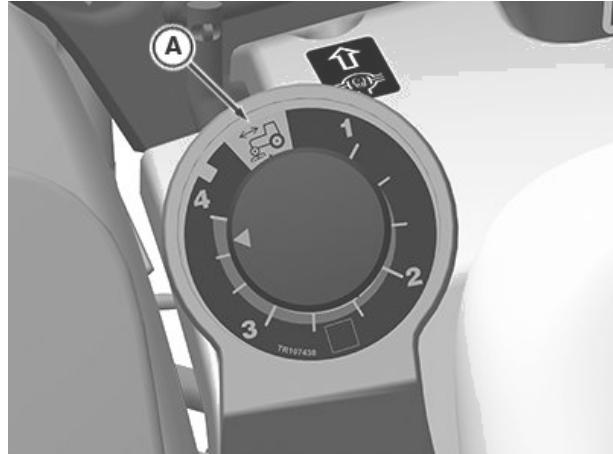
Install Mower

Install Mower

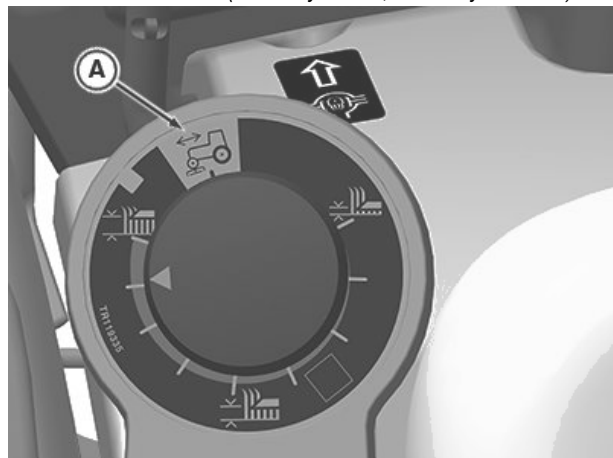
NOTE: If equipped, remove the front weights before installing the mower deck. Replace the weights after the mower deck is installed.

1. Set the mower height control to the install position (A).

A—Install Position



Numeric Label (1 - family shown, 2 - family is similar)



Symbolic Label (1 - family shown, 2 - family is similar)

PP71895,0001307 -19-16OCT20-1/7

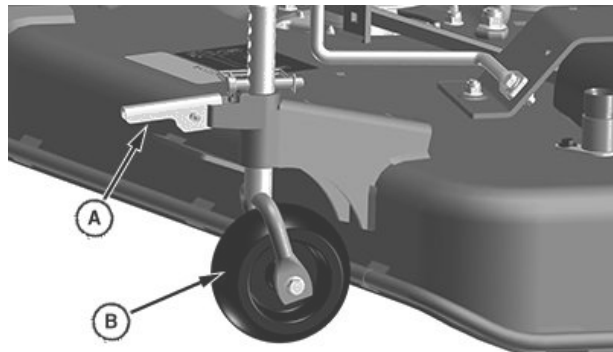
LVP11309 —UN—09SEP20

LVP11152 —UN—19AUG20

2. Raise handle (A) to release the lock on each gauge wheel (B). The mower rests fully on the ground.
3. Ensure that the mower deck is sitting on firm, level ground. A smooth surface allows the mower to be pushed along by the tractor. Inflate tires to 20 PSI.

A—Handle

B—Wheel



Continued on next page

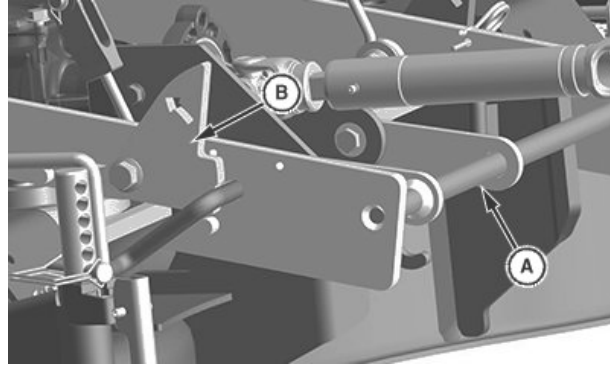
PP71895,0001307 -19-16OCT20-2/7

LV27027 —UN—09DEC16

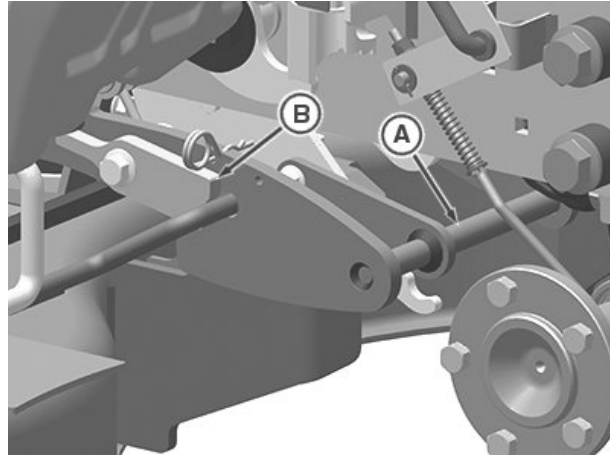
4. Ensure the rear lock assembly (A) is in the locked (B) position. The lock assembly automatically unlocks as the machine engages the mower, and locks after full engagement.
5. Lower the mower lift arms using the SCV or the rockshaft lever control.
6. Shift the machine PTO selector to the rear PTO to allow the mid-PTO and driveshaft to turn freely and engage the mower gear case with minimal resistance.

A—Rear Lock Assembly

B—Locked



Rear Lock Assembly (—MY19)



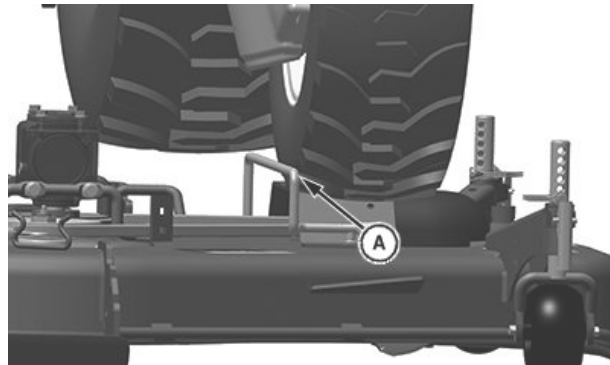
Rear Lock Assembly (MY20—)

PP71895,0001307 -19-16OCT20-3/7

LV27143 —UN—16DEC16

LVP11520 —UN—15OCT20

7. Engage the tractor MFWD with the machine in low range. Drive the machine straight toward the rear of the mower while aligning the inside of the left front tire with the guide bar (A).
8. Drive the tractor onto the mower deck with the inside of the left tire against the guide bar.
9. Slowly drive the tractor forward until the mower begins to pull along ground for approximately 102 mm (4 inches) behind front wheels.
10. If mower deck pulls forward early or appears to be caught in the lift system, stop the tractor, reverse slightly, and move forward again. If mower deck still does not properly attach, stop the tractor, lock the park brake, dismount the tractor, and determine the cause of the problem.



Mower Deck (—MY19) Shown, MY20— is Similar

A—Guide Bar

Continued on next page

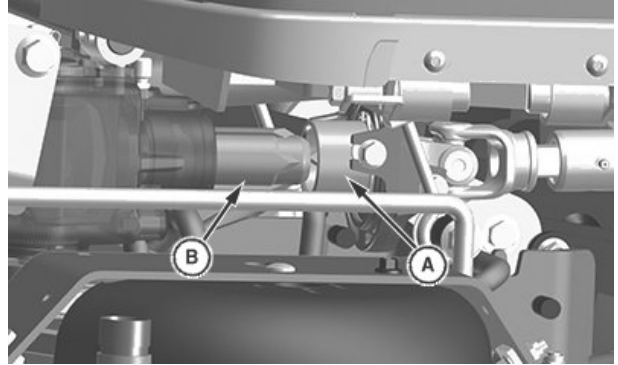
PP71895,0001307 -19-16OCT20-4/7

LV27016 —UN—09DEC16

11. PTO coupler (A) aligns with the gear box coupler (B).

A—PTO Coupler

B—Gear Box Coupler



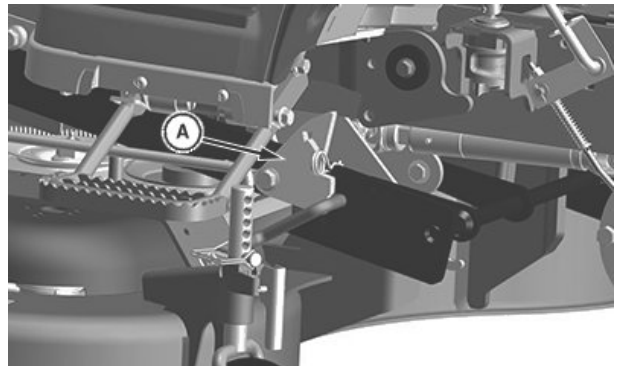
LV27020 —UN—08DEC16

PP71895,0001307 -19-16OCT20-5/7

12. Dismount the tractor and ensure locks (A) on both sides have dropped to the locked position. If necessary, pull the mower rearward to engage the lock and the coupler. On first installation, mower may not lock in position if front link is too short.

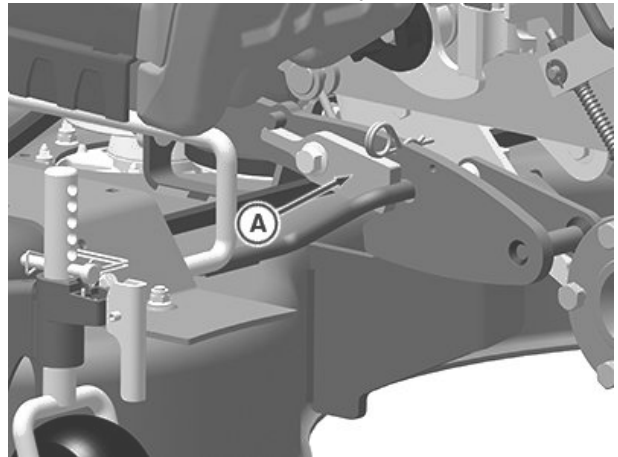
13. Install the cotter pins in the locked position.

A—Lock



LV27019 —UN—09DEC16

—MY19



LVP11521 —UN—15OCT20

MY20—

Continued on next page

PP71895,0001307 -19-16OCT20-6/7

14. Make sure the forward lift link (A) is nested into the hangers (B) per specification.

Specification

Forward Lift Link

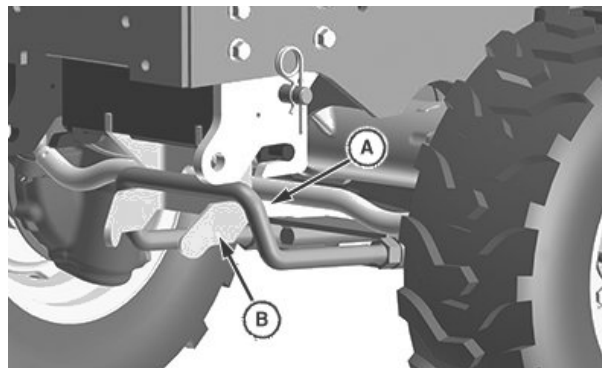
(A)—Gap..... 3 mm
0.125 in

15. Start the engine and lift the mower to full height.

16. Lock down all gauge wheels by snapping the handles down and ensuring the lock pins are fully seated in the vertical rods.

A—Forward Lift Link

B—Hanger



Forward Link (—MY19) Shown, MY20— is Similar

PP71895,0001307 -19-16OCT20-7/7

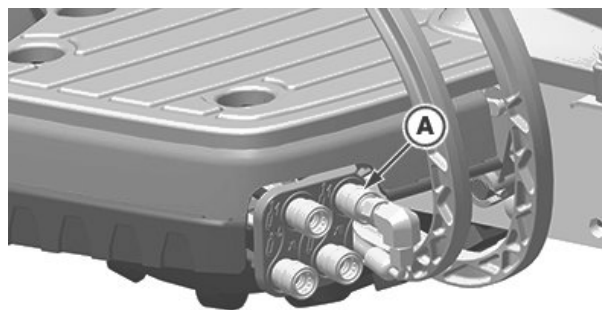
LV27018 —UN—13DEC16

Connect Hydraulic Hose for Mower Lift

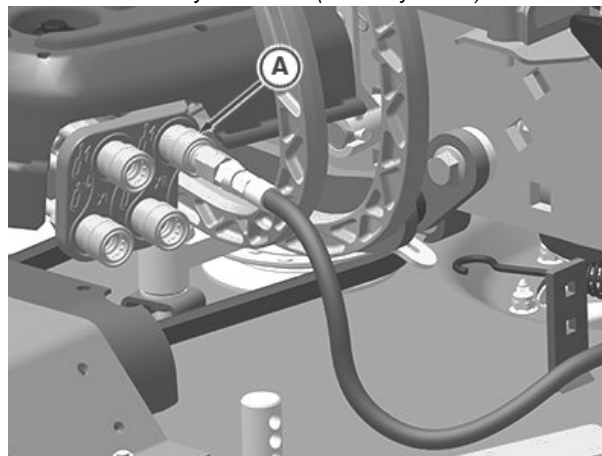
Connect Hydraulic Hose for SCV Hydraulic Mower Lift

1. Disconnect all loader SCV hose from SCV ports.
2. Connect the hydraulic mower lift hose to port (A).

A—Port



Hydraulic Port (2 - family tractor)



Hydraulic Port (1 - family tractor)

Continued on next page

DN39857,000031B -19-16OCT20-1/2

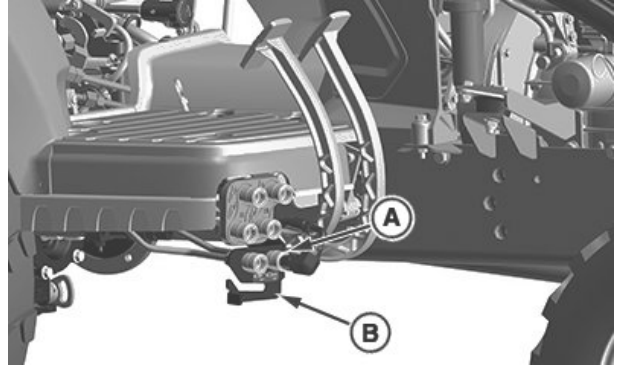
LV30376 —UN—11OCT18

LVP11522 —UN—15OCT20

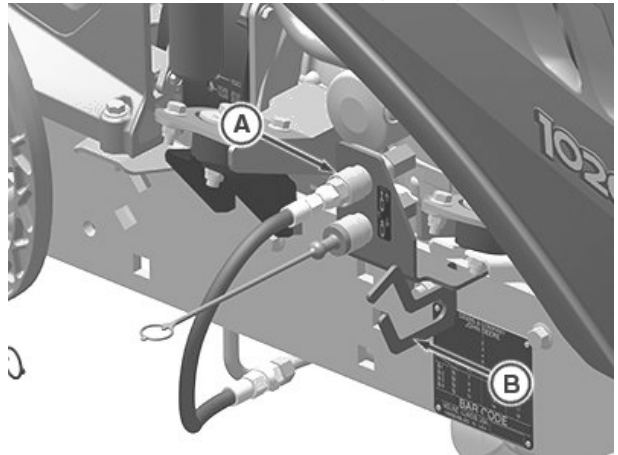
Connect Hydraulic Hose for Third Function Mower Lift

1. Disconnect all loader SCV and third function hose from SCV ports.
2. Connect the third function mower lift hose to the SCV port (A).
3. When not in use, store the third function lift hose in the storage bracket (B)

A—Third Function Mower Lift Hose **B—Storage Bracket**



2 - Family Shown, 1 - Family (—MY19) is Similar



1 - Family (MY20—)

DN39857,000031B -19-16OCT20-2/2

LV30378 —UN—15OCT18

LVP11540 —UN—16OCT20

Adjust Mower

Preparing Machine

Required Equipment:

- Mower Lift Kit
- Independent Hydraulic Lift Kit (Optional)

Machine Setup:

1. Park machine safely.

2. Follow machine operator's manual instructions to check tire pressure.
3. Assemble the mower deck per assembly instructions in operator's manual.

UP00731,0000106 -19-21DEC16-1/1

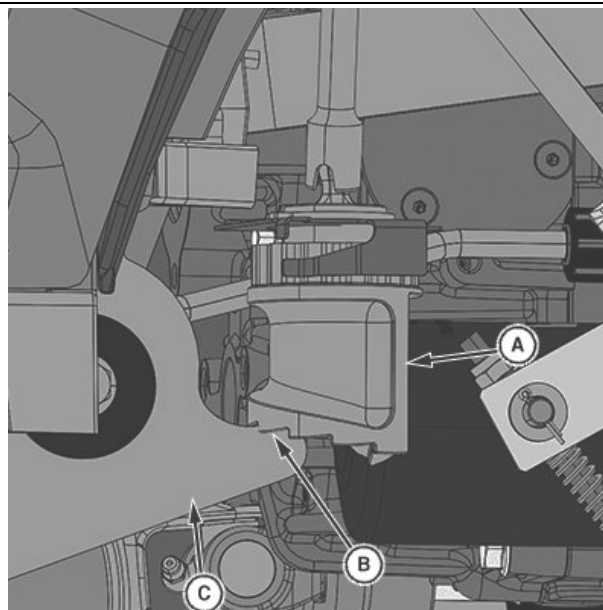
Adjusting Mower Level (Side-to-Side)

1. Park machine on a flat, level surface.
2. Lock park brake.
3. Disengage mower blades.
4. Raise the mower deck. Turn the height-of-cut control dial until the fifth step (B) on the height of cut cam (A) is oriented towards the bell crank (C). Lower the mower deck fully.

CAUTION: Rotating blades are dangerous. Before adjusting or servicing mower:

- To prevent the engine from starting accidentally, disconnect the negative (-) battery cable.
- Always wear gloves when handling mower blades or working near blades.

5. Stop the engine, remove the key, and hang a "DO NOT OPERATE" tag in the operator station.
6. Wait for the engine and all moving parts to stop before leaving the seat.
7. Disconnect the negative (-) battery cable.



A—Height of Cut Cam
B—Fifth Step

C—Bellcrank

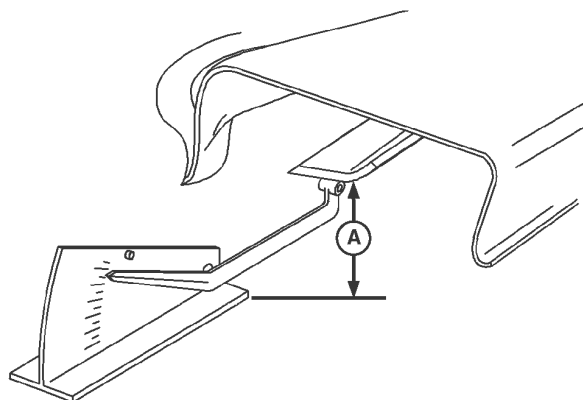
LV29980 —UN—04APR18

UP00731,000010C -19-12AUG21-1/4

NOTE: Do not allow the mower wheels to contact the ground during leveling.

8. Measure from the outside blade tip to the level surface (A).

A—Level Surface



Using Leveling Gauge

LV18692 —UN—20AUG13

Continued on next page

UP00731,000010C -19-12AUG21-2/4

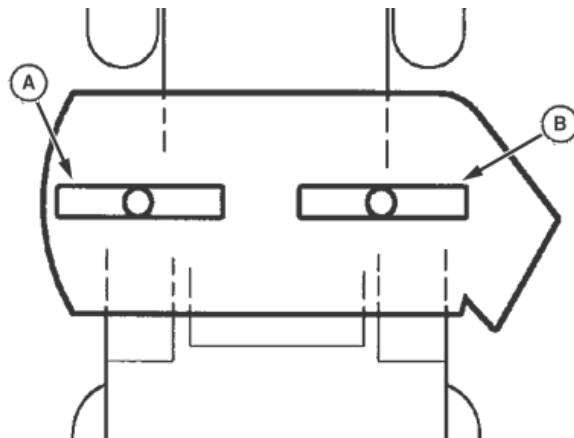
9. Turn the left blade (A) as shown. Hold drive belt and turn the right blade (B) as shown. Take blade tip-to-surface measurement on both blades. The difference between both measurements must not be greater than specification.

Specification

Side-to-Side—Difference..... 3 mm
0.125 in

A—Left Blade

B—Right Blade



UP00731,000010C -19-12AUG21-3/4

LV24008 —UN—04AUG15

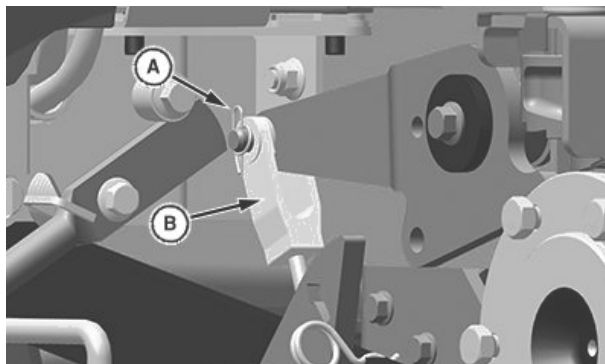
IMPORTANT: Avoid damage! For MY20— tractors, the protrusion (C) must face towards the front of the tractor to avoid damage to parts.

10. To adjust the side-to-side level:

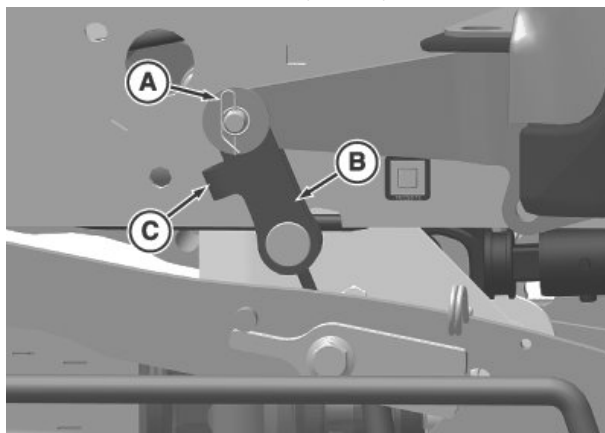
- Remove the retaining pins (A) from the left and right rear turnbuckles (B).
- Adjust one turnbuckle at a time, and check the blade level.
- When adjustment is complete, install the retaining pins.

A—Retaining Pins
B—Turnbuckle

C—Protrusion



Turnbuckle (—MY19) Shown



Turnbuckle (MY20—) Shown

UP00731,000010C -19-12AUG21-4/4

LV27024 —UN—15DEC16

LV30785 —UN—10AUG21

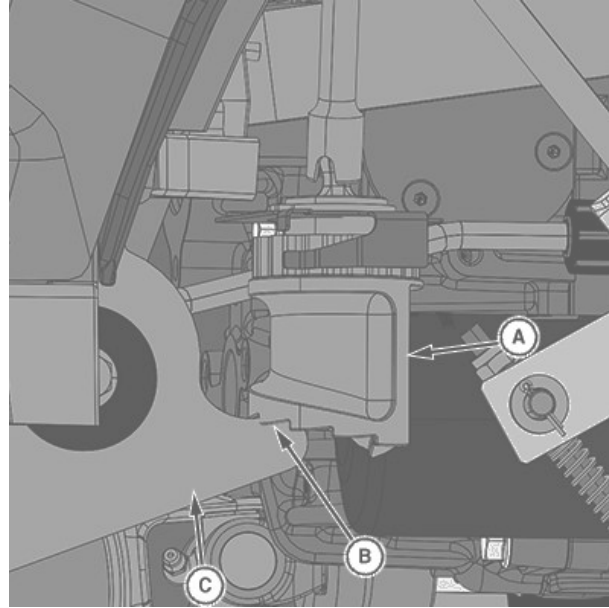
Adjusting Mower Level (Front-to-Rear)

1. Park machine on a flat, level surface.
2. Lock the park brake.
3. Disengage the mower blades.
4. Raise the mower deck. Turn the height-of-cut control dial until the fifth step (B) on the height of cut cam (A) is oriented towards the bell crank (C). Lower the mower deck fully.

CAUTION: Rotating blades are dangerous. Before adjusting or servicing mower:

- To prevent the engine from starting accidentally, disconnect the negative (-) battery cable.
- Always wear gloves when handling mower blades or working near blades.

5. Stop the engine, remove the key, and hang a "DO NOT OPERATE" tag in the operator station.
6. Wait for the engine and all moving parts to stop before leaving the operator seat.
7. Disconnect the negative (-) battery cable.



A—Height of Cut Cam
B—Fifth Step

C—Bellcrank

LV29980—UN—04APR18

UP00731,0000373 -19-12AUG21-1/5

NOTE: Adjust the front blade of the mower lower than the rear blade of the mower.

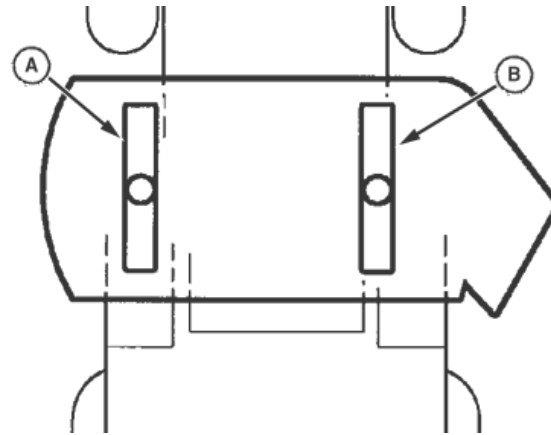
Do not allow the mower wheels to contact the ground during leveling.

8. Turn the left blade (A) as shown. Hold the drive belt and turn the right blade (B) as shown. Take blade tip-to-surface measurement on both ends of each blade and compare to specification:

Specification

Blade Tip Front-to-Rear
(front is the lower

end)—Height Difference.....3—6 mm
0.125—0.236 in



A—Left Blade

B—Right Blade

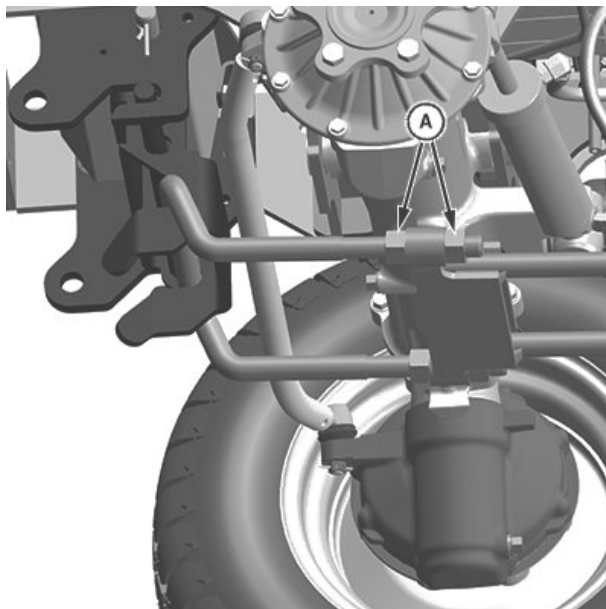
LV24010—UN—04AUG15

Continued on next page

UP00731,0000373 -19-12AUG21-2/5

9. If the front-to-rear difference is within specification, tighten draft link nuts (A) and go to step 12.
10. If the front-to-rear difference is greater than 13 mm (0.50 in), loosen draft link nuts (A).
 - a. To raise the front of the deck, shorten the draft link.
 - b. To lower the front of the deck, lengthen the draft link.
 - c. Return to step 4 to measure the front-to-rear level.
11. If the front-to-rear difference is less than 13 mm (0.50 in) but greater than 3 mm (0.125 in), tighten the draft link nuts (A).

A—Draft Link Nut (4 used)



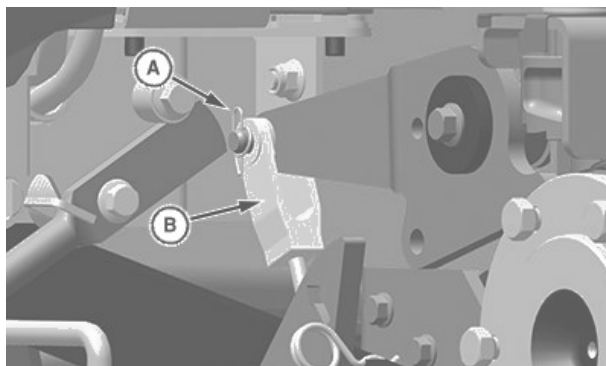
LV29882—UN—04APR18

UP00731,0000373 -19-12AUG21-3/5

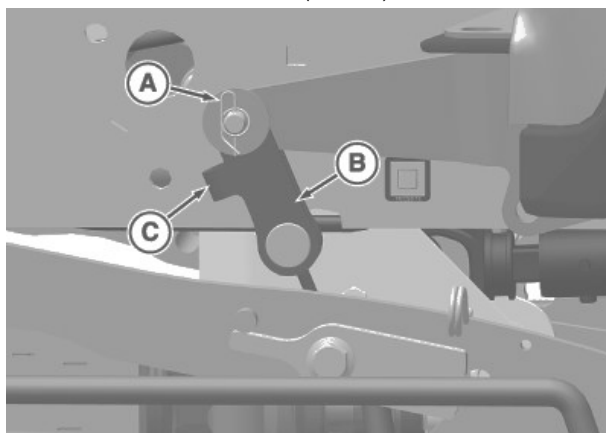
- a. Connect the negative battery cable.
 - b. Lower the deck to the ground, stop the engine, and remove the key.
- IMPORTANT: Avoid damage! For MY20— tractors, the protrusion (C) must face towards the front of the tractor to avoid damage to parts.**
- c. Remove the retaining pins (A) and pivot pin securing both turnbuckles (B) to the lift arms.
 - d. Shorten both turnbuckle assemblies an equal number of turns to raise the rear of the deck.
 - e. Lengthen both turnbuckle assemblies an equal number of turns to lower the rear of the deck.
 - f. When the adjustment is complete, install the retaining pins.
 - g. Return to step 4 to measure the front-to-rear level.
12. Connect the negative battery cable.
 13. Lower the deck to the ground, stop the engine, and remove the key.

A—Retaining Pins
B—Turnbuckle

C—Protrusion



Turnbuckle (—MY19) Shown



Turnbuckle (MY20—) Shown

LV27024—UN—15DEC16

LV30785—UN—10AUG21

Continued on next page

UP00731,0000373 -19-12AUG21-4/5

14. Measure the draft link gap (B) and compare to specifications.

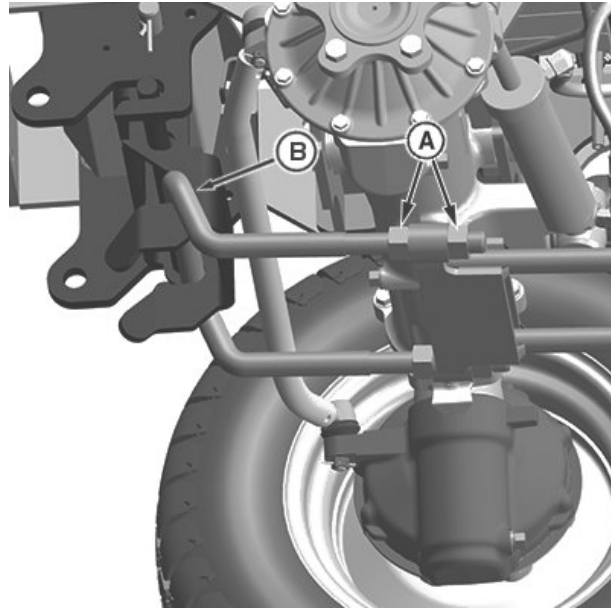
Specification

Draft Link Gap
(B)—Distance..... 3 mm
0.125 in

15. If the draft link gap (B) is not to specification, loosen the draft link nuts (A).
- a. To decrease the draft link gap, shorten the draft link.
 - b. To increase the draft link gap, lengthen the draft link.
 - c. Return to step 4 to measure the front-to-rear level.
16. If the draft link gap (B) is to specification, the front-to-rear leveling procedure is complete.

A—Draft Link Nut (4 used)

B—Draft Link Gap



Draft Link (—MY19) Shown, MY20— is Similar

LVP11523 —UN—15OCT20

UP00731,0000373 -19-12AUG21-5/5

Adjusting Deck Height

1. Ensure that the mower deck is level.
2. Raise the mower deck fully and measure the mower stop-to-tractor frame gap (A) between the mower lift stop and the tractor frame. Compare the measurement to specification:

Specification

Mower Stop-to-Tractor

Frame Gap

(A)—Distance.....3—13 mm
0.125—0.5 in

3. **If the mower stop-to-tractor frame gap is to specification, the deck adjustment is complete.**

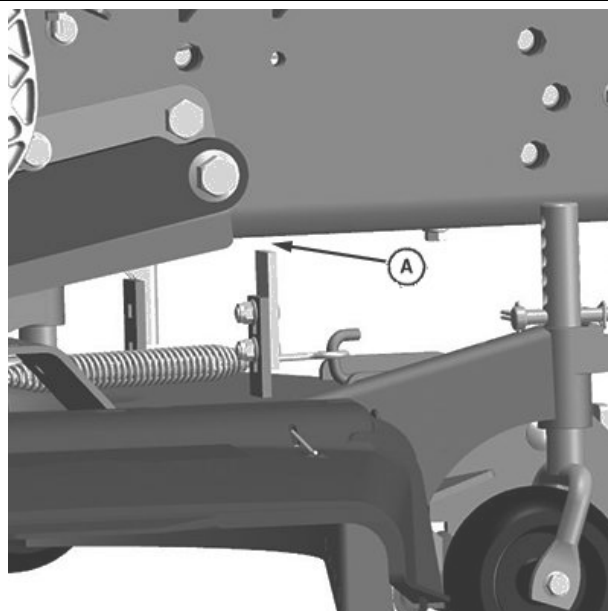
NOTE: If adjustments are needed beyond this point, perform the deck side-to-side and the front-to-rear procedures after the mower stop-to-tractor frame gap is successfully set.

If the mower stop-to-tractor frame gap cannot be achieved, the rockshaft linkage and or the lift strap linkage are out of adjustment. See your John Deere dealer for the proper adjustment procedure.

4. **If the mower stop-to-tractor frame gap is not to specification:**

- a. Lower the mower deck to the ground.
- b. Stop the engine and remove key.
- c. Wait for the engine and all moving parts to stop before leaving the operator seat.

A—Gap



Mower Stop (2 - family tractor)



Mower Stop (1 - family tractor)

LV29984—UN—04APR18

LVP11525—UN—15OCT20

Continued on next page

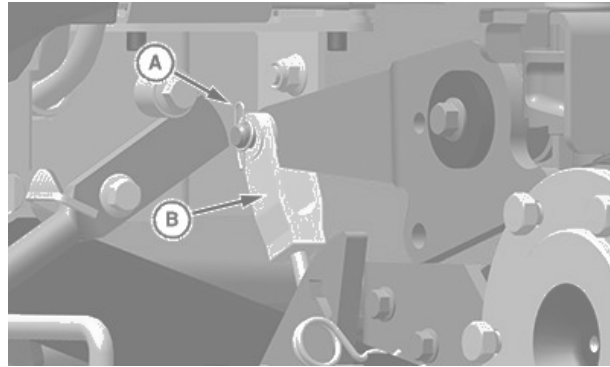
UP00731,000010D -19-12AUG21-1/3

IMPORTANT: Avoid damage! For MY20— tractors, the protrusion (C) must face towards the front of the tractor to avoid damage to parts.

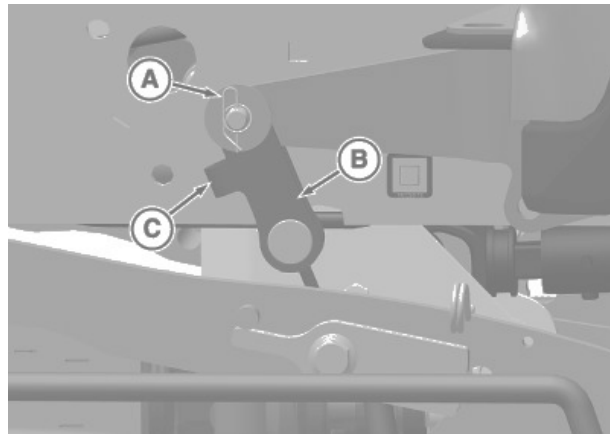
- d. Remove the retaining pins (A) and pivot pin securing both turnbuckles (B) to the lift arms.
- e. To reduce the gap, shorten the turnbuckle assemblies an equal number of turns.
- f. To increase the gap, lengthen the turnbuckle assemblies an equal number of turns.
- g. Install the turnbuckles on the lift arms.
- h. Raise the mower deck fully, stop engine, and remove key.

A—Retaining Pins
B—Turnbuckle

C—Protrusion



Turnbuckles (—MY19) Shown



Turnbuckle (MY20—) Shown

Continued on next page

UP00731,000010D -19-12AUG21-2/3

LV27024 —UN—15DEC16

LV30785 —UN—10AUG21

- i. Measure the mower stop-to-tractor frame gap (A) between the mower lift stop and the tractor frame. Compare the measurement to specification:

Specification

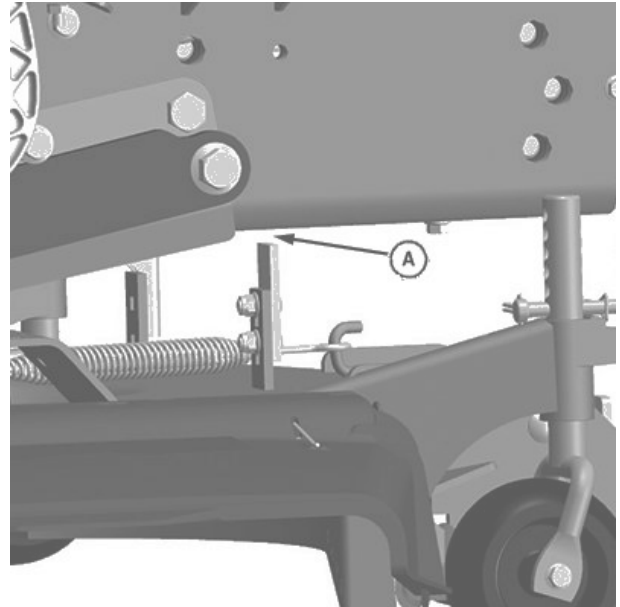
Mower Lift Stop-to-
Tractor Frame Gap

(A)—Distance.....3—13 mm
0.125—0.5 in

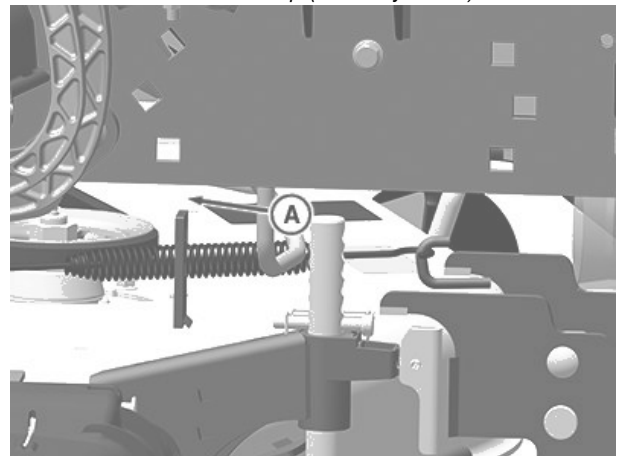
- j. Repeat steps a - i until mower stop-to-tractor frame gap is to specification.

5. Perform the side-to-side and the front-to-rear adjustment procedure.

A—Gap



Mower Stop (2 - family tractor)



Mower Stop (1 - family tractor)

LV29884 —UN—04APR18

LVP11525 —UN—15OCT20

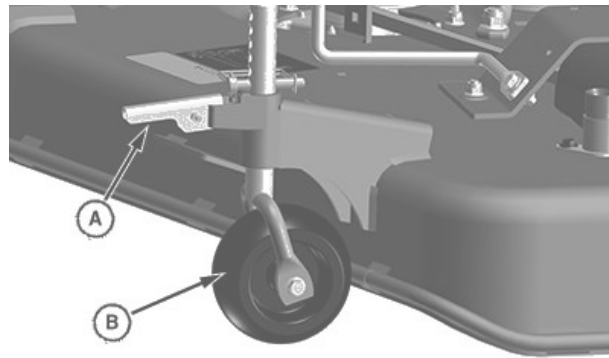
UP00731,000010D -19-12AUG21-3/3

Adjusting Mower Wheels

IMPORTANT: Avoid damage! If mower wheels are adjusted incorrectly, the mower deck can be damaged:

- Wheels must not ride on ground supporting mower weight.
- Check wheel adjustment each time cutting height is changed.

1. Park machine on a level surface, not on a slope.
2. Disengage mower blades.
3. Raise mower, turn the height-of-cut control to the desired cutting height and lower mower.
4. Lock park brake.
5. Stop engine and remove key.
6. Wait for engine and all moving parts to stop before leaving operator seat.
7. Set gauge wheel height:
 - a. Release gauge wheel lock (A).
 - b. Adjust wheel assembly to 9.5 mm (3/8 in) distance between gauge wheels and ground.



A—Gage Wheel Lock

B—Lock Pin

IMPORTANT: Avoid damage! Ensure that at least one hole remains above lock bracket. In extreme mowing conditions, retract wheels completely to avoid damage.

- c. Install snap lock pin (B) in hole just above gauge wheel bracket.
- d. Repeat for remaining gauge wheels.

UP00731,000010E -19-09DEC16-1/1

LV27027 —UN—09DEC16

Operate Mower

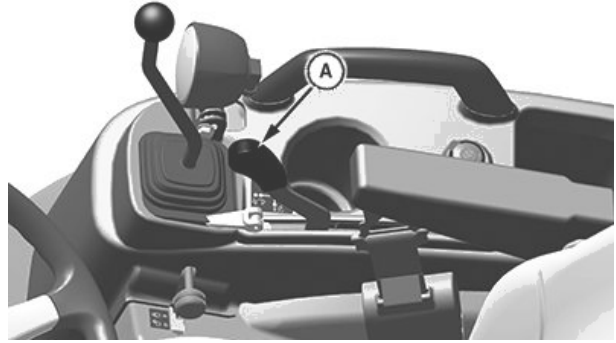
Raise and Lower Mower

The machine can be equipped with a mechanical or hydraulic mower lift control system. The height-of-cut control is the same for both systems. All controls are described below.

Mechanical Lift System

IMPORTANT: Avoid Damage when using the mechanical lift system. To prevent unintended operation, do not connect any implement or attachment to the three point hitch when the machine is being used for mowing operations.

A mechanical mower lift kit is connected to the machine rock shaft and operates with the rock shaft control lever (A). See the machine Operator's Manual for operating instructions for your specific model.



A—Rock Shaft Lever

UP00731,000010A -19-21DEC16-1/2

LV27021—UN—13DEC16

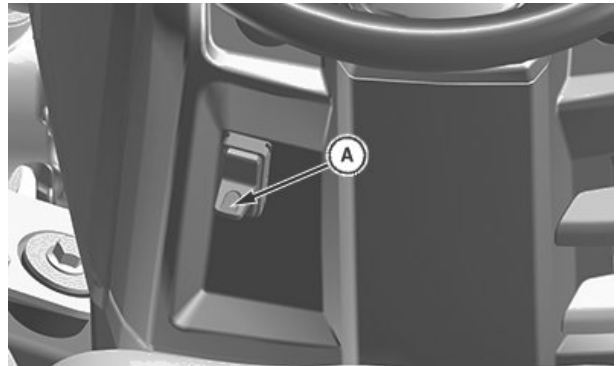
Hydraulic Mower Lift System

A hydraulic mower lift system operates independently of the machine rock shaft and is operated by the machine mower lift switch (A). See the machine Operator's Manual for operating instructions for your specific model.

To raise the mower:

1. Pull the mower lift switch up to raise the mower.
2. Push the mower lift switch down to lower the mower.

A—Mower Lift Switch



UP00731,000010A -19-21DEC16-2/2

LV27149—UN—21DEC16

Setting Height of Cut

NOTE: The label on the height-of-cut knob can be either numeric or symbolic.

NOTE: The numbers on the height-of-cut dial are for reference only. They do not represent a one-to-one ratio between the dial and the deck cutting height.

The mower height-of-cut is adjusted with the control (A) on the left side of the operator. Raise and hold the mower to its highest position using either type of the lift system and adjust the mower cutting height knob as follows:

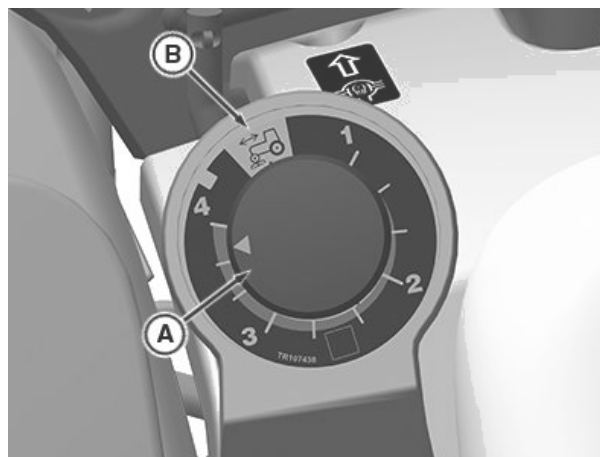
- Install (B) - Turn the control to this position to lower the mower lift mechanism whenever removal or installation of the mower is required.

NOTE: Do NOT lower lift system after adjusting the height-of-cut to the desired level.

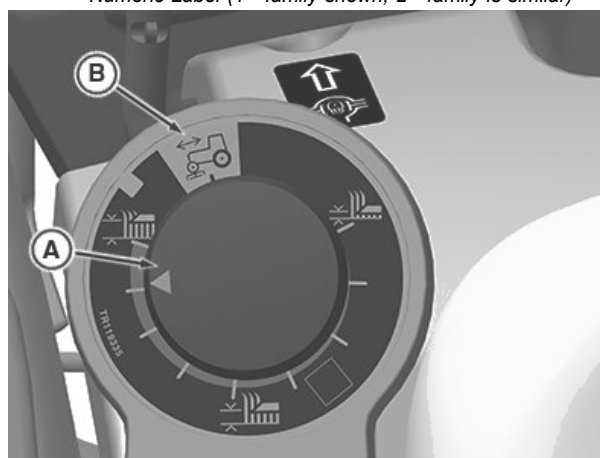
- Height-of-Cut Range 1—4 or Low to High - Turn the control to any position in this range to select the desired height-of-cut.

A—Height-of-Cut Control

B—Install Position



Numeric Label (1 - family shown, 2 - family is similar)



Symbolic Label (1 - family shown, 2 - family is similar)

LVP11308 —UN—09SEP20

LVP11154 —UN—19AUG20

UP00731,000010B -19-15OCT20-1/1

Engaging Mower

1. Review instructions on using mid-PTO included in your machine operator's manual.

2. Follow machine operator's manual instructions to engage mid-PTO and mower.

UP00731,0000069 -19-26AUG13-1/1

Unplugging Mower

CAUTION: Avoid injury! Do not attempt to unplug attachment with machine running.

- Rotating blades are dangerous. Shut off the engine and remove the key before getting off the seat to inspect the machine and attachment.
- Thrown objects can cause serious injury. Make sure all machine parts are stopped before raising hopper top or removing chutes.

1. Park machine safely. Wait for all moving parts to stop before getting off to inspect machine.
2. Check under mower deck and discharge chute for debris.
3. Remove debris and check for proper operation.

UP00731,000006A -19-06AUG15-1/1

Transporting Mower on Machine

Raise mower to the highest position possible on the mower cutting height knob for transport.

DN39857,0000318 -19-15OCT20-1/1

Transporting Machine on Trailer

Refer to machine operator's manual for transporting information.

UP00731,0000377 -19-30JUL15-1/1

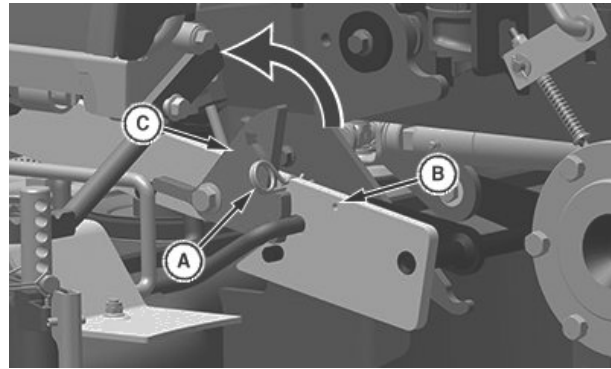
Removal and Storage

Remove Mower

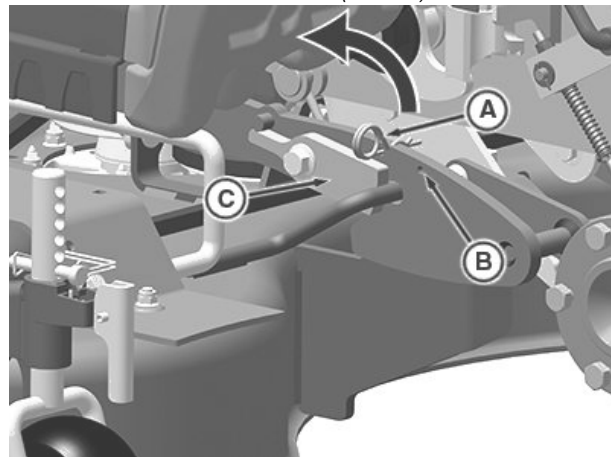
1. Park machine on a level surface, not on a slope.
2. Lock park brake.
3. Disengage mower blades.
4. Ensure that tractor can be pulled forward to deposit mower deck and that sufficient room exists to back fully off deck before turning tractor wheels.
5. Place tractor in A range four-wheel drive.
6. Fully raise mower deck and release gauge wheel locks.
7. Remove lock pin (A) and place in the rear storage hole (B).
8. Fully lower mower deck to ground.

NOTE: To make sure all the pressure is off the rear lock, set the park brake after lowering the deck and slightly press the forward pedal.

9. Release rear lock (C) by pushing it forward in direction of arrow. If lock sticks, pull mower deck rearward slightly on the side with the stuck lock and push lock forward.
10. Slowly back tractor straight off the mower deck.
11. If mid PTO is used for other applications:
 - a. Lock lift link in transport position.
 - b. Remove quick connect driveshaft from mid PTO by pulling collar.



Rear Lock (—MY19)



Rear Lock (MY20—)

A—Lock Pin
B—Storage Hole

C—Rear Lock

Continued on next page

UP00731,0000A10 -19-12AUG21-1/3

LV27146 —UN—21DEC16

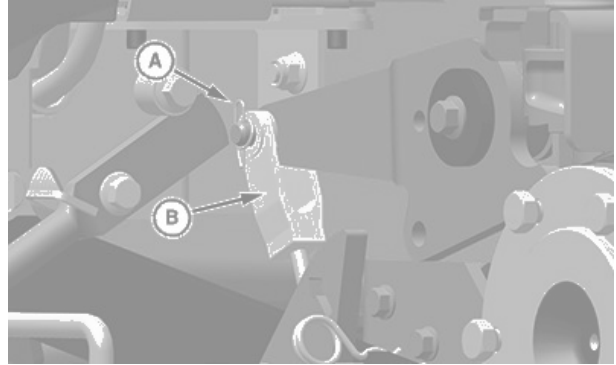
LVP11515 —UN—15OCT20

IMPORTANT: Avoid damage! For MY20— tractors, the protrusion (C) must face towards the front of the tractor to avoid damage to parts.

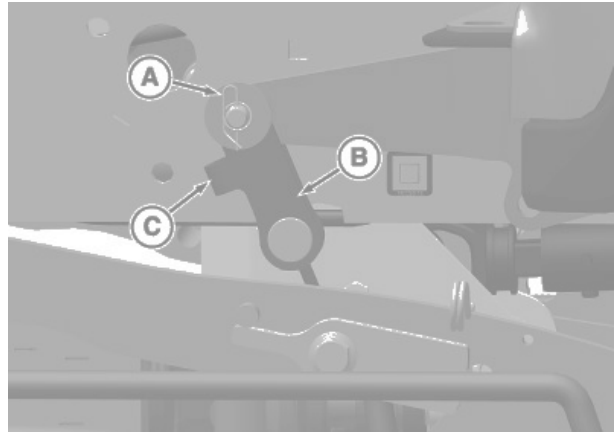
- c. Remove the retaining pins (A) from the left and right rear turnbuckles (B). Remove turnbuckles from mid rockshaft.

A—Retaining Pins
B—Turnbuckle

C—Protrusion



Turnbuckle (—MY19) Shown



Turnbuckle (MY20—) Shown

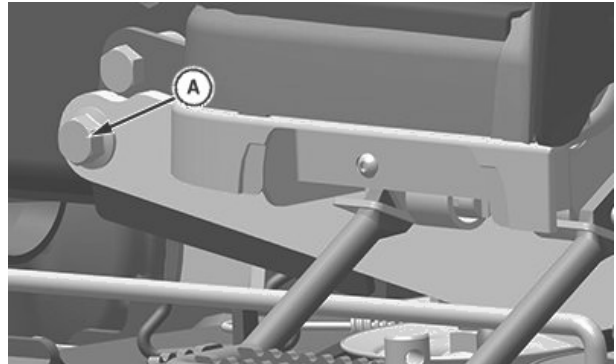
UP00731,0000A10 -19-12AUG21-2/3

LV27024 —UN—15DEC16

LV30785 —UN—10AUG21

- d. Remove bolt (A) and bushing that is securing the rear lift link to the bracket on both sides. Remove lift link from tractor.
- e. Keep all hardware attached to the rear lift link and store for later use.

A—Bolt



UP00731,0000A10 -19-12AUG21-3/3

LV27147 —UN—21DEC16

Storing Mower

 **CAUTION: Blades are sharp. Do not store mower deck on machine or removed from machine with blades exposed. Store mower deck laying flat on ground.**

1. Remove mower from machine. (If machine is to be stored with mower on machine, refer to Storing Machine in your machine's operator's manual.)
2. Clean underside of mower with water pressure and scraper.
3. Inspect blades:
 - Have dull blades sharpened and balanced.
 - Replace damaged blades.
4. Clean top of deck and the area around all of the sheaves.
5. Check condition of belt. If necessary, get a new belt. Do not install new belt until you remove mower from storage.
6. Repair or replace any worn or damaged parts.
7. Apply touch-up paint where needed to prevent rust.
8. Lubricate grease points.
9. Release belt tension.
10. Store mower in a clean, dry place.
11. Put a waterproof cover over mower, if you store the mower outside.

UP00731,0000063 -19-26AUG13-1/1

Service

Service Intervals

Every 10 Hours

- If operating in dry conditions, clean debris from mower.

Every 25 Hours

- Lubricate spindles
- Lubricate driveshaft
- Inspect mower blades

- Inspect mower belt

Every 100 Hours

- Check gearbox oil level
- Wash mower

Every 500 Hours

- Change gearbox oil

UP00731,000006C -19-26AUG13-1/1

Grease

IMPORTANT: Avoid damage! Use recommended John Deere greases to avoid component failure and premature wear. The recommended John Deere greases are effective within an average air temperature range of -29 to 135 degrees C (-20 to 275 degrees F). If operating outside that temperature range, contact your Servicing dealer for a special-use grease.

The following greases are preferred:

- John Deere Multi-Purpose SD Polyurea Grease
- John Deere Multi-Purpose HD Lithium Complex Grease

If not using any of the preferred greases, be sure to use a general all-purpose grease with an NLGI grade No.2 rating.

Wet or high speed conditions may require use of a special-use grease. Contact your Servicing dealer for information.

UP00731,000006E -19-26AUG13-1/1

Gear Oil

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

John Deere GL-5 Gear Lubricant is recommended.

Other oils may be used if they meet one or more of the following:

- API Service Classification GL-5.
- Military Specification MIL-L-2105D.
- Military Specification MIL-L-2105C.
- Military Specification MIL-L-2105B.

Oils meeting Military Specification MIL-L-10324A may be used as arctic oils.

UP00731,000006F -19-26AUG13-1/1

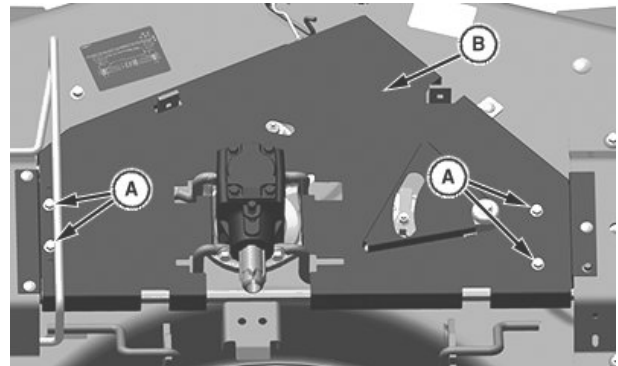
Remove Belt Shield

Remove Belt Shield (—MY19)

1. Remove mower from the machine.
2. Remove hex head bolts (A) and remove belt shield (B).

A—Hex Head Bolt

B—Belt Shield



60 mower deck shown, 54 mower deck is similar.

Continued on next page

UP00731,0000124 -19-15OCT20-1/2

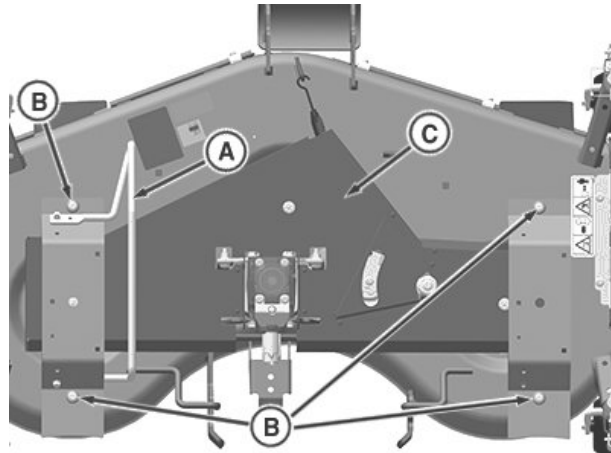
LV27160—UN—04JAN17

Remove Belt Shield (MY20—)

1. Remove mower from the machine.
2. Remove tire guide (A).
3. Remove Bolts (B) and belt shield (C).

A—Tire Guide
B—Bolt

C—Belt Shield



54 mower deck shown, 60 mower deck is similar.

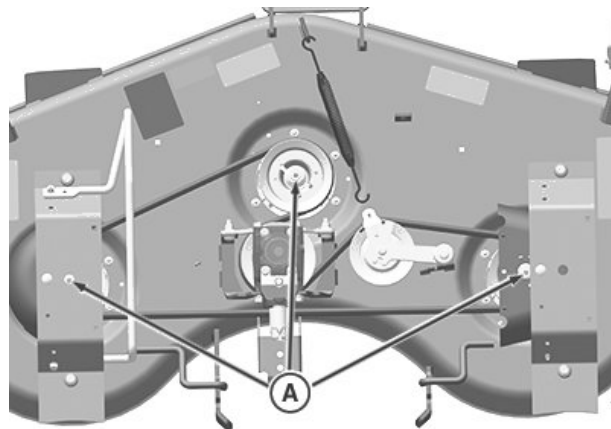
UP00731,0000124 -19-15OCT20-2/2

LVP11528 —UN—15OCT20

Lubricating Mower

1. Remove belt shield from mower.
2. Lubricate three grease fittings (A) on sheaves with the recommended grease.

A—Grease Fittings on Sheaves



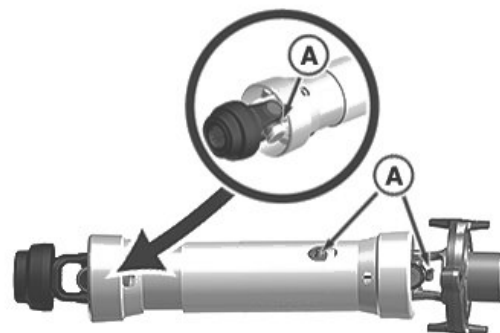
54D Mower Shown

UP00731,0000125 -19-15OCT20-1/2

LVP11526 —UN—15OCT20

3. Lubricate three grease fittings (A) on mid PTO with the recommended lubricant.
4. Install belt shield on mower.

A—Grease Fittings on Mid PTO



UP00731,0000125 -19-15OCT20-2/2

LV27215 —UN—09JAN17

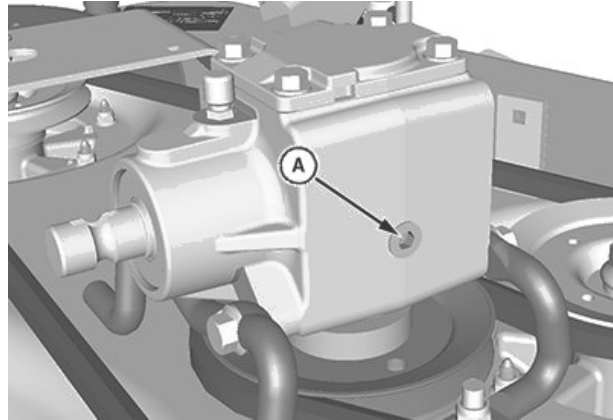
Servicing Gearbox

Checking Oil Level

1. Remove plug from one side of gearbox.
2. Oil level should be even with bottom edge of plug hole.
3. If oil is low, add recommended oil.
4. Install plug.

Changing Oil

1. Remove gearbox bracket with gearbox. Refer to assembly section for additional information.
2. Remove plug (A) on both sides of gearbox.
3. Lift and turn gearbox on side to drain oil from gearbox.
4. Route belt around gearbox sheave and lower gearbox onto deck. Secure gearbox bracket to deck. Refer to assembly section for additional information.
5. Add recommended oil to bottom edge of plug hole in gearbox.



A—Plug

6. Install plugs.

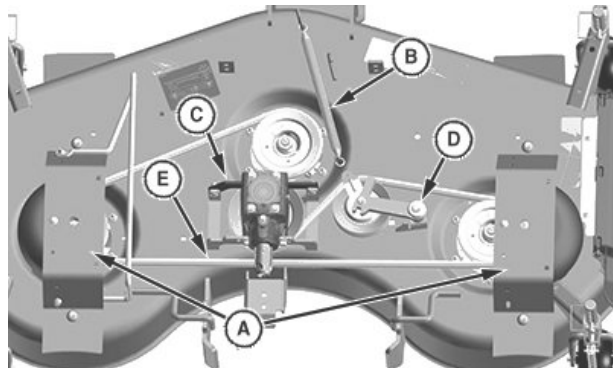
UP00731,0000379 -19-30JUL15-1/1

LV24016 —UN—04AUG15

Servicing Mower Belt

Removing Belt

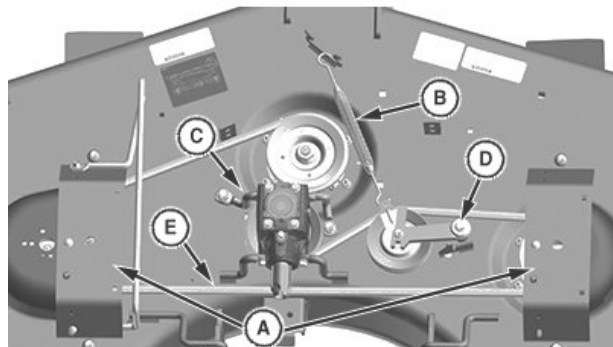
1. Remove mower from the machine.
2. Clean area around and under ramps.
3. Remove belt shield from mower.
4. Remove both drive-over ramps (A) with shields.
5. Remove spring (B) to relieve belt tension.
6. Remove the rear gearbox support (C).
7. Remove the dust cap, snap ring, and flat washer (D) retaining the tensioner pulley assembly and remove the pulley assembly.
8. Remove belt (E) from mower.



54D Mower (—MY19) Shown, MY20— is Similar

Installing Belt

1. Install belt around sheaves and route as shown.
2. Install tensioner pulley assembly and secure using a flat washer, snap ring, and dust cap (D).
3. Install the rear gearbox support (C) with original hardware.
4. Install tensioner spring (B).
5. Install the left and right drive-over ramps (A) with shields.
6. Install belt shield on mower.



60D Mower (—MY19) Shown, MY20— is Similar

A—Ramps
B—Spring
C—Gearbox Support

D—Washer
E—Belt

UP00731,0000126 -19-15OCT20-1/1

LV27035 —UN—13DEC16

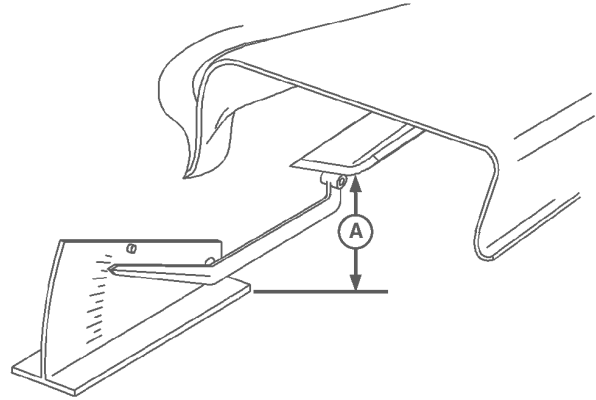
LV27034 —UN—13DEC16

Check for Bent Mower Blades

CAUTION: Avoid injury! Blades are sharp. Always wear gloves when handling blades or working near blades.

Replace blades if defective. Never straighten or weld them.

1. Park machine on a level surface, not on a slope.
2. Disengage mower blades.
3. Fully raise the mower.
4. Lock the park brake.
5. Stop the engine.
6. Remove the key.
7. Wait for engine and all moving parts to stop before you leave the operator's seat.
8. Block the mower.
9. Measure the distance (A) from blade tip to level surface with a ruler or a leveling gauge available at your John Deere dealer.



A—Distance - Blade to Level Surface

10. Rotate blade 180° and measure the distance between other end of blade and surface.
11. Check all blades. Install new blade if difference between measurements is more than 3 mm (1/8 in.).

UP00731,000011A -19-13DEC16-1/1

LV18692 —UN—20AUG13

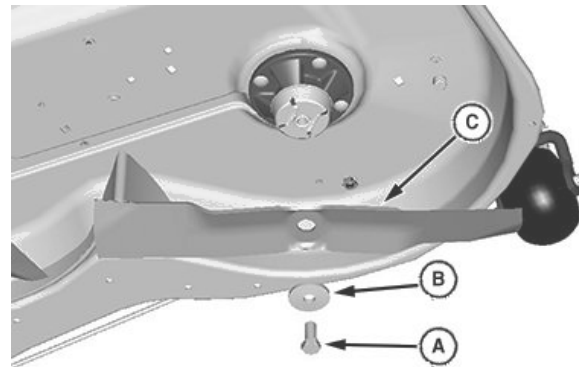
Remove and Install Mower Blades

CAUTION: Avoid injury! Blades are sharp. Always wear gloves when handling blades or working near blades.

Replace blades if defective. Never straighten or weld them.

Removing Mower Blades

1. Park machine safely.
2. Remove the mower from machine.
3. Use a suitable lifting device to raise the mower to gain access to blades.
4. Insert wood block between blade and mower to prevent the blade from turning when removing bolt.
5. Remove the bolt (A), washer (B), and blade (C).



A—Bolt
B—Washer

C—Blade

Continued on next page

PR59899,000100E -19-01JUL21-1/2

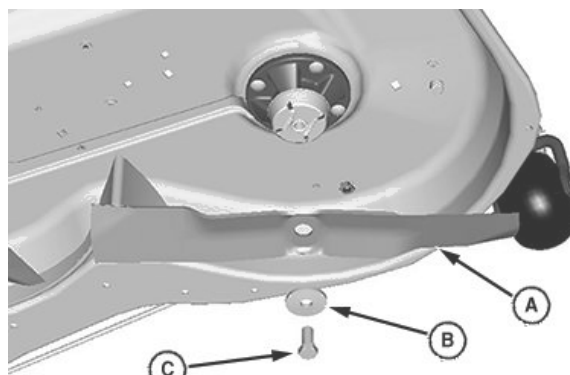
LV24019 —UN—04AUG15

Installing Mower Blades

1. Install the blade (A) with cutting edge toward the ground, washer (B), and bolt (C).
2. Insert wood block between blade and mower to prevent the blade from turning when tightening bolt.
3. Tighten the bolt to 68 N•m (50 lb-ft).

A—Blade
B—Washer

C—Bolt



54D Deck Shown

PR59899,000100E -19-01JUL21-2/2

LV24021—UN—05AUG15

Sharpen Blades

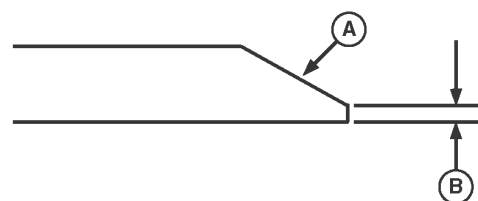
CAUTION: Avoid injury! Rotating blades are dangerous. Before adjusting or servicing mower:

- Disconnect spark plug wire(s) or battery negative (-) cable to prevent engine from starting accidentally.
- Always wear gloves when handling mower blades or working near blades.

1. Sharpen blade with grinder, hand file or electric blade sharpener.

- Keep original bevel (A) when grinding..
- Blade should have 0.40 mm (1/64 in.) cutting edge (B) or less.

2. Balance blade before installing.



A—Bevel

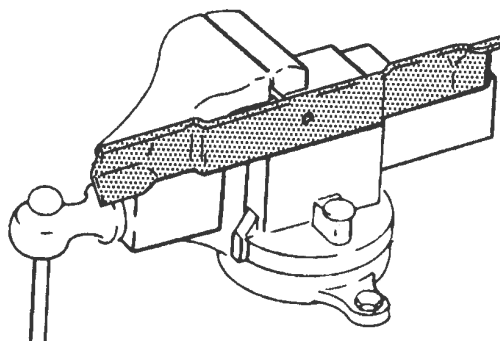
B—Cutting Edge

UP00731,0000118 -19-13DEC16-1/1

LV18895—UN—20AUG13

Balance Blades

1. Clean the blade.
2. Put blade on a nail in a vice or in a vertical wall stud. Turn blade to horizontal position. If blade is not balanced, heavy end of blade will drop.
3. Grind bevel of heavy end. Do not change blade bevel.



UP00731,0000119 -19-13DEC16-1/1

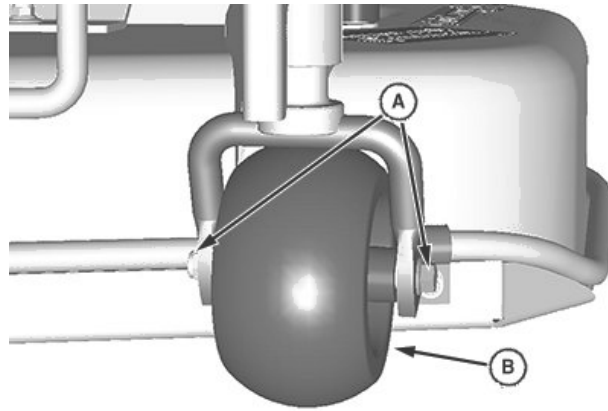
LV18896—UN—20AUG13

Replacing Wheels

1. Park machine on a level surface, not on a slope.
2. Disengage mower blades.
3. Fully raise mower.
4. Lock park brake.
5. Stop engine.
6. Remove key.
7. Wait for engine and all moving parts to stop before leaving operator seat.
8. Remove wheel hardware (A).

IMPORTANT: Avoid damage! Do not overtighten wheel hardware. Overtightening hardware will cause damage to bushing.

9. Install new wheel (B) with hardware.



A—Wheel Hardware

B—Wheel

LV24023—UN—04AUG15

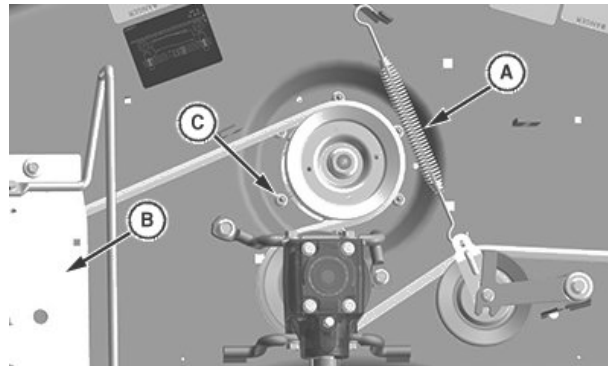
UP00731,000037C -19-06AUG15-1/1

Replace Sheaves

1. Remove belt shield from mower.
2. Remove spring (A) to relieve belt tension.
3. If necessary, remove drive over the ramp (B).
4. Remove six bolts (C) on sheave to be replaced.
5. Replace sheave and secure with original hardware.
6. Replace ramps, if removed.

A—Spring
B—Ramp

C—Bolt



LV27036—UN—13DEC16

UP00731,0000127 -19-15OCT20-1/1

Troubleshooting

Use Troubleshooting Chart

If you are experiencing a problem that is not listed in this chart, see your John Deere distributor for service.

When you have checked all the possible causes listed and you are still experiencing the problem, see your John Deere distributor.

KN52281,1003F58 -19-22AUG12-1/1

Mower Deck Troubleshooting

IF	Check
Discharge chute plugged	• Belt(s) installed incorrectly. • Grass too wet. • Grass too long. • Engine should be at full throttle. • Rear of deck too low.
Patches of grass uncut	• Travel speed too fast. • Engine should be at full throttle. • Dull blades. • Cutting height set too high.
Belt slipping	Debris around sheaves. Worn belt. Mower plugged.
Too much vibration	Debris on mower deck or around sheaves. Damaged drive belt. Damaged sheaves or sheaves out of alignment. Blades out of balance.
Uneven cut	Check procedures on Adjusting Mower Level Side-to-Side and Front-to-Rear. Travel speed too fast. Blades are dull. Check tire pressure. Adjust mower wheels.
Mower stops when reverse foot pedal is depressed and attachment is engaged	Normal condition. See the reverse implement option information in your machine operator manuals.
Blades scalping grass	Turning speed too fast. Ridges in terrain. Rough or uneven terrain. Low tire pressure. Cutting too low. Bent blade(s). Adjust mower wheels.
Mower loads down tractor	Turning speed too fast. Ridges in terrain. Rough or uneven terrain. Low tire pressure. Cutting too low. Bent blade(s). Adjust mower wheels.
Uneven clipping distribution	Cutting height set too low. Mowing too fast. Grass too wet.

UP00731,0000381 -19-06AUG15-1/1

Connecting Mower Deck Troubleshooting

IF	Check
Rear draft arms are not fully lowered	Height of cut control should be in the install position, use SCV or rockshaft control lever to raise and lower deck. Mower lift link is not contacting any step on height stop cam. Refer to adjusting maximum height-of-cut for additional information.
Rear latch is not functioning properly	Rear lock assembly should be in locked position prior to driving over mower. Rear lock assembly only stops in the lock and unlock position. NOTE: If lock assembly stops or binds in-between positions, lubrication at pivot point may be required. Rear lock assembly and surrounding components are not deformed or bent. Rear lift arm rods are completely lowered on both sides of mower. This function is controlled by the SCV or rockshaft control lever. Refer to installing mower deck for additional information.
If mower and ground conditions are not consistent	Ensure mower is parked on level hard surface. If parking on level hard surface is not possible, place a board under front of mower. Gage wheels in unlock position. Mower is centered on the tractor. Driveshaft connection is aligned properly (for AutoConnect driveshaft only). Driveshaft is properly installed in hanger (for standard driveshaft only). If equipped with front weights, remove before installation. Replace weights when complete. Refer to installing mower deck for additional information.
Improper front draft arm engagement	At least a 2-3mm (.08-.10 in) gap at front draft link and frame hook. Adjustment to draft link nuts may be required. If locks are not releasing or locking easily, gap at front draft link and frame hook may need to be increased. Front draft link yoke is properly oriented. Front draft link is at proper height and not dragging on bottom of frame hook. Refer to installing mower deck for additional information.

UP00731,0000387 -19-06AUG15-1/1

Specifications

Mower Deck Specifications

54D Mower Deck

Mower Type	Mulch or Side Discharge
Cutting Blades	3
Overall Width	1.74 m (68.5 in)
Overall Length	1.75 m (69 in)
Cutting Height ^a	2.5 - 10.2 cm (1 - 4 in)
Cutting Width	1.37 m (54 in)
Mower Weight	89 kg (197 lb)
Blade Bolt Torque	68 N·m (50 lb-ft)
Gearbox Oil Capacity	136 mL (4.6 oz)

^a varies depending on the tire size.

60D Mower Deck

Mower Type	Mulch or Side Discharge
Cutting Blades	3
Overall Width	1.85 m (72.8 in)
Overall Length	1.82 m (71.6 in)
Cutting Height ^a	2.5 - 10.2 cm (1 - 4 in)
Cutting Width	1.52 m (60 in)
Mower Weight	117 kg (258 lb)
Blade Bolt Torque	68 N·m (50 lb-ft)
Gearbox Oil Capacity	136 mL (4.6 oz)

^a varies depending on the tire size.

PR59899,000100F -19-01JUL21-1/1

Get Quality Service

Service Literature

If you would like a copy of the Parts Catalog or Technical Manual for this machine call:

- **U.S. & Canada:** 1-800-522-7448.
- **All Other Regions:** Your John Deere dealer.

AP43109,00002CF -19-15APR13-1/1

Parts

We recommend John Deere quality parts and lubricants, available at your John Deere dealer.

When you order parts, your John Deere dealer needs the serial number or product identification number (PIN) for your machine or attachment. These are the numbers that you recorded in the Product Identification section of this manual.

AP43109,00002D0 -19-15APR13-1/1

Order Service Parts Online

Visit <http://JDParts.deere.com> for your Internet connection to parts ordering and information.

AP43109,00002D1 -19-15APR13-1/1

John Deere Quality Continues with Quality Service

John Deere provides a process to handle your questions or problems, should they arise, to ensure that product quality continues with your John Deere dealer's parts and service support.

Follow the steps below to get answers to any questions you may have about your product.

1. Refer to the appropriate attachment, machine or equipment operator manuals.
 2. Contact your John Deere dealer with unanswered questions.
 3. In North America or Canada, call the John Deere Customer Contact.
- Call 1-800-537-8233 and provide product serial number and model

AP43109,00002D2 -19-15APR13-1/1

Declaration of Conformity

EU Declaration of Conformity

Deere & Company
Moline, Illinois, U.S.A.

The undersigned hereby declares that

Machine Type: Mower Deck

Model: 54D and 60D

Serial Numbers: See Product Identification Page

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

DIRECTIVE	NUMBER	CERTIFICATION METHOD
Machinery Directive	2006/42/EC	Self-Certification

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

John Deere Walldorf GmbH & Co. KG
Customer Support
Impexstraße 3
D-69190 Walldorf
EUConformity@JohnDeere.com

Place of Declaration:

Augusta, Georgia U.S.A.

Date of Declaration:

21 June 2016

Manufacturing Unit:

John Deere Horicon Works

DXCE01 —UN—28APR09



AL61114,0000714 -19-01JUL21-1/2

LVP11378 —UN—16APR21

Name: Scott Farlow

Title: Manager, Compact Utility Tractor Engineering

AL61114,0000714 -19-01JUL21-2/2

Declaration of Conformity

UK Declaration of Conformity

Deere & Company
Moline, Illinois, U.S.A.

The undersigned hereby declares that

Machine Type: Mower Deck

Model: 54D and 60D

Serial Numbers: See Product Identification Page

fulfills all relevant provisions and essential requirements of the following UK regulations:

DIRECTIVE	NUMBER	CERTIFICATION METHOD
The Supply of Machinery (Safety) Regulations 2008	S.I. 2008/1597	Self-Certification

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

John Deere Ltd
Harby Road
Langar
Nottinghamshire
NG13 9HT
United Kingdom
EUConformity@JohnDeere.com

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Place of Declaration: Augusta, Georgia U.S.A.

Date of Declaration: 21 June 2016

Manufacturing Unit: John Deere Horicon Works

Ag & Turf Products Importer: John Deere Ltd- Harby Road, Langar, Nottinghamshire, NG13 9HT, United Kingdom

Forestry Products Importer: John Deere Forestry Ltd- Carlisle Airport Industrial Estate, Carlisle, Cumbria, CA6 4NW, United Kingdom

TC101783 —UN—21FEB21



AL61114,0000715 -19-01JUL21-1/2

LVP11378 —UN—16APR21

Name: Scott Farlow

Title: Manager, Compact Utility Tractor Engineering

AL61114,0000715 -19-01JUL21-2/2

EU and UK Certification and Specification Label

This label on your machine indicates that this model has been certified and is in compliance with European Directive 2006/42/EC and with The Supply of Machinery (Safety) Regulations 2008, S.I. 2008/1597.



LVU24212—60 mower deck shown, 54 is similar

PR59899,0001015 -19-05JUL21-1/1

LVP11892—UN—30JUN21

Declaration of Conformity

Index

	Page		Page
B		Mower	
Belt Shield, Remove	40-1	Engaging	30-2
C		Installation	20-1
Compatibility		Lubricating	40-2
Product	00-1	Raise and Lower	30-1
D		Remove	35-1
Deck Height		Storing	35-3
Adjusting	25-6	Unplugging	30-2
Discharge Chute		Mower Belt	
Installation	15-1	Servicing	40-3
E		Mower Blades	
Equipment, Required	15-1	Remove and Install	40-4
G		Mower Blades, Balance	40-5
Gear Oil	40-1	Mower Blades, Check for Bent	40-4
Gearbox		Mower Blades, Sharpen	40-5
Servicing	40-3	Mower Deck	
Grease	40-1	Troubleshooting	45-1, 45-2
H		Mower Level	
Hydraulic Hose for Mower Lift, Connect	20-4	Adjusting - Front to Rear	25-3
I		Adjusting - Side to Side	25-1
Identification Numbers	00-1	Mower on Machine	
Intervals		Transporting	30-3
Service	40-1	Mower Wheels	
L		Adjusting	25-9
Labels		Install	15-1
Safety	10-1	Replacing	40-6
M		P	
Machine		Preparing Machine	25-1
Transporting	30-3	S	
T		Safety	
Troubleshooting Chart, Use	45-1	Protect against noise	05-7
		Safety, Avoid High-Pressure Fluids	
		Avoid High-Pressure Fluids	05-5
		Setting of Cut, Adjusting	30-2
		Sheaves	
		Replace	40-6
		Signal words, understand	05-2
		Specifications	50-1
		T	
		Troubleshooting Chart, Use	45-1

