

JOHN DEERE
WORLDWIDE COMMERCIAL & CONSUMER
EQUIPMENT DIVISION

AutoConnect™ Mid-Mount Mower
60D and 72D

OMLVU20443 L9

OPERATOR'S MANUAL



JOHN DEERE

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Previous Editions

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North American Version

Litho in U.S.A.

INTRODUCTION

Introduction

Using Your Operator's Manual

Read this entire operator's manual, especially the safety information, before operating.

This manual is an important part of your machine. Keep all manuals in a convenient location so they can be accessed easily.

Use the safety and operating information in the attachment operator's manual, along with the machine operator's manual, to operate and service the attachment safely and correctly.

If your attachment manual has a section called Preparing the Machine, it means that you will have to do something to your tractor or vehicle before you can install the attachment. The Assembly and Installation sections of this manual provide information to assemble and install the attachment to your tractor or vehicle. Use the Service section to make any needed adjustments and routine service to your attachment.

If you have any questions or concerns with the assembly, installation, or operation of this attachment, see your local John Deere dealer or call the John Deere Customer Contact Center at 1-800-537-8233 for assistance.

Warranty information on this John Deere attachment can be found in the warranty that came with your John Deere tractor or vehicle.

Product Identification

Product Compatibility

The 60D and 72D AutoConnect mowers are designed for use with compact utility tractor models: 3120, 3320, 3520 and 3720.

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

- Mid-PTO Kit
- Mower Lift Kit

Record Identification Numbers

AutoConnect™ Mower

60D Serial No. (010001 -)

72D Serial No. (010001 -)

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 number for the mower and record the information in the spaces provided below.

DATE OF PURCHASE:

DEALER NAME:

DEALER PHONE:

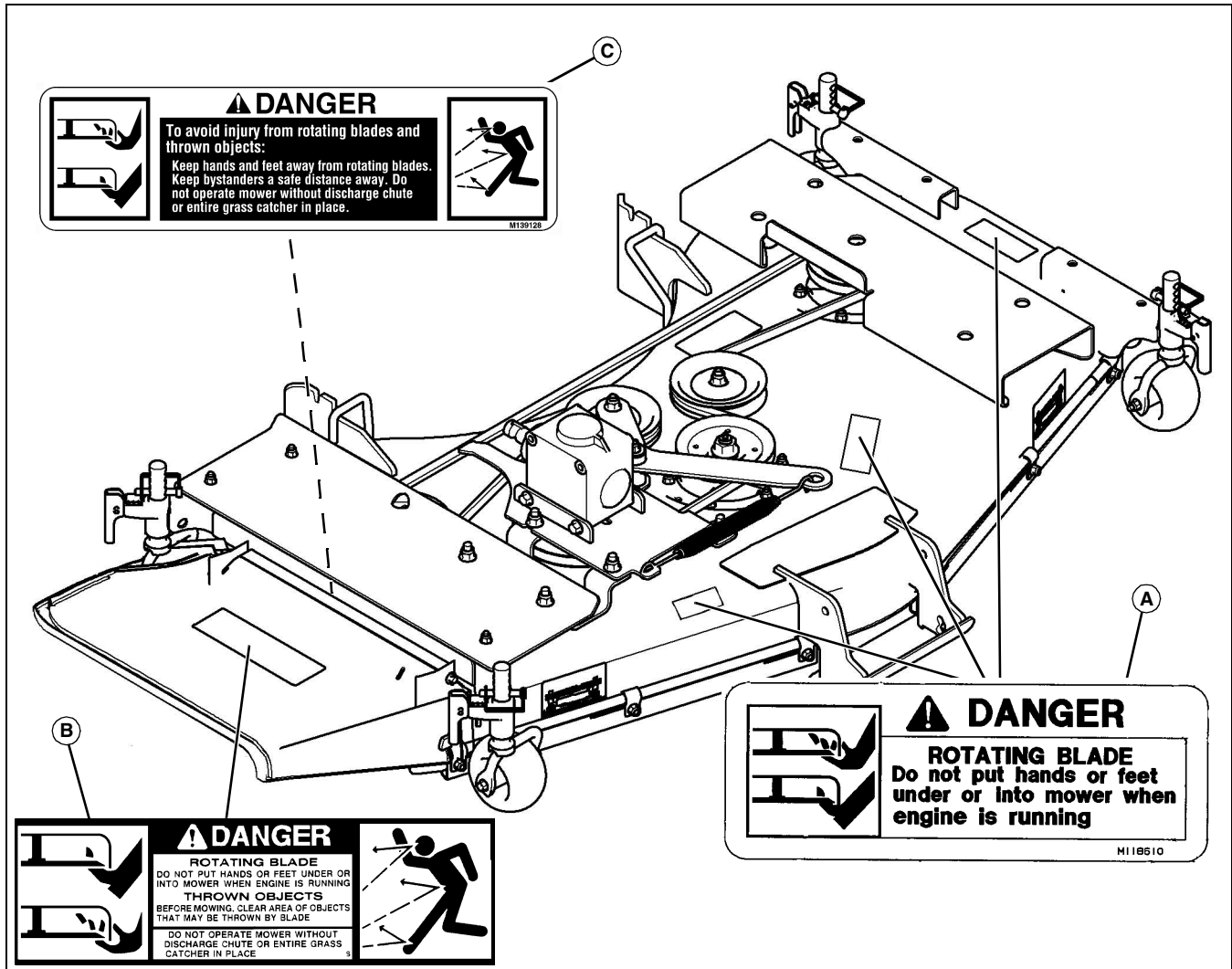
PRODUCT SERIAL NUMBER (A):

SAFETY LABELS

Safety Labels

Safety Label Location

60D AutoConnect Mower



MX40689A, M89504, M139128, M118610

Picture Note: Use label number listed in table below to locate complete text of safety label message following this illustration.

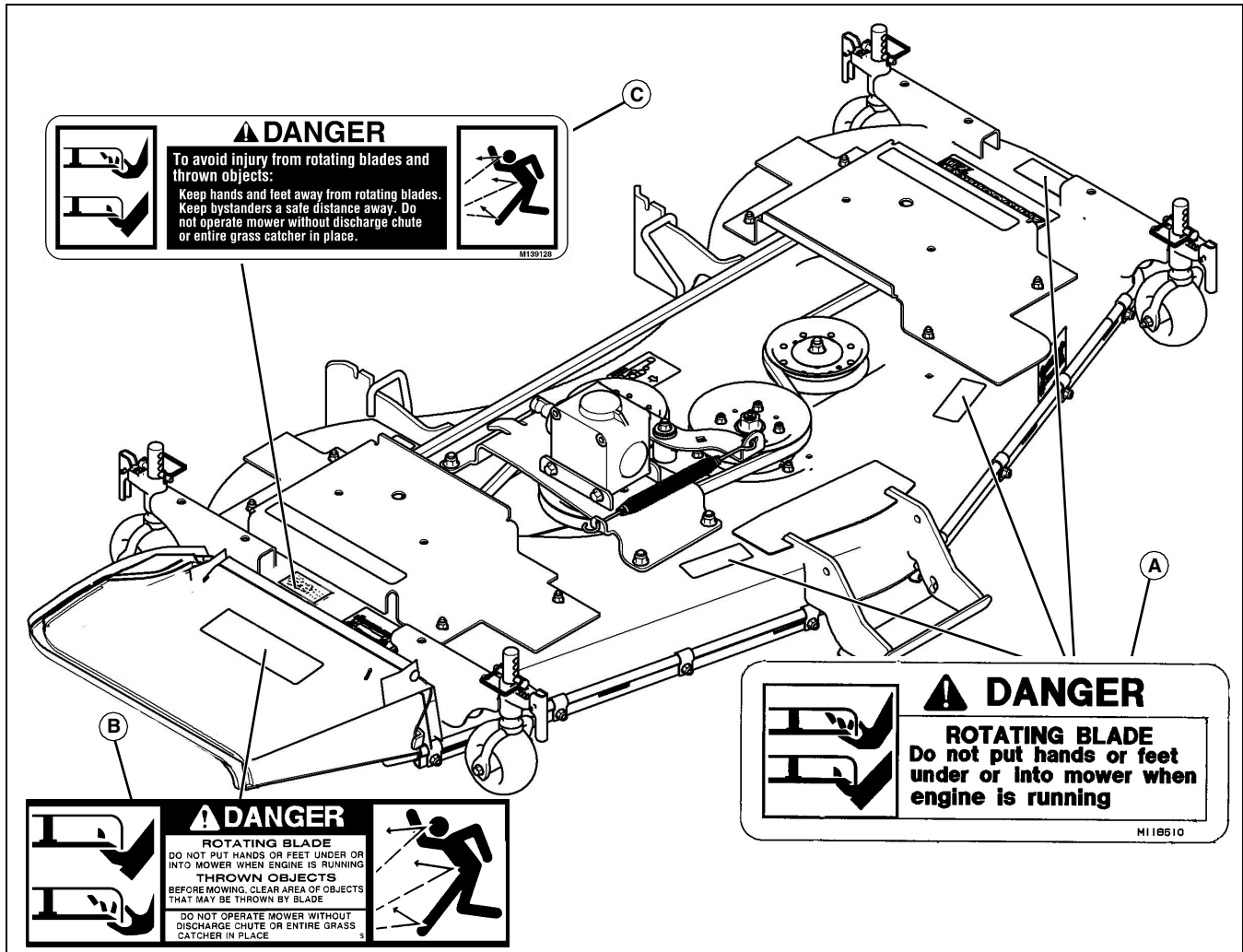
A- Danger - M118610

B- Danger - M89504

C- Danger - M139128

SAFETY LABELS

72D AutoConnect Mower

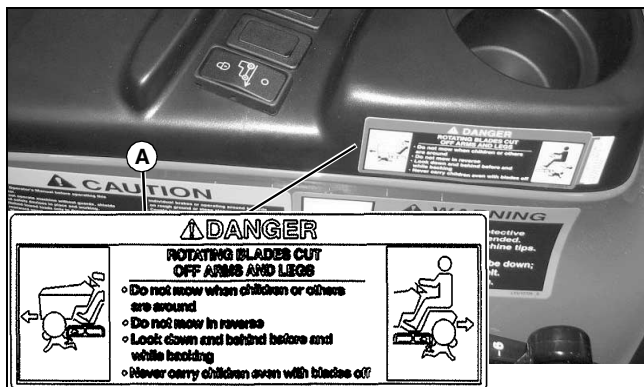


MX40690A, M89504, M139128, M118610

Picture Note: Use label number listed in table below to locate complete text of safety label message following this illustration.

- A- Danger - M118610
- B- Danger - M89504
- C- Danger - M139128

Safety Label Location



MX44639 LVU14509

Picture Note: Open Station Models

- A- DANGER - LVU14509



MX44640 LVU14509

Picture Note: Cab Models

- A- DANGER - LVU14509

SAFETY LABELS



Understanding The Machine Safety Labels

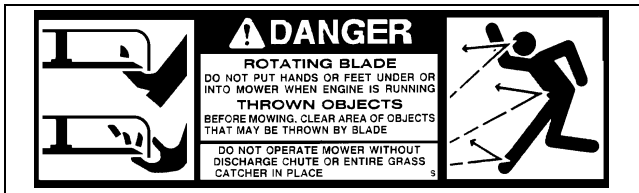
The machine safety labels shown in this section are placed in important areas on your machine to draw attention to potential safety hazards.

On your machine safety labels, the words DANGER, WARNING, and CAUTION are used with this safety-alert symbol. DANGER identifies the most serious hazards.

The operator's manual also explains any potential safety hazards whenever necessary in special safety messages that are identified with the word, CAUTION, and the safety-alert symbol.

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

DANGER - M89504



M89504

ROTATING BLADE

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

THROWN OBJECTS

- Before mowing, clear area of objects that may be thrown by blade.
- Do not operate mower without discharge chute or entire grass catcher in place.

DANGER M139128

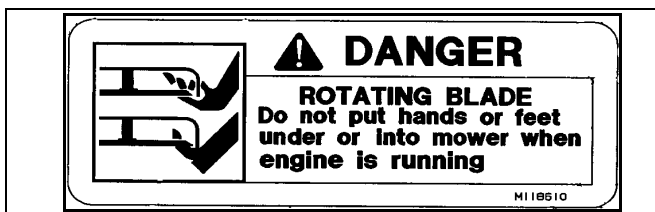


M139128

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 mower without discharge chute or entire grass catcher in place.

DANGER - M118610



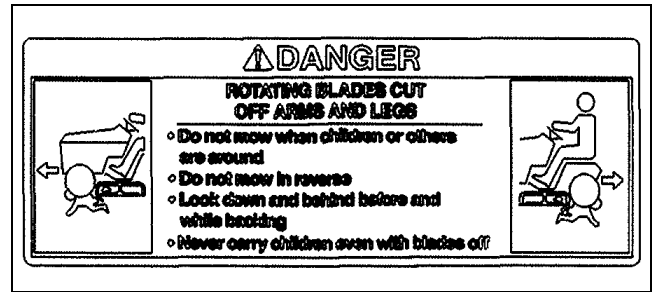
M118610

ROTATING BLADE

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

DANGER - LVU14509

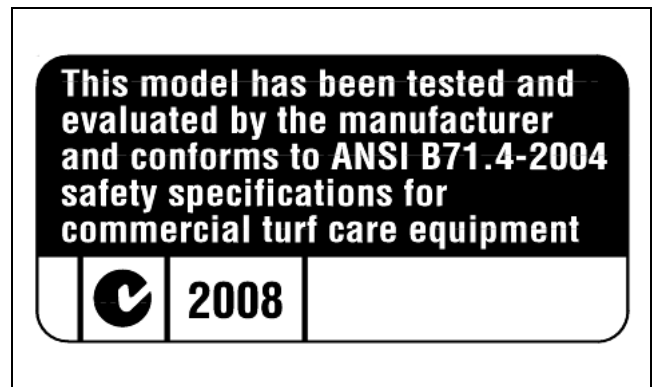
ROTATING BLADES CUT OFF ARMS AND LEGS



LVU14509

- Do not mow when children or others are around.
- Do not mow in reverse.
- Look down and behind before and while backing.
- Never carry children even with blades off.

Certification - TCU25088



TCU25088

Your product has been tested and evaluated by the manufacturer and conforms with American National Standard B-71.4-2004 safety specifications for commercial turf care equipment.

SAFETY

Read Safety in Machine Operator's Manual

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

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.

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.
- Use extra care when handling gasoline and other fuels. They are flammable and vapors are explosive.
 - a. Use only an approved container.
 - b. Never remove gas cap or add fuel when engine is running. Do not smoke.
 - c. 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.

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.

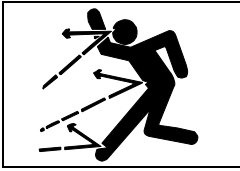
- Never operate with the discharge deflector raised, removed or altered, unless using a grasscatcher. Do not operate mower without discharge chute or entire grasscatcher in place.
- Do not change the engine governor setting or overspeed the engine. Operating the engine at excessive speed can increase 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.

Parking Safely

1. Stop machine on a level surface, not on a slope.
2. Disengage PTO and stop attachments.
3. Lower attachments to the ground.
4. Lock park brake.
5. Stop engine.
6. Remove key.
7. Wait for engine and all moving parts to stop before you leave the operator's station.
8. Close fuel shut off valve before servicing the fuel system, if your machine is equipped.

SAFETY

9. Disconnect the battery ground cable before making repairs to electrical system or doing any welding.



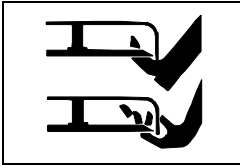
Checking Mowing Area

- 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.



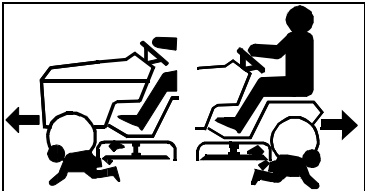
Rotating Blades are Dangerous

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 carefully. People, especially children can move quickly into the mowing area before you know it.
- Do not mow in reverse.
- Shut off blades when you are not mowing.
- Park machine safely before leaving the operator station for any reason including emptying the catchers or unplugging the chute.



Protect Children

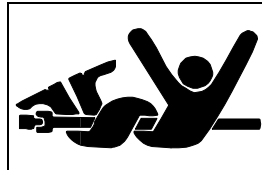
- Death or serious injury can occur when young children associate having fun with a lawn mowing machine simply because someone has given them a ride on a machine.

- 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.

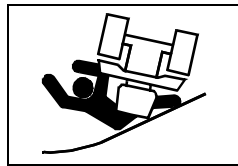


Stay Clear of Rotating Drivelines

Entanglement in rotating driveline can cause serious injury or death.

- Wear close fitting clothing.

- Stop the engine and be sure PTO driveline is stopped before getting near it.



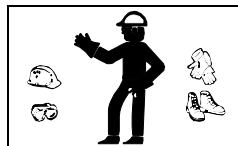
Avoid Tipping

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 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.



Wear Appropriate Clothing

Always wear safety goggles, or safety glasses with side shields, and a hard hat when operating the machine.

- Wear close fitting clothing and safety equipment appropriate for the job.

- While operating this machine, always wear substantial footwear and

ASSEMBLY

long trousers. Do not operate the equipment when barefoot or wearing open sandals.

- Wear a suitable protective device such as earplugs. Loud noise can cause impairment or loss of hearing.



Maintenance and Storage

- Never operate machine in a closed area where dangerous carbon monoxide fumes can collect.

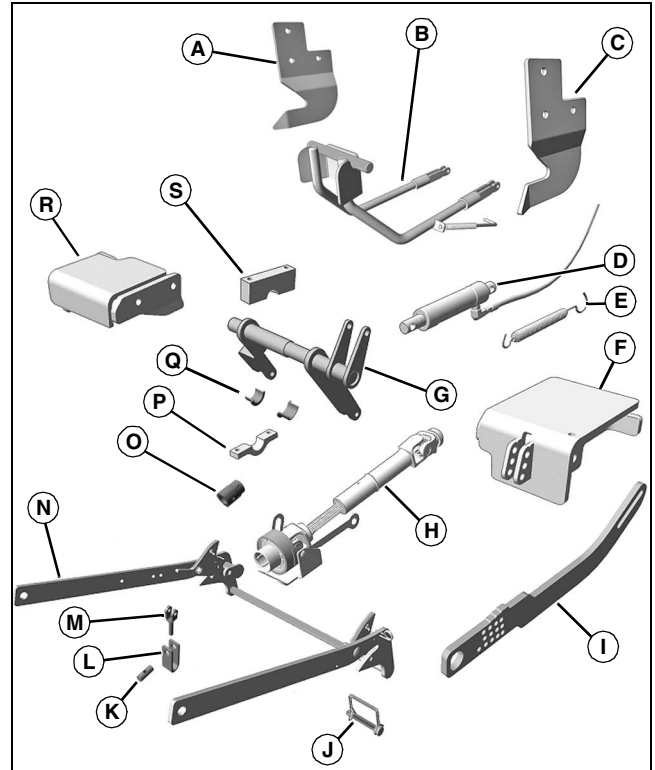
• Disengage drives, lower implement, lock parking brake, stop engine and remove key or disconnect spark plug (for gas engines). Wait for all movement to stop before adjusting, cleaning or repairing.

- 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.

Assembly

Parts in Lift Kit

NOTE: Some parts are installed on tractor, and others are installed on mower.



MX27199

Qty.	Description
1	Right Hanger (A)
1	**Forward Lift Link (B)
1	Left Hanger (C)
1	Cylinder (D)
1	Spring (E)
1	Left Bracket (F)
1	Mid Rockshaft (G)
1	Bearing Assembly (H)
1	Height Adjust Link (I)
2	Snap Lock Pin Assembly (J)
2	Link Pin (K)
2	U-Bracket (L)
2	Adjustable Yoke (M)
1	Rear Lift Link (N)
1	**Coupler, Male (O)

ASSEMBLY

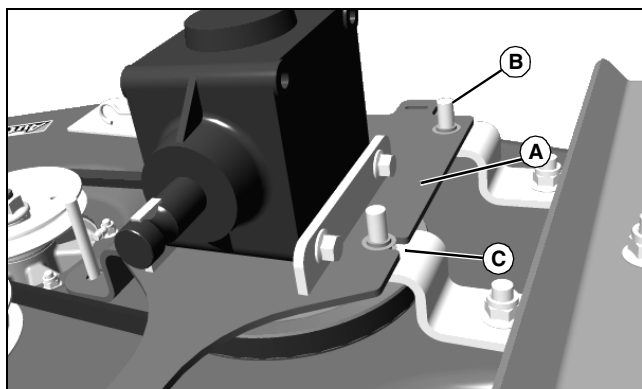
Qty.	Description
2	Half Clamp (P)
2	Rockshaft Bushing (Q)
1	Right Bracket (R)
2	Block Clamp (S)
1	**Set Screw, M8x8
2	Clevis
2	Drilled Pin
6*	Flange Head Bolt, M12x65
6*	Flange Head Bolt, M12x45
12	Locknut, M12
1	Hex Socket Head Bolt, M12x30
3	Hex Head Bolt, M12x30
4	Hex Head Bolt, M12x90
1	Pin, Cylinder to Rockshaft
1	Clevis Pin, M12x70
4	Washer, 1/2
3	Cotter Pin
4	Bushing
4	Flange Head Bolt, M12x50
2	Drilled Pin, M12x35
2	Locking Ring

* Quantity used will depend on tractor with grille guard application.

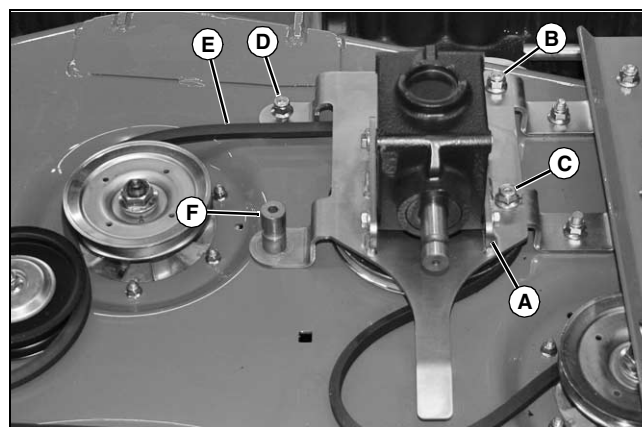
** Parts will be installed on mower deck.

Assemble Mower

Install Gearbox and Tensioner Pulley (60D only)

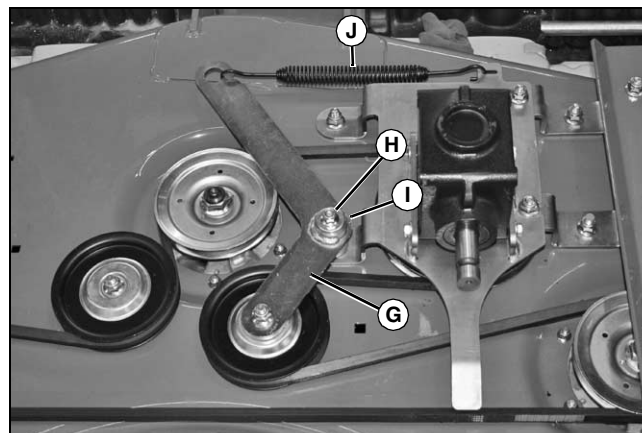


1. Place gearbox support (A) over bolt (B) and rotate slot into position at location (C).



MX27188

2. Drop support down onto bolt at location (D).
3. Route belt (E) between left legs of gearbox support and around gearbox pulley as shown.
4. Install nuts on bolts (B) (C) and (D).
5. Install bushing (F) on left rear bolt. It may be necessary to grasp end of bolt and pull upward to install bushing.

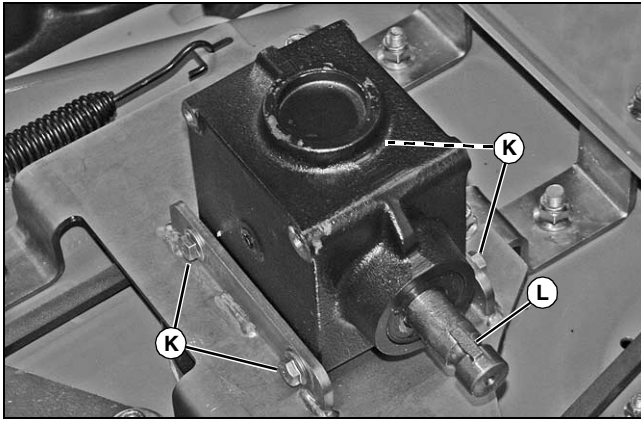


MX27189

6. Position tensioner pulley (G) on top of bushing. Install washer (H) and secure with nut (I).
7. Route belt around tensioner pulley as shown.
8. Attach spring (J) to tensioner arm and gearbox support.
9. Tighten nut (I) to 73 N•m (53.8 lb-ft).
10. Tighten remaining three nuts to 120 N•m (88.5 lb-ft).
11. Check all pulleys for proper belt alignment.

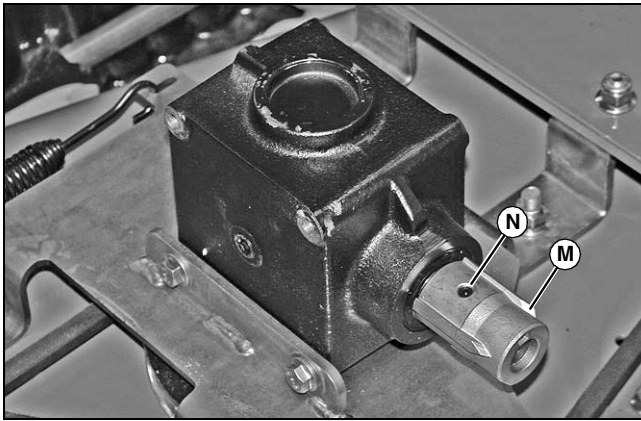
ASSEMBLY

NOTE: Gearbox side mounting bolts (K) are loose. Do not tighten them at this time. They will be tightened after mower is installed on tractor and couplers are aligned properly.



MX27190

12. Install woodruff key (L) in slot in gearbox shaft. Coat shaft with MPG-2 anti-seize lubricant or equivalent.



MX27191

13. Install male coupler (M) onto gearbox shaft and secure with set screw (N). Male coupler and set screw are provided in lift kit.

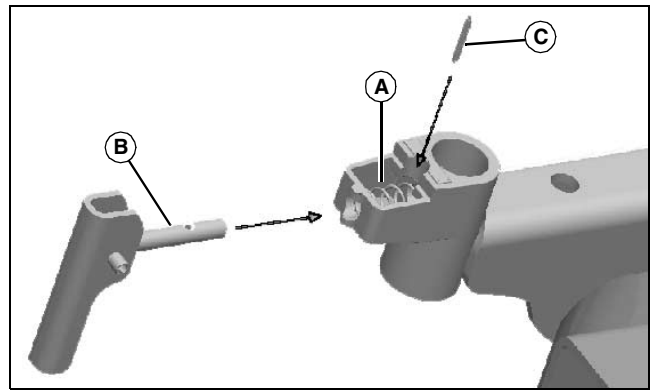
Install Wheels

NOTE: 60D mower includes two offset wheels which are to be installed on right side of mower; 72D mower wheels are all the same.



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

1. Remove mower from crate using chain hoist or other suitable device.
2. 60D Mower:

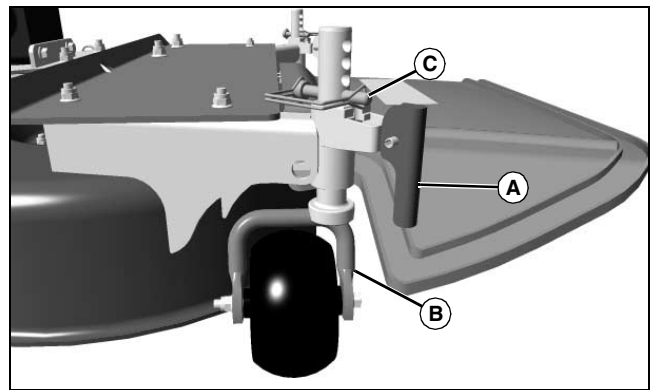


MX27138

Picture Note: 60D mower left rear wheel area shown.

- Install spring (A) in bracket as shown.
- Push wheel lock assembly (B) into bracket.
- Install roll pin (C) to secure wheel lock assembly.

NOTE: After wheels are installed, it may be necessary to lock wheels by pressing downward on handles (A) until they are perpendicular to ground. However, wheels must be in the unlocked position before installing mower on tractor.



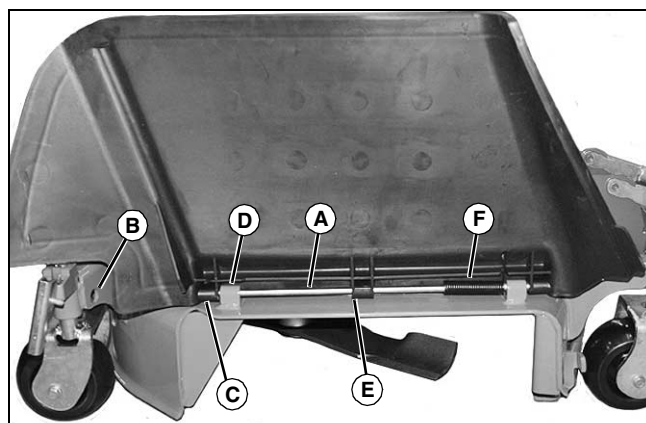
MX27127

Picture Note: 60D mower offset wheels shown installed on right side of mower.

3. Install wheels (B) by sliding wheel shaft up through wheel bracket.
4. Install spring pin (C) in each wheel.

ASSEMBLY

Install Discharge Chute



MX27193

Picture Note: 60D mower shown, 72D does not have access hole (B).

1. Install rod (A):

60D Mower:

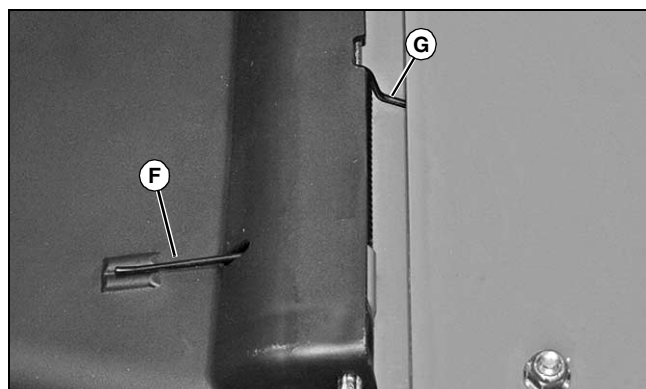
- Insert rod (A) through access hole (B) in right rear wheel bracket.
- Continue installing rod through first chute hole (C), first mower deck attaching point (D), second chute hole (E) and spring (F).

72D Mower:

NOTE: 72D Mower does not have access hole (B).

- Install rod through first chute hole (C), first mower deck attaching point (D), second chute hole (E) and spring (F).

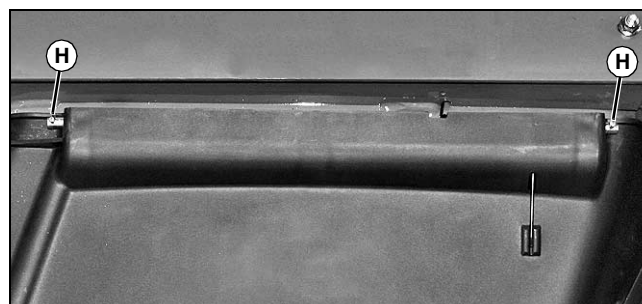
NOTE: Correct placement of spring is necessary to provide downward pressure on discharge chute.



MX27194

Picture Note: View from front of mower.

- Insert long end of spring (F) through hole in discharge chute and push pin into spring.
- Unwind short end of spring until it can be placed on top of mower deck. 60D Mower only: Push spring through slot at location (G).
- Insert rod through remaining mower deck and discharge chute attaching points.
- Verify that spring placement is correct by ensuring discharge chute has downward pressure.



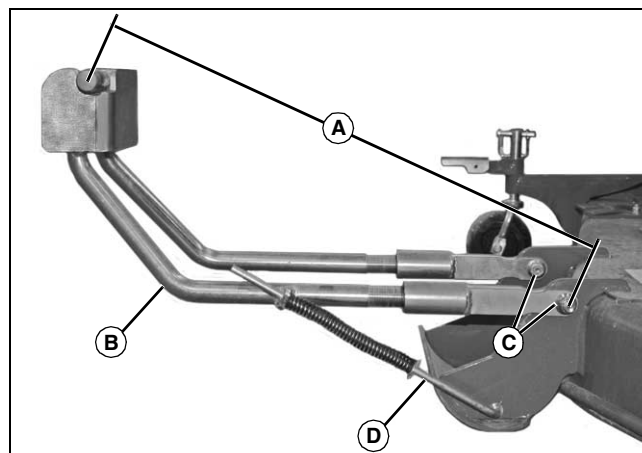
MX27195

Picture Note: 60D mower shown, 72D has one roll pin.

6. Install roll pins (H) at both ends of rod. 72D Mower: Install one roll pin.

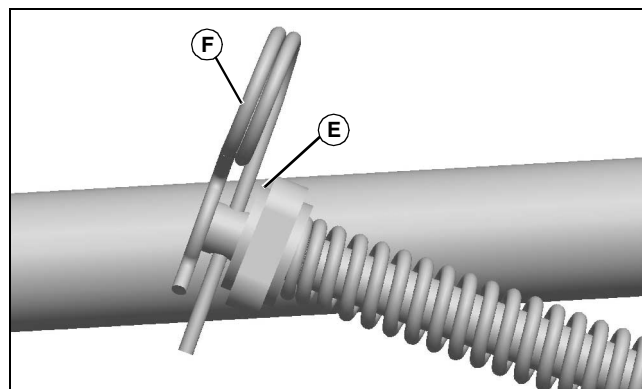
Install Mower Lift Kit

Install Forward Lift Link on Mower Deck



MX27187

- Measure distance (A) from center of horizontal frame to center of bolt. Distance (A) should be 599 mm (23.6 in.).
- Secure forward lift link (B) to mower deck with two M12x50 flange head bolts and two locknuts (C). Adjust as necessary to obtain correct distance before tightening locknuts completely.
- Insert end of rod (D) in slot with front link raised so spring is fully extended.



MX27128

4. Tractors with loader installed: Loader components may hit forward link when removing mower. During initial set up, add washers (E) as needed to prevent contact with loader components.

- Remove hair pin (F) from top of rod.

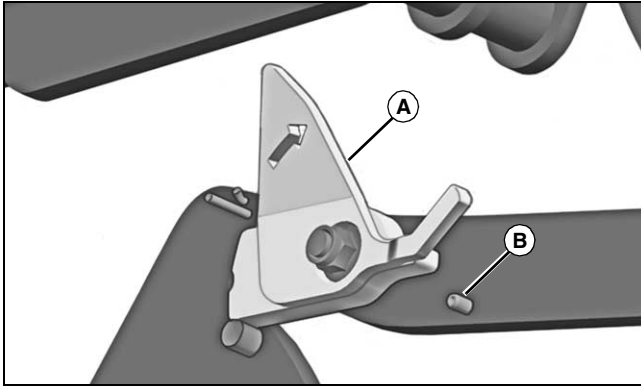
ASSEMBLY

b. Add washers (E) as needed to prevent contact with loader components.

c. Install hair pin.

Assemble Rear Lift Link

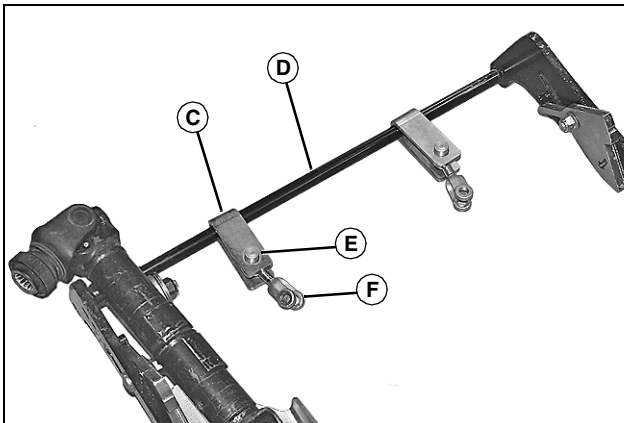
NOTE: If installing kit on tractor with cab, a lock (A) and roll pin (B) must be ordered separately.



MX27200

Picture Note: Image shown from inside of rear lift link. Lock is shown in the install/locked position.

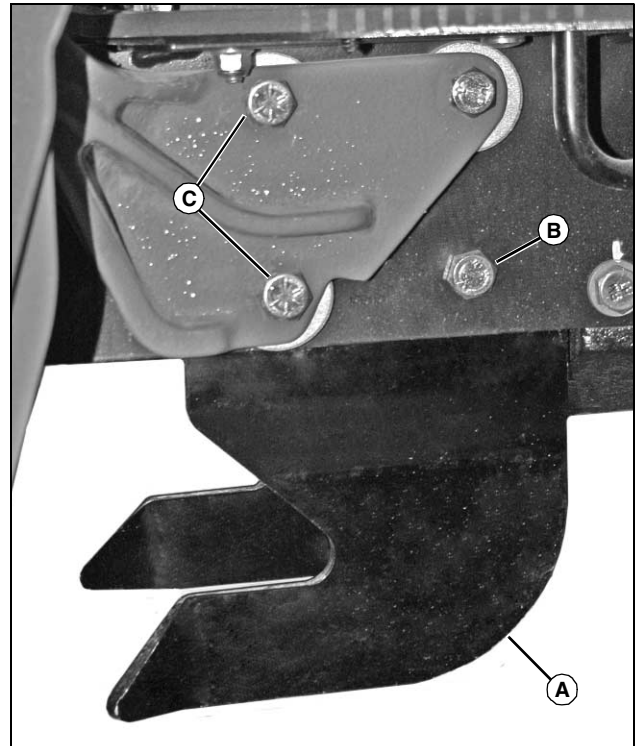
1. Tractors with cab: Replace lock on left side of rear link with new lock (A). Push roll pin in from outside of rear lift link. Roll pin should clear sheet metal tab on new lock.



MX27108

2. Install two U-brackets (C) on rear lift link (D) with two link pins (E) and adjustable yokes (F).

Install Hangers (Tractors without Front Hitch)



MX27109

Picture Note: Hangers shown on tractor with grille guard.

1. Tractor with grille guard:

a. Install left hanger (A) on inside of tractor frame with one M12x45 flange head bolt (B), two M12x65 flange head bolts (C) and three M12 locknuts.

b. Install right hanger.

2. Tractor without grille guard:

a. Install left hanger (A) on inside of tractor frame with three M12x45 flange head bolts (B and C) and M12 locknuts.

b. Install right hanger.

3. Push bottom of hangers fully rearward and tighten hardware to 130 N•m (96 lb-ft).

Install Hangers (Tractors with Front Hitch)

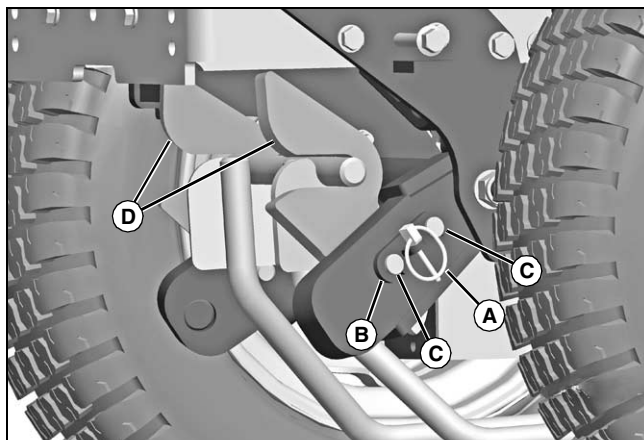
NOTE: Hangers included in this kit are intended for use on tractors without front hitch. If kit is being installed on tractor with front hitch, different hangers must be purchased and installed. See your John Deere Dealer.

1. Fully lower front hitch using hydraulics.

2. Completely close flow valve.

3. Disconnect front hitch hoses from SCV and tie out of way.

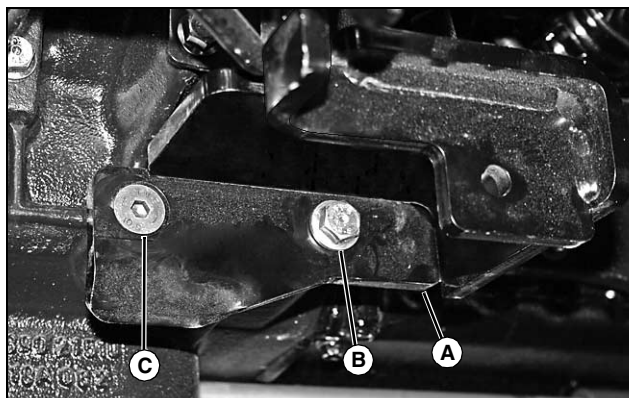
ASSEMBLY



MX27228

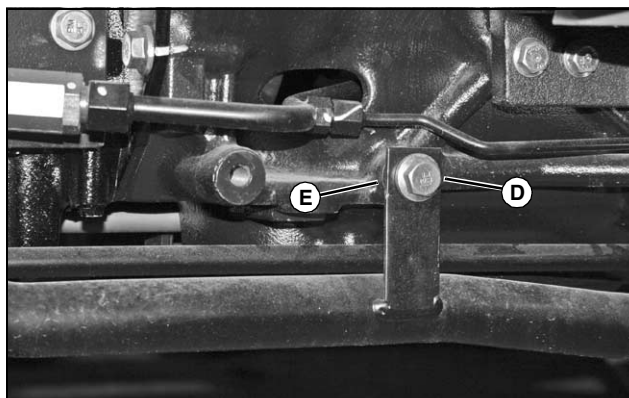
4. Remove locking rings (A) securing hitch arms to front hitch structure.
5. Pull brackets (B) and pins (C) out enough to insert new hangers (D).
6. Push pins (C) through holes in hangers and replace locking rings (A).

Install Brackets



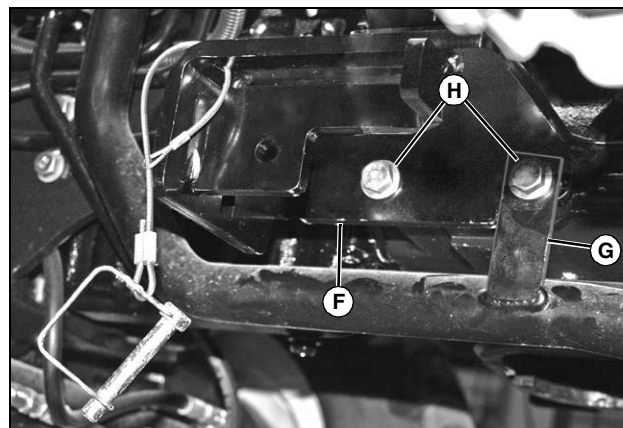
MX27110

1. Install right bracket (A) on tractor with one M12x30 hex head bolt (B) and one M12x30 hex socket head bolt (C). Push bracket fully forward and tighten hardware.



MX27111

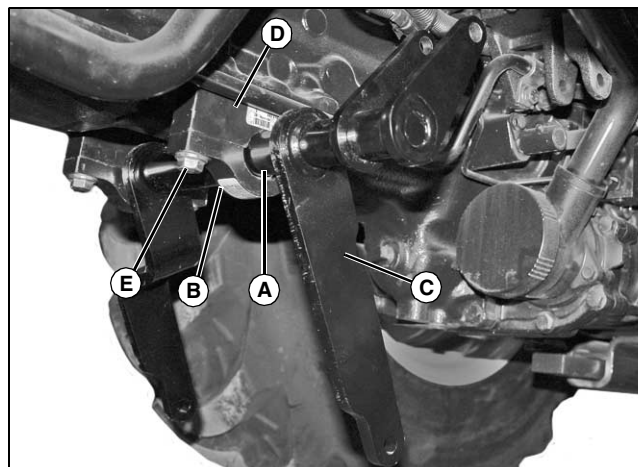
2. Remove bolt (D) and spacer (E) from suction side filtration tube at left side of tractor.



MX27112

3. Slide edge of right bracket (F) behind tab (G). Push bracket fully forward and secure with two M12x30 hex head bolts (H).

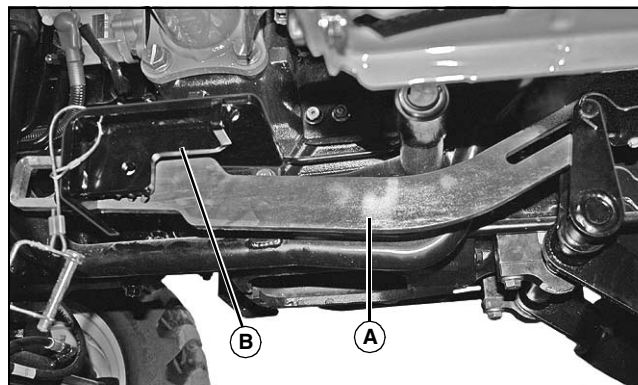
Install Mid Rockshaft



MX27113

1. Position rockshaft bushings (A) with flange end facing centerline of tractor, and between half clamp (B) and mid rockshaft (C).
2. Position block clamp (D) on top of mid rockshaft and install all parts to tractor with four M12x90 hex head bolts (E).
3. Tighten bolts to 130 N•m (96 lb-ft).

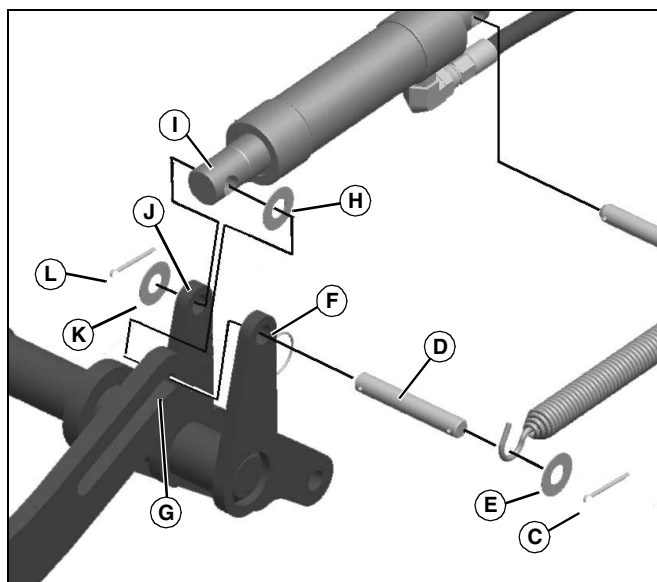
Install Height Adjust Link



MX27114

1. Slide height adjust link (A) in left bracket (B).

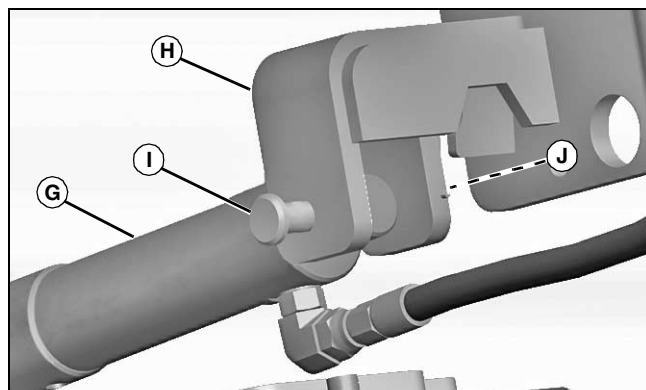
ASSEMBLY



MX27225A

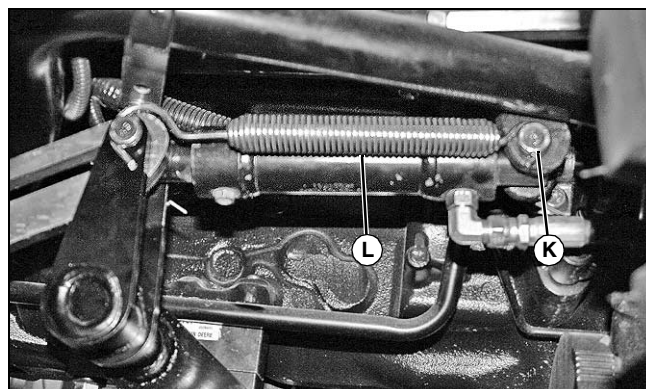
2. Install cylinder rod end and height lock link to rockshaft. Insert cotter pin (C) into end of rockshaft pin (D). Push pin through washer (E), first arm of rockshaft (F), slot in height lock link (G), washer (H), rod end of cylinder (I), second arm on rockshaft (J) and final washer (K). Secure with cotter pin (L). Make sure washers are installed as shown.

NOTE: If installing lift kit on tractor with cab, a separate bracket must be purchased before cylinder can be installed.



MX27226

3. Tractor with cab: Attach head end of cylinder (G) to bracket (H) with M12x70 drilled pin (I) and locking ring (J).

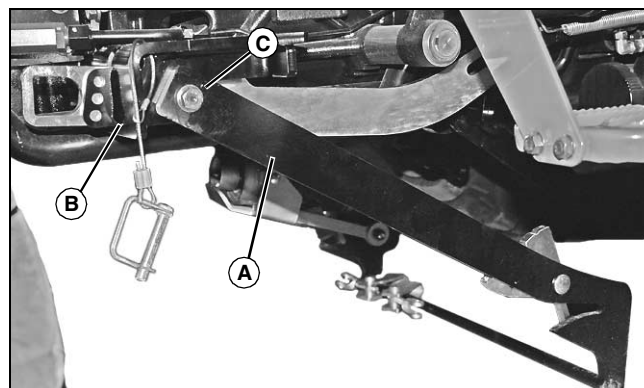


MX27115

4. Secure other end of cylinder with M12x70 drilled pin (K), washer and cotter pin.

5. Install spring (L) with spring rotation down.

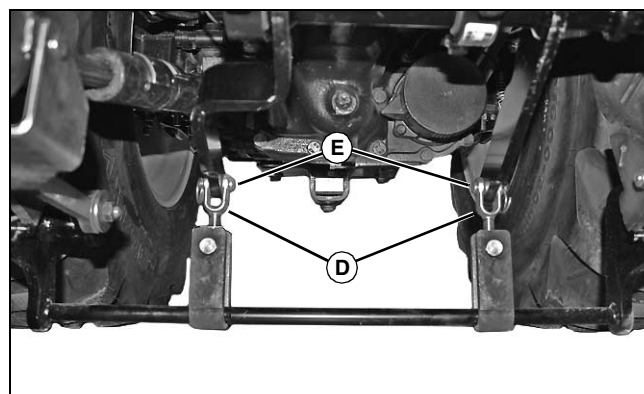
Complete Installation of Lift Kit



MX27116

1. Secure rear lift link (A) to left bracket (B) with one M12x50 flange bolt, one bushing and one M12 locknut (positioned at outside of lift link) (C).

2. Secure rear lift link to right bracket.



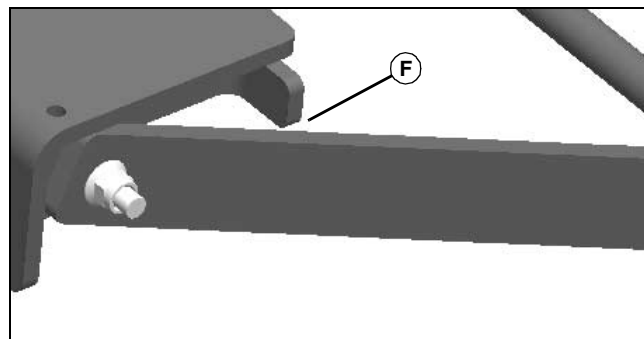
MX27117

3. Attach adjustable yokes (D) to mid rockshaft with two M12x35 drilled pins (E) and locking rings.

4. Install mid PTO shaft.

5. Either route hydraulic cylinder hose to rear of tractor and attach to third SCV, or attach it to curl circuit on dual SCV.

6. Install one hair pin in rear hole on right arm of rear lift link. Install hair pin in hole in left bracket.



MX27132

7. Start tractor and slowly raise lift system. Arms of rear link should clear up-stops at rear of brackets mounted on transmission by 1-2 mm (0.04 - 0.08 in.) (F).

INSTALLING

Installing

Preparing Machine

Required Equipment

- Tractor Mid-PTO
- Mower Lift Kit

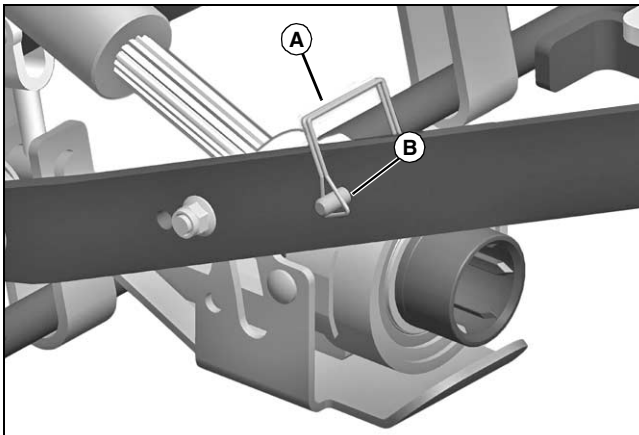
Machine Setup

1. Park machine safely. (See Parking Safely in SAFETY.)
2. Follow machine operator's manual instructions to check tire pressure.
3. Follow instructions in ASSEMBLY in this manual.

Installing Mower

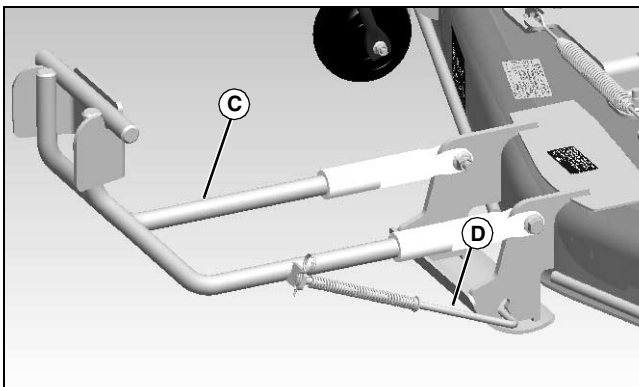
Prepare Tractor and PTO Coupler

1. Raise lift system fully.
2. Remove pin from height lock.
3. Lower lift system fully.
4. Remove snap lock pin from coupler support and make sure support drops completely.



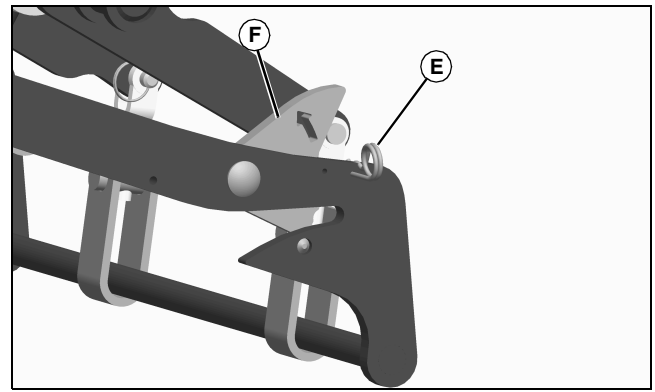
MX27224

5. Place pins (A) in forward storage holes (B) in lift link.



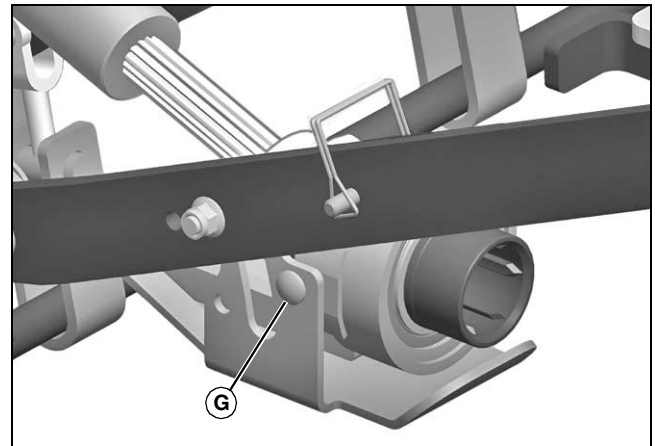
MX27133

6. Make sure front link (C) of mower is unfolded from top of deck and spring rod (D) is inserted in slot at front of deck.



MX27135a

7. Hair pins (E) should be in the storage position and locks (F) should be in the install/locked position.



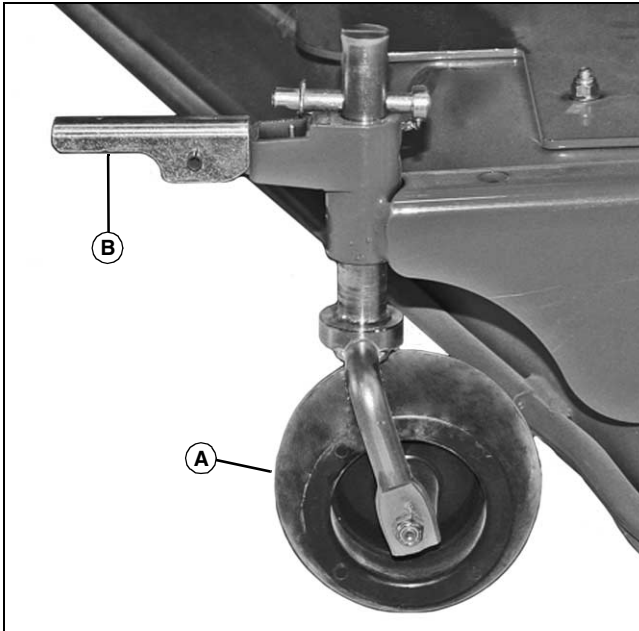
MX27224

8. For initial installation of mower deck, ensure that carriage bolts (G) on PTO coupler support are snug, but allow limited pivoting of PTO coupler.
9. Adjust PTO coupler so that it is parallel with lower plate of coupler support.

Attach Mower Deck to Tractor

1. Ensure that deck is sitting on firm, level ground. An extremely smooth surface can allow deck to be pushed along by tractor.

INSTALLING



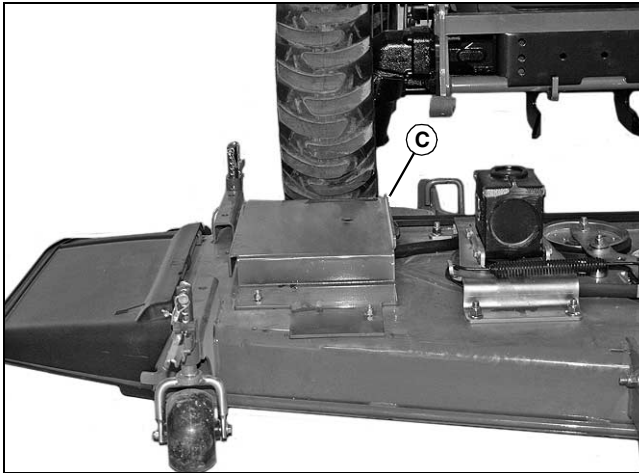
MX27182

2. Ensure that all four mower deck gage wheels (A) are in unlocked position, with handles (B) parallel to ground. Deck should be resting fully on ground.

3. Place tractor in A range four wheel drive.

4. Drive tractor onto mower deck:

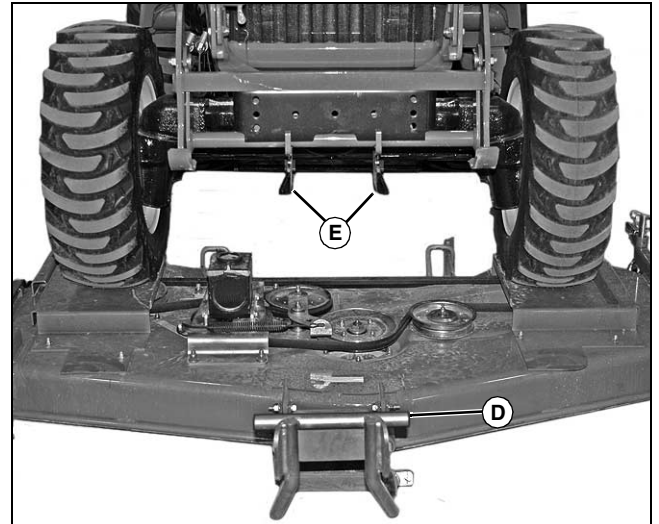
NOTE: Driver should concentrate on either the left or right side of the tractor and should not look back and forth from one side to the other while driving over mower deck. Drive forward smoothly.



MX27179

Picture Note: 72D mower shown. 60D mower deck has an angled edge instead of a vertical edge.

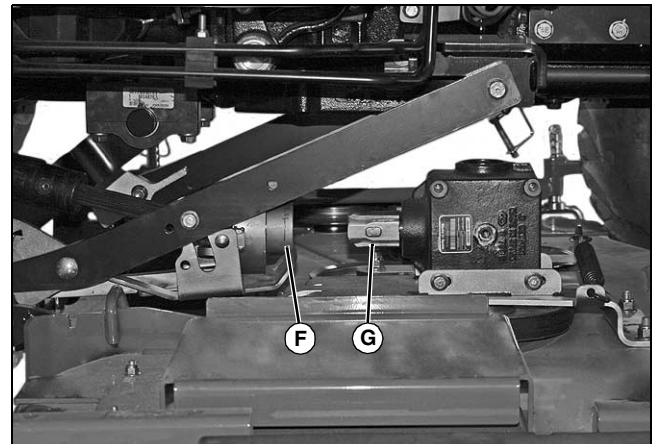
- 72 D mower: Drive tractor up to mower deck focusing on one of the front tires. Align with ramp so the inside of tire is approximately 1/2-in. from the vertical wall on the ramp.
- 60 D mower: Drive tractor up to mower deck with right front tire aligned approximately 1/2-in. from angled edge of right drive over ramp.



MX27183

5. Drive tractor slowly, smoothly and straight over mower deck making sure forward lift link (D) aligns hangers (E).

6. If mower deck pulls forward early or appears to be caught in lift system, stop tractor, reverse slightly and move forward again. If mower deck still does not properly attach, stop tractor, lock park brake, dismount tractor and determine cause of problem.

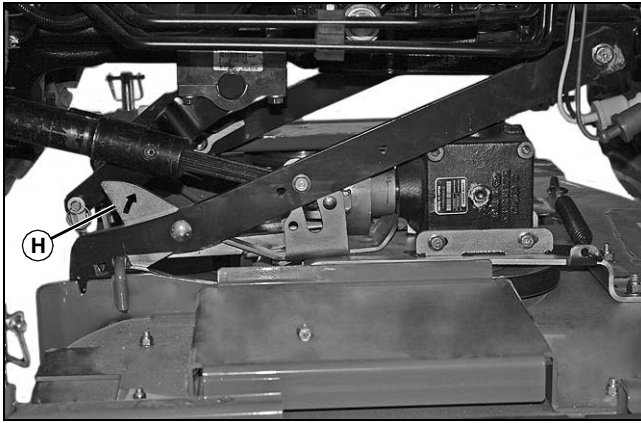


MX27184

7. PTO coupler (F) will align with gear box coupler (G).

8. Continue to slowly drive tractor forward until mower begins to pull along ground approximately 102 mm (4 inches) behind front wheels.

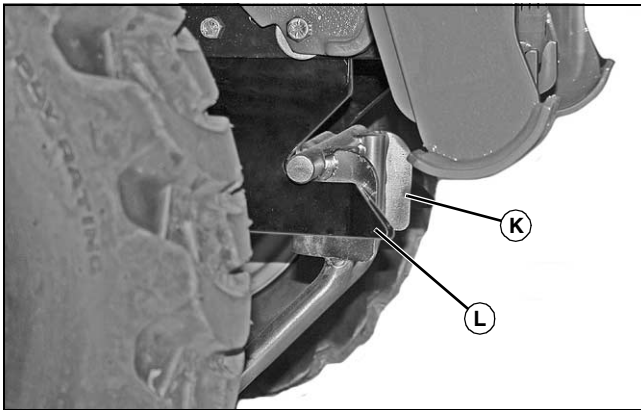
REMOVING



MX27185

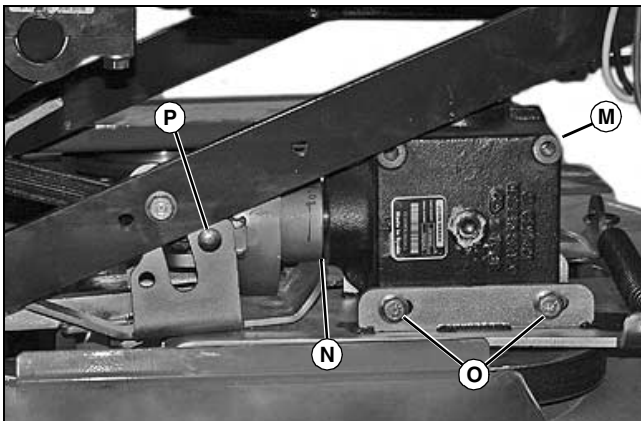
9. Dismount tractor and ensure locks (H) on both sides have dropped to locked position shown. Mower may sometimes have to be pulled rearward slightly to engage lock. On first installation, mower may not lock in position if front link is too short.

10. Install hair pins in locked position.



MX27186

11. Make sure forward lift link (K) is nested into hangers (L).



MX27185

12. 60D mower only: Adjust gearbox (M) so that end of male coupler is flush with face of female coupler (N) as shown. Tighten gearbox bolts (O) to 80 N•m (59 lb-ft).

13. Cycle PTO to set coupler.

14. After first installation, tighten carriage bolts (P) on PTO coupler support.

15. Start engine and lift mower to full height.

16. Pull height lock fully forward and place pin in nearest hole for transport or set link to desired height.

17. Lock all gage wheels down by snapping handles down and ensuring that lock pins are fully seated in vertical rods.

Removing

Removing Mower

1. Park machine on a level surface, not on a slope.

2. Lock park brake.

3. Disengage mower blades.

4. Ensure 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 gage wheel locks.

7. Remove pin from height lock.

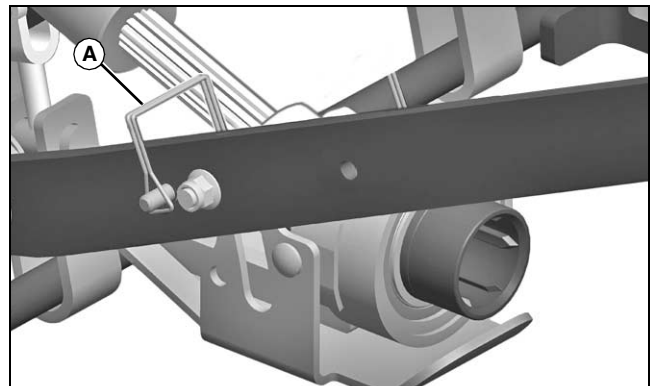
8. Remove hair pins and place in rear storage holes.

9. Lower mower deck to ground and release rear locks by pushing them forward in direction of arrow. If lock sticks, pull mower deck rearward slightly on side with stuck lock and push lock forward.

10. Slowly back tractor straight off mower deck.

11. When removing the mower for storage, raise forward lift link, pull wireform gently to side and fold forward lift link back over the deck.

12. Raise lift system fully and lock in highest position by pulling forward on height lock link and placing tethered pin in closest available hole.



MX27227

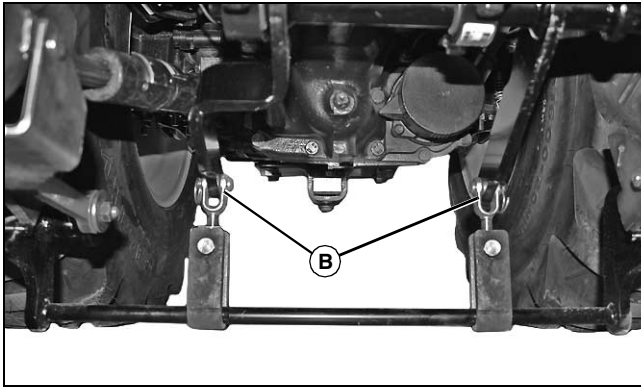
13. Lock coupler support up by lifting and installing the snap lock pin (A) in hole as shown.

14. If mid PTO will be used for other applications:

a. Lock lift link in transport position.

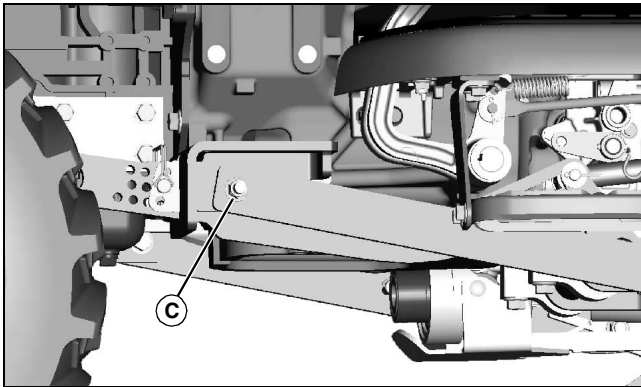
b. Remove quick connect driveshaft from mid PTO by pulling collar.

OPERATING



MX27117

c. Remove yokes (B) from mid rockshaft.



MX27166

d. Remove bolt (C), bushing, and locknut securing the rear lift link to the bracket on both sides.

e. Keep all hardware attached to the rear lift link and store for later use.

Storing Mower

CAUTION: Avoid injury! 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.

Operating

Raising and Lowering Mower

1. Review instructions on using dual and third selective control valve lever included in your machine operator's manual.
2. Remove mower from transport lock position. See Transporting Mower on Machine in OPERATING in this manual.
3. Follow machine operator's manual instructions to raise and lower the implement using the third selective control valve lever or the dual SCV curl function.

Adjusting Mower Level (Side-to-Side)



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. Park machine on a level surface, not on a slope.
 2. Lock park brake.
 3. Disengage mower blades.
 4. Raise mower fully and stop engine.
 5. Remove key.
 6. Wait for engine and all moving parts to stop before leaving operator's seat.
 7. Remove height lock pin.
- NOTE: Mower wheels should not contact ground during leveling.**
8. Lower mower slowly to desired cutting height.
 9. Pull height lock link fully forward and lock at first hole available. Lower mower so pin supports height.
 10. Measure distance from ground to right blade and left blade.
 11. Remove retaining ring from right or left rear link support. Adjust only one link at a time. Adjust link as necessary to level deck. Install retaining ring.

Adjusting Mower Level (Front-to-Rear)



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. Park machine on a level surface, not on a slope.
2. Lock park brake.
3. Disengage mower blades.
4. Raise mower fully and stop engine.
5. Remove key.
6. Wait for engine and all moving parts to stop before leaving operator's

OPERATING

seat.

7. Remove height lock pin.

NOTE: Mower wheels should not contact ground during leveling.

8. Lower mower to desired cutting height.

9. Pull height lock link fully forward and lock at first hole available. Lower mower so pin supports height.

10. Measure distance from ground to front of blade and rear of right or left blade.

NOTE: Front of mower should never be higher than rear of mower.

11. Front measurement should be 0 - 3.18 mm (0 - 1/8 in.) lower than rear.

12. Remove deck and adjust front yokes as required to obtain desired measurement.

13. If locks are not releasing or locking easily, front link may need to be loosened slightly. A sticking lock might require the opposing front yoke be tightened slightly.

Adjusting Mower Wheels



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.

IMPORTANT: Avoid damage! The mower deck can be damaged if mower wheels are adjusted wrong:

- 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. Fully raise the mower.
4. Lock park brake.
5. Stop engine.
6. Remove key.
7. Wait for engine and all moving parts to stop before leaving operator's seat.
8. Set cut height with height lock pin and lower mower until the mower weight is supported by the height lock.
9. Set gage wheel height:
 - a. Release wheel lock.
 - b. Adjust wheel to 3/8-in. distance from ground and lock wheels.

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 in hole just above gage wheel bracket.

Using Height Adjust Link

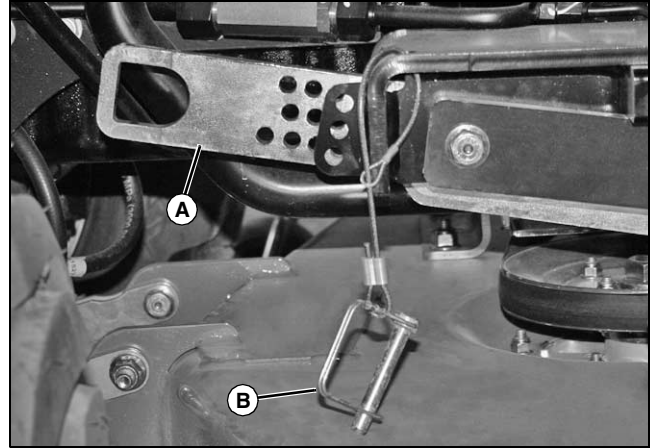
For Transport

NOTE: Do not mow with mower in highest (transport) position. Mow at least 25 mm (1 in.) lower than highest position.

1. Raise deck to highest position, pull link forward and install pin in nearest hole available. Lower deck after pin is engaged to transport position.

To Set Cut Height

1. Lower mower slowly to desired cutting height.



MX27223

2. Pull height adjust link (A) forward fully and place pin (B) in nearest hole. Be aware of hole location for any future adjustments.
3. Lower mower.
4. If cutting height is too low, raise mower, remove pin and install in adjacent hole then lower mower. Holes in height adjust link allow for adjustment in (13 mm) 1/2 increments.

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.

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.

Transporting Mower on Machine

1. Remove height lock pin at left side of mower.
2. Pull height link fully forward and install pin in hole that secures link in

SERVICE

highest position.

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

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.

Gear Oil

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

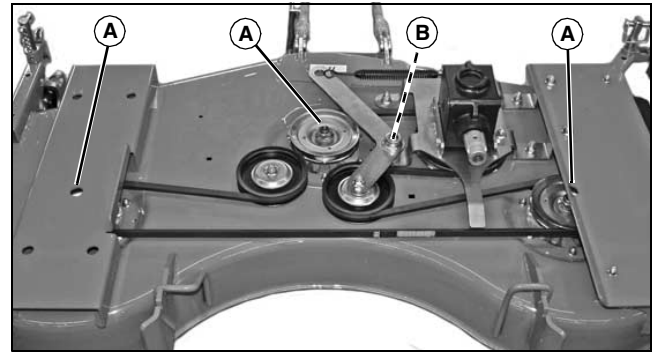
John Deere GL-5 Gear Lubricant is recommended.

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.

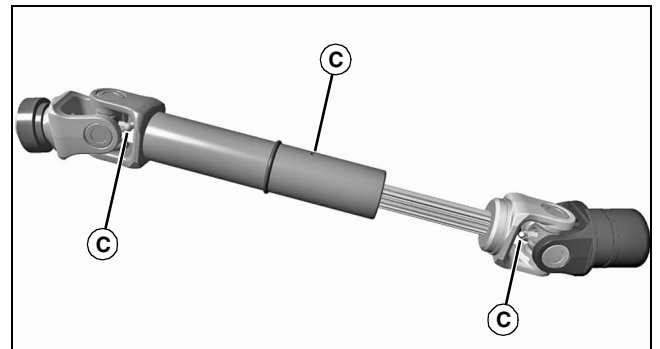
Lubricating Mower



MX27197

Picture Note: 60D mower shown.

1. Lubricate three grease fittings (A) on sheaves with recommended grease.
2. Lubricate grease fitting (B) on tensioner pulley with recommended grease.



MX27198

3. Lubricate three grease fittings (C) on mid PTO with recommended lubricant.

Servicing Gearbox

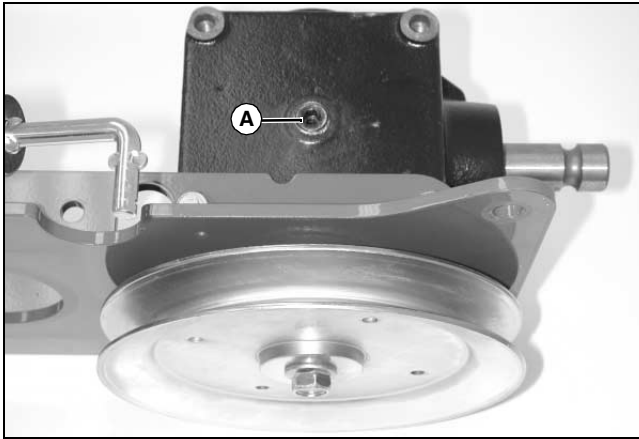
Checking Oil Level

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. See Removing Belt in SERVICE.

SERVICE



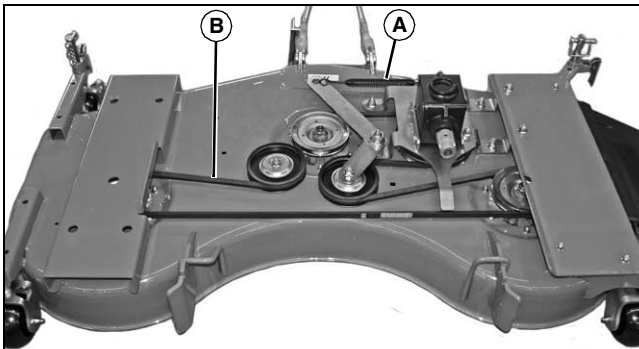
MX20647

2. Remove plug (A) on both sides of gearbox.
3. Lift and turn gearbox bracket on side to drain oil from gearbox.
4. Route belt around gearbox sheave as you install gearbox bracket on five bolts. See Installing Belt in SERVICE.
5. Following remaining instructions in Installing Belt in SERVICE to install gearbox and rod.
6. Add recommended oil to bottom edge of plug hole in gearbox.
7. Install plugs.

Servicing Mower Belt

Removing Belt

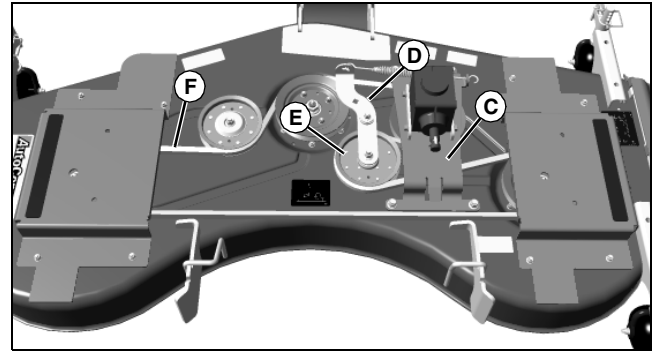
1. Remove mower from machine.
2. Clean area around and under ramps.
3. 60D Mower:



MX27197

Picture Note: 60D mower shown.

- Remove spring (A) to relieve belt tension.
 - Remove belt (B) from mower.
4. 72D Mower:



MX27136

Picture Note: 72D mower shown.

- Remove the gearbox support (C) by removing four nuts.
- Remove the nut, washer and tensioner (D).
- Remove the bolt and hardware retaining the tensioner pulley (E) then remove bolt.
- Remove belt (F) from mower.

Installing Belt

1. Install belt around sheaves and route as shown.
2. 60D: Install spring.
3. 72D: Install tensioner pulley, tensioner and gearbox support.

Servicing Mower Blades



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

Checking for Bent Mower Blades

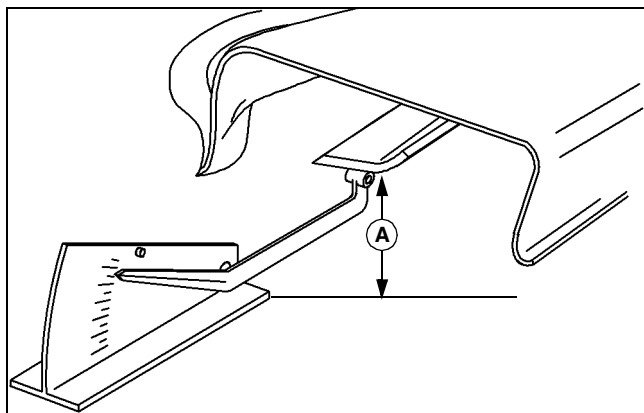


CAUTION: Avoid injury! Blades are sharp. Always wear gloves when handling blades or working near blades.

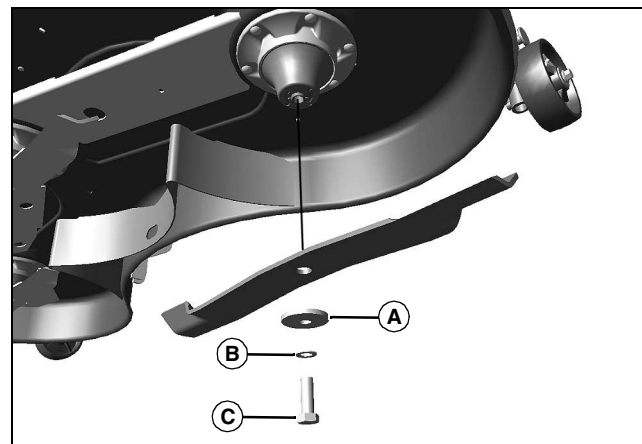
Replace blades if defective. Never straighten or weld them.

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.

SERVICE



MX11181



MX32792

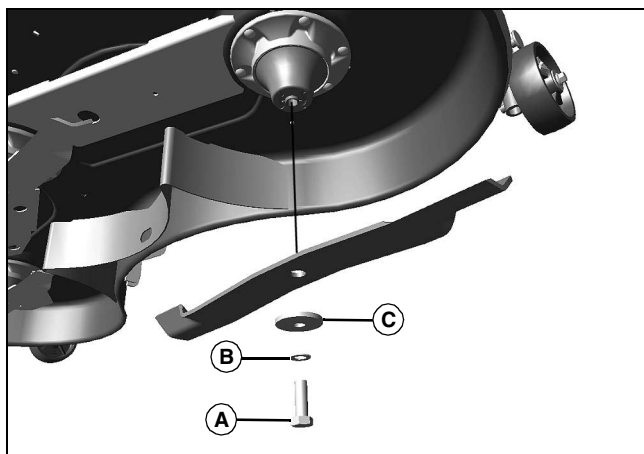
9. Measure the distance (A) from blade tip to level surface with a ruler or a leveling gauge available at your John Deere dealer.

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.).

Removing Mower Blades

1. Park machine safely. (See Parking Safely in SAFETY.)
2. Remove mower from machine.
3. Use a suitable lifting device to raise mower to gain access to blades.
4. Insert wood block between blade and mower to prevent blade from turning when removing bolt.



MX32792

5. Remove bolt (A), washer (B), washer (C) and blade.

Installing Mower Blades

1. Install blade with cutting edge toward the ground.

2. Install washer (A), washer (B) and bolt (C).

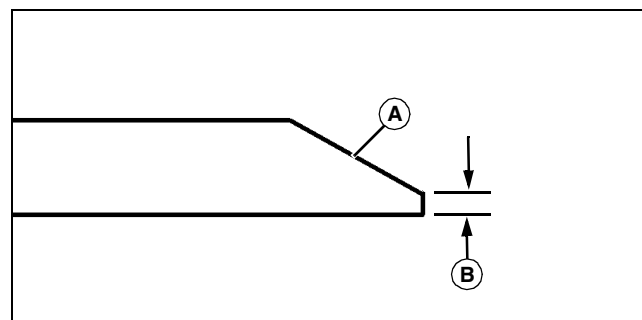
3. Insert wood block between blade and mower to prevent blade from turning when tightening bolt. Tighten to 122 N•m (90 lb-ft).

Sharpening 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.



MX8333

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

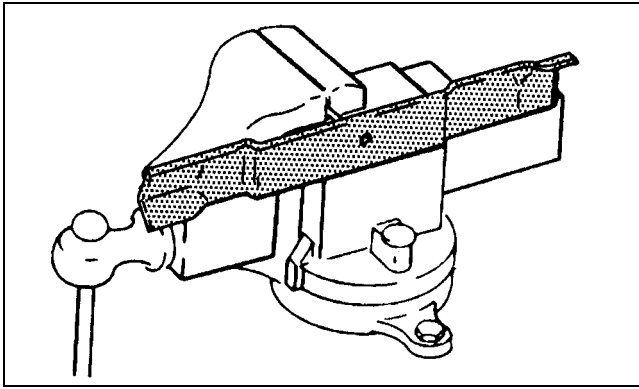
- Keep original bevel (A) when grinding.
- Blade should have 0.40 mm (1/64 in.) cutting edge (B) or less.

2. Balance blade before installing.

Balancing Blades

1. Clean the blade.

SPECIFICATIONS

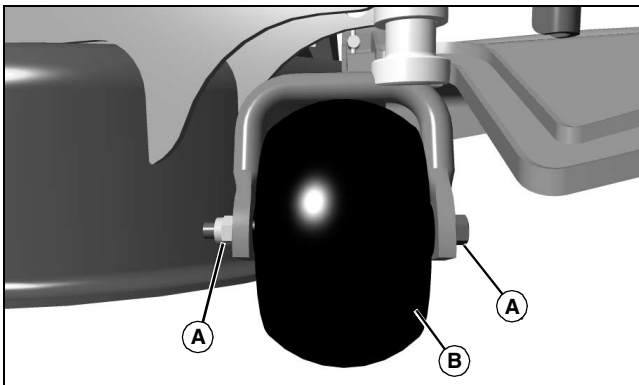


M61524

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.

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's seat.



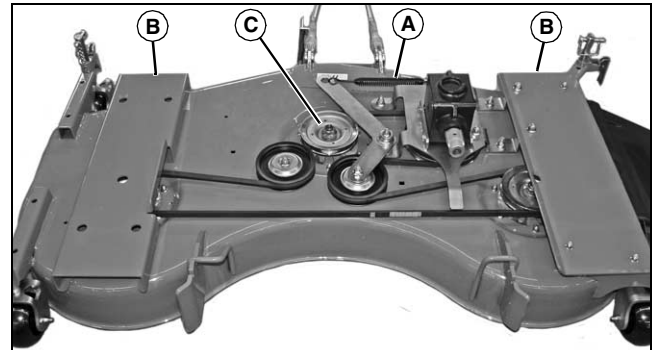
MX27130

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.

Replacing Sheaves



MX27197

Picture Note: 60D mower shown. 72D mower sheaves have four nuts instead of one.

1. Remove spring (A) to relieve belt tension.
2. If necessary, remove drive over ramp (B).
3. 60D mower: Remove center bolt (C) on sheave to be replaced.
4. 72D mower: Remove four bolts on sheave to be replaced.
5. Replace sheave(s) and install hardware.

Specifications

60-Inch 7-Iron

Mower Type	Mulch or Side Discharge
Cutting Blades	3
Overall Width	1.9 m (75.3 in.)
Overall Length	1.04 m (41 in.)
Cutting Height*	3.8-12.7 cm (1-1/2 -5 in.)
Cutting Width	1.5 m (60.9 in.)
Mower Weight	147 kg (324 lb)
Blade Bolt Torque	122 N•m (90 lb-ft)
Gearbox Oil Capacity	136 ml (4.6 oz)

*May vary depending on tire size.

72-Inch 7-Iron

Mower Type	Mulch or Side Discharge
Cutting Blades	3
Overall Width	2.19 m (86 in.)
Overall Length	1.14 m (45 in.)
Cutting Height*	3.8-12.7 cm (1-1/2 -5 in.)
Cutting Width	1.8 m (72.8 in.)
Mower Weight	156 kg (345 lb)
Blade Bolt Torque	122 N•m (90 lb-ft)
Gearbox Oil Capacity	136 ml (4.6 oz)

*May vary depending on tire size.

GETTING QUALITY SERVICE

Getting 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.

Parts

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

Part numbers may change, use part numbers listed below when you order. If a number changes, your dealer will have the latest number.

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.

Order Service Parts Online

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

Replacement Parts

60-Inch 7-Iron Mower

Item	Part Number
Blade	M128485
Belt	M136137

72-Inch 7-Iron Mower

Item	Part Number
Blade	TCU15822
Belt	M149866

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. Call the John Deere Customer Contact Center.
 - Call 1-800-537-8233 and provide product serial number and model number.