

JOHN DEERE
WORLDWIDE COMMERCIAL & CONSUMER
EQUIPMENT DIVISION

**Mower Deck
Freedom42**

OMM142634 G0

OPERATOR'S MANUAL



North American Version
Litho in U.S.A.



F W U



G 0
4
3
6
2
4
M
O

INTRODUCTION

Thank You for Purchasing a John Deere Product

We appreciate having you as a customer and wish you many years of safe and satisfied use of your machine.

IMPORTANT: Avoid damage! This text is used to tell the operator of actions or conditions that might result in damage to the machine.

NOTE: General information is given throughout the manual that may help the operator in the operation or service of the machine.

Using Your Operator's Manual

This manual is an important part of your machine and should remain with the machine when you sell it.

Reading your operator's manual will help you and others avoid personal injury or damage to the machine. Information given in this manual will provide the operator with the safest and most effective use of the machine. Knowing how to operate this machine safely and correctly will allow you to train others who may operate this machine.

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

Sections in your operator's manual are placed in a specific order to help you understand all the safety messages and learn the controls so you can operate this machine safely. You can also use this manual to answer any specific operating or servicing questions. A convenient index located at the end of this book will help you to find needed information quickly.

The machine shown in this manual may differ slightly from your machine, but will be similar enough to help you understand our instructions.

RIGHT-HAND and LEFT-HAND sides are determined by facing in the direction the machine will travel when going forward. When you see a broken line arrow (----->), the item referred to is hidden from view.

Before delivering this machine, your dealer performed a predelivery inspection to ensure best performance.

Special Messages

Your manual contains special messages to bring attention to potential safety concerns, machine damage as well as helpful operating and servicing information. Please read all the information carefully to avoid injury and machine damage.



CAUTION: Avoid injury! This symbol and text highlight potential hazards or death to the operator or bystanders that may occur if the hazards or procedures are ignored.

PRODUCT IDENTIFICATION

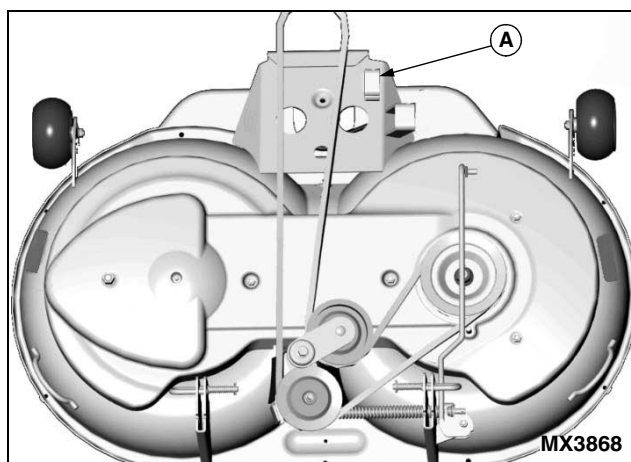
Record Identification Numbers

Freedom42 Mower Deck

Serial No. (011501-)

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 deck and record the information in the spaces provided below.



DATE OF PURCHASE:

DEALER NAME:

DEALER PHONE:

PRODUCT SERIAL NUMBER (A):

TABLE OF CONTENTS

Safety	1
Preparing Vehicle	4
Installing	5
Removing	8
Operating	10
Replacement Parts	14
Service Intervals	15
Service Lubrication	16
Service Mower	17
Troubleshooting	25
Storage	27
Specifications	28
Index	29

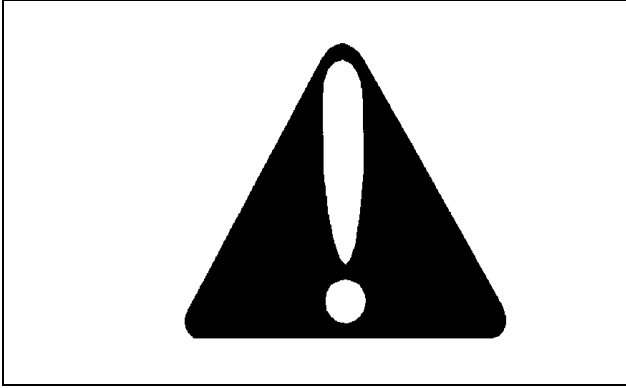
All information, illustrations and specifications in this manual are based on the latest information at the time of publication. The right is reserved to make changes at any time without notice.

COPYRIGHT© 2000
Deere & Co.
John Deere Worldwide Commercial and
Consumer Equipment Division
Horicon, WI
All rights reserved
Previous Editions
COPYRIGHT© 1998

OMM142634 G0 - English

SAFETY

Understanding The Machine Safety Labels



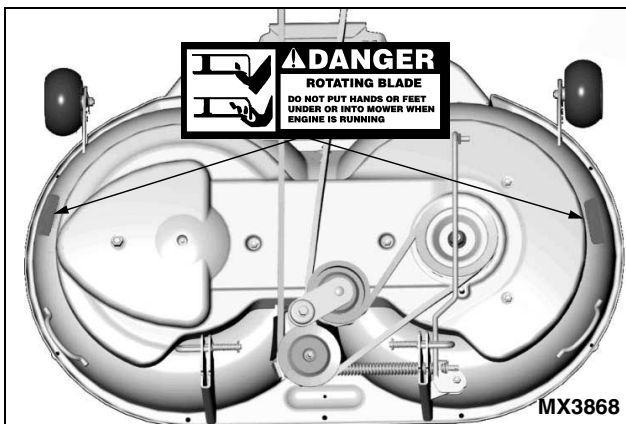
The machine safety labels shown in this section are placed in important areas on your machine to draw attention to potential safety hazards.

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, (▲).

Machine Safety Labels

DANGER: ROTATING BLADE



Picture Note: Two decals, one on each side.

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

Certification

Your mower has been certified by an independent

laboratory for compliance with American National Standard B-71.1, "Safety Specifications" for Power Lawn Mowers, Lawn and Garden Tractors, and Lawn Tractors.

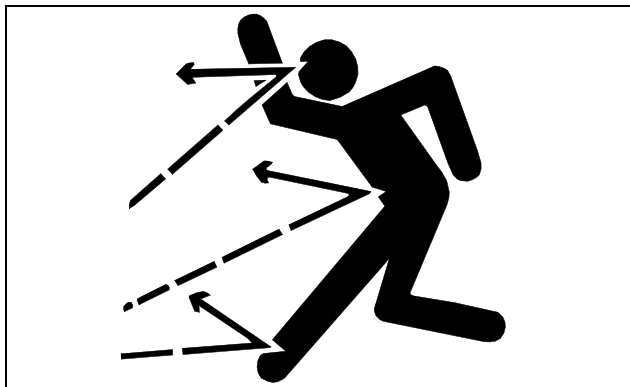
Operating Safely



- Read, understand and follow all instructions in the manual and on the machine before starting.
- Only allow responsible adults, who are familiar with the instructions to operate the machine.
- 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.
- Check brake action before you operate. Adjust or service brakes as necessary.
- Stop machine if anyone enters the area.
- If you hit an object, stop the machine and inspect it. Make repairs before you operate. Keep machine and attachments properly maintained and in good working order.
- Be aware of the mower discharge direction and make sure that no one is in the path of the discharge direction.
- Do not leave machine unattended when it is running.
- Only operate during daylight or with good artificial light.
- Be careful of traffic when operating near or crossing roadways.
- Do not wear radio or music headphones while operating the machine. Safe operation requires your full attention.
- Older adults are involved in a large percentage of riding mower accidents involving injury. These operators should evaluate their ability to operate a mower safely enough to protect the operator and others from serious injury.

SAFETY

Checking Mowing Area



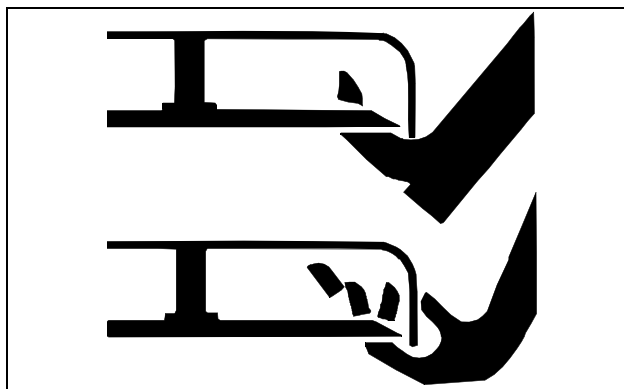
- Clear mowing area of objects that might be thrown. Keep people and pets out of mowing area.
- Study mowing area. Set up a safe mowing pattern. Do not mow where traction or stability is doubtful.
- Test drive area with mower lowered but not running. Slow down when you travel over rough ground.

Parking Safely

1. Stop machine on a level surface, not on a slope.
2. Disengage mower blades.
3. Lower attachments to the ground.
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. Close fuel shut-off valve, if your machine is equipped.

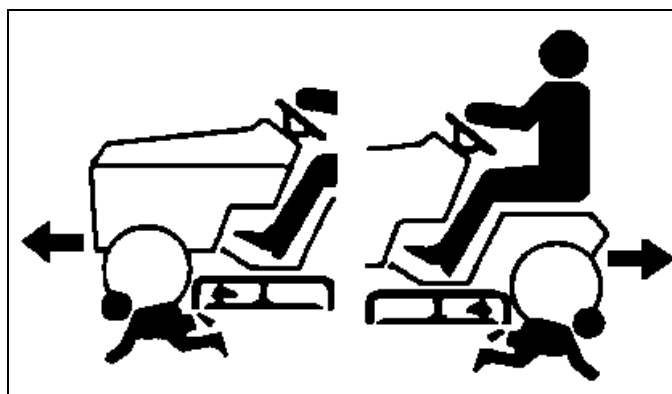
Rotating Blades are Dangerous

HELP PREVENT SERIOUS OR FATAL ACCIDENTS:



- Rotating blades can cut off arms and legs.
- 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.
- Before backing up, shut off PTO and look down and behind the machine carefully, especially for children.
- Do not mow in reverse.
- Shut off blades when you are not mowing.
- Do not operate machine if you are under the influence of drugs or alcohol.
- Park machine safely before inspecting or unplugging mower or bagger.

PROTECT CHILDREN:



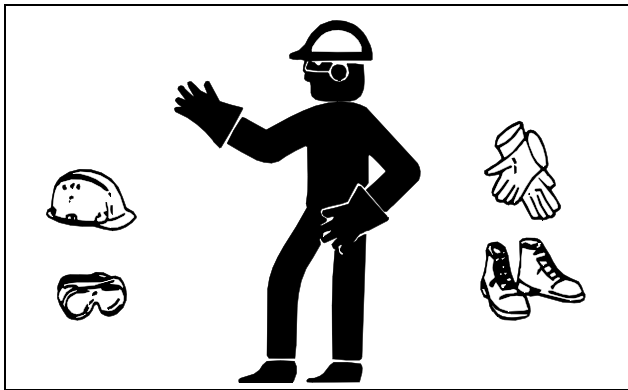
- Never assume that children will remain where you last saw them. Children are attracted to mowing activity, stay alert to the presence of children.
- Keep children indoors when you are mowing. Turn the machine off if a child enters the mowing area.
- Use extra care when you come to blind corners, shrubs,

SAFETY

trees, or other objects that may block your vision.

- Do not let children or an untrained person operate the machine.
- Do not carry or let children ride on any attachment or machine even with the blades off. Do not tow children in a cart or trailer.

Wear Appropriate Clothing



- Wear close fitting clothing and safety equipment appropriate for the job.
- Always wear safety goggles or safety glasses with side shields when operating the mower.
- Wear a suitable protective device such as earplugs. Loud noise can cause impairment or loss of hearing.
- Do not wear radio or music headphones. Safe service and operation requires your full attention.

- Keep hands, feet, clothing, jewelry, and long hair away from any moving parts, to prevent them from getting caught.
- Lower attachments to the ground before servicing machine. Disengage all power and stop the engine. Lock park brake and remove the key. Let machine cool.
- Disconnect battery or remove spark plug wire before making any repairs.
- Before servicing the machine, carefully release pressure from any components with stored energy, such as hydraulic components.
- Keep all nuts and bolts tightened, especially blade attachment bolts.
- Securely support any machine elements that must be raised for service work.
- Never run engine unless park brake is locked.
- Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Replace all worn or damaged safety and instruction decals.
- To prevent fires, remove any buildup of grease, oil, or debris from the machine, especially the engine compartment.
- Charge batteries in an open, well-ventilated area, away from sparks. Unplug battery charger before connecting or disconnecting from the battery. Use insulated tools.
- Do not modify machine or safety devices. Unauthorized modifications may impair its function and safety.
- Do not wear radio or music headphones while servicing the machine. Safe service requires your full attention.

Practice Safe Maintenance



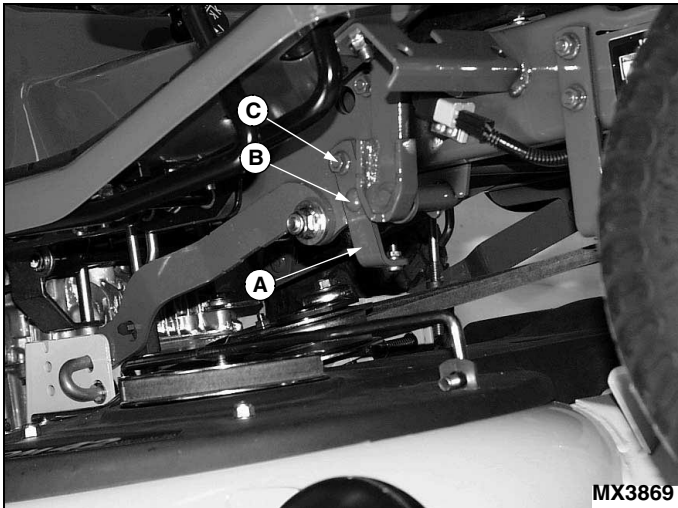
- Understand service procedure before doing work. Keep area clean and dry.
- Never lubricate, service, or adjust machine while it is moving. Keep safety devices in place and in working condition. Keep hardware tight.

PREPARING VEHICLE

Remove Bracket From Tractor Frame (LX and GT Models)

NOTE: Some early model tractors will have a bracket on the right side of the tractor frame.

If your tractor has bracket (A), remove it to avoid contact with the mower deck belt shield.



1. Check to see if your tractor has bracket (A) located on the right side of tractor frame below foot platform.
2. Remove hardware (B) from bottom hole and hardware (C) from top hole and remove the bracket.
3. Retain hardware (C) and install into top hole of tractor frame. Tighten nut securely.
4. Discard bracket and hardware removed from bottom hole.

INSTALLING

Installing Mower

1. Park vehicle safely. (See Parking Safely in the Safety Section.)
2. Put lift lever in transport position.



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

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

3. Slide mower under the tractor.



4. Turn cut height adjustment knob (A) to the BLANK position or "0" cut height.

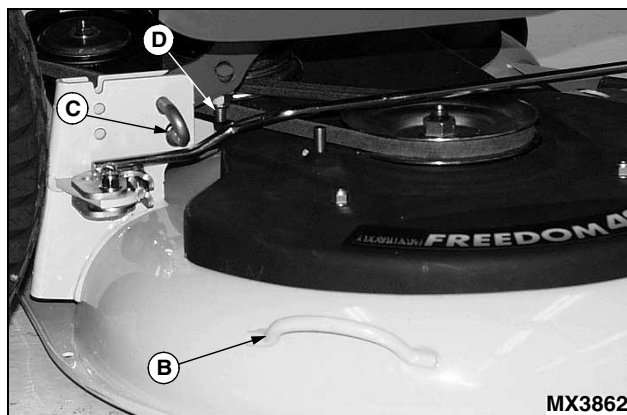


CAUTION: Avoid injury! Lift lever is spring-assisted and may have unexpected movement. Put the lift lever in the mowing position before removing or installing the mower.

5. Put lift lever in the mowing position to lower mower draft arms.

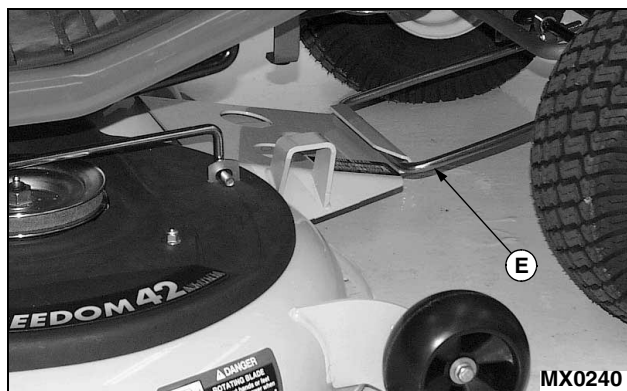


CAUTION: Avoid injury! Mower blades are sharp. Always wear gloves when handling mower blades or working near blades.



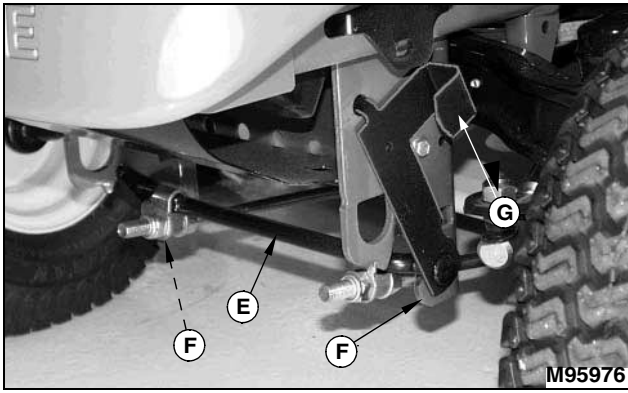
6. Lift up on rear of mower deck with handle (B) and release rear J-pin (C) to attach lift brackets to lift arms on each side of mower. Make sure belt is routed to the inside of lift link (D).

7. Install front lift rod.



- a. Put front lift rod assembly (E) in hooked end of mower deck bracket and brackets (F) of front tractor frame. Be sure both ends of lift rod assembly are seated in tractor frame hooks.

INSTALLING



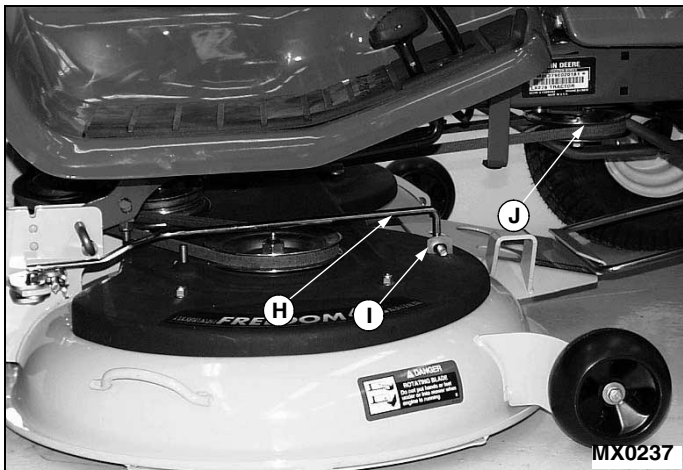
- b. Push up on lever (G) and lock in hole on left-hand side of tractor frame.



CAUTION: Avoid injury! Drive belt tension rod is spring-assisted and may have unexpected movement.

Keep a tight grip on rod when installing or removing drive belt or servicing mower deck.

8. Put mower drive belt on engine drive sheave.



- a. Remove drive belt tension rod (H) from bracket (I) and move rod all the way out toward you as far as it will go and hold in position while installing drive belt.
b. Put belt on engine drive sheave (J).
c. Move drive belt tension rod to tighten belt and hook rod in bracket

9. Put lift lever in transport position.

10. Adjust mower wheels for desired cutting height.

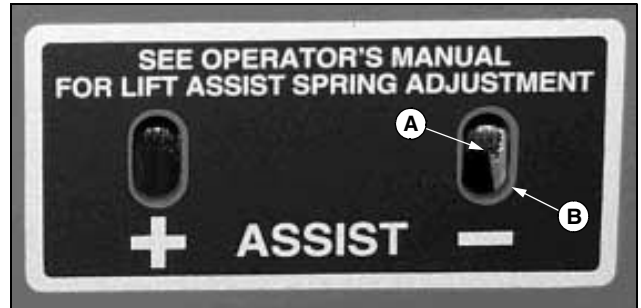
11. Level mower.

Adjust Lift Assist Spring (LX and GT Model Tractors)

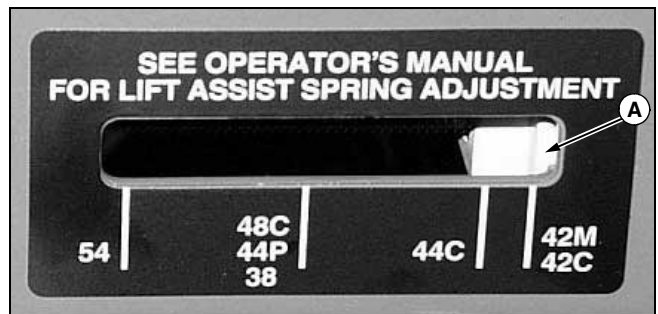
The weight of the mower deck affects ease of lifting.

Adjust lift assist spring tension when installing a different deck to tractor.

1. Check the position of the yellow spring plug (A):



- On older model tractors: Make sure the yellow spring plug is visible in the (-) window (B).



- On newer model tractors: Make sure that the yellow spring plug is positioned above the mark for the mower deck size.

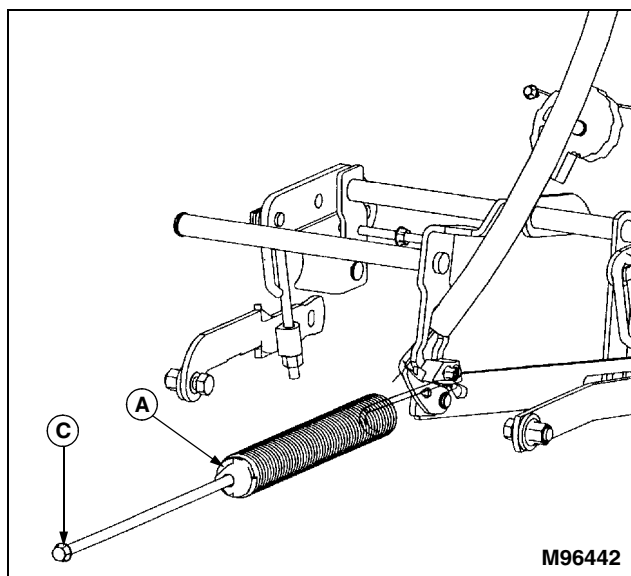
2. Adjust the tension on the lift assist spring if necessary.



Picture Note: New model tractor shown.

- Turn long adjusting bolt (C) clockwise to tighten spring tension and move the yellow spring plug toward the front of the tractor or the (+) window.

INSTALLING



- Turn long adjusting bolt (C) counterclockwise to loosen spring tension and move yellow spring plug toward the rear of the tractor or the (-) window.

REMOVING

Removing Mower

1. Park machine safely. (See Parking Safely in the Safety Section).



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

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

2. Put lift lever in transport position.



3. Turn cut height adjustment knob (A) to the BLANK position or "0" cut height.



CAUTION: Avoid injury! Lift lever is spring-assisted and may have unexpected movement. Put the lift lever in the mowing position before removing or installing the mower.

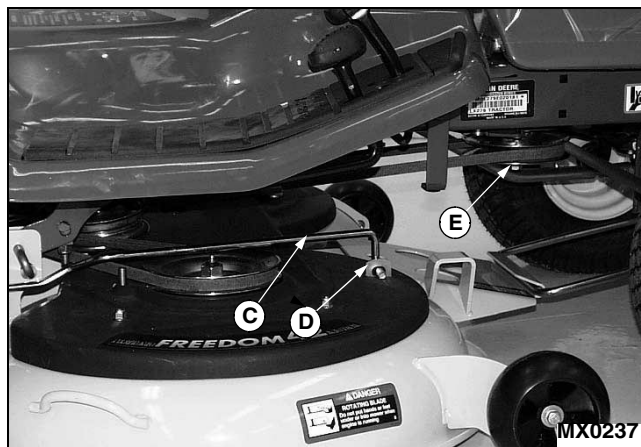
4. Lower mower.



CAUTION: Avoid injury! Drive belt tension rod is spring-assisted and may have unexpected movement.

Keep a tight grip on rod when installing or removing drive belt or servicing mower deck.

5. Remove mower drive belt from engine drive sheave.



- a. Remove drive belt tension rod (C) from bracket (D) and move rod all the way out toward you as far as it will go and hold in position while removing drive belt.
- b. Remove belt from engine drive sheave (E).
- c. Return tension rod to latched position.

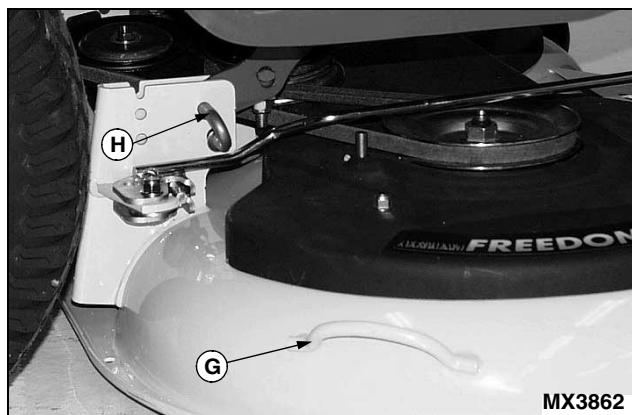


6. Pull out and push down on lever (F) to release front lift rod assembly from tractor and mower deck.

REMOVING



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



7. Lift up on rear of mower deck with handle (G) and disconnect draft arms, one on each side, by pulling spring loaded J-pins (H) out.



CAUTION: Avoid injury! Lift lever is spring-assisted and can snap back when deck is removed.

Hold lift lever tightly when releasing from lock (lower) position.

8. Raise mower deck to the TRANSPORT (upper) position.
9. Slide mower deck out from under the tractor.

OPERATING

Adjusting Cutting Height

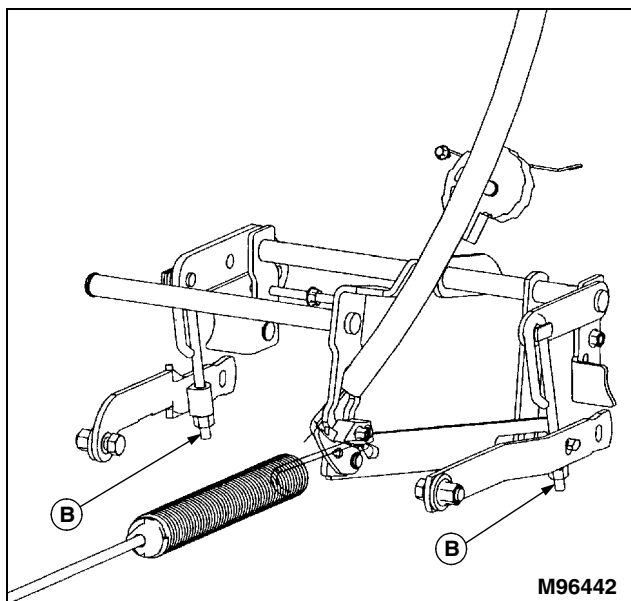
NOTE: Lift lever should be in Transport (upper) position before turning cutting height knob.

Cutting height can be adjusted from approximately 25–100 mm (1–4 in). When lift lever is in transport position, cutting height is approximately 100 mm (4 in).

1. Put lift lever in transport position.



2. Turn cutting height knob (A) to desired cutting height. Mower will be at that cutting height when it is lowered.



3. Check that the actual Height of Cut matches the reading on the cutting height knob. If they DO NOT match, adjust lift links (B) on BOTH sides of mower.

- Turn nuts (B) CLOCKWISE to RAISE the mower deck to match the cutting height knob.
- Turn nuts (B) COUNTERCLOCKWISE to LOWER the mower deck to match the cutting height knob.

4. Adjust mower wheels.

Adjusting Mower Deck Wheels



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

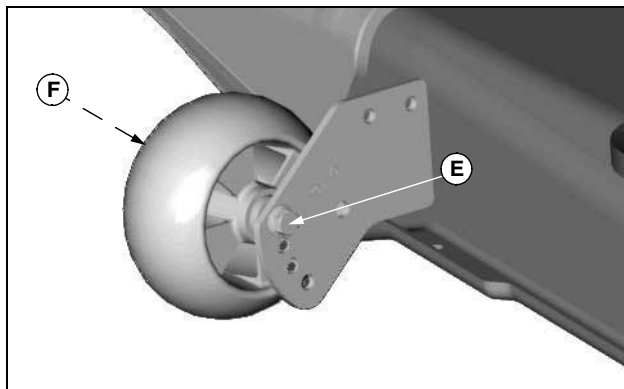
- Disconnect spark plug wire(s) to prevent engine from starting accidentally.
- Always wear gloves when handling mower blades or working near blades.

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.

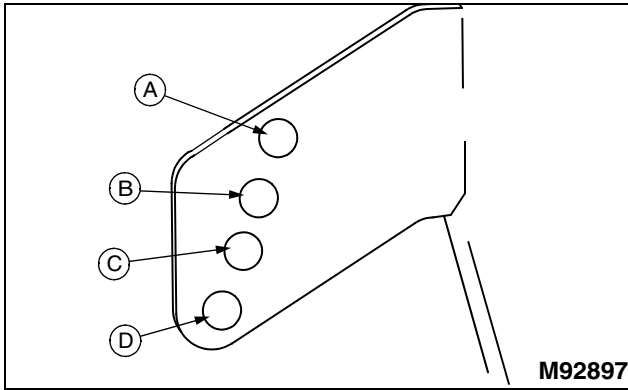
1. Park machine safely on a level surface. (See Parking Safely in the Safety Section.)
2. Inflate tires to the correct pressure.
3. Move lift lever to the transport position and adjust cutting height.
4. Move lift lever to the mowing position.

NOTE: Bottom of wheels should be approximately 3-13 mm (1/8-1/2 in.) from the ground.



5. Check mower wheel position. Remove bolt (E) and nut (F) on wheels and move wheels to proper hole.

OPERATING



6. Install bolts and nuts and tighten to 34 N•m (25 lb-ft).

A	38.1 mm (1.5-Inch)
B	51 mm (2-Inch)
C	63.5 mm (2.5-Inch)
D	76 mm (3-Inch)

7. Move lift lever to FLOAT (middle) position.

Adjusting Mower Level (Side-to-Side)



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

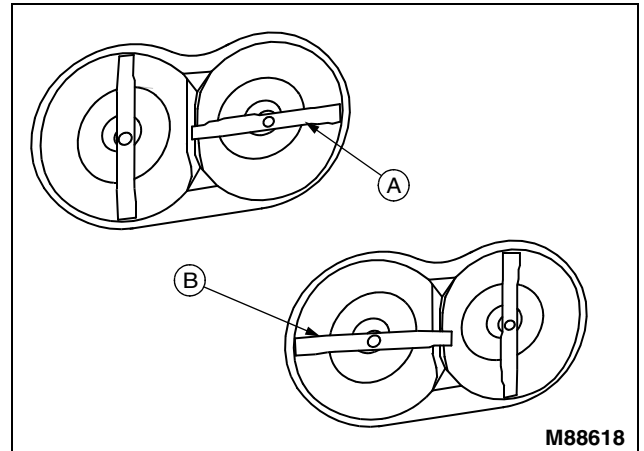
- Disconnect spark plug wire(s) to prevent engine from starting accidentally.
- Always wear gloves when handling mower blades or working near blades.

NOTE: Mower wheels should not contact the ground when leveling the deck.

1. Park machine safely on a level surface. (See Parking Safely in the Safety Section.)
2. Inflate tires to the correct pressure.
3. Adjust cutting height to 50 mm (2 in).
4. Put lift lever in mowing position.

NOTE: The difference between blade measurements must not be more than 3 mm (1/8 in).

5. Position mower blades as follows and measure from each outside blade tip to the level surface:



- Turn blade (A) as shown. Take measurement. Rotate blades 90° so that blade (B) is positioned as shown. Take measurement.

NOTE: Cutting height can closely match knob setting by adjusting lift links on both sides of deck.

Deck will not lock in Transport position if adjusted too high.



6. Adjust lift links by turning nut (C) clockwise to raise right side of mower, counterclockwise to lower right side of mower. Make sure belt is routed to the inside of lift link.

Adjusting Mower Level (Front-to-Rear)



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

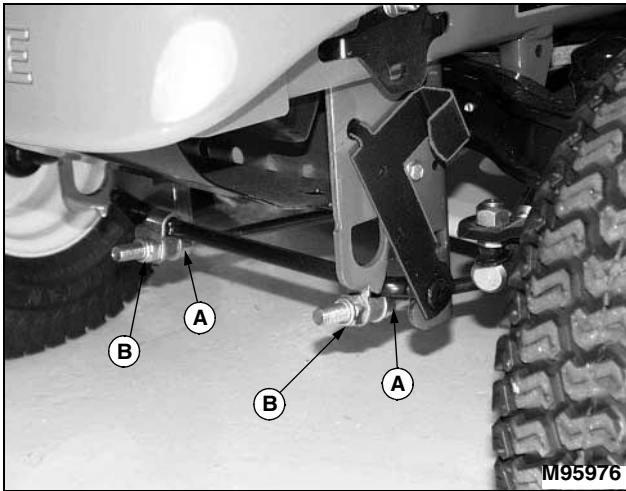
- Disconnect spark plug wire(s) to prevent engine from starting accidentally.
- Always wear gloves when handling mower blades or working near blades.

NOTE: Mower wheels should not contact the ground

OPERATING

during leveling.

1. Park machine safely on a level surface. (See Parking Safely in the Safety Section.)
2. Inflate tires to the correct pressure.
3. Adjust cutting height to 50 mm (2 in).
4. Put lift lever in mowing position.
5. Turn right blade so blade tip points straight forward.
6. Measure from the front of blade tip to the level surface. The difference between front and rear measurements must not be more than 3 mm (1/8 in).



7. Loosen two rear nuts (A) on adjusting bolts and turn two front nuts (B) clockwise to raise front of mower deck or counterclockwise to lower front of mower deck.
8. Tighten rear nuts after adjustment is completed.
9. Measure blade tips again and adjust if necessary.

Using Mower

IMPORTANT: Avoid damage! The PTO clutch may be damaged if engaged with the engine set at full throttle.

- Set engine at half throttle before engaging PTO.

1. Start engine and allow it to idle for two to three minutes.
2. Move throttle lever to ONE-HALF engine speed position.
3. Lower mower to desired cutting height position.



4. Pull PTO knob (A) up to start mower.
 5. Push throttle lever (B) up to the full throttle (🔥) position.
- NOTE: The mower will stop as the REVERSE foot pedal is depressed with mower engaged.**
6. Disengage PTO before shifting to REVERSE.
 7. Push PTO knob (A) down to stop mower blades.

Mower Blade Selection

Mower deck performance depends on using the correct mower blade for your mower. Use the following recommendation when choosing blades:

Mulch blades are standard. (Blades must be ordered in a set, with a left and right blade.)

Unplugging Mower



CAUTION: Avoid injury! Rotating blades are dangerous:

- Park the machine safely and lock the park brake before getting off the seat.
- Turn the mower off.
- Stop the engine.

Before getting off the seat:

1. Stop machine.
2. Put transmission in neutral.
3. Disengage mower blades.
4. Move throttle lever to slow (🐢) position.
5. Lower mower to the ground.
6. Lock the park brake.
7. Stop the engine.

OPERATING

8. Remove the key.
9. Wait for all moving parts to stop.

REPLACEMENT PARTS

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 your product serial number. This is the number that you recorded in the Product Identification section of this manual.

Part Numbers

Item	Part Number
Belts:	
• Primary V-Belt	M140502
• Secondary-Timed Belt	M141558
Mower Blade Kit (Includes Set of Blades and Blade Bolts)	AM130172
Blade Bolt	AM127890

(Part numbers are subject to change without notice. Part Numbers may be different outside the U.S.A.)

SERVICE INTERVALS

25 Hours

- Check mower blades.

50 Hours

- Lubricate mower spindles.

100 Hours

- Inspect blade timing and adjust timing belt tension.
- Check mower drive belt.

Yearly - As Required

- Sharpen mower blades.
- Inspect belts/replace.

SERVICE LUBRICATION

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.

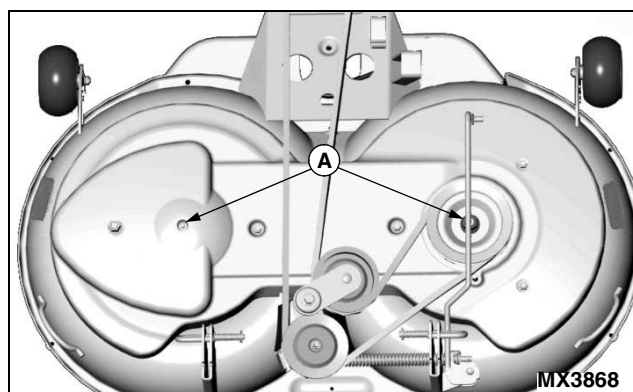
The following greases are preferred:

- John Deere Multi-Purpose SD Polyurea Grease
- John Deere Multi-Purpose HD Lithium Complex Grease
- John Deere Moly High Temperature EP 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.

Lubricate Mower Spindles



Lubricate two mower spindles grease fittings (A) with two pumps of general all-purpose grease.

SERVICE MOWER

Avoid Injury from Contacting Blades

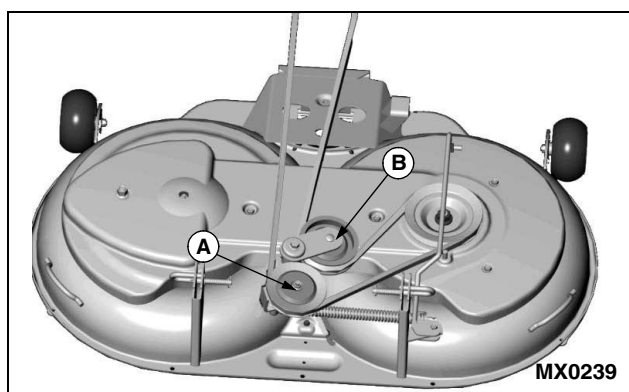


CAUTION: Avoid injury! Rotating blades are dangerous. Before adjusting or servicing mower:

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

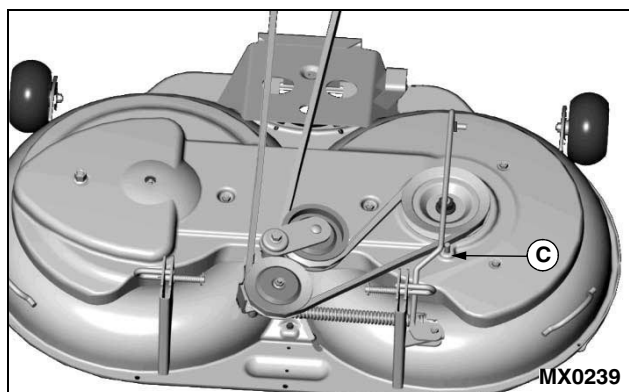
Replacing Mower Drive Belt

1. Park machine safely. (See Parking Safely in the Safety Section.)
2. Remove mower deck.



3. Loosen idler sheave (A) and tensioning sheave (B).
4. Remove mower belt.
5. Inspect belt for wear or damage; replace as necessary.

IMPORTANT: Avoid damage! Route the belt to the inside of the belt guide. Routing belt incorrectly can cause belt damage.



6. Install belt on mower deck as shown. Make sure belt is routed to the inside of belt guide (C).

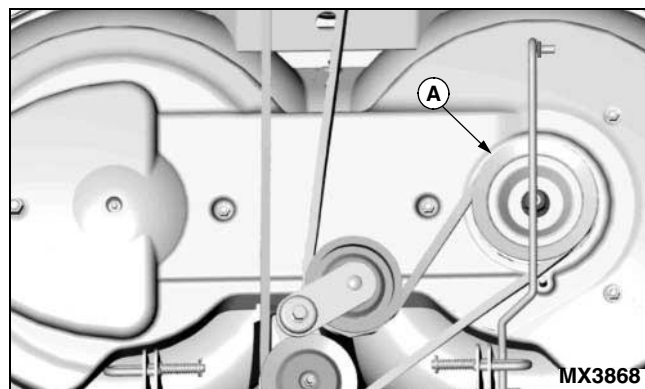
7. Tighten idler sheave and tensioning sheave.
8. Install mower deck.

Adjusting Mower Deck Timing Belt

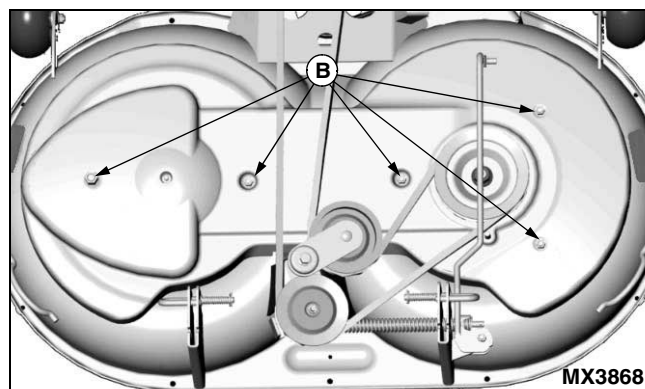
IMPORTANT: Avoid damage! Damage may occur to the belt or blades after a major blade impact:

- Check blades for damage and timing.
- Check the timing belt for damage and proper tensioning.

1. Park vehicle safely. (See Parking Safely in the Safety Section.)
2. Remove mower deck from tractor.



3. Remove drive belt from right spindle (A).



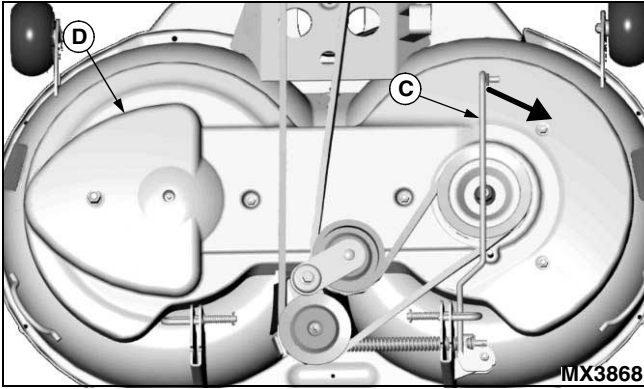
4. Remove five nuts (B).

SERVICE MOWER



CAUTION: Avoid injury! Drive belt tension rod is spring-assisted and may have unexpected movement.

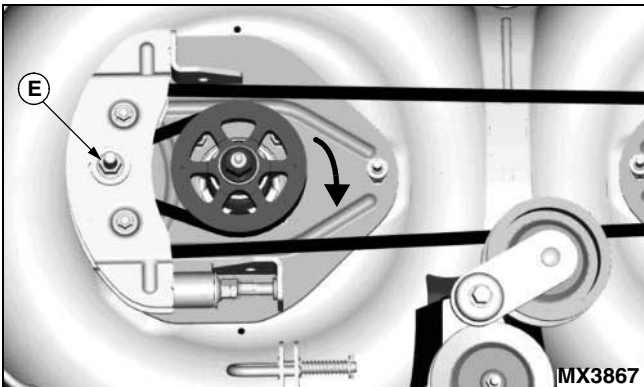
Keep a tight grip on rod when installing or removing drive belt or servicing mower deck.



5. Remove tension rod (C) from support bracket, move rod all the way out as far as it will go and hold, and remove cover (D). Slowly release tension rod.

6. Check secondary timing belt for damage.

- If belt is damaged, replace timing belt.
- If belt is not damaged, continue with the following steps to adjust belt tension.

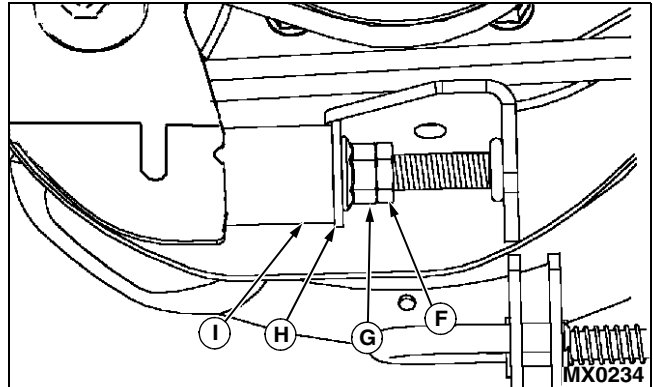


7. Loosen center idler assembly nut (E) one full turn. DO NOT remove nut.

8. Check that blades are timed (90° from each other).

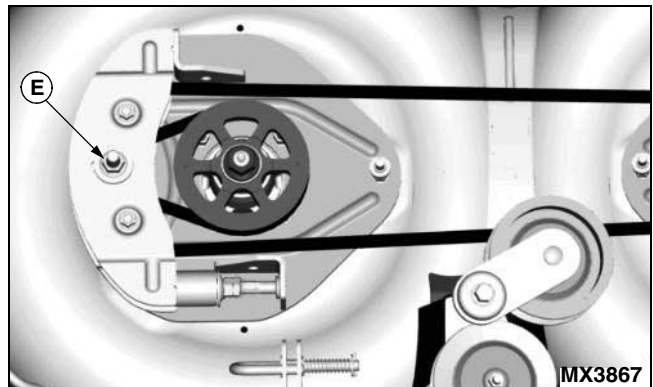
9. Turn spindle sprockets several rotations in clockwise direction and observe that belt is seated properly in the sprockets and idlers.

IMPORTANT: Avoid damage! Incorrect belt tensioning can cause belt damage. Do not over tighten belt tensioning spring assembly.



10. Adjust timing belt tension.

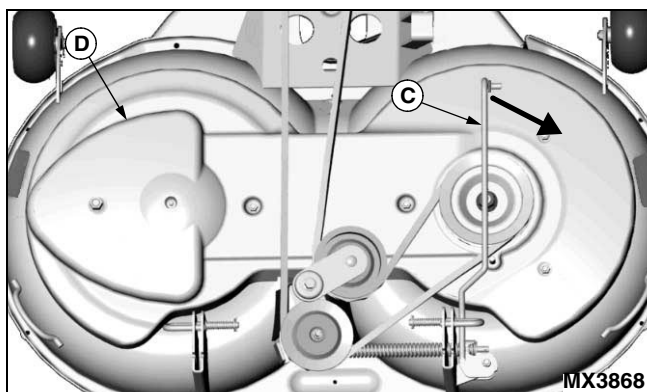
- Loosen jam nut (F) and adjusting nut (G) so that there is a small gap between washer (H) and spring bushing (I).
- Rotate adjusting nut (G) clockwise until the washer (H) makes solid contact with the surface of the spring bushing (I).



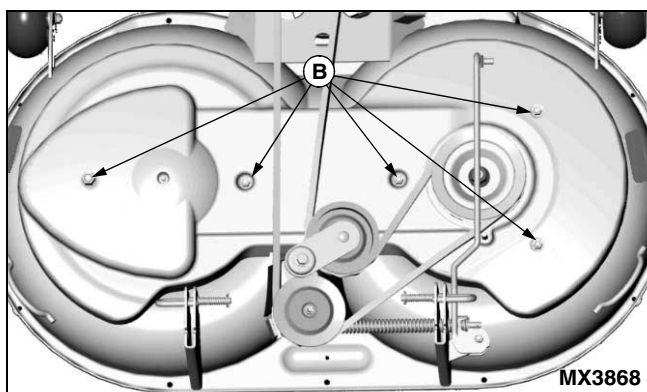
11. Tighten center idler assembly nut (E) to 73 N•m (54 lb-ft).

12. Tighten jam nut (F) against adjusting nut to 27 N•m (20 lb-ft)

SERVICE MOWER



13. Move tension rod (C) all the way out as far as it will go and hold, and slide cover (D) over timing belt and right spindle. Slowly release tension rod.

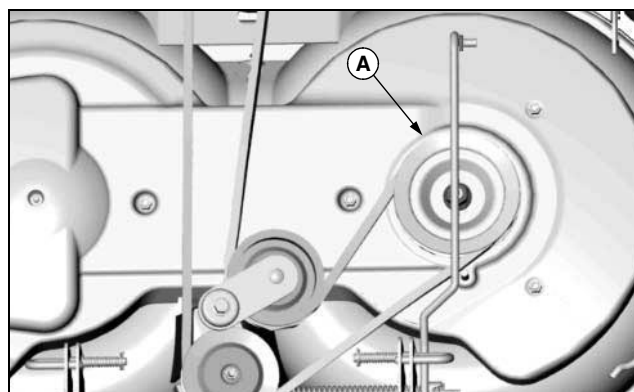


14. Check that cover is seated on shoulder of cover support spacers and secure with five nuts (B).

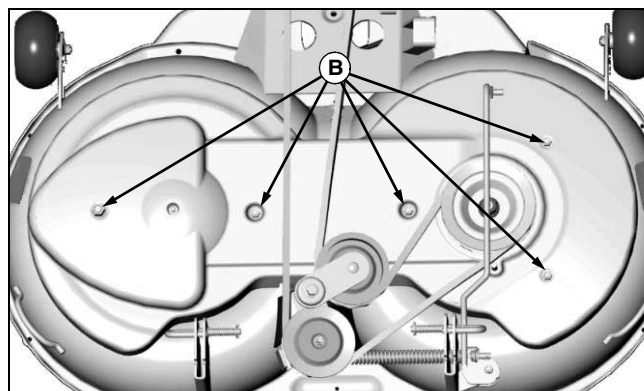
15. Install drive belt on right spindle.

16. Move tension rod in and connect to support bracket.

17. Install mower deck.



4. Remove drive belt from right spindle sheave (A).



5. Remove five nuts (B).



CAUTION: Avoid injury! Drive belt tension rod is spring-assisted and may have unexpected movement.

Keep a tight grip on rod when installing or removing drive belt or servicing mower deck.

Replacing Mower Deck Timing Belt

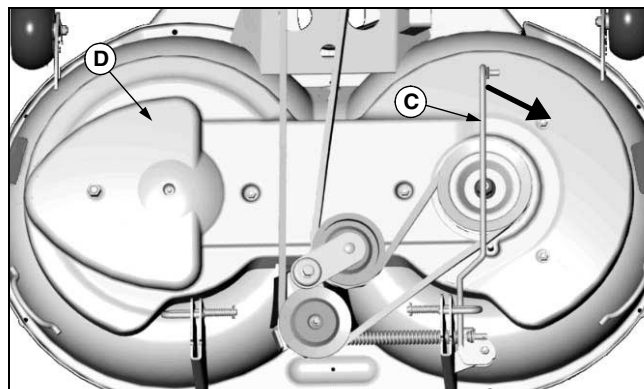
1. Park machine safely. (See Parking Safely in the Safety Section.)

2. Remove mower deck from tractor.



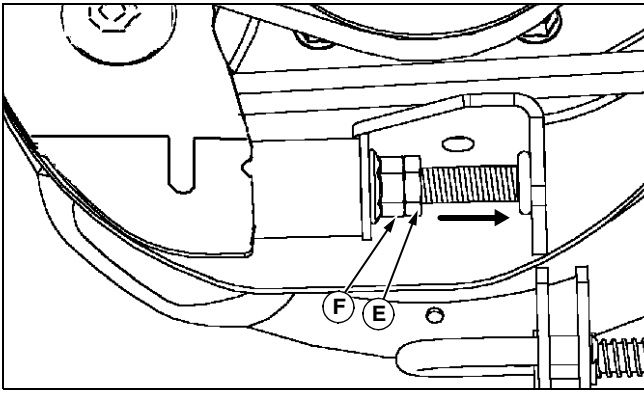
CAUTION: Avoid injury! Mower blades are sharp. Always wear gloves when handling mower blades or working near blades.

3. Check blade bolt torque. Carefully hold blade with glove, use a hand torque wrench, and tighten bolt to 62 N•m (46 lb-ft).

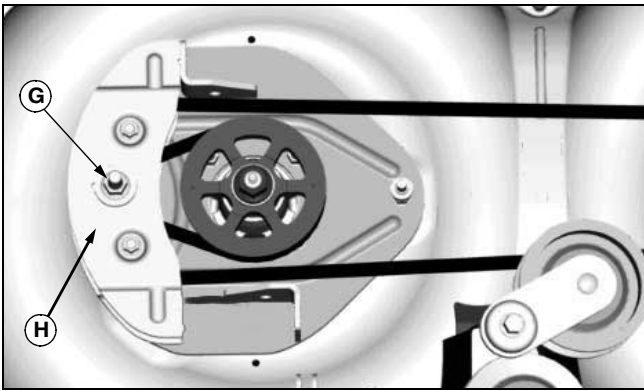


6. Remove tension rod (C) from support bracket, move rod all the way out as far as it will go and hold, and remove cover (D). Slowly release tension rod.

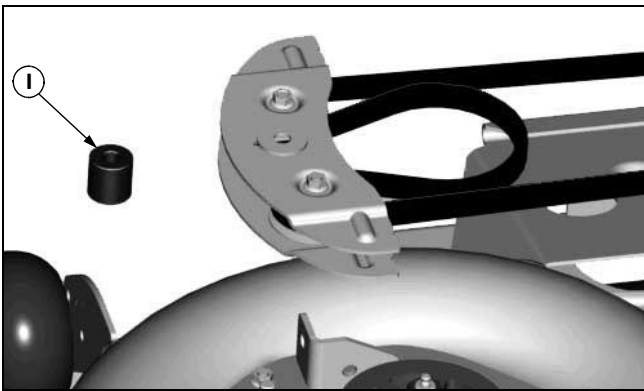
SERVICE MOWER



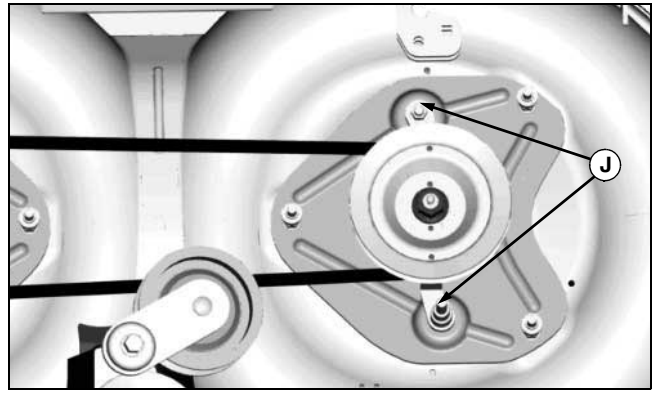
7. Turn jam nut (E) and adjusting nut (F) counterclockwise to end of threaded rod, and remove tensioning spring assembly.



8. Remove center nut and washer (G) and remove fixed idler assembly (H) from left support plate. DO NOT loosen other idler assembly hardware that retains idlers.



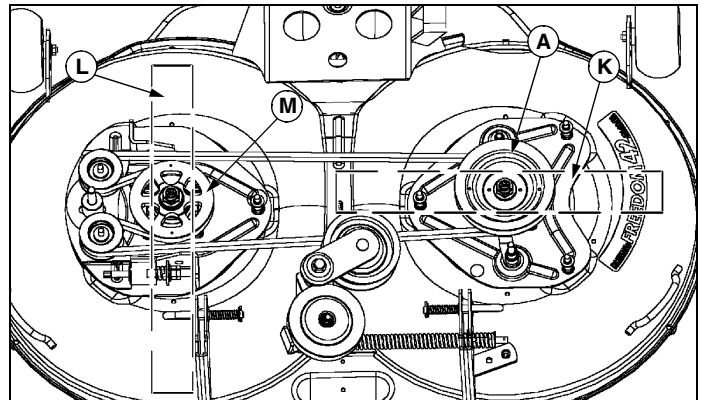
9. Remove spacer (I) located between fixed idler assembly plates and remove idler assembly from belt.



10. Loosen two belt guides (J) and rotate away from left sprocket.

11. Remove damaged timing belt.

NOTE: The position of the drain holes in the spindle sheave (A) and the indentations in the timing sprocket (M) are in alignment with the mower blades (K) and (L).



12. Position mower blades (K) and (L) 90° from each other.

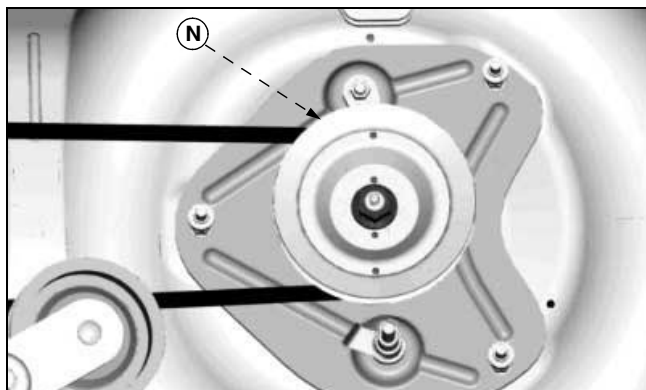
IMPORTANT: Avoid damage! Handle timing belts with care.

- Do not crimp.
- Do not fold.
- Do not twist.

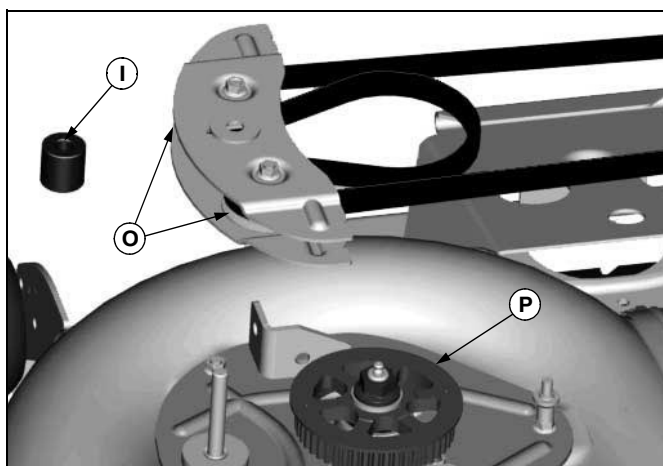


13. Install new mower deck timing belt.

SERVICE MOWER



a. Route belt around right spindle sprocket (N) located under the mower drive belt sheave.

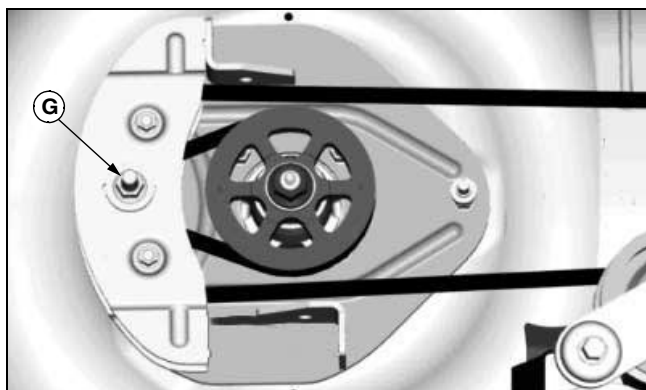


b. Route belt around outside of idlers and then in between left fixed idlers (O) pulling a belt loop through the idler assembly.

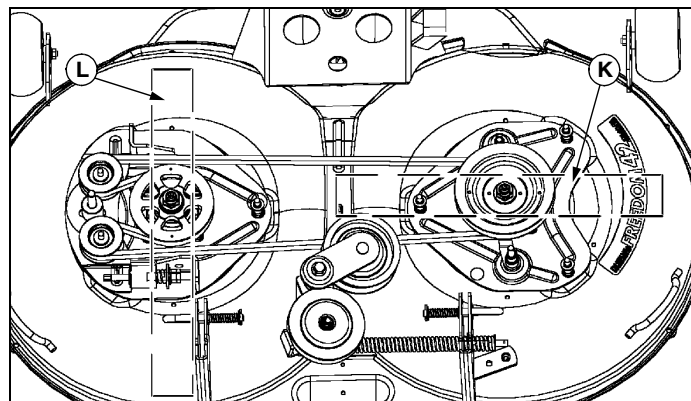
c. Insert spacer (I) between fixed idler plates and idlers.

d. Install the fixed idler assembly on the stud of the left support plate.

e. Wrap belt loop around left spindle sprocket (P).

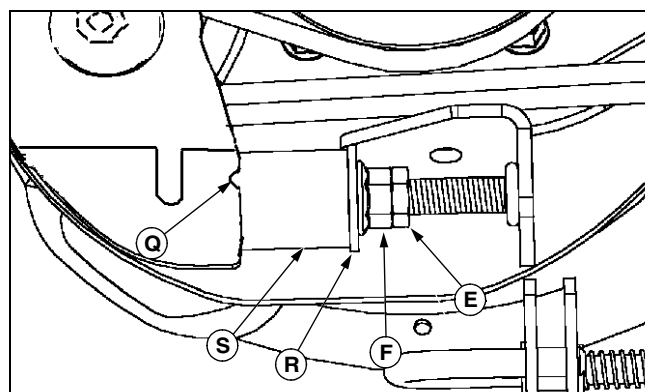


14. Install washer and center nut (G) on fixed idler assembly. Leave nut one turn loose at this time.



15. Check that blades (K) and (L) are still timed (90° from each other).

IMPORTANT: Avoid damage! Incorrect belt tensioning can cause belt damage. Do not over tighten belt tensioning spring assembly.



16. Install tensioning spring assembly and adjust timing belt tension.

a. Align notch (Q) in idler assembly with tab on spring bushing (S).

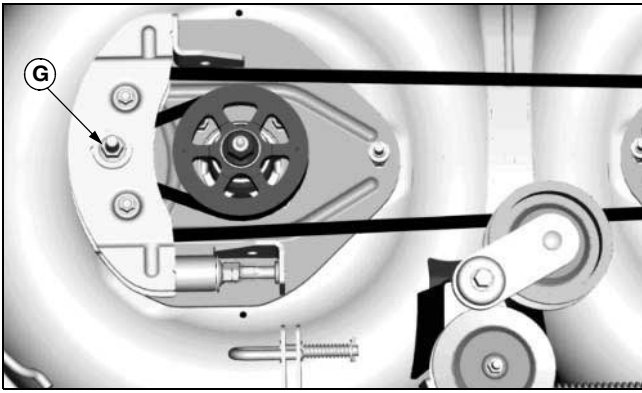
b. Rotate adjusting nut (F) clockwise until the washer (R) makes solid contact with the surface of the spring bushing (S).

c. Turn adjusting nut an additional 1/2 turn to allow for new belt stretch. DO NOT over tighten.

d. Turn right spindle sheave several rotations clockwise and observe that belt is riding properly in sprockets and idlers.

e. Tighten jam nut (E) against adjusting nut.

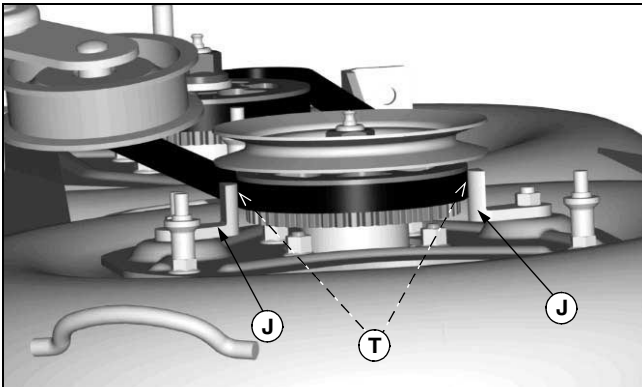
SERVICE MOWER



17. Tighten center nut (G) to 73 N•m (54 lb-ft).

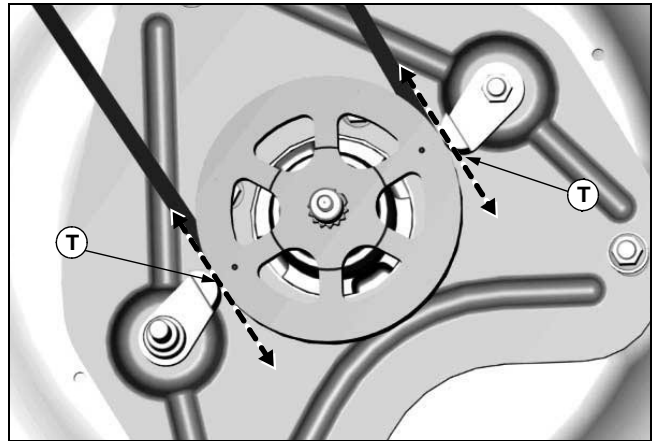
18. Adjust belt guides.

IMPORTANT: Avoid damage! Check belt guide-to-sprocket rim clearance. Measuring clearance incorrectly can cause belt or blade damage.



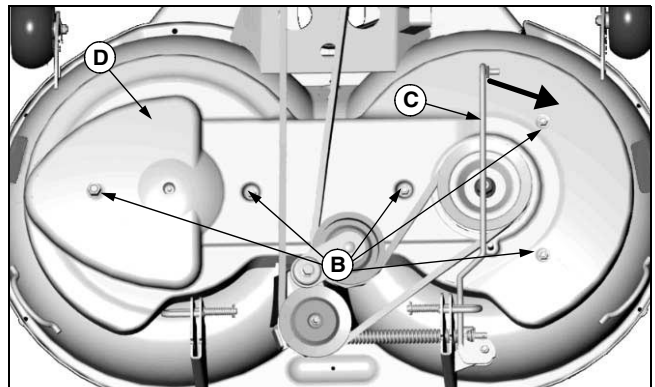
a. Hold a 1 mm (0.039 in.) shim/gage between belt guides and sprocket rim, location (T), and rotate belt guides (J) clockwise against gage.

b. Tighten belt guide nuts to 24 N•m (18 lb-ft).



Picture Note: Right spindle sheave removed for photo clarity only.

c. Remove gage and inspect belt guide-to-sprocket rim clearance (T) while rotating spindle in the clockwise direction. Clearance (T), one on each side, should be 1 ± 0.5 mm (0.039 ± 0.020 in.). Belt should not contact belt guide.



19. Move tension rod (C) all the way out as far as it will go and hold, and slide cover (D) over timing belt and right spindle. Slowly release tension rod.

20. Check that cover is seated on shoulder of cover support spacers and secure with five nuts (B).

21. Install drive belt on right spindle.

22. Move tension rod in and connect to support bracket.

23. Install mower deck.

Servicing Mower Blades

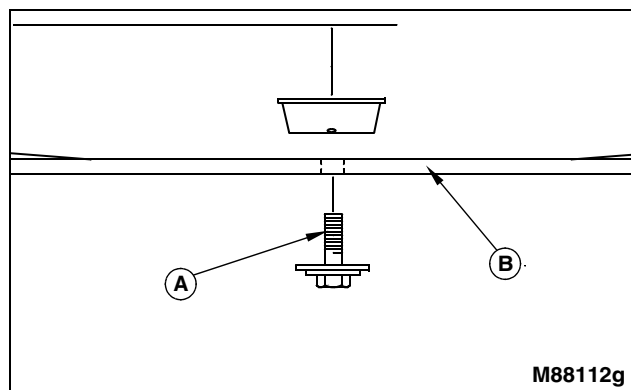


CAUTION: Avoid injury! Mower blades are sharp. Always wear gloves when handling mower blades or working near blades.

SERVICE MOWER

Removing Mower Blades

1. Hold mower blade with glove to prevent mower blades from spinning.
2. Raise mower deck to gain access to mower blades. If necessary, remove mower deck.



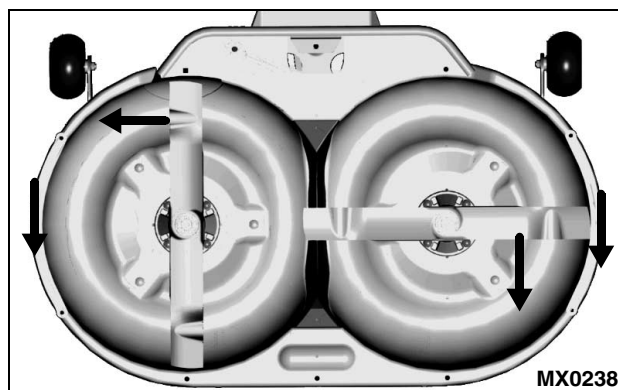
3. Loosen and remove bolt with washer (A), and blade (B).
4. Inspect blades; sharpen, balance or replace blades as necessary.

Installing Mower Blades

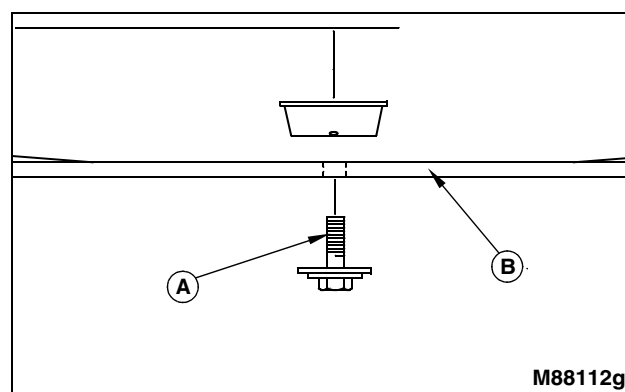
1. Check mower to be sure you are installing the blades on the correct side.



- The RIGHT and LEFT sides are marked on the rear draft brackets (C).



- There are direction arrows located on each outside edge of the mower. There is a RIGHT and a LEFT side blade. The blades are marked for identification.



2. Position mower blades (B) with the cutting edge towards the ground onto the mower spindle and align key on bottom of spindle with slot in blade.

IMPORTANT: Avoid damage! Improperly installed blades can loosen during operation. Do not lubricate or use power tools when installing the blade bolt or the bolt will be ineffective.

Use a hand torque wrench and tighten bolts to blade bolt torque of: 62 N•m (46 lb-ft.)

3. Install and hand tighten bolt with washer (A) until mower blade is in full contact (fully seated) with spindle.
4. Hold mower blade with glove to prevent spinning, tighten bolts to 62 N•m (46 lb-ft).
5. Check mower deck timing and adjust if necessary.

SERVICE MOWER

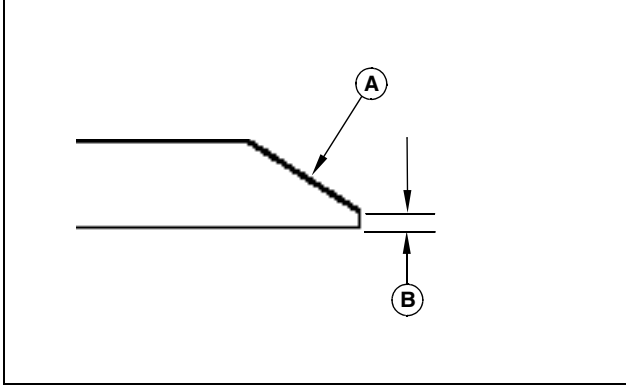
Sharpening Blades



CAUTION: Avoid injury! Mower blades are dangerous!

- Always wear gloves while working on blades.
- Always wear safety eye protection when grinding.

Sharpen blades 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.

Balance blades before installing.

3. Check balance. If blade is not balanced, heavy end of blade will drop.

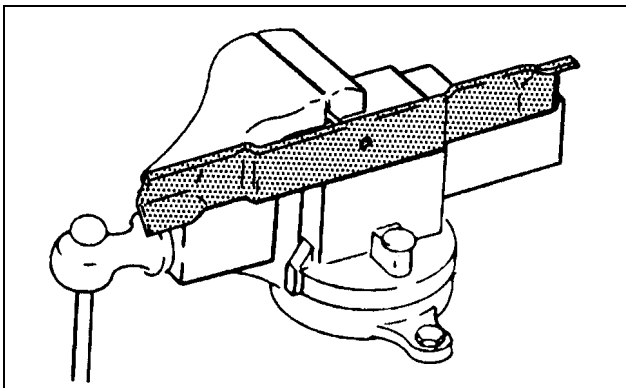
4. Grind bevel of heavy end. Do not change blade bevel.

Balancing Blades



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

1. Clean blade.



2. Put blade on nail in a vise. Turn blade to horizontal position.

TROUBLESHOOTING

Using Troubleshooting Chart

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

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

Mower

IF	CHECK
Patches Of Grass Uncut	Travel speed too fast. Engine should be at full throttle. Dull blades. Cutting height set too high. Blades should be assembled on correct spindle, (left or right identification).
Belt Slipping	Debris in sheaves. Worn belt. Mower plugged.
Mower Blades Do Not Stop	Belt routed incorrectly.
Too Much Vibration	Debris on mower deck or in sheaves. Damaged drive belt. Damaged sheaves or sheaves out of alignment. Blades out of balance.
Mower Makes Unusual Noise	Inspect blade timing and make sure timing belt tension is adjusted correctly. (See Adjusting Mower Deck Timing Belt in Service Section.)
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. Blades should be assembled on correct spindle, (left or right identification).
Mower Stops When REVERSE foot pedal is depressed and Attachment Is Engaged	Normal condition. (See Using Reverse Implement Option in the OPERATING Section of your Tractor's Operator Manual.)

TROUBLESHOOTING

IF	CHECK
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	Engine should be at full throttle. Travel speed too fast. Debris wrapped around mower spindles. Check procedure on Adjusting Mower Level Front-to-Rear. Grass conditions. Cutting height set too low.
Uneven Clipping Distribution	Cutting height set too low. Mowing too fast. Grass too wet. Blades should be assembled on correct spindle, (left or right identification).
Mower deck is difficult to lift.	Adjust lift lever assist spring. (See Adjust Lift Assist Spring in Installing section.)

STORAGE

Storing Mower

1. Remove mower from tractor. (If tractor is to be stored, keep mower on tractor and refer to Storing Machine in your Tractor's Operator Manual.)
2. Clean underside of mower with water pressure and scraper.
3. Inspect blades:
 - Have dull blades sharpened and balanced.
 - Replace damaged blades.
4. Remove belt shields and 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. Install belt shields.
11. Store mower in a clean, dry place.
12. Put a waterproof cover over mower, if you store the mower outside.

SPECIFICATIONS

Freedom42 Mower

Mower Type.....	Mulching
Cutting Blades	2
Mower Weight	42 kg (92.5 lbs.)
Blade Bolt Torque.....	62 N•m (46 lb-ft.)
Cutting Width	106.7 cm (42 in.)
Cutting Height (approximate)	25 to 102 mm (1 to 4-in.)
Height Adjustment	13 position, 6.35 mm (1/4 in.) increments

Recommended Lubricants

Grease:

..... John Deere MOLY HIGH TEMPERATURE EP GREASE
..... John Deere HIGH TEMPERATURE EP GREASE
..... John Deere GREASE GARD™

(Specifications and design subject to change without notice.)

INDEX

B

Balancing Blades	24
Belt, Adjusting Mower Deck Timing	17
Belt, Replacing Mower Drive	17
Belt, Timing Replacing	19
Blades, Balancing	24
Blades, Servicing Mower	22
Blades, Sharpening	24
Blades, Using Correct	12

C

Certification Label	1
Cutting Height, Adjusting	10

F

Freedom42 Mower Specifications	28
--------------------------------------	----

G

Grease	16
--------------	----

H

Height, Adjusting Cutting	10
---------------------------------	----

L

Label, Certification	1
Labels, Safety	1
Leveling Mower Front-to-Rear	11
Leveling Mower Side-to-Side	11
Lift Assist Spring (LX and GT Model Tractors), Adjust	6
Literature, Service	14
Lubricants, Recommended	28
Lubricate Mower Spindles	16

M

Mower Blades, Servicing	22
Mower Deck Timing Belt, Adjusting	17
Mower Deck Wheels, Adjusting	10
Mower Level (Front-to-Rear), Adjusting	11
Mower Level (Side-to-Side), Adjusting	11
Mower Spindles, Lubricating	16
Mower, Dismounting to Inspect or Unplug	12
Mower, Engaging and Disengaging	12
Mower, Installing	5
Mower, Removing	8
Mower, Storing	27

P

Parts Catalog	14
Parts, Replacement	14

S

Safety Labels	1
Safety Messages	1
Safety-Alert Symbol	1
Service Literature	14

Sharpening Blades	24
Specifications	28
Spindles, Lubricate Mower	16
Spring, Adjust Lift Assist	6
Storing Mower	27

T

Technical Manual	14
Timing Belt, Replacing	19
Troubleshooting Chart	25

W

Wheels, Adjusting Mower Deck	10
------------------------------------	----

NOTES

NOTES

JOHN DEERE QUALITY STATEMENT

John Deere Quality



John Deere equipment is more than just a purchase, it's an investment in quality. That quality goes beyond our equipment to your John Deere dealer's parts and service support. This support is needed to keep you a satisfied customer.

That's why John Deere has initiated a process to handle your questions or problems, should they arise. The following three steps will help guide you through the process.

Step 1

Refer to your operator's manual

- A. It has many illustrations and detailed information on the safe and proper operation of your equipment.
- B. It gives troubleshooting procedures, and specification information.
- C. It gives ordering information for parts catalogs, service and technical manuals.
- D. If your questions are not answered in the operator's manual, then go to Step 2.

Step 2

Contact your dealer

- A. Your John Deere dealer has the responsibility, authority, and ability to answer questions, resolve problems, and fulfill your parts and service needs.
- B. First, discuss your questions or problems with your dealer's trained parts and service staff.
- C. If the parts and service people are unable to resolve your problem, see the dealership manager or owner.
- D. If your questions or problems are not resolved by the dealer, then go to Step 3.

Step 3

Call the John Deere Customer Communications Center

- A. Your John Deere dealer is the most efficient source in addressing any concern, but if you are not able to resolve your problem after checking your operator's manual and contacting your dealer, call the Customer Communications Center.
- B. For prompt, effective service, please have the following ready before you call:
 - The name of the dealer with whom you've been working.
 - Your equipment model number.
 - Number of hours on machine (if applicable).
 - Your 13-digit serial number which you recorded on the inside front cover of this manual.
 - If the problem is with an attachment, your attachment identification number.
- C. Then call 1-800-537-8233 and our advisor will work with your dealer to investigate your concern.