

Z370R Residential ZTrak[™] Serial Number 10001-



OPERATOR'S MANUAL

Z370R Residential ZTrak[™]

OMUC35877 ISSUE E3 (ENGLISH)



John Deere Power Products North American Edition PRINTED IN U.S.A.

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.

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Using Your Operator's Manual

Read this operator's manual, watch the safety video, https://www. deere.com/en/parts-and-service/safety/ and review the safety signs on your machine before use. They all contain important safety information and operating instructions that must be followed to help keep you and others safe. Be sure everyone who uses the machine has read the manual, reviewed the safety signs, and knows how to use the machine safely and properly.

Your machine was designed and built to be operated in accordance with all the safe operating instructions. Since it was designed to cut grass, it can amputate hands and feet and throw objects. If you do not follow safety instructions, serious injury or death can occur.

This operator manual is organized in sections to help you find information quickly. You can use this manual to find answers to many of your operating and servicing questions. An index at the end of this book helps you find needed information guickly. Contact your dealer if this manual does not answer your questions.

Before using your machine:

- · Know how to operate the machine. The Operating Controls section helps you understand the controls of your machine and what they do.
- Prepare your machine and the mowing area by performing required daily checks outlined in the General Instructions section.
- Follow instructions in the Preventing Injuries section, especially related to:
 - Keeping children safe by following instructions in the Protect Children section.
 - Avoiding injury on slopes and near terrain hazards by following instructions in the Operating on Slopes and Near Terrain Hazards section.
 - Follow the instructions in the Avoid Thrown Objects section and keep all guards in place, including discharge chute.
 - Cleaning machine during use and before storing as outlined in the Machine Cleanout section.
- · Understand how to service and inspect your machine.

If you do not understand the instructions or have questions, contact vour dealer.

The machine shown in this manual can differ slightly from your machine

RIGHT-HAND and LEFT-HAND sides are determined by facing in the direction that the machine travels when going forward. When you see a broken line (-----), the item referenced is hidden from view.

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

This manual is an important part of your machine. Keep this manual with the machine when you sell it.

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FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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Special Messages

Your manual contains special messages to bring attention to potential safety concerns and 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.

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.

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Parts

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

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

Order Service Parts Online

Visit https://partscatalog.deere.com/jdrc/ for your Internet connection to parts ordering and information.

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Service Literature

If you would like to purchase a copy of the Parts Catalog or Technical Manual for this machine, visit The John Deere Technical Information Store at:

https://techpubs.deere.com/

or call:

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

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Contents

Contents

Product Identification

Record Identification Numbers

Zero-Turn Mowers

When you contact an Authorized Service Center for information on servicing, always provide the product model and identification numbers.

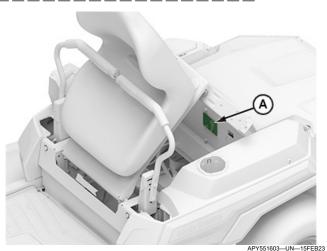
Locate the model and serial number for the machine, battery of your machine and record the information in the spaces provided as follows.

DATE OF PURCHASE:

DEALER NAME:

DEALER PHONE:

Product Identification Number:



A—Product Identification Number

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Register Your Product and Warranty Online

To register your product through the Internet, simply go to www. JohnDeereWarrantyRegistration.com. Completing the information, either online or with the product warranty card, will ensure that your product will receive all post sales, service, and important product information.

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

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Safety Labels with Text

Safety Label Location



A—WARNING M146577 B—DANGER UC36931 C—DANGER, WARNING, CAUTION UC31082 D—DANGER M139128 E—DANGER UC36935

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Understanding the Machine Safety Labels



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The machine safety labels shown in this section are placed in important areas on your machine to draw attention to potential safety hazards. DANGER or WARNING safety labels are located near specific 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.

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

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

Replace missing or damaged safety labels. Use this operator's manual for correct safety label placement.

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

Spanish Safety Labels and Operator's Manual

Operator's manuals and safety labels with content in Spanish are available for this machine through authorized John Deere dealers. See your John Deere dealer.

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WARNING



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To avoid injury from loaded spring, read operator's manual before changing attachments.

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DANGER



ROTATING BI ADE

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

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DANGER



ROTATING BLADES CUT OFF ARMS AND LEGS

- Do not mow when children or others are around.
- Do not mow in reverse.
- Look down and behind before and while backing.
- Look in the direction the machine is traveling.
- · Never carry children even while blades are off.

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WARNING

AVOID INJURY OR DEATH FROM ROLLOVER

- Do not drive where the machine could slip or tip, on steep slopes, near water, or drop-offs.
- Drive across slopes, not up and down.
- If machine loses traction on a slope, stop blades, and proceed slowly off slope.
- Avoid sudden starts, turns, and stops.

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[·] Read operator's manual and watch safety video.

Do not mow when children or others are around ook down and behind before and while backing

- Keep safety devices (guard, shield and switches) in place and working.
- Pick up objects that can be thrown by blades.
- When leaving machine:

Set Park Brake - Turn Off Machine Remove Key or Key Pin.

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DANGER



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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.

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DANGER



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ROTATING BLADE

DO NOT PUT HANDS OR FEET UNDER OR INTO MOWER WHEN MACHINE 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.

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Safety

Use Your Mower Safely

General Instructions

- Read this operator's manual, watch the safety video, and review the safety signs on your machine before use. They all contain important safety information and operating instructions that must be followed to help keep you and others safe. Be sure everyone who uses the machine has read the manual, reviewed the safety signs, and knows how to use the machine safely and properly.
- Age, physical ability, and mental capacity can be factors in equipment-related injuries. Operators must be mentally and physically capable of operating the machine properly and safely. Never allow a child to operate the machine.
- Do not operate the machine while under the influence of alcohol or

drugs or when distracted or fatigued. Proper operation requires your full attention.

- Always wear eye protection, hearing protection, close-fitting clothing, and substantial footwear while operating the machine. Never operate while wearing sandals or when barefoot.
- Do not wear radio or music headphones. Both safe operation and service require your full attention.
- Never tamper with safety devices.
- Operate the machine only in daylight or good artificial light.
- Look both ways when approaching roadways and use caution when turning around on public roadways. You can be struck by a vehicle and suffer serious injury or death.

Before Using Your Machine

- Know how to operate the machine. The Operating Controls section helps you understand the controls of your machine and what they do.
- Prepare your machine and the mowing area by performing required daily checks outlined in the General Instructions section.
- Follow instructions in the Preventing Injuries section, especially related to:
 - Keeping children safe by following instructions in the Protect Children section.
 - Avoiding injury on slopes and near terrain hazards by following instructions in the Operating on Slopes and Near Terrain Hazards section.
 - Follow the instructions in the Avoid Thrown Objects section, and keep all guards in place, including discharge chute.
 - Cleaning machine during use and before storing as outlined in the Machine Cleanout section.
- Understand how to service and inspect your machine.
- Disconnect the machine from charging.

Inspection and Daily Checklist

- Inspect machine before you operate. Be sure that hardware is tight, and all guards and shields are in good condition and fastened in place. Make all necessary adjustments before you operate. Repair or replace damaged, badly worn, or missing parts.
- Visually inspect that mower blades, blade bolts, and the mower assembly are not worn or damaged. To prevent machine damage, replace worn or damaged blades and bolts in sets.
- If the machine is emitting heat, or is emitting unusual smells do not operate and move 50 feet from any combustible material.

Check the Mowing Area

- Keep bystanders and pets out of the mowing area.
- Clear the area of objects such as rocks, wire, or toys, which can be thrown by the blades. Remove low-hanging branches or other obstacles, which can interfere with your travel path.
- Study the mowing area. Set up a safe mowing path. Do not mow where traction or stability is doubtful.
- Slopes and terrain hazards are major factors related to loss-ofcontrol and tipover accidents. Operation on slopes and near terrain hazards requires extra caution. Follow instructions in the Operating on Slopes and Near Terrain Hazards section.

Weights and Attachments

- Some attachments require ballast weights. Follow recommendations for wheel weights or counterweights.
- Use only accessories and attachments approved by John Deere.
- If you do not understand the instructions or have questions, contact your dealer.

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Preventing Injuries

Protect Children



- Children can be killed or seriously injured by riding mowers when operators do not follow safe operating practices.
- Do not mow in reverse. Operating with the mower engaged while backing up is discouraged.
- Never give children a ride on a mower or in a cart behind the mower, even when the blades are off. They can fall off and be run over or cut by the mower blades. Children can interfere with mower operation. Children who have been given rides in the past can suddenly appear in the mowing area for another ride. If you are not aware, they can be run over or backed over by the mower.
- Children are often attracted to lawn mowers and mowing activities, especially if they have been given rides before. They do not know if the blades are rotating or understand that they can be killed or seriously injured even if the blades are not rotating.
- Keep children indoors and out of the mowing area when the mower is being operated. Keep children under the watchful eye of a responsible adult, other than the operator. If there is not a responsible adult to ensure that children stay indoors, DO NOT mow.
- Be alert to the presence of children or others. Turn off the mower blades and stop the machine if someone enters the mowing area.
- Look in the direction the machine is traveling. Before and while backing, turn off the mower blades and look down and behind the machine carefully, especially for children.
- Use extreme care when approaching objects that block your view, such as blind corners, shrubs, or trees, especially while backing. They can hide a child.

Avoid Thrown Objects

- Clear the mowing area of all bystanders when using this machine. Thrown objects could cause serious injury or death.
- Clear the area of objects such as rocks, wire, or toys, which can be thrown by the blades.
- Never direct discharged material toward anyone.
- Avoid discharging material against a wall or obstruction such as a fence or retaining wall. Material can ricochet towards the operator.
- Avoid discharging material towards a street or roadway.
- Stop the blades when crossing gravel surfaces.

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Operating on Slopes and Near Terrain Hazards

- Slopes are a major factor related to loss-of-control and tip-over accidents, which can result in serious injury or death. Use caution and common sense when operating on slopes.
- If you feel uneasy on a slope, do not mow or operate the machine on it.
- Mow across slopes, not up and down.
- Watch for holes, ruts, bumps, rocks, or other hidden objects. Tall grass can hide obstacles.
- Drive slowly so you do not have to stop while on a slope.
- Do not mow on wet grass. Tires can slip on wet grass even if the brakes are working normally.
- Keep all movement on slopes slow and gradual. Do not make sudden changes in speed or direction, which can cause the ride-on mower to roll over.
- If the tires lose traction, disengage the PTO and proceed slowly and carefully off the slope.

Do not shift to neutral and coast downhill.

Identify Safe Slopes

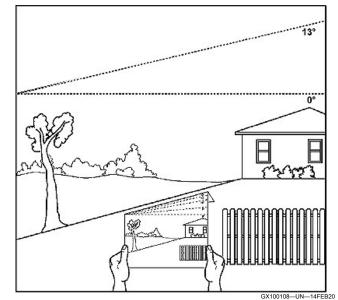
 Before using your machine, measure slopes of all mowing areas to determine which slopes are safe for mowing with a ride-on mower. Use good judgment and common sense when performing this survey.

Measuring Slopes

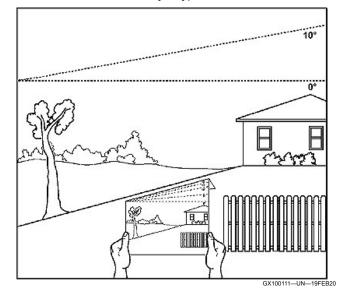
- Suggested method 1: Lay a straight piece of sturdy lumber 1.2 m (4 ft) long on the slope and measure the angle with an angle gauge or protractor level.
- Suggested method 2: Refer to the slope gauge provided at the end of the manual.

Slope Limits

 Exceeding the recommended maximum slope angle increases the risk of rollover accidents that can result in serious injury or death.

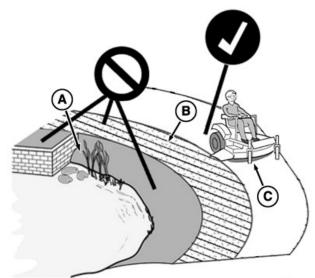


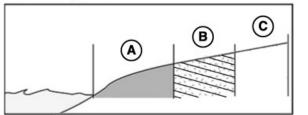
 Never mow or operate this ride-on mower on slope angles greater than 13° with ride-on mower in its basic configuration. The basic configuration is the ride-on mower with a mower deck and no other attachments. (A 13° slope is a slope that rises 1.4 m [4.6 ft] over a horizontal distance of 6.1 m [20 ft].)



- · Attachments such as material collection systems, weather enclosures, or other attachments increase the risk of a rollover. When using attachments, never mow or operate this ride-on mower on slope angles greater than 10°. (A 10° slope is a slope that rises 1 m [3.5 ft] over a horizontal distance of 6.1 m [20 ft].)
- The risk of rollover is low on slopes of 10° or less. As the slope angle increases to the recommended maximum, the risk increases to a medium level.

Operating Near Terrain Hazards





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- Terrain hazards such as ditches and drop offs are a factor related to loss-of-control and tip-over accidents, which can result in serious injury or death. Use caution and common sense when operating near terrain hazards
- · Do not mow or operate the machine in areas adjacent to hazards that can cause the machine to roll over. If a wheel goes over an edge or if the edge breaks away, the machine can suddenly lose traction, slide, and/or roll over.
- Hazards (A) include but are not limited to ditches, drop-offs, embankments, or areas near bodies of water.
- Maintain a buffer area (B) at least as wide as the machine between hazards (A) and the mowing area (C). Do not mow or operate the machine in the hazard area or buffer area.
- Only mow or operate in the mowing area (C). Do not exceed the recommended slope operating angle. Refer to the Slope Limits section.

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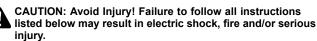
Lithium Battery Fires

- Do not attempt to extinguish a Lithium battery fire.
- Handheld extinguishers and or residential water supplies will not be sufficient to extinguish a Lithium battery fire.
- If a Lithium battery fire is suspected, maintain a safe distance from the machine and call first responders immediately.

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Electrical Safety

General Electrical Safety



- 1. Remove key pin before inspecting, cleaning, or servicing machine.
- 2. Before each use, inspect machine for damaged electrical components.
- 3. Unplug charging cord from machine before moving machine, prior to cleaning, maintenance, or service.
- 4. Service machine only as indicated in the service instructions. Contact your servicing dealer for assistance with service or replacement of any electrical components.

Charging Your Battery Safely

- 1. Inspect machine, for exposed electrical components and harnesses for damage before each use. If damage is found, move machine away from buildings and combustible material until repairs can be made.
- 2. Do not use multiple extension cords.
- 3. Do not charge machine in standing water or in the rain.
- 4. Disconnect charger from the electrical outlet, before moving machine, prior to cleaning, maintenance, or service.
- 5. Inspect charging cord for damage before each use. Do not use if cord is damaged.
- 6. Only plug charging cord into a grounded outlet. Use a ground fault circuit interrupter (GFCI) or residual current device (RCD) protected supply. Use of a GFCI reduces the risk of electric shock. Do not modify plug or use adapter plugs.
- 7. Handle charging cord with care. Keep cord away from heat, oil, and sharp edges. Damaged or entangled cords increase the risk of electric shock.
- 8. When charging outdoors, use charging cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- 9. Minimum gage for charging cord.

Cha Moo	arger del	25ft	50ft	100ft	150ft
RQ	700	16	16	12	10
RQ	1200	16	14	10	8

Use Caution Wet Conditions



CAUTION: Avoid injury! Contacting charging cord in wet conditions will increase the risk of electric shock.

- 1. Do not handle charging cord with wet hands or while standing in water. Do not route cord through standing water or wet grass.
- 2. Unplug charging cord from machine prior to cleaning with water.
- 3. Do not clean machine by high-pressure washing.
- 4. If charging needs to be stopped while machine or charging cord is in wet condition, disconnect power at dry location, using circuit breaker or fuse panel if necessary.

General Battery Safety

- 1. A mistreated battery pack may present a risk of fire, explosion, or chemical burn. Do not use or charge a battery that has been dropped or is damaged.
- 2. If battery is dropped or damage is found, move battery or machine

away from buildings and combustible material by at least 50 feet (15 meters) and contact your servicing dealer.

- 3. Do not submerge battery. Do not use or charge a wet battery.
- 4. If battery or machine has been submerged, move machine away from buildings and combustible material by at least 50 feet (15 meters) and contact your servicing dealer.
- 5. Never modify, disassemble, or tamper with battery. Battery has no serviceable parts.

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Prevent Fires



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- Do not mow tall, dry grass or through piles of leaves. Combustible materials can contact hot components and increase the risk of fire.
- Debris can build up anywhere on the machine, especially on horizontal surfaces. While using your machine, periodically check for and remove debris, especially in dry or heavy debris conditions, such as when collecting leaves.
- After operating, completely remove any combustible materials from equipment before storing. Use compressed air, a leaf blower, or water to keep the machine clean.
- Allow machine to cool in an open area before storing. Do not park machine near flammable materials, such as straw, mulch, cloth, or chemicals. Do not park near an open flame or other sources of ignition, such as a water heater or furnace.
- Excess lubrication or fuel/oil leaks or spills on the machine can also provide collection sites for debris. Promptly cleaning up spills and repairing leaks reduces the potential for debris collection.
- Refer to the Machine Cleanout section for more information on checking for debris buildup and locations to inspect.
- Always park the machine safely before cleaning or servicing a machine. See the Parking Safely section.
- · Handle battery with care. Refer to General Electrical Safety section.
- If machine is dropped more than 3 feet (1 meter), move machine away from buildings and combustible material by at least 50 feet (15 meters) and contact your servicing dealer.
- If machine is submerged, move machine away from buildings and combustible material by at least 50 feet (15 meters) and contact your servicing dealer.
- For proper charging cord selection. (See Charging Your Battery Safely in Safety section.)

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Parking Safely

Always apply the park brake and remove the key or key pin before leaving the machine unattended. Children or others may attempt to move or operate an unattended machine.

- Bring the machine to stop on a level surface.
- Disengage mower blades or other attachments.
- Lower attachments to the ground.
- Apply the park brake.

- Shut the machine OFF.
- Remove the key or key pin.
- Wait for all moving parts to stop before you leave the seat.

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Additional Safety Information

Towing Loads Safely

- Stopping distance increases with speed and weight of towed load. Travel slowly and allow extra time and distance to stop.
- Total towed weight must not exceed Towing Capacity stated in Specifications of this manual.
- Excessive towed load can cause loss of traction and loss of control on slopes. Reduce towed weight when operating on slopes.
- Never allow children or others in or on towed equipment.
- Use only approved hitches. Tow only with a machine that has a hitch designed for towing. Do not attach towed equipment except at the approved hitch point.
- Towed equipment increases the risk of rollover on slopes. Refer to the Operating on Slopes and Near Terrain Hazards section for more information.
- Do not turn sharply. Use additional caution when turning or operating on adverse surface conditions. Use care when reversing.

Safe Transportation

Follow instructions in the Transporting Machine on Trailer section.

• Use a full-width loading ramp at least 30 cm (12 in) wider than the machine, never two separate ramps.

Service and Maintenance

- Proper service and maintenance of the machine is essential.
- Keep all parts in good condition, keep all nuts and bolts tight, and repair any damage immediately. Stop and inspect the machine immediately if you strike an object.
- Ensure that all safety devices, discharge chute, and grass catcher components are in good condition and replace when necessary.
- Understand service procedures thoroughly before working on the machine. If you do not understand the service procedures or are uncomfortable working on your machine, contact your servicing dealer.
- · Remove key pin before servicing the machine.
- Some components could have stored energy in springs. Servicing procedures described in the Service section describe how to perform service and maintenance tasks safely.
- Support any machine elements that must be raised for service work. Use jack stands or service locks to support components when needed.

Disposing of Waste Products and Chemicals

- A Safety Data Sheet (SDS) provides specific details on chemical products: Physical and health hazards, safety procedures, and emergency response techniques. The seller of the chemical products used with your machine is responsible for providing the SDS for that product.
- To learn how to recycle or properly dispose of waste products generated from service, see your local recycling center or authorized dealer. If you wish to discard the machine, contact your local recycling center or authorized dealer.

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Battery Safety

• Handle battery with care. A mistreated battery pack may present a risk of fire, explosion, or chemical burn. Do not use or charge a battery that has been dropped or is damaged.

Machine Cleanout

- Do not submerge battery. Do not use or charge a wet battery.
- Never modify, disassemble, or tamper with battery.

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Machine Cleanout

General Cleaning Guidelines

Machine must be inspected periodically throughout the day. Buildup of debris must be removed to ensure proper machine function and to reduce the risk of fire. Frequency of these inspections and cleanings vary depending on a number of factors including operating conditions, machine configuration, operating speeds, and weather conditions. Inspections and cleanings may be required multiple times throughout the day particularly in dry, hot, and windy conditions.

Use compressed air, a leaf blower, or water to keep the machine clean. High-pressure washing causes damage to machine components. It is recommended to wash vehicle by hand or with a garden hose using mild soap.

IMPORTANT: Avoid fire! Regular and thorough cleaning of machine combined with other routine maintenance procedures listed in the Operator's Manual greatly reduce the risk of fire, downtime, and improve machine performance.

Besides proper maintenance the condition of the material being handled is the most significant factor contributing to fires. Dry, light, and fluffy materials that can create a dust cloud are the most likely to catch fire. Debris can accumulate in various areas especially on horizontal surfaces. Conditions such as wind speed and direction can change where the material accumulates. Be aware of these changing conditions and adjust your cleaning schedule and practices to ensure proper machine function and to reduce the risk of fire.

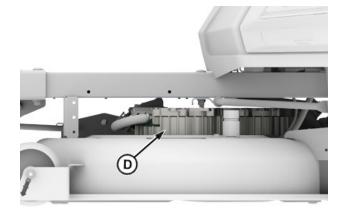
Always follow all safety procedures posted on the machine and in the Operator's Manual. Before carrying out any inspection or cleaning, always park machine safely. (See Parking Safely in the Safety Section).

The entire machine should be inspected, with extra attention given to the areas noted below.

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Cleanout Areas

Primary areas that must be inspected and cleaned on the machine include deck and area under seat (see machine service label):



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• Top of the mower deck, near the electric motor (D).



• Under the seat, near wiring harness (E).

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Operating Controls

Operator's Station Controls



Operator's Station Controls for Model Z370R Electric

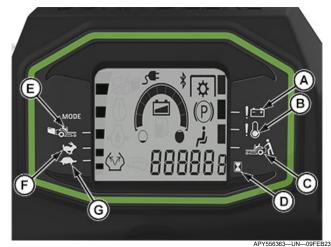
A—Left Motion Control Lever B—Right Motion Control Lever C—Mower Deck Lift Pedal D—Instrument Cluster E—Power Button and Key Pin F—Light Switch

G—Height-of-Cut Dial Adjustment H—Mode Switch I—Mower Engagement Switch J—USB-C Port K—Status Display

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Instrument Cluster



- -Battery Attention
- -Temperature Alert -Push Mode C.
- D—Hour Meter
- Bagging Mode, High Blade Speed, Full Travel Speed
- -High Mode, Standard Blade Speed, Full Travel Speed –Low Mode, Standard Blade Speed, Limited Travel Speed

gh8xt3t,1669979294600-19-22MAR23

Daily Operations

Daily Operating Checklist

- Check brake system.
- Clean mower deck with washout port after use. •
- Check safety interlock system.
- Check tire pressures.
- Check mulch control open/close operation (if equipped).

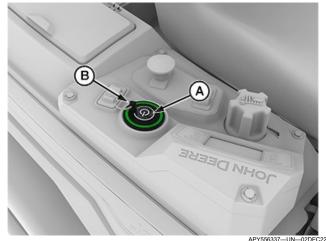
vs70618,1664956439431-19-22MAR23

Avoid Damage to Plastic and Painted Surfaces

- Do not wipe plastic parts until they are rinsed first. Using a dry cloth causes scratches.
- Insect repellent spray damages plastic and painted surfaces. Do not spray insect repellent near machine.
- Prolonged exposure to sunlight damages some surfaces. ٠

gh8xt3t,1669983446259-19-02DEC22

Use Power Button



- 1. Insert key pin (B) next to the power button (A), press and hold power button to START the machine.
 - Armed State: Armed state is activated when the power button is • held and two audible beeps are heard. Allows the operator to fully operate/drive the machine and engage the mower deck.
 - Disarmed State: Disarmed state is activated when the power button is pressed and no audible noise is heard, turning only the display on. Allows only the display to be powered on. The machine is not operable in this state.
- 2. Press the power button (A) to STOP the machine, remove key pin (B).
- NOTE: Hours of use are displayed when machine is in disarmed state. The armed state shows the level of charge.

gh8xt3t,1675967365575-19-22MAR23

Mounting and Dismounting Machine



APY564721-UN-17FEB23

IMPORTANT: Avoid damage! Do not step on status display (B).

NOTE: Do not step on the mower deck when mounting and dismounting the machine.

- 1. Mount the machine from the side using the foot plate (A).
- 2. Park machine safely before dismounting. (See Parking Safely in the Safety section.)

3. Keep the foot plate clean.

vs70618,1664956628257-19-12APR23

Adjust Seat

Adjustable Seat

1. Raise the seat from back side as shown.

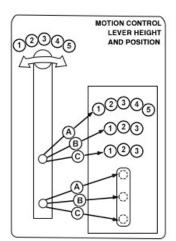


- 2. Remove the knob (A).
- 3. Slide seat forward or backward to the desired position.
- 4. Reinsert the knob (A).

vs70618,1664956735275-19-19JAN23

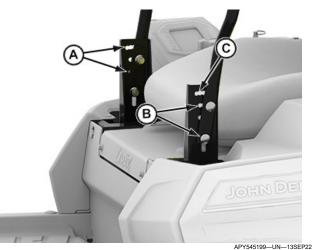
Adjust Motion Control Levers

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



APY536236-UN-08JUN22

To adjust the motion control lever height, refer to the operator instruction label on the machine front panel and the instructions that follow.

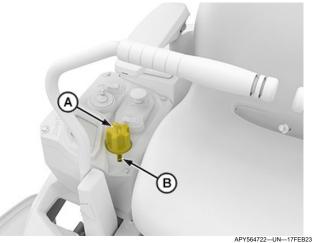


- 3. Remove two bolts and nuts and raise or lower each control lever to your comfort level.
 - For highest lever position, use holes (A).
 - For lowest lever position, use holes (B).
- 4. You can also adjust each motion control lever slightly forward or rearward (C) within slotted holes.

vs70618,1664956928926-19-11JAN23

Adjust Cutting Height

Cutting height can be adjusted from approximately 31-114 mm (1.25 -4.5 in). Refer to the control lever label on the front platform.



- 1. Press the lift pedal and rotate dial (A) counterclockwise to raise mower deck height and clockwise to lower mower deck height.
- 2. Rotate dial (A) to index mark (B) to get desired mower deck height.

gh8xt3t,1670315652721-19-17FEB23

Adjust Mower Level

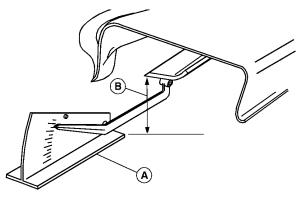
CAUTION: Avoid injury! Rotating blades are dangerous.

Before adjusting or servicing mower:

- Remove the key pin next to the power button.
- Always wear gloves when handling mower blades or working near blades.

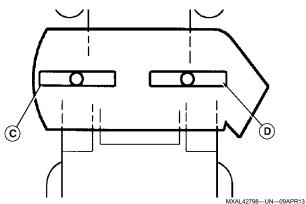
NOTE: Mower deck wheels should not contact the ground when leveling the deck.

- 1. Park machine safely. (See Parking Safely in the Safety section.)
- 2. Inflate tires to the correct pressure. (See Tires pressure in the Specifications section.)
- 3. Position caster wheels to the forward driving position.
- 4. Set mower to preferred cutting height and lower deck into the mowing position.
- 5. Measure mower level (side-to-side).



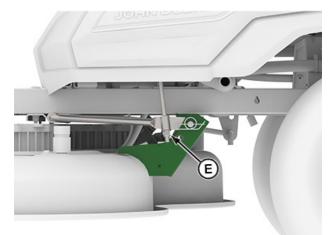
MXAL42797—UN—09APR13 A convenient leveling gauge (A) (AM130907) is available from dealer.

a. Position mower blades as follows and measure from each outside blade tip (B) to the level surface.



b. Turn left blade (C) as shown. Turn the right blade (D) as shown. Take measurement for both blades.

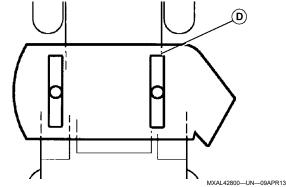
The difference between blade measurements must not be more than 3 mm (1/8 in).



c. If necessary, adjust mower lever by turning nuts (E) clockwise

to raise the side of the mower deck, or counterclockwise to lower the mower deck.

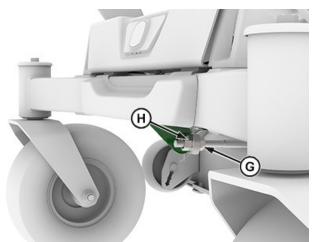
- NOTE: Ensure that bottom of the lock nut is fully engaged on the threaded fitting to avoid hardware loosening during operation.
- 6. Measure mower level (front-to-rear).



- a. Turn right blade (D) so that a blade tip points straight forward.
- b. Measure from the blade tip to the surface. Take measurement for both blades. The front blade tips must be lower than the rear blade tips according to the specification listed.

Specification

- - c. 42A Mower Deck



APY545202-UN-13SEP22

Adjust the mower front-to-rear level by loosening rear nut (G) on the front lift rod. Turn front nut (H) clockwise to raise front of mower or counterclockwise to lower it. Tighten rear nut (G) after adjustment is complete.

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Adjust Mower Wheels

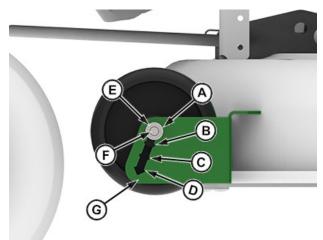
CAUTION: Avoid injury! Rotating blades are dangerous. Before adjusting or servicing mower:

- Remove the key pin next to the power button.
- Always wear gloves when handling mower blades or working near blades.
- IMPORTANT: Avoid damage! The mower deck can be damaged if mower wheels are incorrectly adjusted:
 - · 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 correct pressure.
- 3. Move the motion control lever outward to lock machine in start/ shutdown position.
- 4. Adjust mower wheels to the correct height:

42A Mower Decks



APY545203-UN-13SEP22

Position 1 (A)	31—38 mm (1.25—1-1/2 in) Height of Cut	
Position 2 (B)	38—50 mm (1-1/2—2 in) Height of Cut	
Position 3 (C)	50—76 mm (2—3 in) Height of Cut	
Position 4 (D)	76–101 mm (3—4.5 in) Height of Cut	

Remove nut (E). Pull carriage bolt (F) out until end of bolt clears the outer wall of the gauge wheel bracket (G), then slide bolt and wheel assembly to the desired position. Push bolt back through outer wall of bracket. Install nut (E) and tighten to specification.

Specification

Test Safety Systems

The safety systems installed on your machine should be checked before each machine use. Be sure to read the machine Operator's Manual and are familiar with the operation of the machine before performing these safety system checks.

Use the following checkout procedures for normal operation of machine.

If there is a malfunction during one of these procedures, do not operate machine. See your authorized dealer for service.

Perform these tests in a clear open area. Keep bystanders away.

vs70618,1664959835621-19-11JAN23

Test Park Brake Switch

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

- 2. Sit on operator's seat.
- 3. First test:
 - a. Move right motion control lever inward to the neutral position.

 Press and hold power button no longer than 2 seconds to START the machine.

Result: Machine must not start. If machine starts, there is a problem with the safety interlock circuit.

- 4. Return right motion control lever to fully outward position.
- 5. Second Test:
- NOTE: Machine will turn on but will not go into armed mode. You should not hear 2 beeps at this stage.
 - a. Move left motion control lever inward to the neutral position.
 - b. Press and hold power button no longer than 2 seconds to START the machine.

Result: Machine must not start. If machine starts, there is a problem with the safety interlock circuit.

6. Return left motion control lever to fully outward position.

gh8xt3t,1667468413535-19-23MAR23

Test Park Brake

- 1. Park machine safely. (See Parking Safely in the Safety section.)
- Lock the park brake by moving the motion control levers fully outward.
- 3. Try to push machine manually.

Result: Park brake must prevent machine from moving. If machine moves, see the authorized dealer for service.

gh8xt3t,1676037877908-19-12APR23

Test Mower Engagement (PTO) Switch

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

- 2. Sit on operator's seat.
- 3. Lock the park brake by moving motion control levers fully outward.
- 4. Pull mower engagement (PTO) switch up to engage.
- 5. Press and hold power button until 2 audible beeps are heard to START the machine and enter the armed state.

Result: Machine must not start. If machine starts, there is a problem with the safety interlock circuit.

vs70618,1664963489593-19-17FEB23

Test Seat Switch

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

- 2. First test:
 - a. Lock the park brake by moving the motion control levers fully outward.
 - b. Sit on operator's seat.
 - c. Start the machine. (See Use Power Button in Daily Operation section.)
 - d. Move motion control levers inward to neutral position.
 - e. Pull mower engagement switch (PTO) up to engage.
 - Raise up slightly off the seat. Do not get off machine.
 Result: The PTO blades should stop. If the PTO blades do not stop, there is a problem with the safety interlock circuit.
 - g. Return to sitting position in operator's seat.
 - h. Return motion control levers to the fully outward position.
 - i. Push mower engagement switch (PTO) down to disengage.
 - j. Turn machine off.
- 3. Second test:

- a. Lock the park brake by moving the motion control levers fully outward.
- b. Sit on operator's seat.
- c. Start the machine. (See Use Power Button in Daily Operation section.)
- d. Get up slightly off the seat. Do not get off machine.

Result: Machine should continue to run. If the machine stops, there is a problem with the safety interlock circuit.

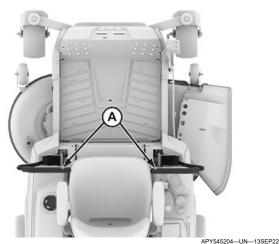
- e. Return to sitting position in operator's seat.
- f. Turn machine off.

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Use Park Brake

CAUTION: Avoid injury! Children or bystanders may attempt to move or operate an unattended machine. Always lock the park brake and remove the key pin before leaving the . machine unattended.

Locking Park Brake



To lock the park brake, move motion control levers (A) fully outward.

Unlocking Park Brake



To unlock the park brake, move motion control levers (A) inward to neutral position.

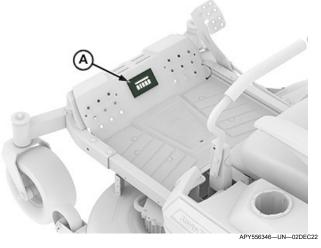
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Using Mower Engagement Switch

- To Engage Mower Pull mower engagement knob up.
- To Disengage Mower Push mower engagement knob down.

MP47322,00F463F-19-15MAR13

Status Display



- Status display (A) displays a bar graph of the battery's charge status.
- Top display bar lights as follows:
 - White-Disarmed state
 - Green-Armed state
 - Red-STOP diagnostic trouble code (DTC)
 - Amber-Warning diagnostic trouble code (DTC)

gh8xt3t,1669823799745-19-16FEB23

Use the Motion Control Levers



CAUTION: Avoid injury! Learn to use the motion control levers and practice at low mode limited travel speed until becoming proficient and comfortable with the operation of the machine.

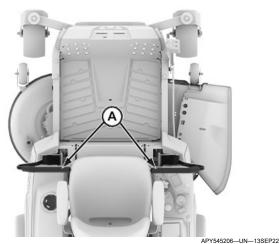
Do not move motion control levers from forward to reverse or reverse to forward position rapidly. Sudden direction change causes loss of control or damages the machine.

Use low limited travel speed mode to learn to drive the machine become familiar with the motion control levers and how they respond. It is essential to know how the machine accelerates, steers, and stops.

The functions of the motion control levers are:

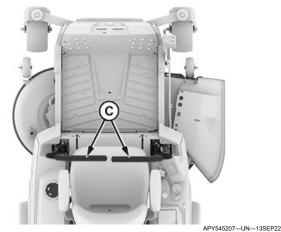
- Dual function neutral position
- Steering
- Acceleration
- Braking

Start/Shutdown Position



- Motion control levers must be placed fully outward (A). This position engages the park brake and allows the operator to start the machine.
- Forward and reverse movement of the motion control levers is prevented when levers are moved fully outward to the start/ shutdown position.
- Operator can exit mower when machine is running, when the mower blades are not engaged and the motion control levers are fully outward. (See Standby Mode in Daily Operations section.)
- Motion control levers must be fully outward to safely enter and exit the operator's seat.

Neutral Position



- Machine speed, motion, and direction can be controlled when the machine is running and motion control levers are in the neutral position (C).
- To stop the machine for an emergency, move the motion control levers quickly back to the neutral position.

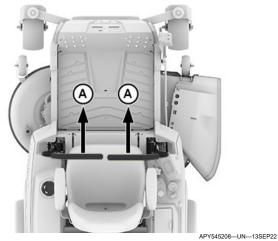
Forward and Reverse Travel

Traveling straight forward and backward requires practice. If the machine does not track in a straight line when going forward or reverse, the motion control lever tracking may need adjusting.

- 1. Move both motion control levers from the start/shutdown position inward to the neutral position.
- 2. Move the motion control levers forward to begin forward travel.
- 3. Move the motion control levers rearward to begin reverse travel.

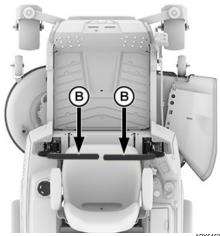
4. To stop travel, move motion control levers back to the neutral position.

Forward Travel



Gradually move both motion control levers evenly forward (A) from neutral. To speed up, move the levers farther forward. To slow down smoothly, slowly move the levers toward neutral.

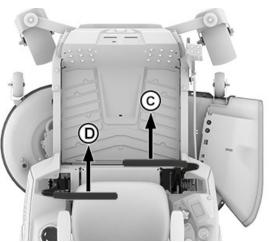
Reverse Travel



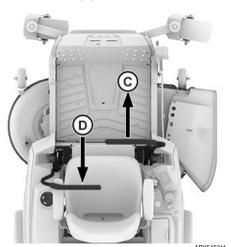
APY545209—UN—13SEP22

Look down and behind when evenly moving both motion control levers backward (B) from neutral. To speed up, move the levers farther rearward. To slow down smoothly, slowly move the levers toward neutral.

Left Turn

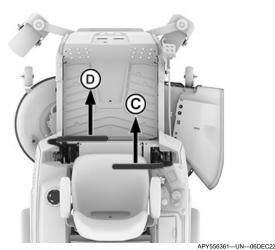


-06DEC22 1. To turn slightly to the left, push right control lever (C) further forward than the left control lever (D).



APY545211-UN-13SEP22 2. To turn sharply to the left, push right control lever (C) forward and pull left control lever (D) rearward at the same time.

Right Turn



1. To turn slightly to the right, push left control lever (D) further forward than the right control lever (C).



2. To turn sharply to the right, push left control lever (D) forward and pull right control lever (C) rearward at the same time.

vs70618,1664964506035-19-05MAY23

Start the Machine

- 1. Sit on the operator's seat.
- 2. Set both motion control levers fully outward to the start/shutdown position.
- 3. Push the mower engagement switch and confirm that mower blades are not engaged.
- 4. Insert the key pin next to the power button, press the power button until two audible beeps are heard to start the machine in armed state.
- 5. Set both motion control levers to the neutral position from the start/ shutdown position.

gh8xt3t,1675967459431-19-22MAR23

Engage Mower

CAUTION: Avoid injury! Clear mowing area of all bystanders

when operating this machine. Thrown objects cause serious injury or death.

Keep hands and feet away from blades and discharge opening.

Do not mow in reverse unless necessary.

- 1. Adjust mower to desired cutting height.
- 2. Start the machine.
- 3. Move both motion control levers to the neutral position from the start/shutdown position.
- 4. Pull mower engagement switch to engage mower.
- NOTE: The amount that the control levers are moved varies the travel speed and turn rate.
- 5. Push motion control levers forward slowly. Mow at safe travel speed.

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Use MulchControl[™] (If Equipped)



1. Park machine on a flat, level surface.

MulchControl is a trademark of Deere & Company

- 2. Disengage mower blades.
- 3. Lock the park brake by moving both motion control levers fully outward to start/shutdown position.
- 4. Wait for all moving parts to stop before leaving the operator's station.



 Rotate lever clockwise (A) to close or counterclockwise (B) to open discharge plate.

gh8xt3t,1668084560546-19-22MAR23

Unclog Mower



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

Rotating blades are dangerous. Shut off the machine and remove the key pin before getting off the seat to inspect the machine and attachment.

Thrown objects can cause serious injury. Make sure that all machine parts are stopped before raising hopper top or removing chutes.

- 1. Park machine safely. Wait for all moving parts to stop before leaving the operator's station to inspect machine.
- 2. Check under mower deck and discharge chute for debris.
- 3. Clear all debris before using mower.
- 4. If clogging occurs, switch to open mode to allow some grass to discharge.

gh8xt3t,1668083529872-19-22MAR23

Stop the Machine

- 1. Stop machine on a flat, level surface.
- 2. Push the mower engagement switch to disengage mower
- Lock the park brake by moving the motion control levers fully outward.
- 4. Press the power button to STOP the machine.

CAUTION: Avoid injury! Children or bystanders may attempt to move or operate an unattended machine.

Always lock the park brake and remove the key pin before leaving the machine unattended.

5. Remove key pin.

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Move Machine by Hand

CAUTION: Avoid injury! When the machine is in push mode, it may move abruptly.

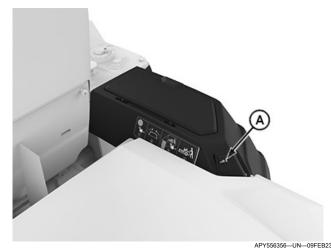
 Do not use push mode when the machine is stopped on an incline to prevent it from going downhill out of control.

IMPORTANT: Avoid damage! Transmission damage occur if the machine is towed or moved incorrectly:

- Move machine manually.
- Do not use another vehicle to move machine.
- Do not tow machine.

Moving Machine with Push Mode Active:

- 1. Ensure machine is OFF and motion control levers are fully outward in start/shutdown position.
- Press the power button briefly ensuring no audible beeps are heard and the status display is on, placing the machine in disarmed state. (See Use Power Button in Daily Operation section.)
- 3. Standing next to the machine, move control levers to inward/neutral position.



 Press the push mode switch (A) and move machine to desired location.

Moving Machine without Push Mode Active or When Unable to Use Switch.

- 1. Standing next to the machine, move control levers to inward/neutral position.
- 2. Push the machine no faster than a speed of 1.5mph.

NOTE: Exceeding 1.5 mph will cause brakes to be applied. If this occurs, wait for machine to stop, then begin pushing again.

gh8xt3t,1675967477386-19-22MAR23

Unclog Mower, Bagger, or Material Collection System



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

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

Checking for Clogging While Driving

If grass builds up in the front of the mower discharge chute, check for clogged chute or problems with blower assembly (if equipped).

If there is a trail of clippings behind mower or clippings blow to the side, check for clogged chute, full collector bags, or problems with blower assembly.

Removing Debris from Inspection Points:

CAUTION: Avoid injury! Do not use hands or feet to clear clogged mower deck or blower assembly. Stored energy cause blades to rotate.

- Park machine safely. (See Parking Safely in the Safety section.) Wait for all moving parts to stop before getting off to inspect machine.
- 2. Open hopper cover. Check chute outlet.
- 3. Remove chute from the mower deck or blower assembly. Check chute inlet.
- 4. Check under the mower deck for debris.

gh8xt3t,1668086816572-19-12APR23

Use Wash Port to Clean Mower Deck

NOTE: Follow this procedure after each use to prevent buildup and remove corrosive lawn chemicals.

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



- 2. Attach quick coupler to the garden hose.
- 3. Attach garden hose with the quick coupler to wash port (A) on the mower deck.
- 4. Turn on water.
- 5. Start the machine.
- 6. Run at full power.
- 7. Engage mower blades.
- 8. Flush water under the deck for approximately one minute.
- 9. Disengage mower blades.
- 10. Stop machine.
- 11. Turn off water and remove quick coupler from the wash port and garden hose.

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Transport Machine on Trailer

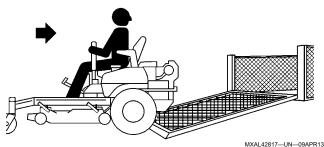
NOTE: Trailer capacity must exceed combined machine weight and attachment weight. (See Specifications section in Operator's Manual.)

Ensure that trailer has all the necessary lights and signs required by law.

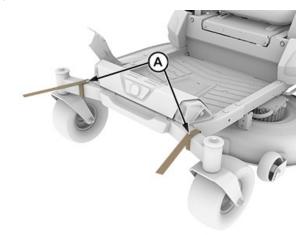


CAUTION: Avoid injury! Use extra care when loading or unloading the machine onto a trailer or truck. Machine wheels can go off the ramp or trailer, causing the machine to tip over.

- To load, back up slowly and in a straight line. Keep wheels away from drop-offs and edges.
- Do not use two separate loading ramps. Use full width loading ramp at least 30 cm (12 in) wider than machine to keep caster wheels from going off the ramp edge.
- Use a trailer with sides.
- 1. Park trailer on level surface.
- 2. Fully raise mower deck before driving machine onto trailer.

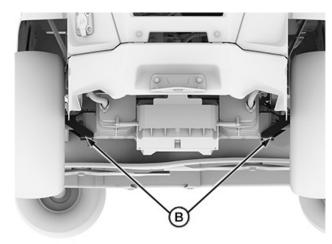


- 3. Back machine onto heavy-duty trailer with full-width ramp.
- 4. Lower mower deck completely.
- 5. Engage park brake.
- 6. Turn off machine and remove key pin.
- 7. Flip seat forward.



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 Fasten front of machine at both sides of the frame at points (A) to trailer with heavy-duty straps, chains, or cables. Straps must be directed down, forward, and outward from machine.



APY551601-UN-08NOV22

9. Fasten rear of machine at both sides of frame at points (B) to trailer with heavy-duty straps, chains, or cables. Straps must be directed down, rearward, and outward from machine.

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Transporting Material Collection System (If Equipped)

If the material collection system is left on the machine during transport, follow these guidelines when trailering the unit:

- Empty the cloth bags and remove them from the hopper. Full bags add extra weight which can overstress the hopper frame on rough roads. At road travel speeds, wind can cause premature wear of the cloth bags.
- Make sure that the hopper cover is latched securely to the hopper frame.
- If the unit is transported over long distances or at high speeds, remove the rear bagger or power flow chute before transport.

TH84124,000020A-19-10APR19

Tow Loads

IMPORTANT: Avoid damage! Towing excessive trailer loads can stress drivetrain components. To avoid damage to drivetrain components, use the following guidelines.

- Do not exceed maximum towing capacity of 113.4 kg (250 lbs).
- Do not exceed maximum tongue weight of 45.4 kg (100 lbs).
- Avoid inclines greater than a 10 degrees slope while towing to avoid damage to the pulling machine. Use the Slope Guide located in this Operator's Manual to ensure proper machine towing operation. See Operating on Slopes in the Safety section for additional information.
- Avoid making sharp turns. Make wide turns to avoid jack-knifing.
- · Travel slowly and allow extra stopping distance.

gh8xt3t,1669986929895-19-22MAR23

Mowing Tips

- Mow grass when it is dry.
- Stay at least two mowing widths away from ditches, drop-offs, or water to avoid accident.
- Keep mower deck and discharge chute clean.
- Mow with sharp blades.
- · Properly level mower deck for a smooth cut.
- Mow grass frequently.
- Use a travel speed that fits the conditions:

- Mow tall or wet grass twice. With the first pass, cut grass halfway to desired height. With the second pass, cut to the desired height.
- Travel slowly when mowing tall or thick grass.
- Avoid damaging grass by slipping or skidding machine drive wheels. Practice smooth control lever movements.
- When performing sharp turns, do not allow inside machine drive wheel to stop and twist on grass.

gh8xt3t,1670309911078-19-19JAN23

Use Charging Port

IMPORTANT: Avoid damage! Do not move machine while battery is charging. Do not remove battery for charging.

Do not allow the charging cord to be coiled when charging the machine, the cord must be fully extended while charging.

- NOTE: Leaving the machine connected to the charger when charging is complete will not impact battery lift or function.
- Charge machine safely. Do not handle charging cord with wet hands, while standing in water, or when cord is routed through standing water or wet grass. (See Charging your Machine Safely and Use Caution in Wet Conditions in the Safety section.)
- 2. Use an appropriate charging cord rated for use. Minimum gage for charging cord:

Charger Model	25ft	50ft	100ft	150ft
RQ700	16	16	12	10
RQ1200	16	14	10	8

In Europe and other 220-240VAC regions, the extension lead must be 3-conductor outdoor rated at a minimum: RQ700: 6 amp RQ1200: 10 amp Always follow all local codes and regulations.

Connect an outdoor-rated charging cord to an outlet protected by a ground fault circuit interrupter (GFCI).



A—Charging Port

- 4. Use the charging port (A) for charging machine.
- 5. Display backlight will remain on until battery reaches 100% (SOC) State of charge.
- 6. Vehicle will enter into charger maintain mode at 100% SOC.
- 7. Charger maintain mode.
 - Display backlight will go off

Service Intervals

- Vehicle will no longer be charging even though charger is connected.
- The system will resume charging as needed.
- 8. Unplug charging cord from machine prior to cleaning with water.
- If charging needs to be stopped while machine or charging cord is in wet condition, disconnect power at dry locating using circuit breaker or fuse panel, if necessary.

gh8xt3t,1669824735977-19-05MAY23

Standby Mode

To enter into standby mode:

- Park machine safely. (See Parking Safely in the Safety section.)
- Press and hold power button until 2 audible beeps are heard to enter the armed state.
- The machine will remain in standby mode for ~4 minutes when the operator is off the seat.
- After 4 minutes, the vehicle will enter into disarmed mode requiring the operator to restart the machine.

If the operator returns to the seat prior to the standby mode timeout, the machine will return to armed mode and the operator can resume traction and mowing functions without interacting with the power button.

gh8xt3t,1676488149669-19-05MAY23

Service Intervals

Servicing Machine

IMPORTANT: Avoid damage! Operating in extreme conditions may require more frequent service intervals:

Machine components may become dirty or clogged when operating in extreme heat, dust or other severe conditions.

Do not clean machine by high-pressure washing. It is recommended to wash vehicle by hand or with a garden hose using mild soap.

Avoid spraying water with great force near or into the following places:

- Electrical connections (including battery compartment)
- Wheel bearings
- Warning labels
- Other labels
- Instrument panel (display and switches)
- Mower spindle motors

Please use the following timetables to perform routine maintenance on the machine.

Park the vehicle safely. (See Parking Safely in the Safety section.)

vs70618,1664966230883-19-22MAR23

Service Intervals

Every 8 Hours or Daily

- Check brake system.
- Clean mower deck with washout port after use.
- Check safety interlock system.
- Check tire pressure.

Every 50 Hours or Yearly (Whichever Comes First)

Check mower deck level.

Every 100 Hours or Yearly (Whichever Comes First)

- Sharpen/replace mower blades.
- Clean underside of mower deck.

gh8xt3t,1672296836923-19-15FEB23

vs70618.1664966695801-19-11JAN23

Service Mower

Mower Deck Identification

Mower decks in the following instructions are identified by a code designation. The codes are as follows:

Code	Description	
42A	42—inch Accel Deep™	
Accel Deep is a trademark of Deere & Company		

Remove and Install Mower Deck Foot Plate

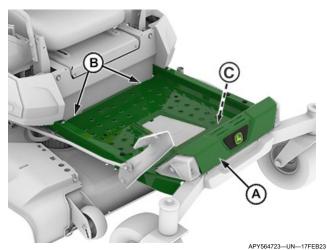


CAUTION: Avoid injury! Always operate the mower with the foot plate installed. Operating with the foot plate removed can cause serious injury.

Remove Foot Plate

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

IMPORTANT: Avoid damage! Do not step on status display (C).



- 2. Lift the front end of the foot plate (A).
- 3. Using both hands, pull the foot plate out of the two openings (B) in the frame.

Install Foot Plate

- 1. Using both hands, position the foot plate (A) into the two openings (B) in the frame.
- 2. Lower the foot plate until it rests securely in place.

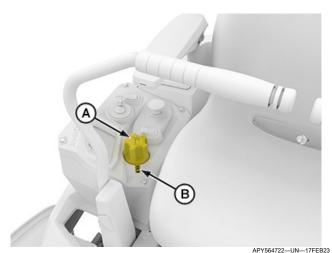
vs70618,1664966819188-19-20FEB23

Remove Mower Deck (42A)

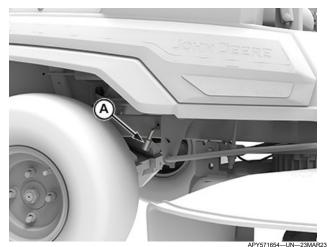
1. Park machine safely. (See Parking Safely in the Safety section.)

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

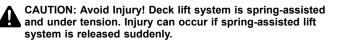
- Remove the key pin next to the power button.
- Always wear gloves when handling mower blades or working near blades.



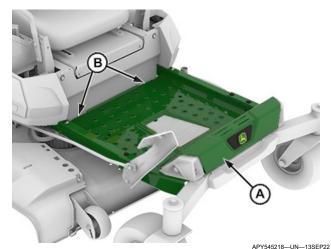
 Press the lift pedal and rotate the height-of-cut dial (A) in clockwise direction to the lowest range in index mark (B) to lower deck to 1.25 in height-of-cut for lockout position.



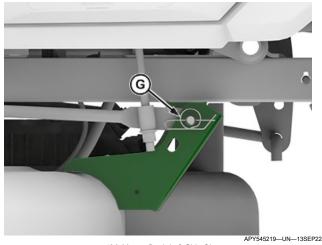
 Use the tracking adjustment socket (A) found in the glove box to lock the lift system when removing the deck.



NOTE: Use of the tracking adjustment socket restrains the lift spring from rotating the rockshaft.

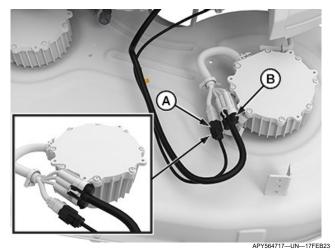


 Lift the front end of the foot plate (A) and remove the foot plate from the slots (B).



42A Mower Deck Left Side Shown

- 5. Remove spring pin (G) from each side of the rear mower bracket.
- 6. Rotate front caster wheels to maximize clearance.



7. Press the connectors tap (A) and (B) then disconnect the connectors.



- 8. Disconnect both wire harness connectors (A) and (B).
- 9. Slide the mower out from the machine. Do not operate the machine without the mower deck. Machine may become unstable without the mower deck attached. Move machine only by hand. (See Move Machine by Hand in Daily Operation section.)

gh8xt3t,1672832694755-19-23MAR23

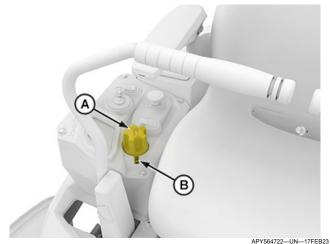
Install Mower Deck (42A)

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

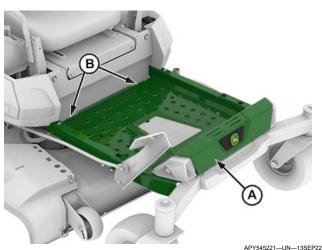
CAUTION: Avoid injury! Rotating blades are dangerous.

Before adjusting or servicing mower:

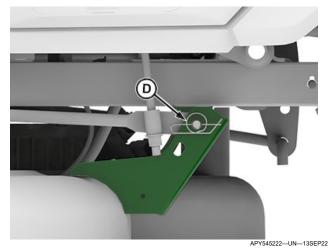
- Remove the key pin next to the power button.
- Always wear gloves when handling mower blades or working near blades.
- 2. Rotate the height-of-cut dial counterclockwise direction and press the lift pedal to lock in raised position.
- 3. Slide mower deck under machine.
- NOTE: Ensure to remove the tracking adjustment socket used for lift system before installation of mower deck.



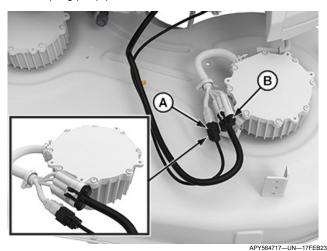
 Rotate the height-of-cut dial (A) clockwise direction to the lowest range in index mark (B) to lock deck in lowered position.



- 5. Lift the front end of the foot plate (A) and remove the foot plate from the slots (B).
- CAUTION: Avoid Injury! Deck lift system is spring-assisted and under tension. Injury can occur if spring-assisted lift system is released suddenly.



6. Install spring pin (D) onto each side of the rear mower bracket.



7. Press the connectors tap (A) and (B) then connect the connectors.



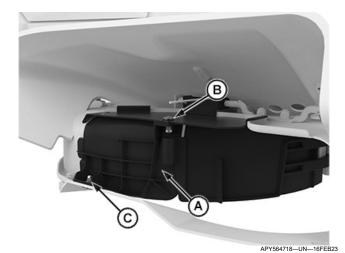
- 8. Connect both wire harness connectors (A) and (B).
- 9. Install foot plate.

gh8xt3t,1672832864428-19-23MAR23

Install MulchControl[™] Discharge Plate (If Equipped)

CAUTION: Avoid injury! Machine component or attachment is heavy. Use a safe lifting device or get an assistant to help lift, install, or remove component or attachment.

NOTE: For ease of installation, place mower deck in the vertical position.



- 1. Position discharge plate (A) as shown.
- 2. Insert M8 x 20 carriage bolt (B) through the mower deck and into the hole in the discharge plate.
- 3. Install M8 lock nut on bolt (B). Do not tighten yet.
- Insert M8 shoulder bolt (C) through the discharge plate and into the hole in the mower deck.
- 5. Install M8 lock nut on bolt (C).
- 6. Tighten nuts.

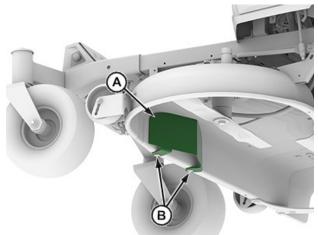
Specification

gh8xt3t,1668074374772-19-16FEB23

Install MulchControl[™] Deflector (If Equipped)

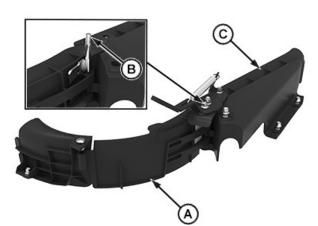
CAUTION: Avoid injury! Machine component or attachment is heavy. Use a safe lifting device or get an assistant to help lift, install, or remove component or attachment.

NOTE: For ease of installation, place mower deck in the vertical position.

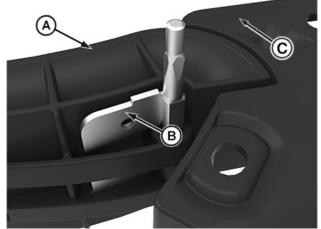


APY571655-UN-24MAR23

 Remove the existing deflector (A) by removing bolts (B) prior to install MulchControl[™] deflector.



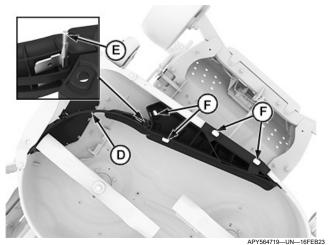
APY551599-UN-08NOV22



APY551600-UN-16FEB23

MulchControl is a trademark of Deere & Company

2. Assemble kit gate (A) and baffle (C) together as shown and insert the pin (B) in the slots.



- Install right deflector assembly (D) to the mower deck using M8 shoulder bolts (F) and M8 nuts.
- 4. Ensure the pin (E) is in the correct slot and that the gate door can open and close.
- 5. Tighten lock nuts.

Lock Nut—Torque.

Specification

gh8xt3t,1668074654927-19-24MAR23

Install MulchControl[™] Handle (If Equipped)

CAUTION: Avoid injury! Machine component or attachment is heavy. Use a safe lifting device or get an assistant to help lift, install, or remove component or attachment.



 Install handle assembly (A) to hinge pin with a M8 lock nut (B). Tighten lock nut until snug on handle.



 On the top side of deck, install M8 lock nut (C) on the shoulder bolt (D) to secure handle assembly.

Specification

...20 N·m (15 lb·ft)

gh8xt3t,1668074852710-19-24MAR23

Remove and Store MulchControl[™] Deck (If Equipped)

Remove MulchControl[™]

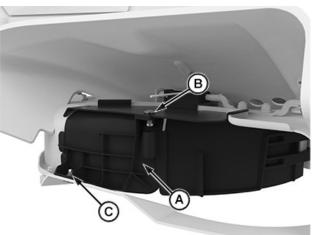
Lock Nut—Torque.

1. Remove the mower deck. (See Removing Mower Deck in this section of the manual.)



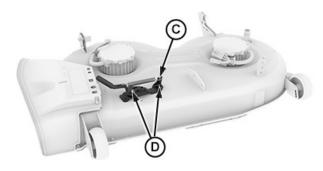
CAUTION: Avoid injury! Blades are sharp. Always wear gloves when handling blades or working near blades. Replace blades if defective. Never straighten or weld them.

2. Remove mulch blades.

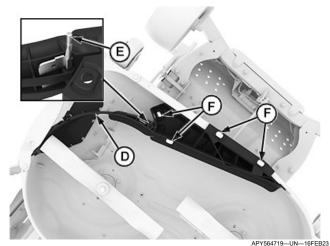


APY564718-UN-16FEB23

3. Remove discharge plate (A) from discharge area by removing the hex flange bolts (C) and hex flange nuts (B).



4. Loosen nuts (D) and remove the handle assembly (C).



 Loosen shoulder bolts (F) and remove M8 nuts, then remove the left-hand side deflector assembly (D) remove the pin (E) from the slots.

Store MulchControl™

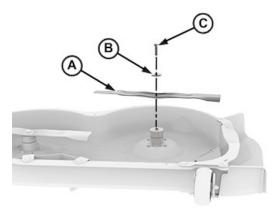
Clean and store all MulchControl[™] parts in a clean, dry place.

gh8xt3t,1668075003852-19-16FEB23

Install Mulch 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.



- APY545223-UN-13SEP22
- 1. Install blade (A) with cutting edge toward the ground.
- 2. Install large washer (B) and bolt (C).



- Hold a wrench at slot (D) or insert wood block between blade and mower to prevent the blade from turning when tightening bolt.
- 4. Tighten bolt.

Specification				
Bolt—Torque	68 N·m 50 lb∙ft)			

5. To check blade-to-mulch baffle clearance, rotate blades by hand. If interference occurs, check that hardware is tightened.

vs70618,1664967539700-19-15FEB23

Checking for Bent Mower Blades

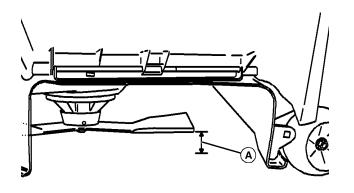


CAUTION: Avoid Injury! Blades are sharp. Always wear gloves when handling blades or working near blades. Replace blades if defective. Never straighten or weld them.

- 1. Park machine safely. (See Parking Safely in the Safety section.)
- 2. Raise mower deck to highest position to access blades.

MulchControl is a trademark of Deere & Company

Service Electrical



MXAL42867-UN-09APR13 Mower deck with side discharge used for illustration

- 3. Measure distance (A) between blade tip and flat ground surface.
- 4. Rotate blade 180° and measure distance between other blade tip and flat ground surface.
- 5. Install new blade if the difference between the two measurements is more than 3 mm (1/8 in).
- 6. Repeat for all blades.

MP47322,00F466C-19-12JAN23

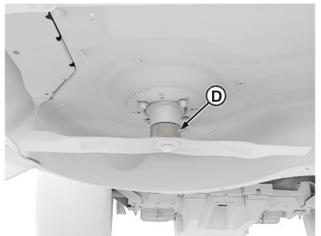
Service Mower Blades

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

- Remove the key pin next to power button.
- Always wear gloves when handling mower blades or working near blades.

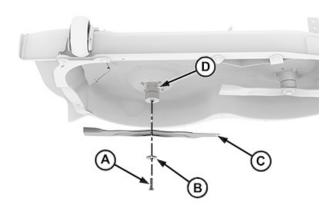
Remove Mower Blades (42A Mower Decks)

- 1. Park machine safely. (See Parking Safely in the Safety section.)
- 2. Raise mower deck to gain access to mower blades. If necessary, remove mower deck.



APY564707-UN-15FEB23

3. Hold a wrench at slot (D) or insert wood block between blade and mower to prevent the blade from turning when removing bolt.



APY545224-UN-13SEP22

- 4. Remove bolt (A), washer (B), and blade (C) from spindle (D).
- 5. Inspect blades. Sharpen, balance or replace blades as necessary.

Install Mower Blades (42A Mower Decks)

- 1. Make sure the blade (C) is seated properly between mower spindle (D) and washer (B).
- 2. Position mower blade (C) with cutting edge toward ground onto mower spindle.
- 3. Install washer (B) with cupped side towards blade, and bolt (A) to secure blade onto spindle shaft.
- 4. Hold a wrench at slot (D) or insert wood block between blade and mower to prevent the blade from turning when tightening bolt.

Specification

gh8xt3t,1668685060732-19-23MAR23

Service Electrical

Battery



CAUTION: Do not submerge the battery in water if submerged keep machine 50 feet from combustibles and contact dealer.

NOTE: For battery service, replacement, and disposal contact the dealer.

gh8xt3t,1667471034458-19-17FEB23

Battery Service

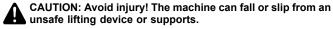
The battery is not a serviceable component. Troubleshooting, disassembly, or replacement of the battery should be performed by qualified technicians only. Contact your John Deere dealer for service.

h57gtet,1679420707376-19-21MAR23

Service Miscellaneous

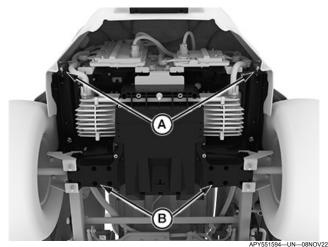
Lift Machine

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

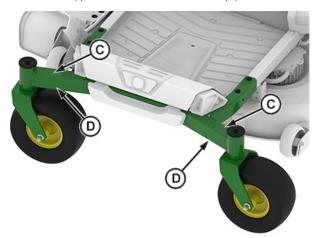


- Use a safe lifting device rated for the load to be lifted.
- Lower machine onto jackstands or other stable supports and block wheels before servicing.

NOTE: Remove any material collection system attachments prior to lifting machine.



 Safely lift rear of machine frame points (A). Place jackstands or other stable supports onto transaxle locations (B).



- Safely lift front of machine at machine frame points (C). Place jackstands or other stable supports onto machine frame locations (D).
- 4. If lifting only the front of machine, block rear wheels remaining on ground to avoid movement of machine.
- 5. To lower the machine, lift front and/or rear of machine, and remove jackstands or supports. Lower the machine.

gh8xt3t,1668075515714-19-11JAN23

Checking Tire Pressure

CAUTION: Avoid injury! Explosive separation of tire and rim parts is possible when they are serviced incorrectly:

- Do not attempt to mount a tire without the proper equipment and experience to perform the job.
- Make sure that all tires are inflated to the recommended pressure, especially when operating on slopes. Low pressure can cause machine to become unstable on slopes.
- · Do not weld or heat a wheel and tire assembly. Heat can

cause an increase in air pressure resulting in an explosion. Welding can structurally weaken or deform the wheel.

- Do not stand in front or over the tire assembly when inflating. Use a clip-on chuck and extension hose long enough to allow you to stand to one side.
- 1. Check tires for damage.
- 2. Check tire pressure with an accurate low-pressure gauge.
- 3. A lower pressure will improve traction and performance depending on turf conditions or if transport areas have steep inclines.
- 4. Add or remove air to meet specified tire pressure. (See Specifications section for recommended tire pressures.)

MP47322,00F4677-19-10JUN20

Remove and Install Wheel Assembly

Remove

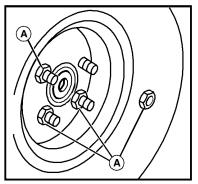
1. Park machine safely. (See Parking Safely in the Safety section.)



- CAUTION: Avoid injury! The machine can fall or slip from an unsafe lifting device or supports.
 - Use a safe lifting device rated for the load to be lifted.
 - Lower machine onto jackstands or other stable supports and block wheels before servicing.

IMPORTANT: Avoid damage! Place jackstands under frame, not under transmission or battery mounting bracket, when raising or supporting machine.

Raise machine with a safe lifting device and lower machine onto jack stands or other stable supports. Block wheels remaining on the ground to prevent machine movement.



- 3. Remove wheel nuts (A).
- 4. Remove the wheel assembly.

CAUTION: Avoid injury! Explosive separation of tire and rim parts is possible when they are serviced incorrectly:

Do not attempt to mount a tire without the proper equipment and experience to perform the job.

5. Take wheel assembly to an authorized service dealer for repairs.

Install

- 1. Install wheel assembly with valve stem to the outside.
- 2. Tighten wheel nuts evenly in alternating sequence until snug.
- 3. Lower machine completely to the ground.
- 4. Tighten wheel nuts to specification.

MXAL42875-UN-09APR13

Service Miscellaneous

Specification

gh8xt3t,1668691504411-19-19JAN23

Remove and Install Front Caster Wheels

Remove:

1. Park machine safely. (See Park Machine Safely in the Safety section.)

CAUTION: Avoid injury! The machine can fall or slip from an unsafe lifting device or supports.

- Use a safe lifting device rated for the load to be lifted.
- Lower machine onto jackstands or other stable supports and block wheels before servicing.

NOTE: Remove all attachments prior to lifting machine.

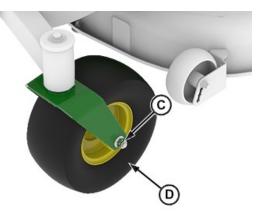
2. Jack up front of machine and place on safety stands.



APY545227-UN-13SEP22

- 3. Support caster assembly and remove flange bolt (A) and cap (B).
- 4. Remove caster from machine.
- Inspect bearings at top and bottom of frame. Replace worn or damaged bearings.

NOTE: Inner race extends above outer race.



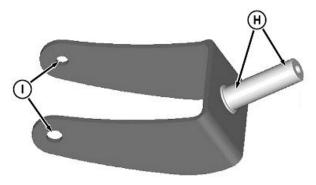
6. Remove lock nut (C) and pull bolt out of caster.

7. Remove wheel assembly (D).



APY545229-UN-13SEP22

8. Remove shield (F) and bearing (G). Inspect shields, wheel, and bearings for wear or damage. Replace worn or damaged parts.



GXT002156-UN-02JUN15

 Inspect bearing wear areas (H), and bolt holes (I) for wear or damage. Replace if necessary.

Install

- Apply grease to caster shaft and bolt.
- · Assemble in the reverse order of disassembly.
- Tighten caster lock nut and bolt to specification.

Specification

• Tighten flange bolt securing yoke to specification.

Specification

vs70618,1664967918900-19-12JAN23

Cleaning and Repairing Metal Surfaces

Cleaning:

Follow automotive practices to care for your vehicle's painted metal surfaces. Use a high-quality automotive wax regularly to maintain the factory look of your vehicle's painted surfaces.

Repairing Minor Scratches (surface scratch):

- 1. Clean area to be repaired thoroughly.
- IMPORTANT: Avoid damage! Do not use rubbing compound on painted surfaces.
- 2. Use automotive polishing compound to remove surface scratches.

3. Apply wax to entire surface.

Repairing Deep Scratches (bare metal or primer showing):

- 1. Clean area to be repaired with rubbing alcohol or mineral spirits.
- 2. Use paint stick with factory-matched colors available from your authorized dealer to fill scratches. Follow directions included on paint stick for use and for drying.
- 3. Smooth out surface using an automotive polishing compound. Do not use power buffer.
- 4. Apply wax to surface.

MP47322,00F467A-19-20SEP21

APY556347-UN-06DEC22

APY556351-UN-10JAN23

APY556355-UN-06DEC22

Troubleshooting

Icons and Definitions



Operator Alert

1. Operator alert-To indicate that one or more functions or systems on the machine are operating outside normal parameters in such a way as to require attention or further monitoring of the function or system, but not necessarily to require shutting down the machine or equipment.



Machine Emergency Stop

2. Machine emergency stop-To instruct the operator to stop the machine as soon as possible.



Solid Sticks

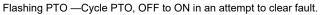
3. Solid sticks-Sticks are in the neutral position and vehicle is in Park.

Flashing sticks-Return sticks to the outward park position to clear fault.



PTO-Power Take-off

4.PTO-To identify the control for the power take-off (PTO) system. Solid PTO-PTO is ON.





Charging

APY556349-UN-06DEC22

- 5. Solid charger-Vehicle is charging
- Flashing charger–Unplug and plug-in charger in an attempt to clear any charger related faults.



APY556861-UN-08DEC22

6. Flashing power button (PBS)-Vehicle needs to be restarted to clear fault.



APY556348-UN-06DEC22

- Battery Failure
- 7.Battery failure—System detected a fault related to the battery management system.



APY556352-UN-10JAN23

8. Temperature—System detected a temperature out of range fault (high or low) on any of the components.

Temperature

gh8xt3t,1669958343457-19-24MAR23

Using Troubleshooting Chart

If you are experiencing a problem that is not listed in this chart, see your Technical Manual or authorized dealer for service.

MP47322,00F467B-19-13NOV18

APY556350-UN-06DEC22

Troubleshooting

Electrical

IF	CHECK
Machine Will Not Power On	Park brake is not locked. Mower engagement switch is engaged. Battery is not charged. Motion control levers not in Start/ Shutdown position. Blown fuse. Defective power button.
Battery Does Not Charge	Blown fuse. Check charging cord for damage. Charger improperly connected. Battery in fault condition. Damage to charge port. Tripped breaker on supply circuit. Supply voltage too low.
Lights Do Not Work	Light plug disconnected.

gh8xt3t,1667471723795-19-23MAR23

Machine

IF	CHECK
Machine Vibrates Too Much or Rattles Excessively	Mower blades not balanced.
Machine Does Not Move with Machine Powered On	Check if push mode switch ON. Check to see if machine is connected to charger.
Front of Machine Squeaks While Driving	Lubricate mower front draft rod at front and rear pivot points.

gh8xt3t,1676548816917-19-17FEB23

Mower Deck

IF	СНЕСК
Discharge Chute Clogged	Travel speed too fast. Grass too long. Grass too wet. Machine at low mow mode. Restricted air flow. Adjust cutting height to remove only 1/3 of grass at a time.
Patches Of Grass Uncut	Travel speed too fast. Mower deck needs cleaning.
Too Much Vibration	Blades out of balance.
Blades Scalping Grass	Cutting too low. Mower wheels not adjusted correctly. Turning speed too fast. Ridges in terrain. Rough or uneven terrain. Low tire pressure.
Mower Loads Down Machine	Travel speed too fast. Debris wrapped around mower spindles. Adjust cutting height to remove only 1/3 of grass at a time.
Uneven Cut	Mower deck not leveled properly. Travel speed too fast. Blades dull. Mower wheels not adjusted correctly.

IF	СНЕСК
	Tire pressure unequal. Adjust cutting height to remove only 1/3 of grass at a time.
Excessive Clippings are Expelled from Front of Mower Deck	Conditions may be too dry or terrain too uneven to provide good seal between front of deck and grass. Contact dealer to purchase dry condition kit.

gh8xt3t,1668685382609-19-23MAR23

MulchControl[™] (If Equipped)

IF	Check
MulchControl™ gate will not open	Clogging of mower deck/baffles.
MulchControl™ gate will not close	Clogging of mower deck/baffles.
MulchControl™ gate not holding setting (open or closed)	Check for handle seated firmly onto pin taper and properly aligned.
MulchControl™ causing blowout in closed position	Check that gate stop is installed (after removal of cut and throw 42–inch Accel Deep™ only). Ensure that system is in closed position.
MulchControl™ Material Dispersion Not Satisfactory	Clean debris buildup from underside of deck. Check blades for sharpness and damage. Ensure that correct blades are installed (MulchControl™ is designed to use mulch blades, not standard blades). Change blades. Check discharge chute for damage. Check procedures on Adjusting Mower. Level Side-to-Side and Front-to-Rear. Adjust system for proper door position. Mowing too fast for grass conditions.

MulchControl is a trademark of Deere & Company Accel Deep is a trademark of Deere & Company

gh8xt3t,1668075813877-19-23MAR23

PTO Switch

IF	Cause	Check
PTO Switch not Running When ON	Software disables the ability to activate the PTO due to a spindle motor fault or other unsafe operating conditions.	Cycle PTO or turn machine off and on.
If low battery bars flash	Low battery.	Charge machine.

gh8xt3t,1669996100438-19-19JAN23

MulchControl is a trademark of Deere & Company

Fault Table (E-Codes)

NOTE: The table contains only faults that trigger e-codes.

Error code with a prefix to designate the fault subsystem type.

- E1XXX– E1 indicates 'Battery' and XXX is the unique Diagnostic trouble code (DTC) error code.
- E2XXX E2 indicates 'Vehicle Controller' and XXX is the unique Diagnostic trouble code (DTC) code.
- E3XXX E3 indicates 'Charger' and XXX is the unique Diagnostic trouble code (DTC) code.
- E4XXX E4 indicates 'Inverter' and XXX is the unique Diagnostic trouble code (DTC) code.
 - E44XX Left traction Motor
 - E45XX Right traction Motor
 - E41XX Left Spindle Motor
 - E42XX Center Spindle Motor
 - E43XX Right Spindle Motor

e-Code Number	SPN	FMI	Fault Name	Console Status	Audible Alarm	Alert Status	Operator Action
E2003	518406	3	Right Traction Stick Circuit Voltage Low or Shorted to Ground	No	Yes	Stop	Inspect right stick sensor interface connector and circuit wiring.
E2005	518406	4	Right Traction Stick Circuit Voltage High or Shorted to Power Source	No	Yes	Stop	Inspect right stick sensor interface connector and circuit wiring.
E2004	518406	8	Right Traction Stick Sensor Circuit Frequency Abnormal Fault	No	Yes	Stop	Inspect right stick sensor interface connector and circuit wiring.
E2006	518406	31	Right Traction Stick Sensor Channel A-B Mismatch Fault	No	Yes	Stop	Inspect right stick sensor interface connector and circuit wiring.
E2007	518407	3	Left Traction Stick Sensor Circuit Voltage High or Shorted to Power Source	No	Yes	Stop	Inspect left stick sensor interface connector and circuit wiring.
E2008	518407	4	Left Traction Stick Sensor Circuit Voltage Low or Shorted to Ground	No	Yes	Stop	Inspect left stick sensor interface connector and circuit wiring.
E2009	518407	8	Left Traction Stick Sensor Circuit Frequency Abnormal Fault	No	Yes	Stop	Inspect left stick sensor interface connector and circuit wiring.
E2010	518407	31	Left Traction Stick Sensor Channel A-B Mismatch Fault	No	Yes	Stop	Inspect left stick sensor interface connector and circuit wiring.
E2014	520874	31	Power Button Lamp Open Circuit Fault	No	Yes	Stop	Inspect power button lamp pin connection and circuit wiring.
E2015	520870	31	Vehicle CAN Communication Fault	No	Yes	Stop	Restart vehicle. Verify CAN bus voltage and resistance. Check interface connector to the other controllers on the vehicle.
E2016	520781	31	Vehicle CAN Bus off Fault	No	Yes	Stop	Restart vehicle. If problem persists, verify CAN bus voltage and resistance.
E2017	520782	31	Vehicle Software EOL Mismatch Fault	No	Yes	Stop	Restart vehicle. If problem persists, reprogram controller.
E2019	524265	31	Vehicle Software E Non-Critical Data Checksum Fault	No	Yes	Stop	Restart vehicle. If problem persists, reprogram controller.
E2024	518703	5	Inverter Software Invalid Fault	PBS flash	Yes	Stop	Restart vehicle. If problem persists, reprogram controller.
E2021	518702	5	Vehicle Software Hours Data Checksum Fault	No	Yes	Stop	Vehicle hours cannot be recovered. Document that last known vehicle hours for future reference.
E2025	518408	3	DC Bus Voltage Critically High	PBS flash	Yes	Stop	Inspect DC-DC converter inference connector and circuit wiring.
E2026	518408	4	DC Bus Voltage High	PBS flash	Yes	Stop	Inspect DC-DC converter inference connector and circuit wiring.
E2029	639	14	Power Button Voltage Low	PBS flash	Yes	Stop	Inspect power button interface connector and circuit wiring.
E1207	5923	1	Battery Cell Low Voltage Failure	Battery Attention solid	Yes	Stop	Replace battery.

Storage

E1247	5924	0	Battery Cell Voltage Differential Critically High Fault	Battery Attention solid	Yes	Stop	Replace battery.
E1248	158	0	Battery 12V Wake-Up Voltage High or Shorted to Battery	Battery Attention solid	Yes	Stop	Inspect vehicle harness battery interface connection and circuit wiring.
E1253	8091	4	Battery Power Circuit Fault	Battery Attention solid	Yes	Stop	Inspect power harness battery interface connection and circuit wiring.
E1251	8121	16	Battery Cell State of Health End of Life Fault	Battery Attention solid	Yes	Stop	Replace battery.
E1252	8121	1	Battery Pack State of Health End of Life Fault	Battery Attention solid	Yes	Stop	Replace battery.
E4(4/5)15	517061	2	Inverter Multiple Phases Open Fault	No	Yes	Stop	Restart vehicle. If problem persists, inspect motor 3 phase circuit wiring.
E4(4/5)17	517061	3	Inverter Phase Shorted to Power Source	No	Yes	Stop	Inspect motor 3 phase circuit wiring.
E4(4/5)18	517061	4	Inverter Phase Shorted to Ground	No	Yes	Stop	Inspect motor 3 phase circuit wiring.
E4(4/5)19	522919	7	Inverter Position Sensor Fault	No	Yes	Stop	Inspect interface connection between inverter and motor wiring. If problem persists, replace motor.
E4(4/5)16	517061	5	Inverter Phase Open Circuit Fault	No	Yes	Stop	Inspect motor 3 phase circuit wiring.
E4(4/5)20	521601	31	Inverter Software Invalid Fault	No	Yes	Stop	Verify vehicle software versions. If problem persists, reprogram controller.
E4(1/2/3)15	517061	2	Inverter Multiple Phases Open Fault	No	Yes	Amber	Restart vehicle. If problem persists, inspect motor 3 phase circuit wiring.
E4(1/2/3)17	517061	3	Inverter Phase Shorted to Power Source	No	Yes	Amber	Inspect motor 3 phase circuit wiring.
E4(1/2/3)18	517061	4	Inverter Phase Shorted to Ground	No	Yes	Amber	Inspect motor 3 phase circuit wiring.
E4(1/2/3)19	522919	7	Inverter Position Sensor Fault	No	Yes	Amber	Inspect interface connection between inverter and motor wiring. If problem persists, replace motor.
E4(1/2/3)16	517061	5	Inverter Phase Open Circuit Fault	No	Yes	Amber	Inspect motor 3 phase circuit wiring.
E4(1/2/3)20	521601	31	Inverter Software Invalid Fault	No	Yes	Stop	Verify vehicle software versions. If problem persists, reprogram controller.

gh8xt3t,1669981363815-19-12APR23

Storage

Preparing Machine for Storage

- 1. Repair any worn or damaged parts. Replace parts if necessary. Tighten loose hardware.
- 2. Repair scratched or chipped metal surfaces to prevent rust.
- 3. Remove grass and debris from machine.
- 4. Clean under the rotary deck and remove grass and debris from inside chute and bagger, if applicable.
- 5. Wash the machine with low pressure water and apply wax to metal and plastic surfaces.
- 6. Check tire pressure.

7. For longer-term storage, a battery in 30–40% state of charge is preferable to one at 100%.

gh8xt3t,1668685507065-19-22MAR23

Optimize Battery

- 1. Avoid storing mower in direct sunlight.
- 2. Lower state of charge to 30-40%, store at temperatures ranging from -20°C to 45°C (-4°F to 113°F).
- 3. Unplug charging chord when storing for long periods of time.
- 4. Store in a dry location.

gh8xt3t,1676546064910-19-24MAR23

Removing Machine from Storage

- 1. Check tire pressure.
- 2. Be sure all shields and guards or deflectors are in place.
- 3. Connect charging cord and allow machine to fully charge.

gh8xt3t,1669980388741-19-23MAR23

Specifications

Full Travel Speed

Forward	0-11.3 km/h (0-7.0 mph)
Reverse	0-5.6 km/h (0-3.5 mph)

gh8xt3t,1676638082190-19-02APR23

Electrical System

Battery Capacity	Max-3.56 kWh, 3.20 kWh nominal
Battery Voltage	. 58 V Maximum, 57.1 V Nominal
Battery Type	E58 Lithium-Ion
Energy	3.56 kWh

gh8xt3t,1669980074835-19-12APR23

E58 Lithium-Ion Battery Serial Number Plate Information



e58 Battery Serial Number Plate

IMPORTANT: Avoid damage to serial number plate. Preserve the serial number plate information for service and warranty purposes. Apply a protective mask to the serial number plate before painting or cleaning.

The e58 battery serial number plate is located on the side of the battery case near the battery terminals. The serial number contains the factory code, product identifier, model identifier, and the production

sequence number. Below the serial number is the manufacture date of the e58 battery.

Scanning the QR code is an additional way of obtaining the serial number, product line, and manufacture information.

NOTE: The e58 battery meets or exceeds the IP66 standard and can be used in a wide range of industry uses and applications.



Serial Number Plate Digit Identification

RG37070-UN-26DEC22

A—Factory Code B—Product Identifier -Model Identifier c -Production Sequence Number **n**--Year of Manufacture E -Month of Manufacture -Day of Manufacture -Rechargeable Li-lon Battery Indication G-H –Maximum Voltage J-Nominal Voltage K—Amp Hours -Nominal kWh м--Maximum kWh O—Part Number

Component serial number plate code information:

- Characters (A) : Factory code
- Characters (B): Product identifier
- Characters (C): Model identifier revision of the battery pack
- Characters (D): Production sequence number
- Year of Manufacture (E): Identifies the year of manufacture
- Month of Manufacture (F): Identifies the month of manufacture
- Day of Manufacturer (G): Identifies the day of manufacture
- Rechargeable indication and chemistry (H)
- Maximum operating voltage (I)
- Nominal operating voltage (J)
- Amperage hours rated capacity (K)
- Nominal kilowatt-hours (L)
- Maximum kilowatt-hours (M)
- Part number (O)

Record this information and have it available when contacting John Deere dealers.

DX,BATTERY,LITHIUM,ID-19-28FEB23

Specifications

Battery Specifications

ITEM	UNIT OF MEASURE	VALUE
Physical Dimensions		
Length	mm (in)	447 (17.6)
Width	mm (in)	338 (13.3)
Height	mm (in)	91 (3.6)
Weight	kg (lb)	22.7 (50.0)
Performance Data		
Nominal/Rated Capacity tested at 3 kW discharge	Amperage hour	67.2 Ah
Nominal/Rated Voltage	Voltage	51.7 V
Nominal/Rated Energy tested at 3 kW discharge	kWh	3.2 kWh
Maximum Operating Voltage (measured at max charge state)	Voltage	58.1 V
Minimum Operating Voltage (measured at zero charge state)	Voltage	39.9 V
Maximum continuous Discharge Current	Amperage	67.2 A
Maximum Calculated Energy (total cell addition)	kWh	3.56 kWh
Maximum Discharge Current at 5 second pulse interval	Amperage	217 A
Maximum Continuous Charge Current	Amperage	22.4 A
Maximum Regen Current at 5 second intervals	Amperage	217 A
Operational Characteristics		
Maximum Battery Packs in Parallel	Quantity	6
Discharge Operating Temperature Range	Celsius (Fahrenheit)	-20—60° (-4—140°)
Charge Operating Temperature Range	Celsius (Fahrenheit)	0—50° (32—122°)
Storage Temperature Range	Celsius (Fahrenheit)	-20—45° (-4—113°)
Operating Humidity	Percentage	Less than or equal to 98 %
Storage Humidity	Percentage	Less than or equal to 70 %
Ingress (moisture) Protection Level	Ingress Protection Code	IP66
IEC 62620 Pack designation		INR/22/71/[14S14P]M/-20+40/80
IEC 62620 Cell designation		INR/22/71/M/-20+40/80

ce1qupp,1665501548870-19-31MAR23

e58 Lithium-Ion Batteries - No Serviceable Parts

WARNING - Risk of Fire - No User Serviceable Parts

AVERTISSEMENT — Risque d'incendie — Aucune des pièces ne peut être réparée l'utilisateur



DX561226B—UN—17FEB23 DX,BATTERY,LITHIUM,SERVICE,NO-19-22MAR23

e58 Lithium-Ion Battery Handling and Storage

CAUTION: Avoid personal injury. Improper handling and storage of lithium-ion batteries can lead to property damage and or personal injury.

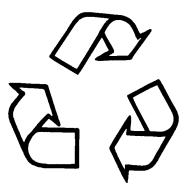
Follow the application instructions pertaining to the vehicle or equipment being serviced.

- Batteries should be moved to and from a location only in the appropriate packaging.
- Transport batteries according to all applicable regulations.
- Do not store or leave a battery near a heat source.
- Storage temperature range is -20°C to 45°C (-4°F to 113°F).
- Use only approved battery charging equipment.

- Stop all use of a battery that is abnormally hot, shows discoloration, deformation, or is emitting an odor.
- Avoid placing the battery on unstable or improperly supported surfaces that could lead to damage.
- Do not use any sharp objects while servicing the machine that could pierce the battery case.
- Avoid impacting the battery with heavy objects such as a hammer or heavy weights.
- Do not use damaged batteries.
- Avoid immersion in liquids.
- Do not attempt to open or disassemble the battery.
- Do not dispose of batteries in fire or water.
- Batteries should be returned for recycling according to applicable regulations.

DX,BATTERY,LITHIUM,HANDLING,STORAGE-19-28FEB23

Decommissioning — Proper Recycling and Disposal of Fluids and Components



TS1133-UN-15APR13

Safety and environmental stewardship measures must be taken into account when decommissioning a machine and/or component. These measures include the following:

- Use appropriate tools and personal protective equipment such as clothing, gloves, face shields or glasses, during the removal or handling of objects and materials.
- Follow instructions for specialized components.
- Release stored energy by lowering suspended machine elements, relaxing springs, disconnecting the battery or other electrical power, and releasing pressure in hydraulic components, accumulators, and other similar systems.
- Minimize exposure to components which may have residue from agricultural chemicals, such as fertilizers and pesticides. Handle and dispose of these components appropriately.
- Carefully drain engines, fuel tanks, radiators, hydraulic cylinders, reservoirs, and lines before recycling components. Use leak-proof containers when draining fluids. Do not use food or beverage containers.
- Do not pour waste fluids onto the ground, down a drain, or into any water source.
- Observe all national, state, and local laws, regulations, or ordinances governing the handling or disposal of waste fluids (example: oil, fuel, coolant, brake fluid); filters; batteries; and, other substances or parts. Burning of flammable fluids or components in other than specially designed incinerators may be prohibited by law and could result in exposure to harmful fumes or ashes.
- Service and dispose of air conditioning systems appropriately. Government regulations may require a certified service center to recover and recycle air conditioning refrigerants which could damage the atmosphere if allowed to escape.
- Evaluate recycling options for tires, metal, plastic, glass, rubber, and electronic components which may be recyclable, in part or completely.
- Contact your local environmental or recycling center, or your John

Deere dealer for information on the proper way to recycle or dispose of waste.

DX,DRAIN-19-01JUN15

Tires

Front
Rear (EZ370R) 18x8.5-8 (Turf)
Inflation - Front 103 kPa (15 psi)
Inflation - Rear

gh8xt3t,1676470727242-19-16FEB23

Dimensions

Z370R 42A

gh8xt3t,1672830682103-19-23MAR23

Mower Decks

42A Mower

Cutting Width	.1.7 mm (43 in)
Blades—Rotary	2
Blade Bolt Torque	68 N·m (50 lb∙ft)
Cutting Height (Approximately) 32-114 n	nm (1.25–4.5 in)

vs70618,1664968664542-19-12JAN23

Charging Battery

Charging Your Battery Safely

NOTE: Machine will not charge below 0°C-32°F.

- 1. Inspect charging cord for damage before each use. Do not use if cord is damaged.
- Only plug charging cord into a grounded outlet. Use a ground fault circuit interrupter (GFCI) or residual current device (RCD) protected supply. Use of a GFCI reduces the risk of electric shock. Do not modify plug or use adapter plugs.
- Handle charging cord with care. Keep cord away from heat, oil, and sharp edges. Damaged or entangled cords increase the risk of electric shock.
- When charging outdoors, use charging cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- 5. Minimum gage for charging cord.

Charger Model	25ft	50ft	100ft	150ft
RQ700	16	16	12	10

Warranty

RQ1200	16	14	10	8

gh8xt3t,1672836787144-19-12APR23

Warranty

Product Warranty

John Deere offers a standard warranty on new John Deere products. For a copy of the product warranty statement or for details on the warranty terms and conditions for products purchased in the United States and Canada, please contact your local John Deere Dealer or utilize the following resources:

United States

Website:

http://www.deere.com/en_US/services_and_support/warranty/ warranty.page

Toll Free: 1-800-537-8233

Dealer Locator:

http://dealerlocator.deere.com/servlet/country=US

French

Website (French):

http://fr.deere.ca/en_CA/services_and_support/ service_plans_warranties/service_plans_warranties.page

Toll Free: 1-800-537-8233

Dealer Locator:

http://dealerlocator.deere.com/servlet/country=CA

Emission-related warranties are included in this Operator's Manual, and applicable if required by law or regulation.

For products purchased in a country other than the United States or Canada, please contact your local John Deere dealer for assistance.

gh8xt3t,1679391956231-19-21MAR23

Tire Warranty

John Deere warranty applies for tires available through the John Deere parts system. For tires not available through the John Deere parts system, the tire manufacturer's warranty applicable to your machine may not apply outside the U.S. (See your John Deere dealer for specific information.)

MX00654,0000314-19-21AUG14

Limited Battery Warranty For Factory Installed Batteries

NOTE: Applicable in North America only. For complete machine warranty, reference a copy of the John Deere warranty statement. Contact your authorized John Deere dealer to obtain a copy.

TO SECURE WARRANTY SERVICE

To secure warranty service, the purchaser must (1) Report the product defect to an authorized dealer and request repair within the applicable warranty term, (2) Present evidence of the warranty start date, and (3) Make the Equipment available to an authorized dealer or service center within a reasonable period of time.

BATTERY REPLACEMENT PERIOD

Any new battery which is tested and confirmed to be unserviceable (not merely discharged) by an authorized dealer due to defects in material or workmanship within the WARRANTY TERM will be replaced free of charge. Installation costs will be covered by warranty if the unserviceable battery was installed by a John Deere factory or dealer and the replacement battery is installed by a John Deere dealer.

THIS WARRANTY DOES NOT COVER

A. Breakage of the container, cover, or terminals.

B. Depreciation or damage caused by lack of reasonable and necessary maintenance or by improper maintenance.

C. Transportation, mailing, or service call charges for warranty service.

D. Discharged batteries.

LIMITATION OF IMPLIED WARRANTIES AND PURCHASER'S REMEDIES

To the extent permitted by law, neither John Deere nor any company affiliated with it makes any warranties, representations, or promises as to the quality, performance or freedom from defect of the products covered by this warranty. IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, TO THE EXTENT APPLICABLE, SHALL BE LIMITED IN DURATION TO THE APPLICABLE ADJUSTMENT PERIOD SET FORTH HERE. THE PURCHASER'S ONLY REMEDIES IN CONNECTION WITH THE BREACH OR PERFORMANCE OF ANY WARRANTY ON JOHN DEERE BATTERIES ARE THOSE SET FORTH HERE. IN NO EVENT WILL THE DEALER, JOHN DEERE OR ANY COMPANY AFFILIATED WITH JOHN DEERE BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. (Note: Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages. So these limitations and exclusions may not apply to you.) This warranty gives you specific legal rights, and you may also have some rights which vary from state to state.

NO DEALER WARRANTY

The selling authorized dealer makes no warranty of its own and the dealer has no authority to make any representation or promise on behalf of John Deere, or to modify the terms or limitations of this warranty in any way.

WARRANTY TERM

Battery Warranty is 5 years or 200 hours, whichever comes first.

gh8xt3t,1676635877034-19-01MAR23

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

Contact John Deere

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, contact John Deere for assistance.

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 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 (United States and Canada) and our advisor will work with your dealer to investigate your concern. If you are outside the United States and Canada, visit the following website:

https://www.deere.com/en/global-country-selector/

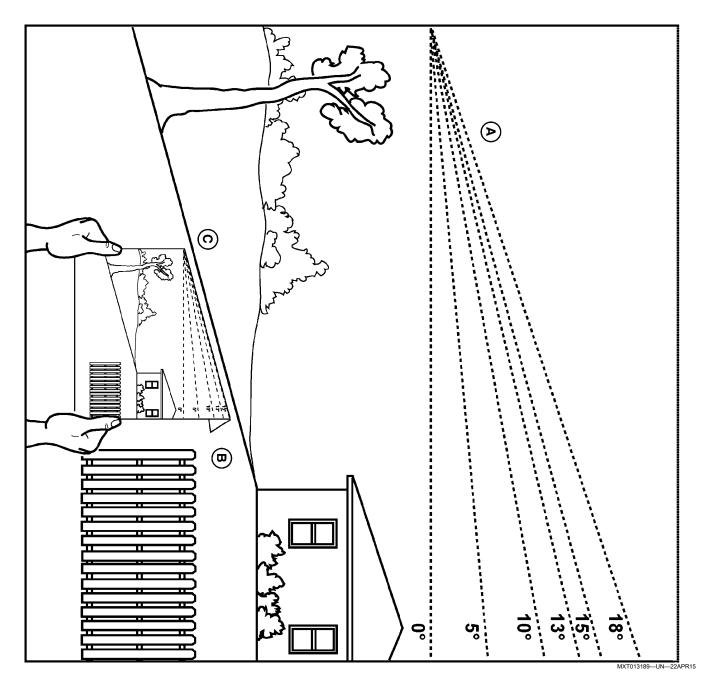
Select your country and then click on the Contact Us link at the bottom of the page.

SP66632,00043A7-19-17MAY22

Slope Gauge

Slope Gauge Template

Hold up or copy this page and follow the directions below to use the Slope Gauge Template.



Use this slope gauge to determine if a slope is too steep for safe operation. Do not operate your machine on a slope greater than what is recommended in your operator's manual. See Operating on Slopes in the Safety section.

- Fold along the appropriate line (A) to match the recommended slope.
- Align this edge (B) with a vertical surface, a tree, building, fence pole, etc.
- Compare slope (C) with folded edge.

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