Form No. 3443-802 Rev B

TORO®

Count on it.

Operator's Manual

eS3200DC 72V TORO® 81cm

Model No. 75501—Serial No. 321000001 and Up

Register at www.Toro.com.
Original Instructions (EN)

CE UK CA

3443-802

Introduction

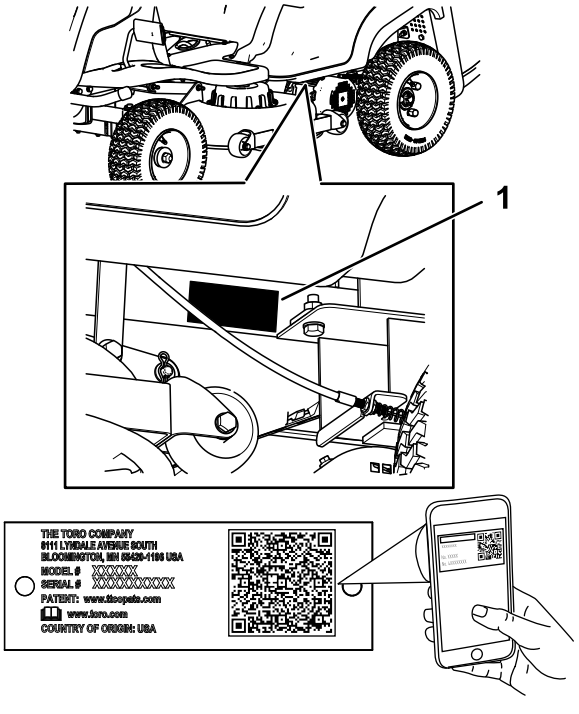
This rotary-blade, riding lawn mower is intended to be used by homeowners in residential applications. It is designed primarily for cutting grass on well-maintained lawns. Using this product for purposes other than its intended use could prove dangerous to you and bystanders.

Read this information carefully to learn how to operate and maintain your product properly and to avoid injury and product damage. You are responsible for operating the product properly and safely.

Visit www.Toro.com for product safety and operation training materials, accessory information, help finding a dealer, or to register your product.

Whenever you need service, genuine Toro parts, or additional information, contact an Authorized Service Dealer or Toro Customer Service and have the model and serial numbers of your product ready. Figure 1 identifies the location of the model and serial numbers on the product. Write the numbers in the space provided.

Important: **With your mobile device, you can scan the QR code on the serial number decal (if equipped) to access warranty, parts, and other product information.**



g378763

Figure 1

1. Model and serial number plate

Write the product model and serial numbers in the space below:

Model No. _____

Serial No. _____

This manual uses 2 words to highlight information. **Important** calls attention to special mechanical information and **Note** emphasizes general information worthy of special attention.

The safety-alert symbol (Figure 2) appears both in this manual and on the machine to identify important safety messages that you must follow to avoid accidents. This symbol will appear with the word **Danger**, **Warning**, or **Caution**.

- **Danger** indicates an imminently hazardous situation which, if not avoided, **will** result in death or serious injury.
- **Warning** indicates a potentially hazardous situation which, if not avoided, **could** result in death or serious injury.
- **Caution** indicates a potentially hazardous situation which, if not avoided, **may** result in minor or moderate injury.



sa-black

Figure 2

1. Safety-alert symbol

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Safety

General Power Tool Safety Warnings

⚠ WARNING

Read all safety warnings, instructions, illustrations and specifications provided with this power tool.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

The term "power tool" in all of the warnings listed below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1. **Work area safety**
   - A. **Keep work area clean and well lit.** *Cluttered or dark areas invite accidents.*
   - B. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gasses, or dust.** *Power tools create sparks which may ignite the dust or fumes.*
   - C. **Keep children and bystanders away while operating a power tool.** *Distractions can cause you to lose control.*
2. **Electrical safety**
   - A. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** *Unmodified plugs and matching outlets will reduce risk of electric shock.*
   - B. **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges, and refrigerators.** *There is an increased risk of electric shock if your body is earthed or grounded.*
   - C. **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*
   - D. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges, or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*
   - E. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** *Use of a cord suitable for*

outdoor use reduces the risk of electric shock.

F. **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** *Use of an RCD reduces the risk of electric shock.*

3. **Personal safety**

A. **Stay alert, watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol, or medication.** *A moment of inattention while operating power tools may result in serious personal injury.*

B. **Use personal protective equipment.** *Always wear eye protection. Protective equipment such as a dust mask, non-skid safety shoes, or hearing protection used for appropriate conditions will reduce personal injuries.*

C. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** *Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.*

D. **Remove any adjusting key or wrench before turning the power tool on.** *A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*

E. **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*

F. **Dress properly. Do not wear loose clothing or jewelry. Keep your hair and clothing away from moving parts.** *Loose clothes, jewelry or long hair can be caught in moving parts.*

G. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of dust collection can reduce dust-related hazards.*

H. **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** *A careless action can cause severe injury within a fraction of a second.*

4. **Power tool use and care**

A. **Do not force the power tool. Use the correct power tool for your application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*

B. **Do not use the power tool if the switch does not turn it on and off.** *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*

C. **Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*

D. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*

E. **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the operation of the power tool. If damaged, have the power tool repaired before use.** *Many accidents are caused by poorly maintained power tools.*

F. **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*

G. **Use the power tool, accessories, and tool bits etc., in accordance with these instructions, taking into account the working conditions and the work to be performed.** *Use of the power tool for operations different from those intended could result in a hazardous situation.*

H. **Keep handles and grasping surfaces dry, clean and free from oil and grease.** *Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.*

5. **Battery tool use and care**

A. **Recharge only with the charger specified by a manufacturer.** *A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.*

B. **Use power tools only with specifically designated batteries.** *Use of any other batteries may create a risk of injury and fire.*

C. **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** *Shorting the battery terminals together may cause burns or a fire.*

D. **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water.** *If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.*

E. **Do not use a battery pack or tool that is damaged or modified.** *Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk or injury.*

F. **Do not expose a battery pack or tool to fire or excessive temperature.** *Exposure to fire temperature above 130°C may cause an explosion.*

G. **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** *Changing improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.*

6. **Service**

A. **Have your power tool serviced by a qualified repair person using only identical replacement parts.** *This will ensure that the safety of the power tool is maintained.*

B. **Never service damaged battery packs.** *Service of battery packs should be performed only by the manufacturer or authorized service providers.*

Lawn Mower Safety Warnings

A. Do not use the lawn mower in bad weather conditions, especially when there is a risk of lightning. This decreases the risk of being struck by lightning.

B. Thoroughly inspect the area for wildlife where you will use the lawn mower. Wildlife may be injured by the lawn mower during operation.

C. Thoroughly inspect the area where you will use the lawn mower and remove all stones, sticks, wires, bones, and other foreign objects. Thrown objects can cause personal injury.

D. Before using the lawn mower, always visually inspect to see that the blade and the blade assembly are not worn or damaged. Worn or damaged parts increase the risk of injury.

E. Keep guards in place. Guards must be in working order and be properly mounted. A guard that is loose, damaged, or is not functioning correctly may result in personal injury.

F. Keep all cooling air inlets clear of debris. Blocked air inlets and debris may result in overheating or risk of fire.

G. Do not operate the lawn mower on steep slopes. This reduces the risk of loss of control, slipping, and falling, which may result in personal injury.

H. While operating the lawn mower, always wear long trousers. Exposed skin increases the likelihood of injury from thrown objects.

I. Always work up or down the face of slopes, never across, and exercise extreme caution when changing direction. This reduces the risk of loss of control, slipping and falling which may result in personal injury.

J. Do not touch blades and other hazardous moving parts while they are still in motion. This reduces the risk of injury from moving parts.

K. Before clearing jammed material or cleaning the lawn mower, turn off all power switches and remove the key. Unexpected operation of the lawn mower may result in serious personal injury.

L. If the machine strikes an object or starts to vibrate, immediately turn off the lawn mower, remove the key (if equipped), and wait for all moving parts to stop before examining the machine for damage. Make all necessary repairs before resuming operation.

M. Before storing the lawn mower, clean grass and debris from the cutting unit, drives, grass catcher, and motor to help prevent fires.

N. To ensure optimum performance, use only genuine Toro replacement parts and accessories. Replacement parts and accessories made by other manufacturers could be dangerous, and such use could void the product warranty.

O. Replace worn or damaged blades and bolts in sets to preserve balance.

P. On multi-bladed machines, take care as rotating one blade can cause other blades to rotate.

Q. Do not put your hands or feet near moving components of the machine.

R. Shut off the lawn mower, remove the key, and wait for all moving parts to stop before you leave the operator's position. Allow the machine to cool before adjusting, servicing, cleaning, or storing it.

S. Avoid mowing on wet grass or in the rain. Doing so may increase the risk of electric shock.

Additional Toro Safety

General Safety

This product is capable of amputating hands and feet and of throwing objects. Always follow all safety instructions to avoid serious personal injury.

- Do not allow children or untrained people to operate or service the machine. Allow only people who are responsible, trained, familiar with the instructions, and physically capable to operate or service the machine. Local regulations may restrict the age of the operator.
- Do not operate the machine near drop-offs, ditches, embankments, water, or other hazards, or on slopes greater than 12°.

Before Operation Safety

- Become familiar with the safe operation of the equipment, operator controls, and safety signs.
- Check that operator-presence controls, safety switches, and guards are attached and working properly. Do not operate the machine unless they are functioning properly.
- Before mowing, inspect the machine to ensure that the cutting assemblies are working properly.
- Evaluate the terrain to determine the appropriate equipment and any attachments or accessories required to operate the machine properly and safely.
- Do not carry passengers on the machine.

During Operation Safety

- The owner/operator can prevent and is responsible for accidents that may cause personal injury or property damage.
- Keep your hands and feet away from the cutting units. Keep clear of the discharge opening.
- Do not mow with the discharge deflector raised, removed, or altered unless there is a grass-collection system or mulch kit in place and working properly.
- Always look down and behind you before moving the machine in reverse.
- Use extreme care when approaching blind corners, shrubs, trees, or other objects that may block your view.
- Stop the blades whenever you are not mowing.
- Slow down and use caution when making turns and crossing roads and sidewalks with the machine. Always yield the right-of-way.
- Before you leave the operating position, do the following:
  - Park the machine on a level surface.
  - Disengage the power takeoff.
  - Engage the parking brake.
  - Shut off the machine and remove the key.
  - Wait for all moving parts to stop.
- Never leave a running machine unattended.
- Be aware of the mower discharge path and direct the discharge away from others. Avoid discharging material against a wall or obstruction because the material may ricochet back toward you.
- Stop the blades, slow down the machine, and use caution when crossing surfaces other than grass or when transporting the machine to and from the operating area.
- Children are often attracted to the machine and the mowing activity. Never assume that children will remain where you last saw them.
- Keep children out of the operating area and under the watchful care of a responsible adult other than the operator.
- Be alert and shut off the machine if children enter the operating area.
- Before backing up or turning the machine, look down and all around for small children.
- Do not carry children on the machine, even when the blades are not moving. Children could fall off and be seriously injured or prevent you from safely operating the machine. Children who have been given rides in the past could appear in the operating area without warning and be run over or backed over by the machine.
- Use extra care with attachments. They can change the stability of the machine.
- Do not attempt to stabilize the machine by putting your foot on the ground.

Slope Safety

- Slopes are a major factor related to loss of control and rollover accidents, which can result in severe

injury or death. The operator is responsible for safe slope operation. Operating the machine on any slope requires extra caution. Before using the machine on a slope, do the following:

  – Review and understand the slope instructions in the manual and on the machine.

  – Use an angle indicator to determine the approximate slope angle of the area.

  – Never operate the lawn mower on slopes greater than 12°.

  – Evaluate the site conditions of the day to determine if the slope is safe for machine operation. Use common sense and good judgment when performing this evaluation. Changes in the terrain, such as moisture, can quickly affect the operation of the machine on a slope.

- Identify hazards at the base of the slope. Do not operate the machine near drop-offs, ditches, embankments, water, or other hazards. The machine could suddenly roll over if a wheel goes over the edge or the edge collapses. Keep a safe distance (twice the width of the machine) between the machine and any hazard. Use a walk-behind machine or a hand trimmer to mow the grass in these areas.

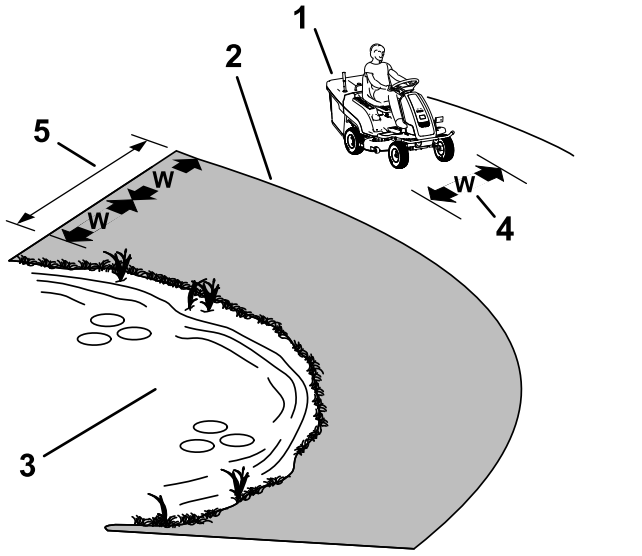


Figure 3

1. Safe Zone—use the machine here on slopes less than 12° or flat areas.
2. Danger Zone—use a walk-behind mower and/or a hand trimmer on slopes greater than 12° and near drop-offs or water.
3. Water
4. W = Width of the machine
5. Keep a safe distance (twice the width of the machine) between the machine and any hazard.

- Drive up and down slopes, not across. Exercise extreme caution when changing direction on slopes.
- Avoid starting, stopping, or turning the machine on slopes. Avoid making sudden changes in speed or direction; turn slowly and gradually.
- If the machine stops going uphill, stop the blades and back down slowly.
- Do not operate a machine under any conditions where traction, steering, or stability is in question. Be aware that operating the machine on wet grass, across slopes, or downhill may cause the machine to lose traction. Loss of traction to the drive wheels may result in sliding and a loss of braking and steering. The machine can slide even if the drive wheels are stopped.
- Remove or mark obstacles such as ditches, holes, ruts, bumps, rocks, or other hidden hazards. Tall grass can hide obstacles. Uneven terrain could overturn the machine.
- If possible, keep the deck lowered to the ground while operating on slopes. Raising the deck while operating on slopes can cause the machine to become unstable.

After Operation Safety

Remove the key before storing or transporting the machine.

Battery and Charger Safety

General

- Improperly using or maintaining the battery charger could result in injury. To reduce this potential, comply with the all safety instructions.
- Use only the supplied charger for battery charging.
- Confirm the voltage that is available in your country before using the charger.
- For connection to a supply not in the US, use an attachment plug adapter of the proper configuration for the power outlet, if needed.
- Do not get the charger wet; keep it protected from rain and snow.
- A risk of fire, electric shock, or injury may result from using an accessory not recommended or sold by Toro.
- To reduce risk of a battery explosion, follow these instructions and the instructions for any equipment that you intend to use near the charger.
- Batteries could emit explosive gasses if they are significantly overcharged.

Training

- Never allow children or untrained people to operate or service the charger. Local regulations may restrict the age of the operator. The owner is responsible for training all operators and mechanics.
- Read, understand, and follow all instructions on the charger and in the manual before operating the charger. Be familiar with the proper use of the charger.

Preparation

- Keep bystanders and children away while charging.
- Wear appropriate clothing while charging, including eye protection; long pants; and substantial, slip-resistant footwear.
- Shut off the machine and wait until the machine has completely powered down before charging. Failure to do this may cause arcing.
- Ensure that the area is well ventilated while charging.
- Read and follow all precautions for charging.
- Use only a power cord approved by Toro.

Operation

- Do not charge a frozen battery.
- Do not abuse the cord. Do not carry the charger by the cord or yank on the power supply cord to disconnect the charger from the receptacle. Keep the cord from heat, oil, and sharp edges.
- Connect the charger directly to a grounding receptacle. Do not use the charger on an ungrounded outlet, even with an adaptor.
- Do not alter the provided power cord or plug.
- Avoid dropping a metal tool near or onto a battery; it might cause a spark or short-circuit an electrical part that could lead to an explosion.
- Remove metal items such as rings, bracelets, necklaces, and watches when working with a lithium-ion battery. A lithium-ion battery can produce enough current to cause a severe burn.
- Never operate the charger without good visibility or light.
- Use an appropriate extension cord.
- If the power supply cord is damaged while it is plugged in, disconnect the cord from the wall receptacle and contact an Authorized Service Dealer for a replacement.
- Unplug the charger from the electrical outlet when not in use, before moving it to another location, or prior to servicing it.

Maintenance and Storage

- Store the charger indoors in a dry, secure place that is out of the reach of unauthorized users.
- Do not disassemble the charger. Take the charger to an Authorized Service Dealer when service or repair is required.
- Unplug the power cord from the outlet before starting any maintenance or cleaning to reduce risk of electric shock.
- Maintain or replace safety and instruction labels as needed.
- Do not operate the charger with a damaged cord or plug. Replace a damaged cord or plug immediately.
- If the charger has received an impact, been dropped, or otherwise damaged, do not use it; take it to an Authorized Service Dealer.

Maintenance Safety

- If you leave the key in the switch, someone could accidently start the machine and seriously injure you or other bystanders. Remove the key from the switch before you perform any maintenance.
- Before you leave the operator's position, do the following:
  - Park the machine on a level surface.
  - Disengage the drives.
  - Engage the parking brake.
  - Shut off the machine and remove the key.
  - Allow machine components to cool before performing maintenance.
- Do not allow untrained personnel to service the machine.
- Carefully release pressure from components with stored energy.
- Check the parking brake operation frequently. Adjust and service it as required.
- Never tamper with safety devices. Check their proper operation regularly.
- Do not rely on hydraulic or mechanical jacks to support the machine; support the machine with jack stands whenever you raise the machine.
- Keep all parts in good working condition and all hardware tightened, especially the blade-attachment hardware. Replace all worn or damaged decals.
- Disconnect the battery before repairing the machine. Disconnect the negative terminal first and the positive last. Connect the positive terminal first and the negative last.

- Inspect the blades periodically for wear or damage.
- Use care when checking the blades. Wrap the blades or wear gloves, and use caution when servicing the blades. Only replace or sharpen the blades; never straighten or weld them.

Storage Safety

- Shut off the machine, remove the key, and wait for all moving parts to stop before you leave the operator's position. Allow the machine to cool before adjusting, servicing, cleaning, or storing it.
- Do not store the machine where there is an open flame, spark, or pilot light, such as on a water heater or on other appliances.

Save all warnings and instructions for future reference.

Slope Indicator

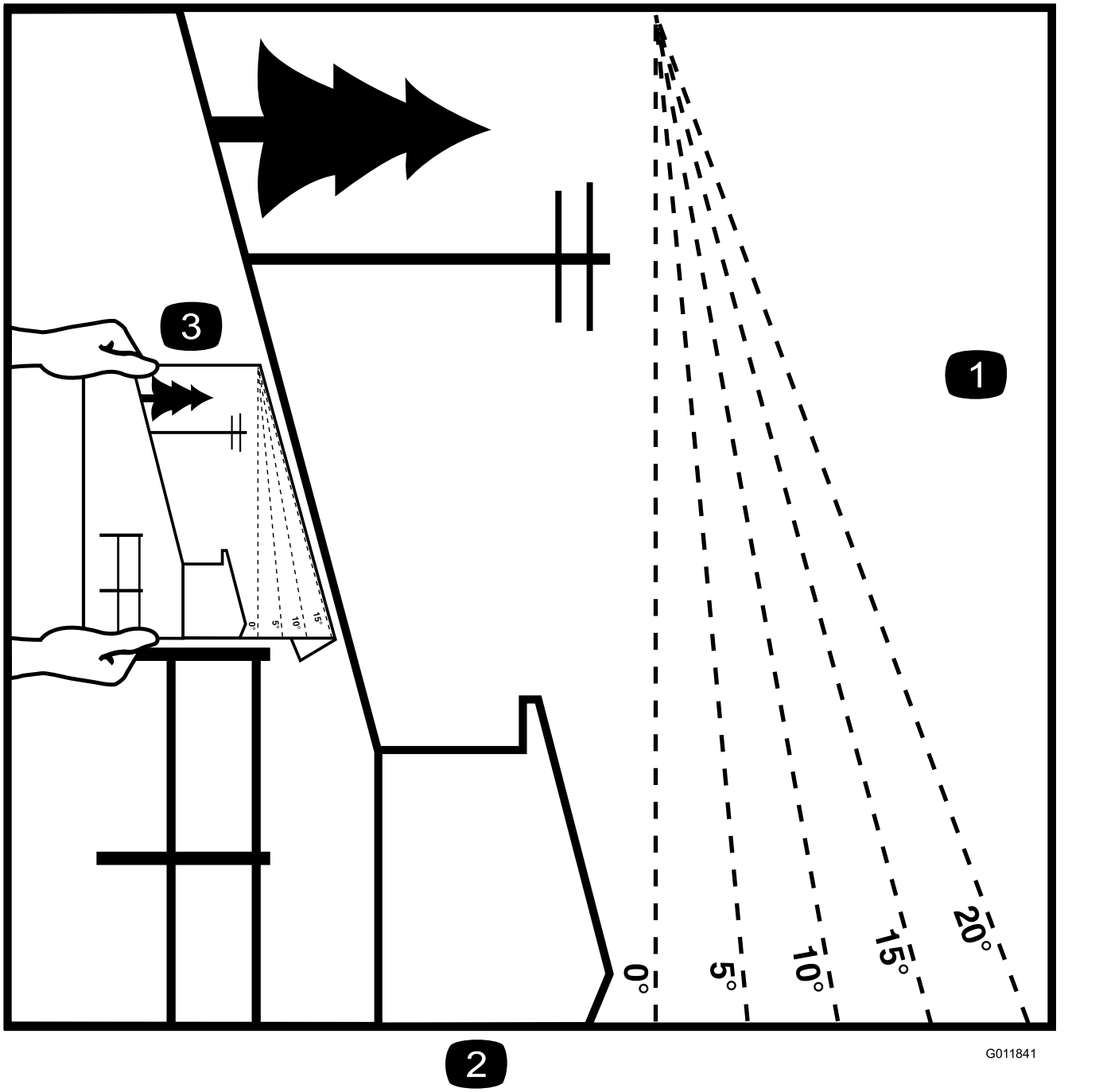


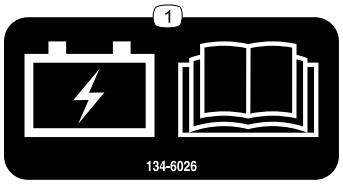
Figure 4

You may copy this page for personal use.

1. The maximum slope you can operate the machine on is **12 degrees**. Use the slope chart to determine the degree of slope of hills before operating. **Do not operate this machine on a slope greater than 12 degrees.** Fold along the appropriate line to match the recommended slope.
2. Align this edge with a vertical surface, a tree, building, fence pole, etc.
3. Example of how to compare slope with folded edge

Safety and Instructional Decals

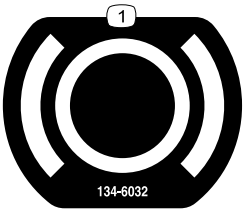
Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or missing.



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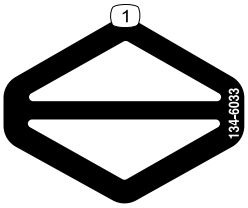
1. Battery charge; read the *Operator's Manual*.



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134-6032

1. Brake



decal134-6033

134-6033

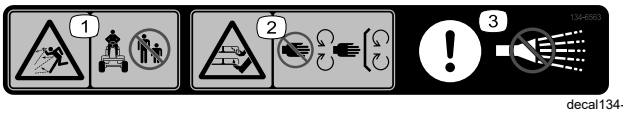
1. Propel



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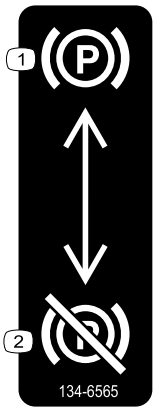
1. Battery powered



decal134-6563

134-6563

1. Thrown object hazard—keep bystanders away from the machine.
2. Cutting/dismemberment hazard of hand or foot, mower blade—keep away from moving parts; keep all guards and shields in place.
3. Attention—do not spray with water.



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1. Parking brake—engage
2. Parking brake—disengage

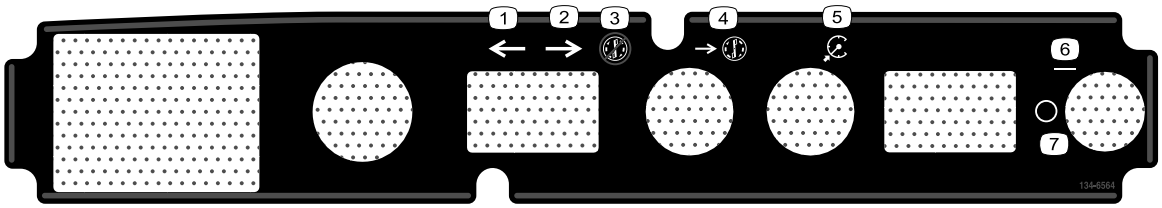


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Note: This machine complies with the industry standard stability test in the static lateral and longitudinal tests with the maximum recommended slope indicated on the decal. Review the instructions for operating the machine on slopes in the *Operator's Manual* as well as the conditions in which you would operate the machine to determine whether you can operate the machine in the conditions on that day and at that site. Changes in the terrain can result in a change in slope operation for the machine.

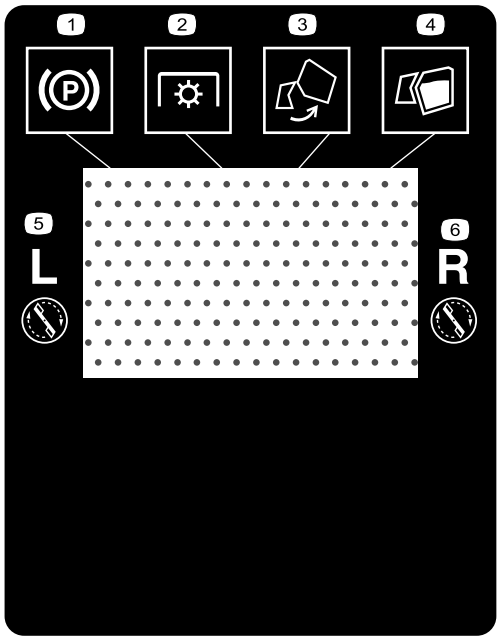
1. Warning—read the *Operator's Manual*.
2. Cutting/dismemberment hazard of hand or foot, mower blade—keep away from moving parts; keep all guards and shields in place.
3. Runover hazard—do not carry passengers; look behind you when mowing in reverse.
4. Thrown object hazard—pick up debris before operating; keep the deflector in place; keep bystanders away.
5. Tipping hazard—do not turn sharply while traveling fast; drive slowly when turning; only operate up slopes less than 12°; only operate across slopes less than 12°.
6. Tipping hazard—do not use dual ramps when loading onto a trailer; use 1 ramp wide enough for the machine; use a ramp with a slope less than 12°; back up the ramp when loading the machine and drive forward off the ramp when unloading.
7. Warning—wear hearing protection; wear eye protection.
8. Warning—shut off the machine and remove the key before performing maintenance.



decal134-6564

134-6564

1. Forward
2. Reverse
3. Reverse without mowing
4. Reverse mowing
5. Cruise control
6. On
7. Off



decal134-6568

134-6568

1. Parking brake
2. PTO
3. Catcher status
4. Clippings level
5. Left motor speed (r/min)
6. Right motor speed (r/min)

Setup

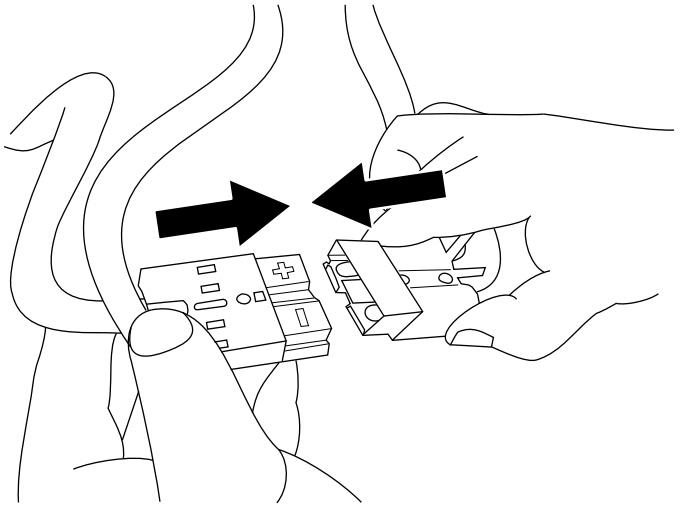
1

Connecting the Battery Cable

No Parts Required

Procedure

1. Remove the side panel as described in Accessing the Battery (page 28).
2. Connect the 2 cables.



g343324

Figure 5

3. Ensure that all wiring is secure.
4. Install the side panel and secure the screws.

2

Charging the Battery

No Parts Required

Procedure

Refer to Charging the Battery (page 29).

Product Overview

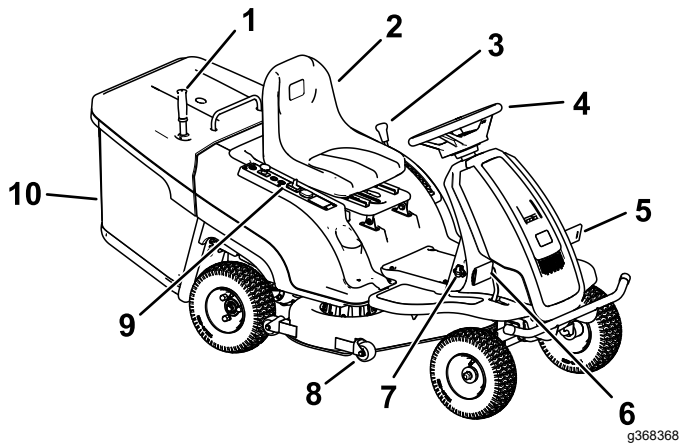


Figure 6

1. Discharge handle
2. Operator seat
3. Height-of-cut lever
4. Steering Wheel
5. Brake pedal
6. Traction pedal
7. Charger receptacle
8. Anti-scalp roller
9. Control panel
10. Grass catcher

Controls

Become familiar with all the controls before you start and operate the machine.

Control Panel

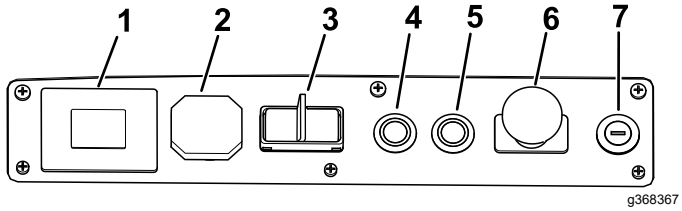


Figure 7

1. Information display
2. USB port
3. Drive-mode switch
4. Reverse-mowing operation button
5. Cruise-control operation button
6. Blade-control switch
7. Key switch

Key Switch

The key switch has 2 positions: ON and OFF. Use the key switch to start or shut off the machine.

Blade-Control Switch (Power Takeoff)

The blade-control switch, represented by a power-takeoff (PTO) symbol, engages and disengages power to the mower blades.

Brake Pedal

Use the brake pedal to stop or slow the machine.

Parking Brake

To engage the parking brake, fully press down the brake pedal, lift the locking lever, and remove your foot from the pedal.

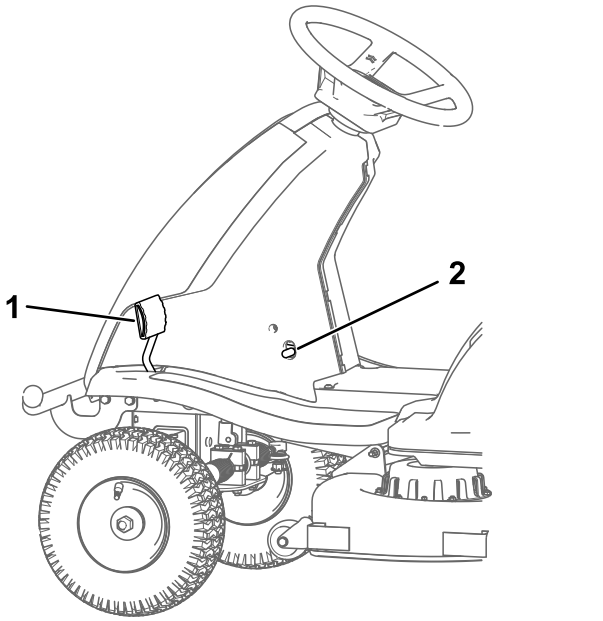


Figure 8

Fully press down the brake pedal to release the parking brake and pedal.

If the machine moves while the parking brake is engaged, the parking brake needs to be adjusted. Contact your Authorized Toro Dealer for details.

Traction-Control Pedal

Use the traction-control pedal to vary the ground speed of the machine. The farther you press the pedal, the faster the machine moves.

Drive-Mode Switch

The drive-mode switch has 3 positions: FORWARD, NEUTRAL, and REVERSE. The drive-mode switch must be in the FORWARD position before engaging the mower blades.

Information Display

Messages and machine status (i.e., motor speed, battery charge, operating hours) appear on the information display.

Note: The interlock indicators appear when each component meets the appropriate condition to start the machine.

Note: The display cycles between battery charge percentage and battery temperature.

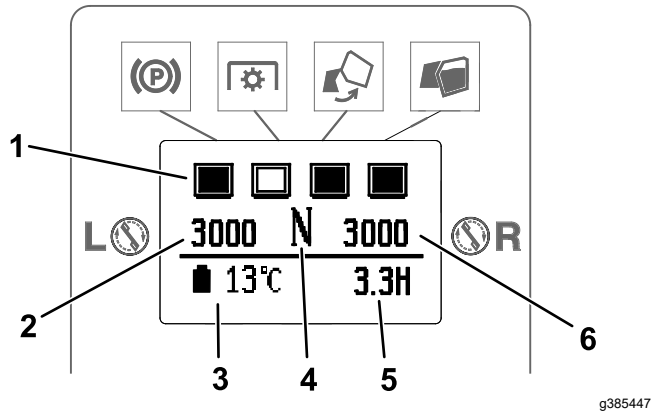


Figure 9

1. Interlock indicators
2. Left motor speed
3. Battery charge/temperature
4. Current drive mode
5. Working hours
6. Right motor speed

Component Status

Parking brake	■ The parking brake is disengaged.	□ The parking brake is engaged.
Blade-control switch	■ The blade-control switch is disengaged.	□ The blade-control switch is engaged.
Catcher status	■ The grass catcher is closed.	□ The grass catcher is open.
Clippings level	■ The grass catcher is empty.	□ The grass catcher is full.

Battery-Charge Indicator

The battery-charge indicator displays the remaining charge in the batteries. When the battery charge is low, the machine alerts you and the mower blades automatically disengage; charge the batteries when this occurs.

Reverse-Mowing Operation (RMO) Button

Use the reverse-mowing operation (RMO) button to operate the mower blades while driving the machine in reverse.

Engage the reverse-mowing mode in the following ways:

- Before engaging the blades
  - Press the reverse-mowing button, engage the mower blades, then move the drive-mode switch to the REVERSE position.
  - Engage the mower blades, press the reverse-mowing button, then move the drive-mode switch to the REVERSE position.
- While mowing in the forward direction
  - Press the reverse-mowing button, then move the drive-mode switch to the REVERSE position.
  - Move the drive-mode switch to the REVERSE position, disengage the mower blades, press the reverse-mowing button, then engage the mower blades.

Cruise-Control System (CCS) Button

Use the cruise-control system (CCS) button to maintain the traction speed without your foot on the pedal.

Press the traction-control pedal to the desired speed, hold the cruise-control button, then release your foot from the pedal.

Press the traction-control pedal or brake pedal to disengage the cruise control.

Height-of-Cut Lever

Use the height-of-cut lever to lower and raise the deck from the seated position. Moving the lever toward you raises the deck from the ground and moving the lever away from you lowers the deck toward the ground. Adjust the height-of-cut only while the machine is not moving.

Specifications

Note: Specifications and design are subject to change without notice.

Cutting width	81 cm (32 inches)
Width	85 cm (33.4 inches)
Length	200 cm (78.7 inches)
Height	104 cm (40.9 inches)
Weight	164 kg (362 lb)
Charging time with 2.5 A charger	10 hours
Charging time with optional 10 A charger	3 hours

Attachments/Accessories

A selection of Toro approved attachments and accessories is available for use with the machine to enhance and expand its capabilities. Contact your Authorized Service Dealer or authorized Toro distributor or go to www.Toro.com for a list of all approved attachments and accessories.

To ensure optimum performance and continued safety certification of the machine, use only genuine Toro replacement parts and accessories. Replacement parts and accessories made by other manufacturers could be dangerous, and such use could void the product warranty.

Operation

Note: Determine the left and right sides of the machine from the normal operating position.

Before Operation

Performing Daily Maintenance

Before starting the machine each day, perform the Each Use/Daily procedures listed in Performing Daily Maintenance (page 17).

Using the Safety-Interlock System

⚠ WARNING

If the safety-interlock switches are disconnected or damaged, the machine could operate unexpectedly, causing personal injury.

- **Do not tamper with the interlock switches.**
- **Check the operation of the interlock switches daily and replace any damaged switches before operating the machine.**

Understanding the Safety-Interlock System

The safety-interlock system is designed to prevent the machine from starting unless:

- The blade-control switch (PTO) is disengaged.
- The parking brake is disengaged.
- You are seated in the operator's seat.
- The drive-mode switch is in the FORWARD or NEUTRAL position.

The safety-interlock system also is designed to prevent the mower blades from engaging unless the drive-mode switch is in the FORWARD position.

Testing the Safety-Interlock System

Test the safety-interlock system before you use the machine each time. If the safety system does not operate as described below, have an Authorized Service Dealer repair the safety system immediately.

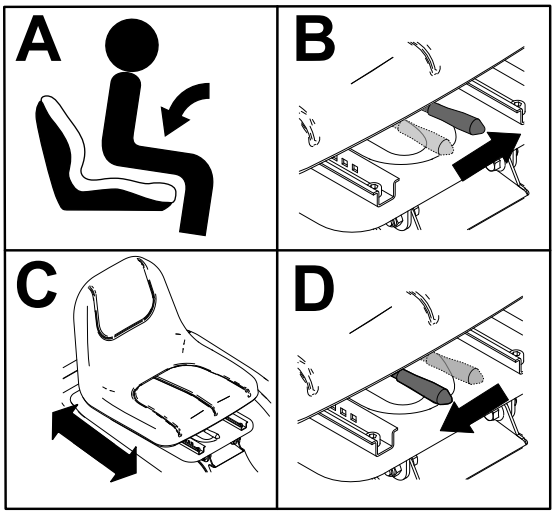
1. Sit on the seat, engage the parking brake, move the drive-mode switch to the FORWARD position,

and move the blade-control switch to the OFF position. Try starting the machine; the machine should not start.

2. Sit on the seat, disengage the parking brake, move the drive-mode switch to the FORWARD position, and move the blade-control switch to the ON position. Try starting the machine; the machine should not start.
3. Sit on the seat, disengage the parking brake, move the drive-mode switch to the REVERSE position, and move the blade-control switch to the OFF position. Try starting the machine; the machine should not start.
4. Sit on the seat, disengage the parking brake, move the drive-mode switch to the FORWARD position, and move the blade-control switch to the OFF position. Start the machine. While the machine is running, rise slightly from the seat; the machine should shut off.
5. Sit on the seat, disengage the parking brake, move the drive-mode switch to the FORWARD position, and move the blade-control switch to the OFF position. Start the machine. While the machine is running, engage the blade-control switch, and rise slightly from the seat; the mower blades and machine should shut off.
6. Sit on the seat, disengage the parking brake, move the drive-mode switch to the FORWARD position, and move the blade-control switch to the OFF position. Start the machine. While the machine is running, engage the blade-control switch, and move the drive-mode switch to the REVERSE position; the mower blades should shut off.

Positioning the Seat

The seat can move forward and backward. Position the seat where you have the best control of the machine and are most comfortable.

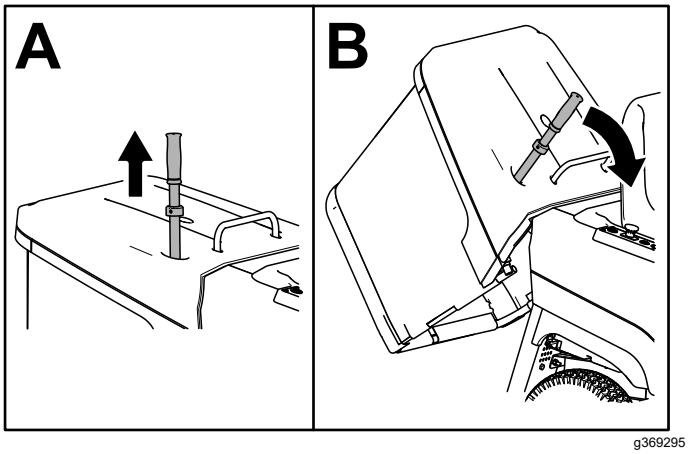


g341496

Figure 10

Removing the Grass Catcher

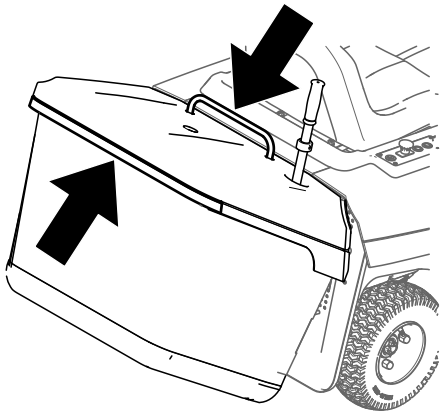
1. Park the machine on a level surface, disengage the blade-control switch, and engage the parking brake.
2. Shut off the machine and remove the key.
3. Open the grass catcher by pulling out the discharging handle and pushing it forward.



g369295

Figure 11

4. Lift the grass catcher off the machine using the handle and rear frame.

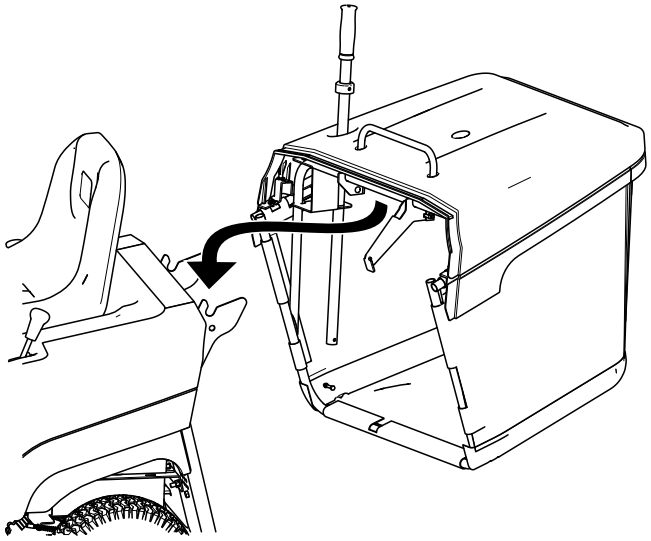


g371008

Figure 12

Installing the Grass Catcher

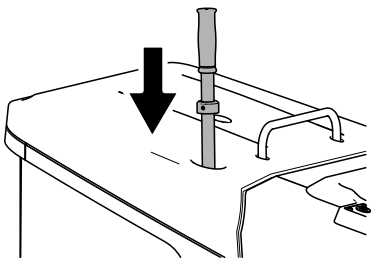
1. Install the grass catcher frame onto the brackets.



g371021

Figure 13

2. Insert the discharging handle.



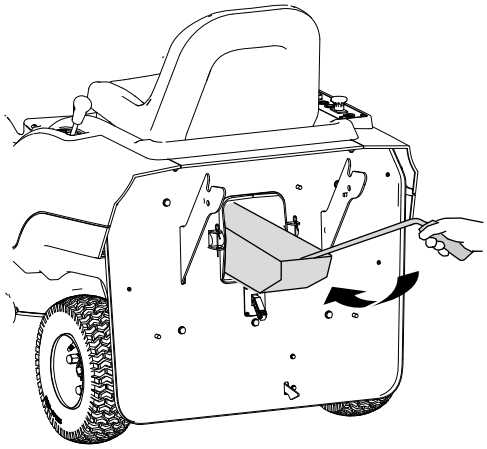
g371020

Figure 14

3. Ensure that the bottom latch is engaged.

Installing the Mulching Plug

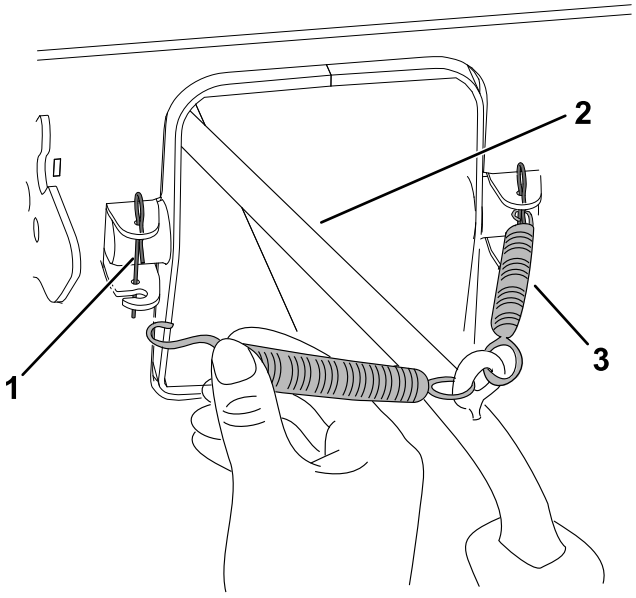
1. Park the machine on a level surface, disengage the blade-control switch, and engage the parking brake.
2. Shut off the machine and remove the key.
3. Remove the grass catcher; refer to Removing the Grass Catcher (page 18).
4. Insert the mulching plug into the discharge opening until it stops on the bottom of the discharge chute.



g369383

Figure 15

5. Extend the 2 springs to the hooks on the rear panel.



g369382

Figure 16

1. Hook (2)
2. Mulch plug handle
3. Spring (2)

6. Install the grass catcher; refer to Installing the Grass Catcher (page 19).

   Note: The mower does not operate unless the grass catcher is installed.

Adjusting the Full-Bag Indicator Switch

1. Park the machine on a level surface, disengage the blade-control switch, and engage the parking brake.
2. Shut off the machine and remove the key.
3. Remove the grass catcher; refer to Removing the Grass Catcher (page 18).
4. Extend the lever to increase the sensitivity of the switch; shorten it to decrease the sensitivity.

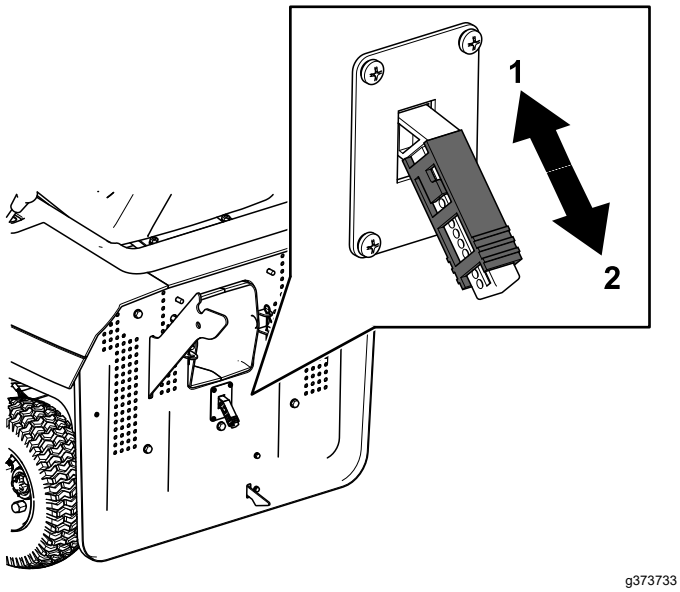


Figure 17

1. Decrease switch sensitivity
2. Increase switch sensitivity

5. Install the grass catcher; refer to Installing the Grass Catcher (page 19).

During Operation

Starting the Machine

1. Sit on the operator's seat.
2. Disengage the parking brake.
3. Ensure that the blade-control switch (PTO) is disengaged.
4. Ensure that the drive-mode switch is in the NEUTRAL position.
5. Turn the key switch to the ON position.

Driving the Machine

Note: Always use caution when backing up and turning.

1. Move the drive-mode switch to the FORWARD or REVERSE position.
2. Place your foot on the traction-control pedal and slowly press it to start driving.

   Note: The farther you press the pedal, the faster the machine moves.
3. Release the traction-control pedal and slowly press the brake pedal to stop or slow the machine.

   Note: Stop the machine before changing direction to forward or reverse.

Shutting Off the Machine

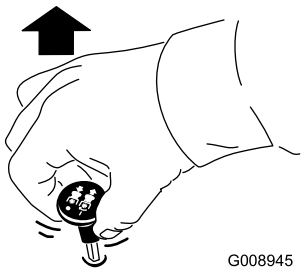
1. Park the machine on a level surface.
2. Disengage the mower blades.
3. Engage the parking brake.
4. Turn the key switch to the OFF position and remove the key.

Operating the Mower Blade-Control Switch (PTO)

The blade-control switch (PTO) starts and stops the mower blades.

Engaging the Blade-Control Switch (PTO)

Ensure that the drive-mode switch is in the FORWARD or NEUTRAL position before engaging the mower blades. Refer to Reverse-Mowing Operation (RMO) Button (page 16) for mowing in reverse.

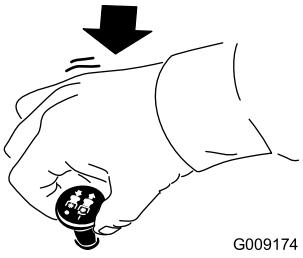


g008945

Figure 18

Disengaging the Blade-Control Switch (PTO)

Note: The mower blades automatically disengage when operating the machine in reverse (when not using the reverse-mowing button) or when the operator rises from the seat.

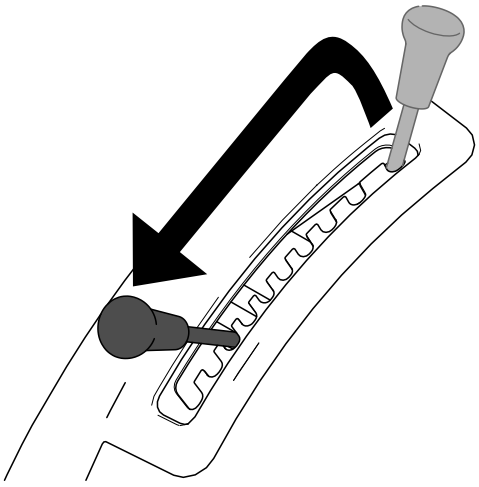


g009174

Figure 19

Adjusting the Height of Cut

You can adjust the height of cut from 25 to 127 mm (1 to 5 inches). Pull the lever to the right, move it to the desired height, and release the lever into the slot. Refer to the table for the height-of-cut positions.



g369282

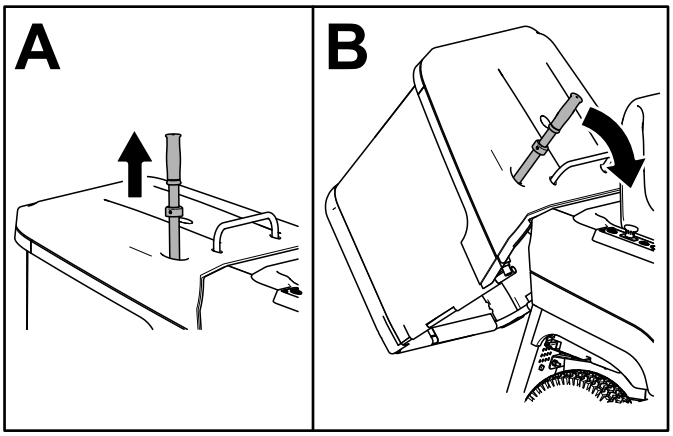
Figure 20

Height-of-Cut Position	Height
1	25.0 mm (1.0 inch)
2	31 mm (1.2 inches)
3	39 mm (1.6 inches)
4	49 mm (1.9 inches)
5	61 mm (2.4 inches)
6	73 mm (2.9 inches)
7	86 mm (3.4 inches)
8	100 mm (3.9 inches)
9	113 mm (4.47 inches)
10	127 mm (5 inches)

Emptying the Grass Catcher

When the grass catcher is full, a sensor alerts the operator on the information display.

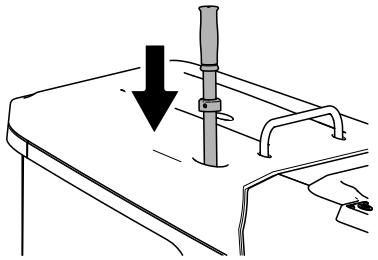
1. While sitting in the operator's seat, pull out the discharging handle and then push it to forward to open the grass catcher.



g369295

Figure 21

2. While the catcher is open, move the machine forward approximately 1 m (3.3 ft) to empty all the clippings.
3. Move the handle back to close the catcher and insert it.



g371020

Figure 22

4. Ensure that the bottom latch is engaged.

Operating Tips

Cutting a Lawn for the First Time

Cut grass slightly longer than normal to ensure that the cutting height of the mower deck does not scalp any uneven ground. However, the cutting height used in the past is generally the best one to use. When cutting grass longer than 15 cm (6 inches) tall, you may want to cut the lawn twice to ensure an acceptable quality of cut.

Cutting a Third of the Grass Blade

It is best to cut only about a third of the grass blade or no more than 2.5 cm (1 inch) off the height. Cutting more than that is not recommended unless grass is sparse, or it is late autumn when grass grows more slowly.

Alternating the Mowing Direction

Alternate the mowing direction to keep the grass standing straight. This also helps disperse clippings, which enhances decomposition and fertilization.

Mowing at Correct Intervals

Grass grows at different rates at different times of the year. To maintain the same cutting height, mow more often in early spring. As the grass growth rate slows in mid summer, mow less frequently. If you cannot mow for an extended period, first mow at a high cutting height, then mow again 2 days later at a lower height setting.

Using a Slower Cutting Speed

To improve cut quality, use a slower ground speed in certain conditions.

Avoiding Cutting Too Low

When mowing uneven turf, raise the cutting height to avoid scalping the turf.

Stopping the Machine

If you must stop the forward motion of the machine while mowing, a clump of grass clippings may drop onto your lawn. To avoid this, move onto a previously cut area with the blades engaged or you can disengage the mower deck while moving forward.

Keeping the Underside of the Mower Deck Clean

Clean clippings and dirt from the underside of the mower deck after each use. If grass and dirt build up inside the mower deck, cutting quality will eventually become unsatisfactory.

Important: **Do not use water to clean the mower deck, otherwise you could damage the electric motors.**

Maintaining the Blade(s)

Maintain a sharp blade throughout the cutting season because a sharp blade cuts cleanly without tearing or shredding the grass blades. Tearing and shredding turns grass brown at the edges, which slows growth and increases the chance of disease. Check the mower blades after each use for sharpness, and for any wear or damage. File down any nicks and sharpen the blades as necessary. If a blade is damaged or worn, replace it immediately with a genuine Toro replacement blade.

Mulching Grass

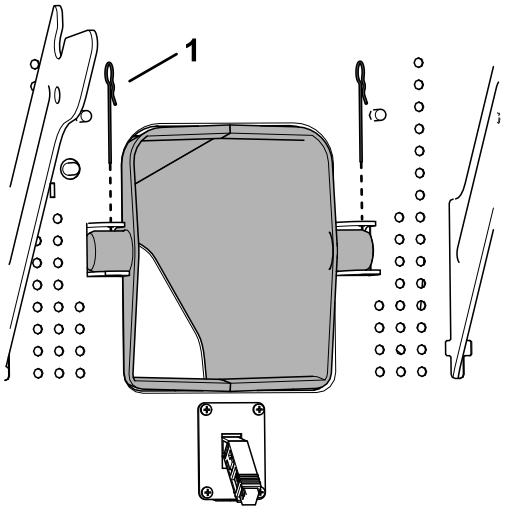
The mulching blade cuts the grass clippings multiple times and reduces their size so that as they fall onto the lawn, they disperse into the grass and is less noticeable. The mulched grass biodegrades more quickly to provide nutrients for the lawn.

Certain types of grass and grass conditions may require mulching an area a second time to hide the clippings. On the second cut path, mow perpendicular to the first cut path.

After Operation

Clearing the Discharge Chute

1. Park the machine on a level surface, disengage the blade-control switch, and engage the parking brake.
2. Shut off the machine and remove the key.
3. Remove the grass catcher; refer to Emptying the Grass Catcher (page 22)
4. Remove the 2 pins securing the chute.

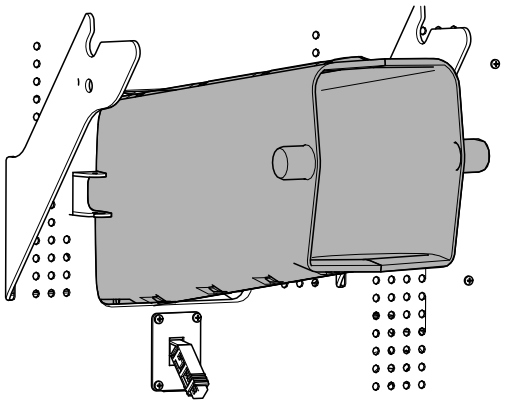


g371442

Figure 23

1. Pin (2)

5. Pull the chute out of the machine.

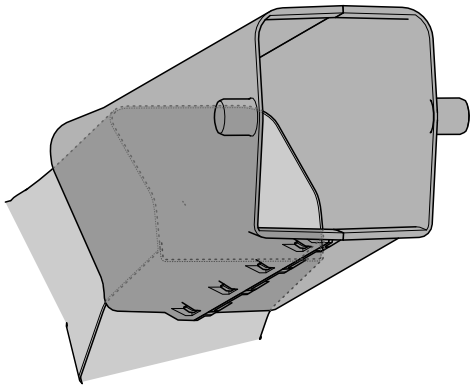


g371443

Figure 24

6. Clear debris from the chute. Use a stick to clear debris inside the machine.

7. Install the chute in the machine; ensure to install it **around** the chute welded on the deck as shown.

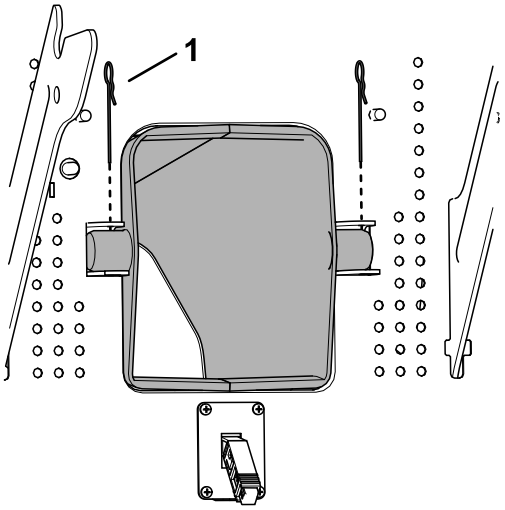


g371441

Figure 25

Rear plate not shown for clarity

8. Secure the chute with the 2 pins.



g371442

Figure 26

1. Pin

Transporting the Machine

Use a heavy-duty trailer or truck to transport the machine. Use a full-width ramp. Ensure that the trailer or truck has all the necessary brakes, lighting, and marking as required by law. Please carefully read all the safety instructions. Knowing this information could help you or bystanders avoid injury. Refer to your local ordinances for trailer and tie-down requirements.

⚠ WARNING

Driving on the street or roadway without turn signals, lights, reflective markings, or a slow-moving-vehicle emblem is dangerous and can lead to accidents, causing personal injury.

Do not drive the machine on a public street or roadway.

Selecting a Trailer

⚠ WARNING

Loading a machine onto a trailer or truck increases the possibility of tip-over and could cause serious injury or death (Figure 27).

- **Use only a full-width ramp; do not use individual ramps for each side of the machine.**
- **Do not exceed a 12-degree angle between the ramp and the ground or between the ramp and the trailer or truck.**
- **Ensure that the length of the ramp is at least 4 times as long as the height of the trailer or truck bed to the ground. This ensures that the ramp angle does not exceed 12 degrees on flat ground.**

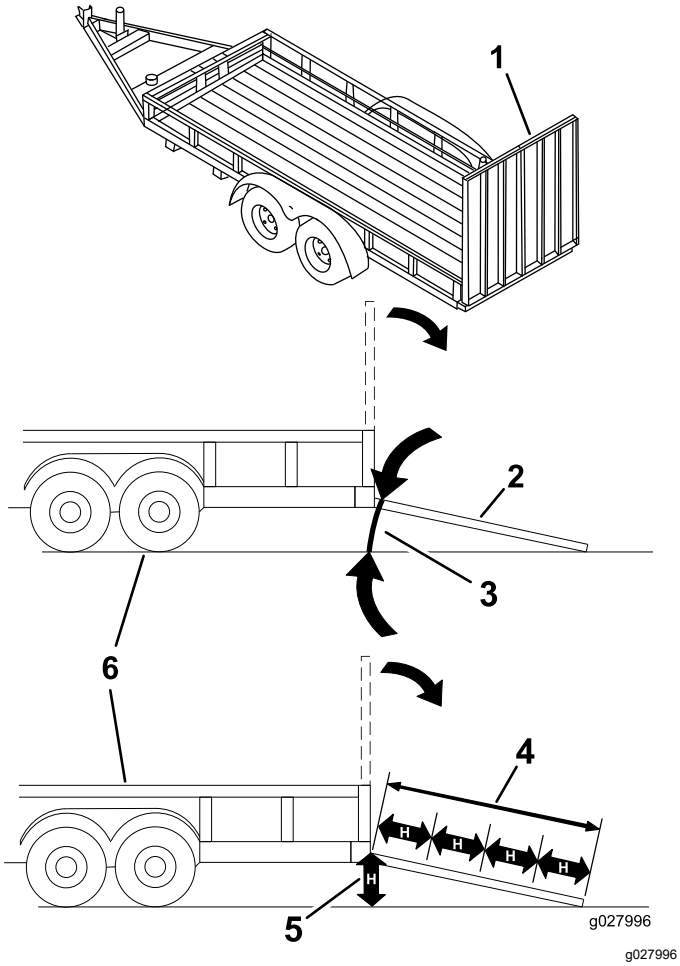


Figure 27

1. Full-width ramp in stowed position
2. Side view of full-width ramp in loading position
3. Not greater than 12 degrees
4. Ramp is at least 4 times as long as the height of the trailer or truck bed to the ground
5. H=height of the trailer or truck bed to the ground
6. Trailer

Loading the Machine

⚠ WARNING

Loading a machine onto a trailer or truck increases the possibility of tip-over and could cause serious injury or death.

- **Use extreme caution when operating a machine on a ramp.**
- **Back the machine up the ramp and drive it forward down the ramp.**
- **Avoid sudden acceleration or deceleration while driving the machine on a ramp as this could cause a loss of control or a tip-over situation.**

1. If using a trailer, connect it to the towing vehicle and connect the safety chains.
2. If applicable, connect the trailer brakes and lights.
3. Lower the ramp, ensuring that the angle between the ramp and the ground does not exceed 12 degrees (Figure 27).
4. Back the machine up the ramp.

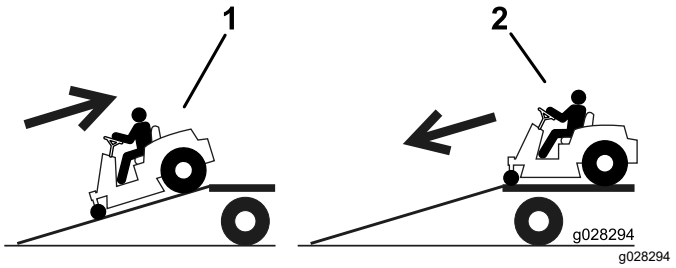


Figure 28

1. Back the machine up the ramp.
2. Drive the machine forward down the ramp.

5. Shut off the machine, remove the key, and engage the parking brake.
6. Tie down the machine at the front and rear axles with straps, chains, cable, or ropes. Refer to local regulations for tie-down requirements.

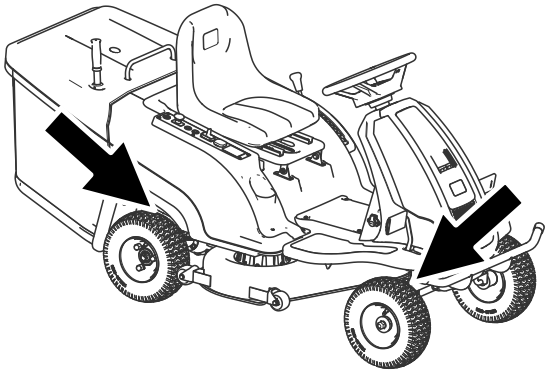


Figure 29

1. Tie-down points

Unloading the Machine

1. Lower the ramp, ensuring that the angle between the ramp and the ground does not exceed 12 degrees (Figure 27).
2. Drive the machine forward down the ramp (Figure 28).

Moving a Non-Functioning Machine

The machine alerts you when the battery charge is low so that you have enough power to return it to the charging location; refer to Battery-Charge Indicator (page 16).

If you need to tow the machine, disengage the parking brake and tow the machine at a walking speed.

Maintenance

Note: Determine the left and right sides of the machine from the normal operating position.

Recommended Maintenance Schedule(s)

Maintenance Service Interval	Maintenance Procedure
Before each use or daily	• Check the safety-interlock system. • Charge the battery. • Inspect the blades.
After each use	• Clean the mower-deck housing.
Every 25 hours	• Grease the front wheel bearings. • Remove the side panel and clean the battery. • Check the tire pressure.
Before storage	• Perform all maintenance procedures listed above before storage.

⚠ CAUTION

If you leave the key in the switch, someone could accidently start the machine and seriously injure you or other bystanders.

Shut off the machine and remove the key from the switch before you perform any maintenance.

Accessing the Battery

1. Park the machine on a level surface, disengage the blade-control switch, and engage the parking brake.
2. Shut off the machine and remove the key.
3. Remove the grass catcher; refer to Emptying the Grass Catcher (page 22).
4. Remove the front screw.

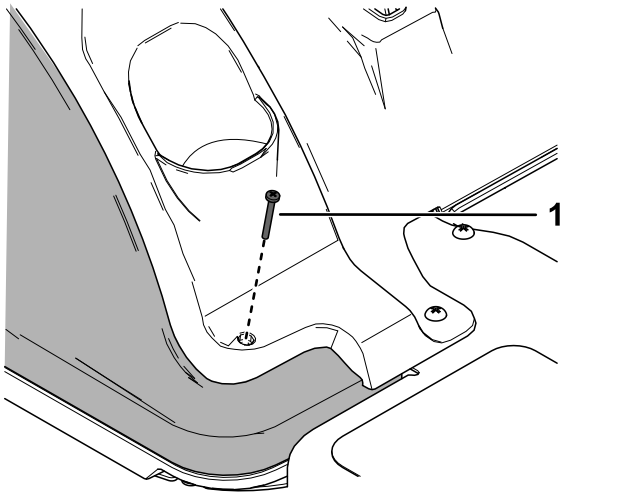


Figure 30

1. Screw (M4 x 35 mm)

5. Remove the 3 right screws from the control panel.

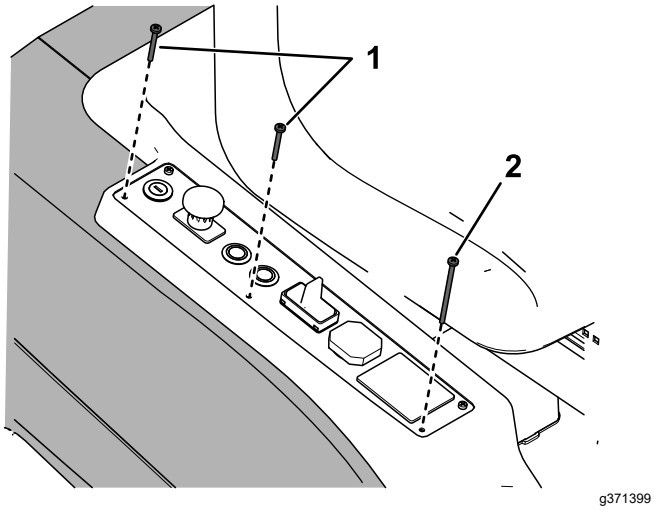


Figure 31

1. Screw (M4 x 35 mm)
2. Screw (M4 x 70 mm)

6. Remove the 2 rear screws.

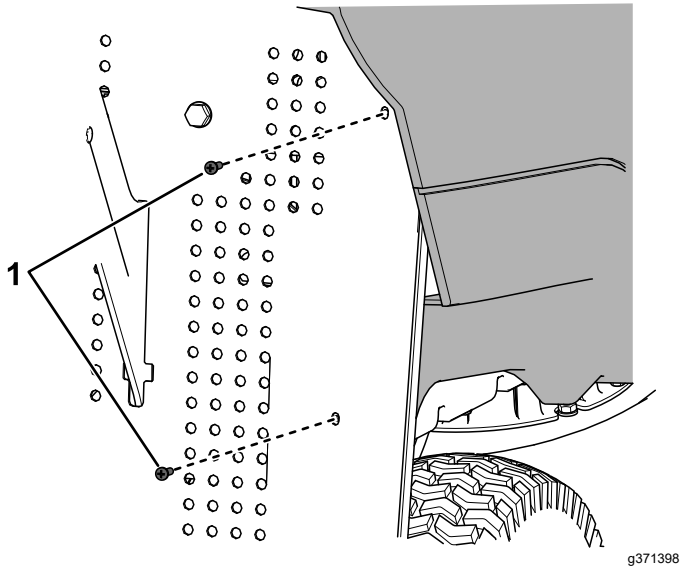


Figure 32

1. Thread-forming screw

7. Remove the side cover to access the battery.

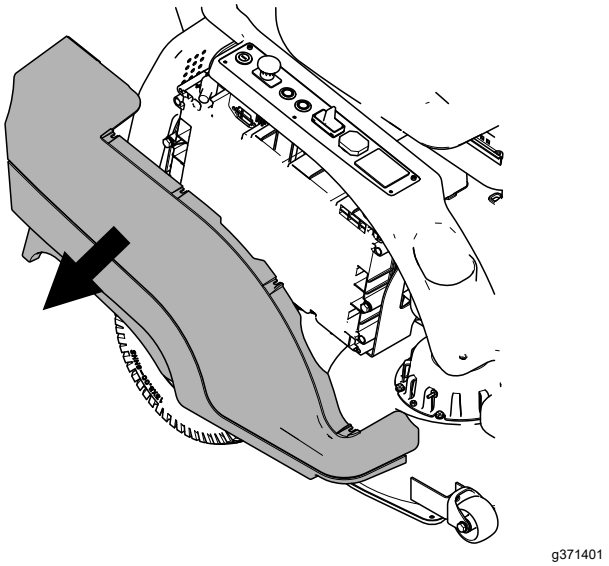


Figure 33

8. Reverse the procedure to install the cover.

Important: **After maintenance, ensure that there are no open circuits or loose wiring.**

Lubrication

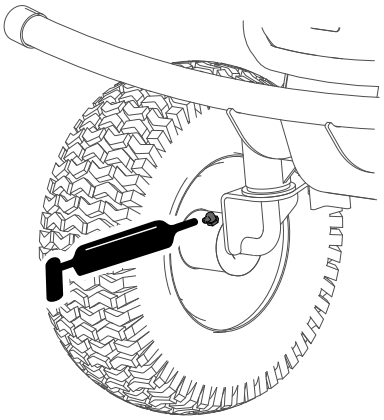
Greasing the Front Wheel Bearings

Service Interval: Every 25 hours

Grease type: General-purpose grease

1. Park the machine on a level surface, disengage the blade-control switch, and engage the parking brake.
2. Shut off the machine and remove the key.
3. Clean the grease fittings with a rag.

   Note: Make sure to scrape any paint off the front of the fitting(s).
4. Connect a grease gun to the fitting.
5. Pump grease into the fittings until grease begins to ooze out of the bearings.
6. Wipe up any excess grease.



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Figure 34

Electrical System Maintenance

Maintaining the Battery

Note: The original battery is maintenance-free and does not require service.

⚠ WARNING

Battery terminals or metal tools could short against metal components causing sparks. Sparks can cause the battery gases to explode, resulting in personal injury.

- **When removing or installing the battery, do not allow the battery terminals to touch any metal parts of the machine.**
- **Do not allow metal tools to short between the battery terminals and metal parts of the machine.**
- **Use insulated tools when maintaining the battery.**
- **Always keep the battery retainers in place to protect and secure the battery.**

⚠ DANGER

Do not touch any electrical components or contacts on the motor.

Touching any of these components or contacts could seriously injure you or cause death.

Charging the Battery

Service Interval: Before each use or daily

For maximum battery life, drain the battery as low as possible before each charge. Charge the battery immediately after depleting a substantial amount of power. The battery will produce more efficient electrical production after you charge and deplete it a number of cycles.

Note: Refer to Specifications (page 17) for the charge time.

Important: **Charge the battery between 0 to 40°C (32 to 104°F).**

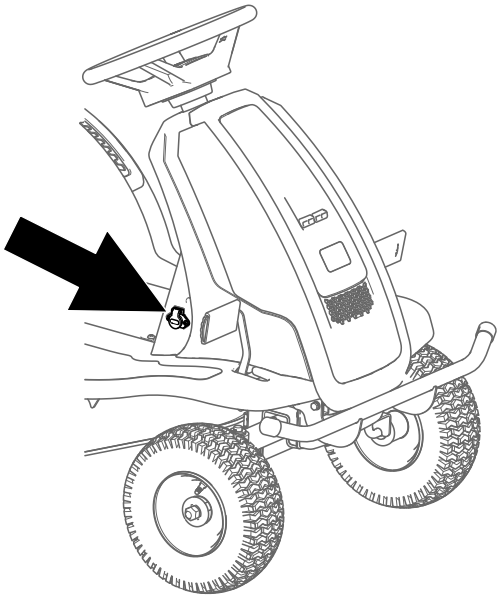
1. Park the machine on a level surface, in a well-ventilated area near a suitable power outlet.
2. Disengage the blade-control switch and engage the parking brake.

3. Shut off the machine, remove the key, and wait for all moving parts to stop before leaving the operating position.
4. Connect the charger to the charging receptacle and rotate the plug clockwise to secure it (Figure 35).

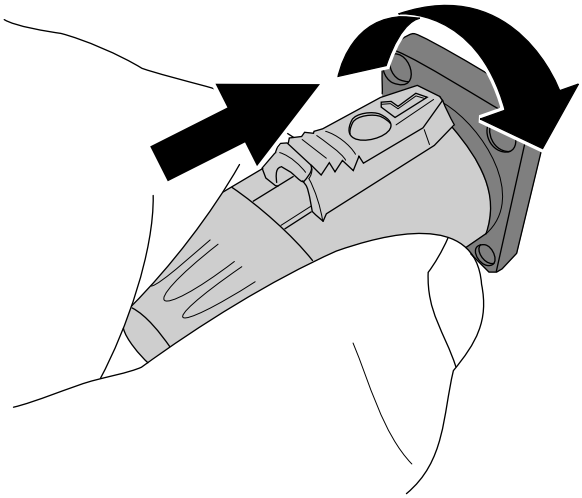
   Note: The charge plug only fits on the machine 1 way.

   Note: Ensure that the charger-voltage setting matches the voltage at the power outlet being used.

   Note: If the battery charger is too hot, it may not charge properly. In cold temperatures, it may take a longer for the battery to charge.



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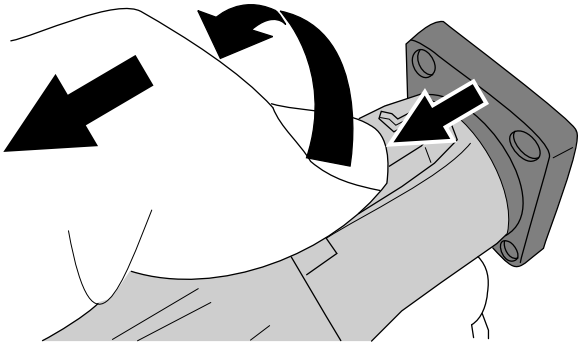
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Figure 35

5. Plug the charger power cord into the power outlet.

   Note: The charger light will illuminate red to indicate a connection between the battery and charger.
6. Allow the battery to charge.

   Note: The battery is fully charged only when the charger light illuminates green.
7. After charging, disconnect the cord from the power outlet.
8. Slide back the button on the plug, turn the plug counterclockwise, and pull the plug out of the socket (Figure 36).



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Figure 36

Replacing the Battery

Contact your Authorized Service Dealer for replacing the battery.

Drive System Maintenance

Checking the Tire Pressure

Service Interval: Every 25 hours—Check the tire pressure.

Maintain the air pressure in the front and rear tires as specified. Uneven tire pressure can cause an uneven cut. Check the pressure at the valve stem when the tires are cold to get the most accurate pressure reading.

Inflate the front tires to 103 kPa (15 psi).

Inflate the rear tires to 138 kPa (20 psi).

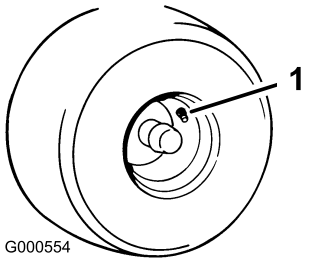


Figure 37

1. Valve stem

Mower Maintenance

Servicing the Cutting Blades

To ensure a superior quality of cut, keep the blades sharp. For convenient sharpening and replacement, keep extra blades on hand.

Before Inspecting or Servicing the Blades

1. Park the machine on a level surface, disengage the blade-control switch, and engage the parking brake.
2. Shut off the machine and remove the key.
3. Raise the machine off the ground so that you can access beneath it. Support the machine using jackstands.

⚠ WARNING

Mechanical or hydraulic jacks may fail to support the machine and cause serious injury.

Use jack stands when supporting the machine.

Inspecting the Blades

Service Interval: Before each use or daily

1. Inspect the cutting edges.
2. If the edges are not sharp or have nicks, remove and sharpen the blade; refer to Sharpening the Blades (page 33).
3. Inspect the blades, especially in the curved area.
4. If you notice any cracks, wear, or a slot forming in this area, immediately install a new blade.

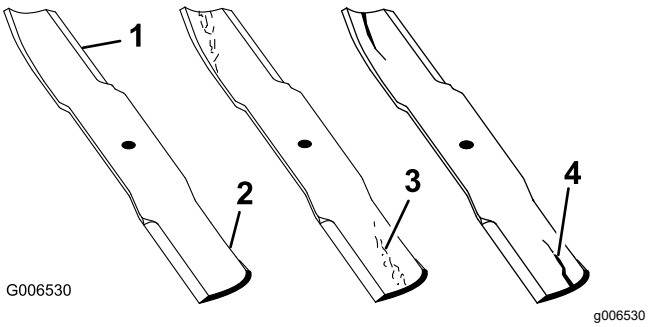


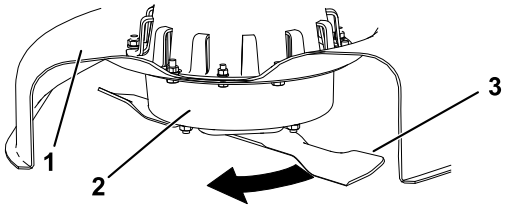
Figure 38

1. Cutting edge
2. Curved area
3. Wear/slot forming
4. Crack

Checking for Bent Blades

Note: The machine must be parked on a level surface for the following procedure.

1. Raise the mower deck to the highest height-of-cut position.
2. While wearing thickly padded gloves, or other adequate hand protection, slowly rotate the blade into a position that allows you to measure the distance between the cutting edge and the level surface.

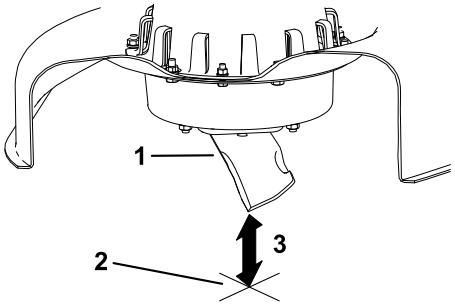


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Figure 39

1. Deck
2. Spindle housing
3. Blade

3. Measure from the tip of the blade to the level surface.

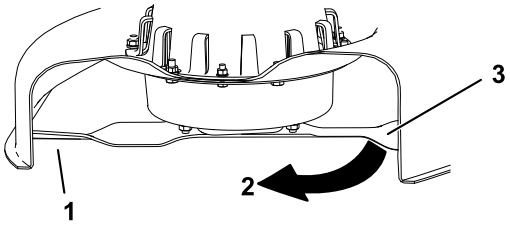


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Figure 40

1. Blade (in position for measuring)
2. Level surface
3. Measured distance between blade and the surface (A)

4. Rotate the same blade 180 degrees so that the opposing cutting edge is now in the same position.



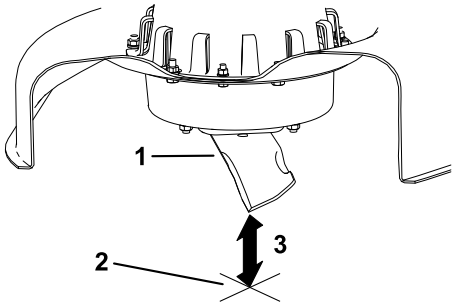
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Figure 41

1. Blade (side previously measured)
2. Measurement (position used previously)
3. Opposing side of blade being moved into measurement position

5. Measure from the tip of the blade to the level surface.

   Note: The variance should be no more than 3 mm (1/8 inch).



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Figure 42

1. Opposite blade edge (in position for measuring)
2. Level surface
3. Second measured distance between blade and surface (B)

   A. If the difference between A and B is greater than 3 mm (1/8 inch), replace the blade with a new blade; refer to Removing the Blades (page 33) and Installing the Blades (page 33).

      Note: If a bent blade is replaced with a new blade, and the dimension obtained continues to exceed 3 mm (1/8 inch), the blade spindle could be bent. Contact an Authorized Service Dealer for service.

   B. If the variance is within constraints, move to the next blade.

6. Repeat this procedure on each blade.

Removing the Blades

Replace the blades if they hit a solid object, or if the blade is out of balance or bent.

1. Place a woodblock between the blade and mower housing to prevent the blade from turning.
2. Hold the blade end using a rag or thickly padded glove.
3. Remove the blade.

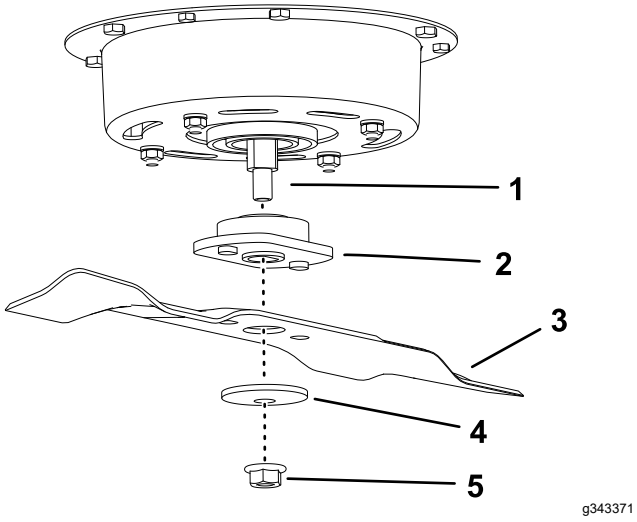


Figure 43

1. Spindle shaft
2. Adapter
3. Blade
4. Curved washer
5. Nut

Sharpening the Blades

1. Use a file to sharpen the cutting edge at both ends of the blade.

   Note: Maintain the original angle.

   Note: The blade retains its balance if the same amount of material is removed from both cutting edges.

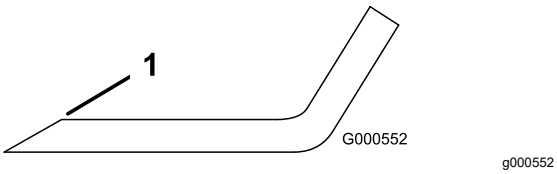


Figure 44

1. Sharpen at original angle.

2. Check the balance of the blade by putting it on a blade balancer.

   Note: If the blade stays in a horizontal position, the blade is balanced and can be used.

   Note: If the blade is not balanced, file some metal off the end of the sail area only (Figure 44).

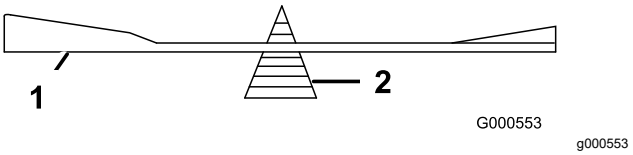


Figure 45

1. Blade
2. Balancer

3. Repeat this procedure until the blade is balanced.

Installing the Blades

1. Install the blade and adapter onto the spindle shaft.

   Important: **The curved part of the blade must be pointing upward toward the inside of the mower to ensure proper cutting.**

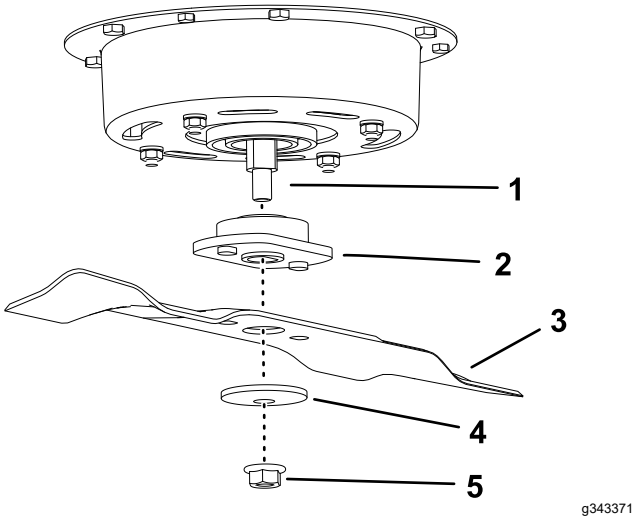


Figure 46

1. Spindle shaft
2. Adapter
3. Blade
4. Curved washer
5. Nut

2. Install the curved washer (cupped side toward the blade) and the nut.
3. Torque the nut to 35 N·m (26 ft-lb).

Cleaning

Cleaning the Underside of the Mower Deck

Service Interval: After each use—Clean the mower-deck housing.

Clean the underside of the mower deck after each use to prevent grass buildup for improved mulch action and clipping dispersal.

Important: **Do not use water to clean the mower deck, otherwise you could damage the electric motors.**

1. Park the machine on a level surface, disengage the blade-control switch (PTO), and engage the parking brake.
2. Shut off the machine, remove the key, and wait for all moving parts to stop before leaving the operating position.
3. Raise the machine off the ground so that you can access beneath it. Support the machine using jackstands.

   ⚠ WARNING

   Mechanical or hydraulic jacks may fail to support the machine and cause serious injury.

   Use jack stands when supporting the machine.

4. Scrape buildup of grass and other debris from the mower deck, finished surfaces, and wheels.

Disposing of Waste

Engine oil, batteries, hydraulic fluid, and engine coolant are pollutants to the environment. Dispose of these according to your state and local regulations.

Storage

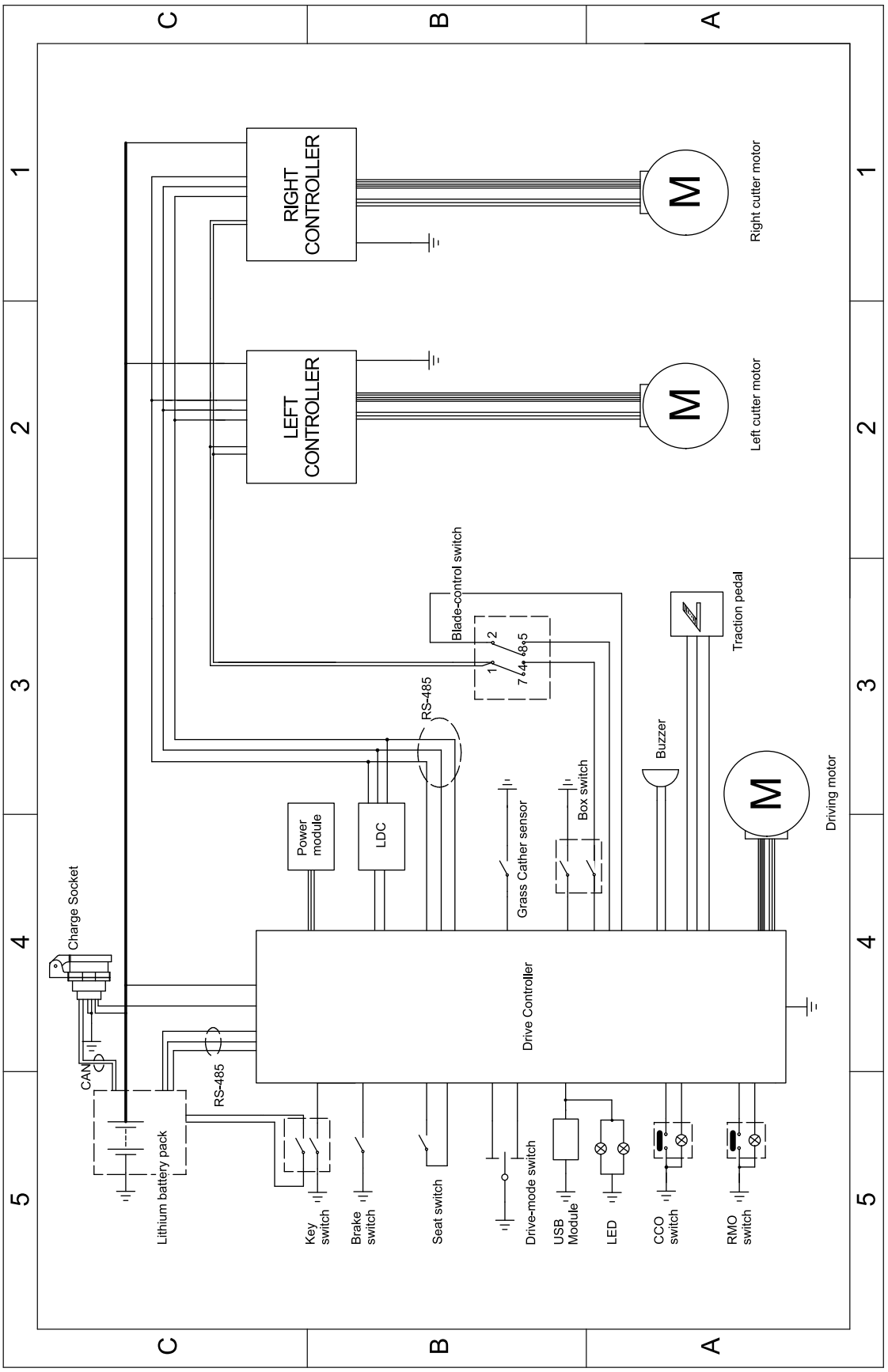
Cleaning and Storage

1. Park the machine on a level surface, disengage the blade-control switch (PTO), and engage the parking brake
2. Shut off the machine, remove the key, and wait for all moving parts to stop before leaving the operating position.
3. Remove grass clippings, dirt, and grime from the external parts of the entire machine, especially the motor.
4. Check the parking brake operation; refer to Parking Brake (page 15).
5. Grease the machine; refer to Lubrication (page 29).
6. Check the tire pressure; refer to Checking the Tire Pressure (page 31).
7. Charge the battery; refer to Charging the Battery (page 29).
8. Scrape any heavy buildup of grass and dirt from the underside of the mower.
9. Check the condition of the blades; refer to Servicing the Cutting Blades (page 31).
10. Check and tighten all fasteners. Repair or replace any part that is damaged.
11. Paint all scratched or bare metal surfaces. Paint is available from your Authorized Service Dealer.
12. Store the machine in a clean, dry garage or storage area. Remove the key from the switch and keep it out of reach of children or other unauthorized users. Cover the machine to protect it and keep it clean.

Troubleshooting

Problem	Possible Cause	Corrective Action
The drive motor does not start.	1. The drive-mode switch is in the NEUTRAL position. 2. The parking brake is engaged. 3. The brake pedal is engaged. 4. The traction-control pedal is engaged. 5. The blade motor is blocked. 6. The drive motor is blocked. 7. Battery charge is low.	1. Move the drive-mode switch to the FORWARD or REVERSE position. 2. Disengage the parking brake. 3. Release the brake pedal. 4. Release the traction-control pedal. 5. Turn off the machine and clean debris, or wait until the controller automatically unlocks after 5 seconds. 6. Remove debris or obstacles from the drive motor. 7. Charge the battery.
The blade motor does not start.	1. The drive-mode switch is in the NEUTRAL position. 2. The parking brake is engaged. 3. The blade motor is blocked. 4. Battery charge is low.	1. Move the drive-mode switch to the FORWARD position. 2. Disengage the parking brake. 3. Turn off the machine and clean debris, or wait until the controller automatically unlocks after 5 seconds. 4. Charge the battery.
The machine does not start.	1. The controller or motor is damaged. 2. A battery is damaged.	1. Shut off the machine and start it again after 5 seconds. If the machine does not start after several cycles, replace the controller. 2. Replace the battery.
The machine vibrates abnormally.	1. The cutting blade(s) is/are bent or unbalanced. 2. The blade mounting bolt is loose. 3. The blade spindle is bent. 4. The motor mount is loose or worn.	1. Install new cutting blade(s). 2. Tighten the blade mounting bolt. 3. Contact an Authorized Service Dealer. 4. Contact an Authorized Service Dealer.
The cutting height is uneven.	1. A cutting blade(s) is/are not sharp. 2. A cutting blade(s) is/are bent. 3. The underside of the mower deck is dirty. 4. The tire pressure is incorrect. 5. A blade spindle is bent.	1. Sharpen the blade(s). 2. Install a new cutting blade(s). 3. Clean the underside of the mower deck. 4. Adjust the tire pressure. 5. Contact an Authorized Service Dealer.
The machine does not discharge or it discharges improperly.	1. The grass is too heavy or tall. 2. The grass is too wet.	1. Mow on the highest height of cut; then mow at the desired height. 2. Wait until the lawn is dry.

Schematics



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Electrical Schematic (Rev. A)

Notes:

Notes:

Notes:

EEA/UK Privacy Notice

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Toro will keep your personal information as long as it is relevant for the above purposes and in accordance with legal requirements. For more information about applicable retention periods please contact legal@toro.com.

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