

greenworks

pro[™]

CRZ426 / CRZ428

P0803709-01, Rev B

EN ZERO-TURN MOWER

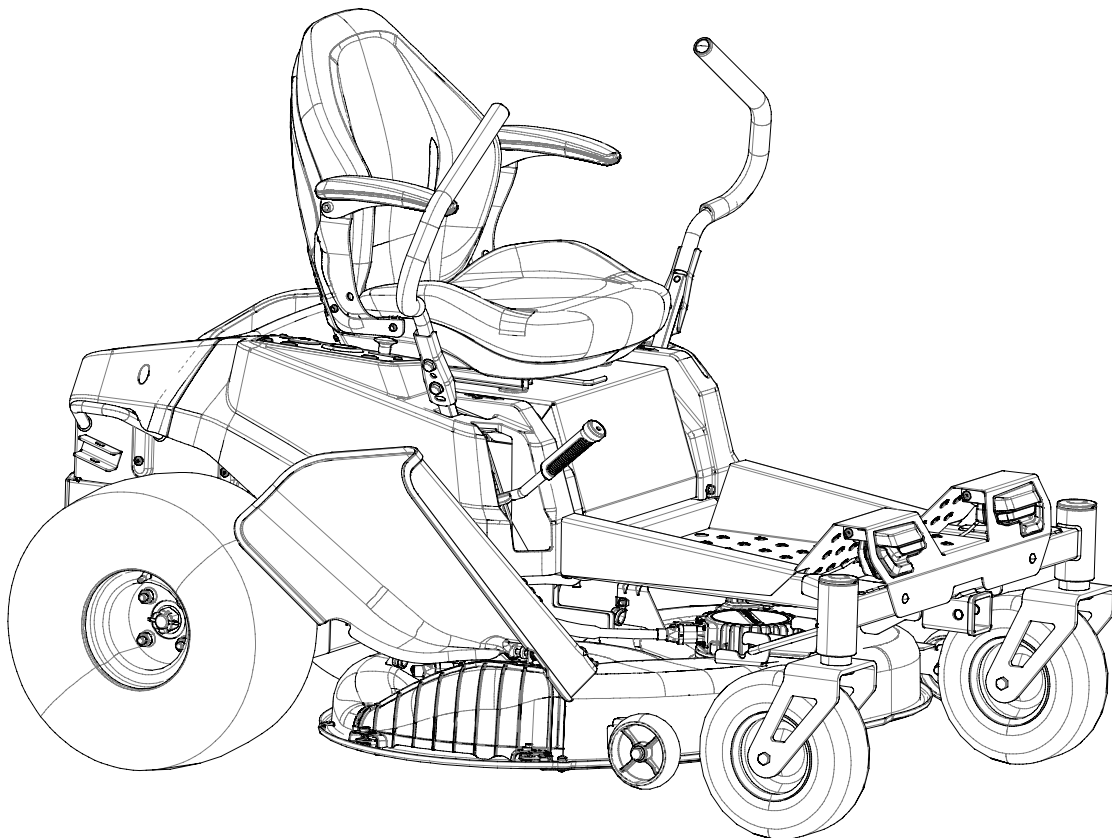
OPERATOR MANUAL

FR TONDEUSE À RAYON DE BRAQUAGE ZÉRO

GUIDE D'ASSEMBLAGE

ES CORTACÉSPED DE GIRO CERO

GUÍA DE MONTAJE






www.greenworkstools.com

www.greenworkscommercial.com

REGISTRATION:

- As the original owner, be sure to register your product (vehicle, batteries & chargers) at following product pages on our Greenworks website(s):

MODEL	VOLTAGE	DESCRIPTION	PRODUCT PAGES	QR CODE
CRZ426	60-volt	42" CrossoverZ Zero Turn Multi-Battery 6-in-Parallel Kitted 60V	https://www.greenworkstools.com/pro-60v-42-inch-crossover-Z-zero-turn-7409302	
CRZ428	80-volt	42" CrossoverZ Zero Turn Multi-Battery 6-in-Parallel Kitted 80V	https://www.greenworkstools.com/pro-80v-42-inch-crossover-Z-zero-turn-7409402	
CRZ428	82-volt	42" CrossoverZ Zero Turn Multi-Battery 6-in-Parallel Kitted 82V	https://www.greenworkscommercial.com/pro-82v-42-inch-crossover-Z-zero-turn-7409502	

- WARNING: To reduce the risk of injury, the user must read and understand the Operator's Manual before using this product. Save these instructions for future reference.**
- We are constantly improving our machines so please find the latest information on it online. Printed manuals can be out of date, so for latest tips and safety always check the online manuals before using the machine.
 - Troubleshooting guides are also online or in the app [link] which can be found in the app store.
 - Videos of uncrating, best practices, and routine maintenance can be found online.

Greenworks hereby warranties this product, to the original purchaser with proof of purchase, for a period of four (4) years or 200 hours (whichever comes first) against defects in materials, parts or workmanship. Greenworks, at its own discretion, will repair or replace any and all parts found to be defective, through normal use, free of charge to the customer. This warranty is valid only for units which have been used for personal use that have not been hired or rented for industrial/commercial use, and that have been maintained in accordance with the instructions in the owners' manual supplied with the product from new.




ITEMS NOT COVERED BY WARRANTY:

- Any that have been transferred to a new owner. This warranty only applies to the original purchaser from an authorized Greenworks retailer or dealer. This warranty is non-transferable.
- Any part that has become inoperative due to misuse, rental use, commercial use, abuse, neglect, accident, improper maintenance, product modification, unauthorized repair or alteration; or
- If item has not been operated and/or maintained in accordance with the owner's manual; or
- Normal wear
- Routine maintenance parts or service include, but are not limited to: lubricants, mower seat wear, blade sharpening, wheels, tiers, anti-scalp wheels, blades as well as any optional accessories or attachments.
- Normal deterioration of the exterior finish due to use or exposure
- Damage or failure resulting from, but not solely: immersion in water or other liquids, accidents, misuse, neglect or lack of proper installation, and proper maintenance and storage
- An item that has not been registered on an authorized Greenworks website (see REGISTRATION info with QR code or product page info for proper product registration).

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1 RISK LEVELS

The following signal words and meanings are intended to explain the levels of risk associated with this product.

SYM-BOL	SIGNAL	MEANING
	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.
	CAUTION	(Without Safety Alert Symbol) Indicates a situation that may result in property damage.

2 READ ALL INSTRUCTIONS

▲ WARNING

This symbol indicates important safety instructions. If these instructions are not followed, it could endanger the personal safety and/or property of the operator and others. Read and understand all instructions in this manual before attempting to operate the mower. Failure to comply with these instructions may result in personal injury.

▲ DANGER

This mower was built to be operated according to the rules for safe operation that are contained in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. This mower is capable of amputating body parts and throwing objects. Failure to observe the following safety rules could result in serious injury or death.

▲ WARNING

Basic safety precautions should always be followed when using lawnmowers in order to reduce the risk of fire, electric shock, and personal injury.

▲ WARNING

Use of this mower should be restricted to individuals who have read and understand and will follow the warnings and instructions that are printed in this manual and on the mower.

▲ WARNING

- Carefully read all instructions on the mower and in the manual before attempting to assemble and operate the mower.
- For safe operation, read, understand, and follow all instructions in this manual.
- Become familiar with all controls and their proper operation. Know how to stop the mower and how to disengage the power in an emergency.
- Keep this manual in a safe place for reference and consult it regularly.

2.1 OPERATOR

- Do not use battery-operated ride-on mower in rain.
- Only allow responsible, capable adults who are familiar with the instructions to operate this machine.
- Safe operation requires your full attention and capabilities.
- Always look where you are going and be aware of your surroundings.
- Listen to the machine and be aware of any change.
- Feel the machine and its responses from both your inputs and the environment.
- Remain focused on your task.
- Always wear proper eye protection that complies with the latest safety standards in order to reduce the risk of eye injury while operating or performing any adjustment or repair. See ANSI Z87.1.
- Do not operate machine unless discharge guard or other safety devices are in place and working.
- Always wear a face mask or a dust mask while operating the mower in a dusty environment.
- Always dress properly. The wearing of protective gloves and safety footwear is recommended.
- Do not wear radios or music headphones while operating the machinery.
- Do not operate the equipment while wearing sandals, tennis shoes, sneakers, shorts or any type of loose-fitting clothing. Long hair, loose clothing or jewelry may get tangled in moving parts. Always wear long pants, safety glasses, ear protection and safety shoes while operating this machine.
- Stay alert! Do not operate the mower when you are tired. Do not operate the mower while under the influence of alcohol or drugs. Pay attention to what you are doing. Use common sense.
- Never carry passengers.
- Follow the manufacturer's recommendation for wheel weights or counterweights.

2.2 MACHINE

- Never operate a poorly maintained machine.
- Always keep safety shields and covers in place.

- Follow daily and weekly checklists, making sure electrical connections are secured and bolts are tightened.
- Replace damaged parts immediately.
- Never operate mower without a proper trail shield, discharge cover, switch control, or other safety device in place and in working order. Do not operate the mower with damaged safety devices; doing so can result in injury.
- Repair or replace any damaged components before restarting and operating the lawnmower.
- Only use approved replacement parts.
- Minimize exposure to water. Do not drive into water. Do not leave in rain. Do not clean with pressurized water or hose.
- Always store your lawnmower indoors. When not in use, the mower should be stored indoors in a dry and locked place, out of reach of children.

2.3 MOWING AREA

- Before mowing any area, thoroughly inspect the area for any hazards. Walk the area to ensure there is adequate traction and no holes, drop-offs, or hidden objects that could cause issues. Clear the area of objects such as rocks, wire, toys, etc., which could be thrown by the blades.
- Be sure the area is clear of bystanders before operating. Stop machine if anyone enters the area.
- Plan your mowing pattern in such a way as to avoid discharging material toward roads, sidewalks, bystanders, vehicles, windows, etc. Do not discharge material against a wall or obstruction. Doing so may cause the discharged material to ricochet back toward the operator.
- Do not mow anything but grasses.
- Stop the blades when crossing dirt, gravel, or paved surfaces.
- Avoid dangerous environments. Do not operate the mower in the rain or in wet or damp grass. To reduce the risk of electric shock, do not expose to water or operate on wet ground.

2.4 MOWING

- For riding mower models, always remain seated while operating machine.
- Do not operate on inclines greater than 15 degrees.
- Mow only in daylight or in good artificial light. Never rush a mowing job.
- Never attempt high-speed maneuvering, especially in crowded, congested areas or on slopes.
- In order to avoid contact with the blade or injury caused by a thrown object, stay in the operating zone behind the handles, and keep children and bystanders at least 100ft (30m) away from the mower while it is in operation. Stop the motor immediately if someone enters the mowing area.
- Look down and behind before and while moving backwards.

- Slow down before turning.
- Do not mow in reverse unless absolutely necessary.
- When moving in reverse, SLOWLY pull right and left Drive Control Levers rearward and avoid sudden movements. Rapid movement of the Drive Control Levers in either direction could result in a reaction of the machine that can cause serious injury.
- Do not put hands or feet near rotating parts or under the cutting deck. Contact with the blade can amputate hands and feet.
- If the mower starts to vibrate excessively, stop the motor and check for the cause immediately. Excessive vibration is generally a sign the mower is not functioning properly.
- Stop the motor and wait until the blade comes to a complete stop before unclogging the chute. The cutting blade will continue to rotate for a few seconds after the motor is shut off. Do not place any part of your body in the blade area until you are sure that the blade has stopped rotating.
- If lawnmower strikes a foreign object, stop the machine, rotate the ignition switch to "OFF" position, then, if it is safe, inspect for damage.
- Don't force the lawnmower.
- Do not use the mower for any job except that for which it is intended.

2.5 SERVICING

- Turn off and remove key before servicing, cleaning, or removing material from the ride-on mower.
- Do not reach under blade guard. Keep hands, feet, and clothing away from rotating blades.
- To reduce personal risk and damage to the machine, never clean with pressure washer.
- Maintain your mower. Keep cutting edges sharp and clean to ensure the best performance and safe operation.

2.6 CHILD SAFETY

Tragic accidents can occur if the operator is not aware of the presence of children. Children are often attracted to the machine and the mowing activity. Never assume that children will remain where you last saw them.

- Never leave machine unattended with key in switch, especially with children present.
- Keep children out of the mowing area and under the watchful care of a responsible adult other than the operator.
- Do not allow children under the age of 14 to operate this mower. Children who are 14 years of age and older must read and understand the operating instructions and safety rules in this manual, and must be trained and supervised by a parent.
- Always disengage deck blade switch and turn key to "OFF" position and remove key.
- Stay alert, and turn the mower off if a child or any other person enters the mowing area.

- Use extreme care when approaching blind corners, doorways, shrubs, trees, or other objects that may obscure your view of a child who may run into the path of the mower.
- Before and while backing, look behind and down for small children.
- Never carry children on the mower with you, even with the blade(s) shut off. They may fall off and be seriously injured or interfere with safe machine operation. Children who have been given rides in the past may suddenly appear in the mowing area for another ride and be run over or backed over by the machine.

2.7 USE A RAMP

- Use extreme caution when loading and unloading this mower onto a truck or trailer with a ramp.
- Use only a single, full-width ramp. This provides a surface for the mower frame to contact if the unit starts to tip backwards. It also reduces the risk of a wheel going off and the machine tipping over.
- Do not exceed a 15-degree angle between the ramp and the ground or between the ramp and the trailer or truck.
- Become familiar with the mower's controls and confident in its smooth operation before attempting to drive it up or down a ramp.
- Use slow drive mode and drive carefully.
- Avoid any sudden movement of the controls and use only slow, even acceleration.

2.8 TOWING

- Tow only with a machine that has a hitch designed for towing. Do not attach towed equipment except at the hitch point.
- Follow the manufacturer's recommendation for weight limits for towed equipment and towing on slopes.
- Never allow children or others in or on towed equipment.
- On slopes, the weight of the towed equipment may cause loss of traction and loss of control.
- Travel slowly and allow extra distance to stop.


2.9 BATTERY AND CHARGER

- Prevent unintentional starting. Ensure the switch is in the off-position before connecting to battery pack, picking up or carrying the appliance. Carrying the appliance with your finger on the switch or energizing appliance that have the switch on invites accidents.
- Disconnect the battery pack from the appliance before making any adjustments, changing accessories, or storing appliance. Such preventive safety measures reduce the risk of starting the appliance accidentally.
- Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.

- Use appliances only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- 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.
- 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.
- Do not use a battery pack or appliance that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.
- Do not expose a battery pack or appliance to fire or excessive temperature. Exposure to fire or temperature above 130°C may cause explosion. The temperature of 130°C can be replaced by the temperature of 265°F.
- Follow all charging instructions and do not charge the battery pack or appliance outside of the temperature range specified in the instructions. Charging improperly or at temperatures outside of the specified range may damage the battery and increase the risk of fire.
- Have servicing performed by a qualified repair person using only identical replacement parts. This will ensure that the safety of the product is maintained.
- Do not modify or attempt to repair the appliance or the battery pack (as applicable) except as indicated in the instructions for use and care.

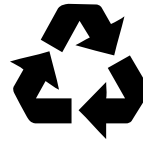
3 SYMBOLS ON THE PRODUCT

Some of the following symbols may be used on this tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

Symbol	Name	Explanation
V	Volt	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
min	Minutes	Time
/min	Per Minute	Revolutions, strokes, surface speed, orbits etc., per minute
	Direct Current	Type or a characteristic of current
n_0	No Load Speed	Rotational speed, at no load

Symbol	Name	Explanation
	Safety Alert	Precautions that involve your safety.
IPX4	Ingress Protection Degree	Protection from splashing water.
	Read Operator's Manual	To reduce the risk of injury, user must read and understand operator's manual before using this product.
	Eye Protection	Always wear eye protection with side shields marked to comply with ANSI Z87.1 when operating this equipment.
	DANGER --- Keep Hands and Feet Away	To reduce the risk of injury, keep hands and feet away from rotating parts. Do not operate unless discharge cover or grass bag is in its proper place. If damaged, replace immediately.
	DANGER --- Steep Slope Hazard	Use extra caution on slopes. do not mow slopes greater than 15 degrees.
	DANGER --- Thrown Debris	Remove objects that can be thrown by the blade in any direction. Wear safety glasses.
	DANGER --- Keep Bystanders Away	Keep all bystanders at least 100 ft. away.
	DANGER --- Keep Bystanders Away	Keep the area of operation clear of all bystanders, particularly small children. Stop the machine and attachment(s) if anyone enters the area.
	Look around	Always look where you are going and be aware of your surroundings.
	Keep children away	Never carry children on the mower with you. Keep children and animals out of the mowing area.
	No Reach	Do not reach hands or feet under mower deck.

4 ENVIRONMENTALLY SAFE BATTERY DISPOSAL



The toxic and corrosive materials below are in the batteries used in this machine: **Lithium-Ion, a toxic material.**

▲ WARNING

Discard all toxic materials in a specified manner to prevent contamination of the environment. Before discarding damaged or worn out Li-ion battery, contact your local waste disposal agency, or the local Environmental Protection Agency for information and specific instructions. Take the batteries to a local recycling and/or disposal center, certified for lithium-ion disposal.

▲ WARNING

If the battery pack cracks or breaks, with or without leaks, do not recharge it and do not use. Discard it and replace with a new battery pack. **DO NOT TRY TO REPAIR IT!** To prevent injury and risk of fire, explosion, or electric shock, and to avoid damage to the environment:

- Cover the terminals of the battery with heavy-duty adhesive tape.
- **DO NOT** try to remove or destroy any of the battery pack components.
- **DO NOT** try to open the battery pack.
- If a leak develops, the released electrolytes are corrosive and toxic. **DO NOT** get the solution in the eyes or on skin, and do not swallow it.
- **DO NOT** put these batteries in your regular household trash.
- **DO NOT** incinerate.
- **DO NOT** put them where they will become part of any waste landfill or municipal solid waste stream.
- Take them to a certified recycling or disposal center.

5 PROPOSITION 65

▲ WARNING

This product contains a chemical known to the state of California to cause cancer, birth defects or other reproductive harm. Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints;
- Crystalline silica from bricks and cement and other masonry products;
- Arsenic and chromium from chemically treated lumber.

Your risk of exposure to these chemicals varies depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

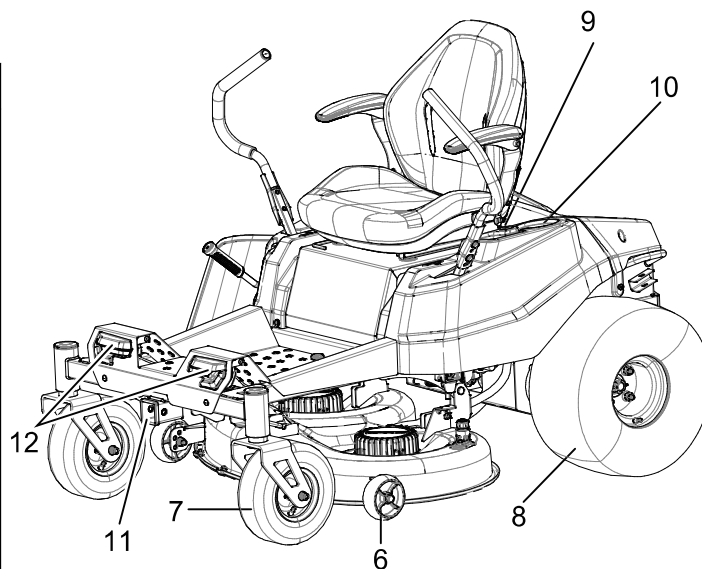
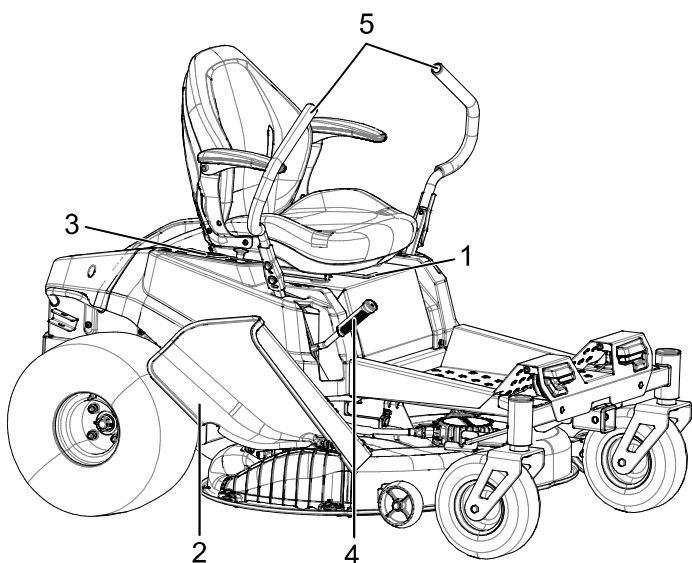
Save these instructions.

6 DESCRIPTION

6.1 PURPOSE

This machine is used for domestic lawn mowing. The cutting blade should be parallel to the ground. All four wheels must touch the ground while mowing.

6.2 OVERVIEW

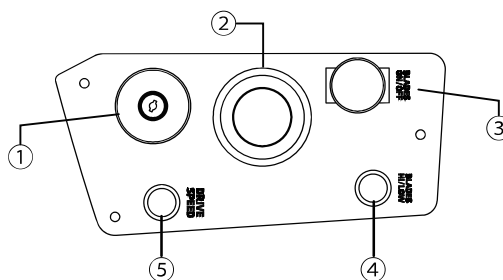


- 1 Seat adjustment lever
- 2 Side discharge chute
- 3 Control panel
- 4 Deck height adjustment lever
- 5 Steer control lever
- 6 Anti-scalp wheels
- 7 Front wheels
- 8 Rear wheels
- 9 USB port
- 10 Cup holder
- 11 ETO socket (2" X 2")
- 12 Headlight

7 KNOW YOUR MACHINE

7.1 CONTROL PANEL

7.1.1 CONTROL PANEL



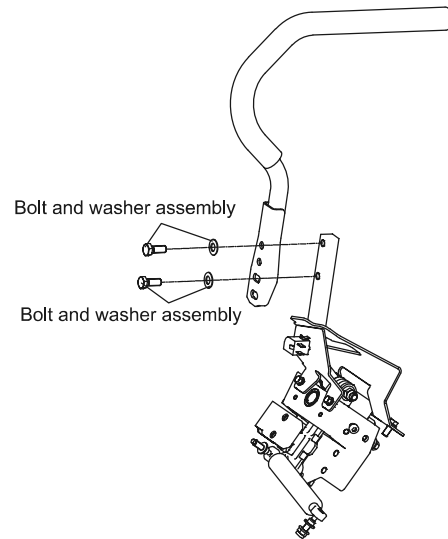
#	Name	Function
1	Power switch with start key	The power switch is used to turn the mower on and off. The start key must be inserted before the switch can be operated.

#	Name	Function
2	Digital display	This display shows important electrical system information. Refer to the Electrical section for complete information.
3	ON/OFF for blade (PTO)	Pull the PTO switch up to activate the mower's cutting blades. Push the knob down to stop the cutting blades.
4	High/Low for blade speed	High blade mode is a higher blade speed for cutting thicker grass, while low blade mode provides lower blade speed for lower battery consumption on thinner, drier grass areas. Press it for high blade speed, the green light will be on. Pull it for low blade speed, the light will be off. i NOTE Mowing time will be increased when mowing in low blade mode.
5	High/Low for driving speed	Allows operators to select a comfortable driving speed. Pressing it to "High Speed" position means that the maximum drive speed will be 8 mph, the green light will be on. Pull up it to "Low Speed" position means that the maximum drive speed will be 4 mph, the light will be off. Pull it up to "Low Speed" position for inexperienced operators or when trimming around objects, buildings and other obstacles. i NOTE Get comfortable with mower before using "High Speed" setting. The maximum speed may be adjusted at any time, whether the mower is in motion or not.

7.2 INSTALL THE ROLL OVER PROTECTION STRUCTURE (ROPS)

▲ WARNING

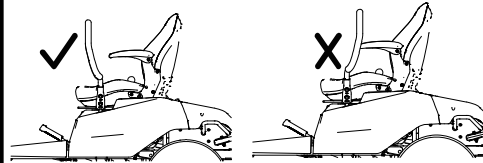
The left and right steering levers should be adjusted so that they align with each other when in the neutral position. NEVER install the steering levers in an asymmetrical operating height.



1. Lift one steering lever to align the holes in the steering lever with the holes in the corresponding mounting pole. Select the preferred steering-lever operating height, and then use the wrench (13*16mm) to secure the steering lever as indicated below.
2. Assemble the other steering lever and in the same way.

▲ CAUTION

Do not install the upper handle reversely.

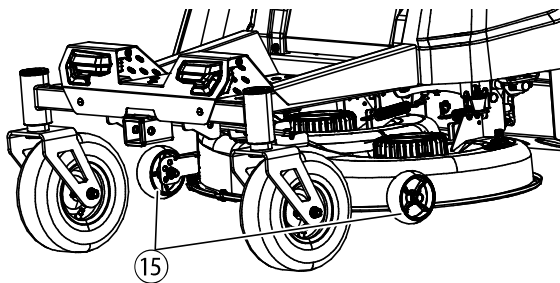


7.3 STEERING CONTROL LEVERS

The two levers control the mower's speed, direction, stopping, neutral lock, and parking brake. Levers are used to steer, accelerate, decelerate, stop, and change direction. When the control levers are in the park brake position, the mower will not move.

7.4 ANTI-SCALP WHEELS

Anti-scalp wheel kits are standard on Greenworks Commercial units. These anti-scalp wheels (23) are designed to minimize scalping when mowing on rough, uneven terrain. After setting the cutting height, adjust the anti-scalp wheels so they extend below the deck but do not contact the ground. They should always be at least 1/4" to 3/4" below the deck. With the unit sitting on a flat level surface, the wheel position can be adjusted up or down as needed from 3/4" to 1-3/4" below the blade surface. Move the wheels up or down - using the different axle mount holes in the wheel mount bracket (if applicable on model).



7.5 NEUTRAL BYPASS KNOB

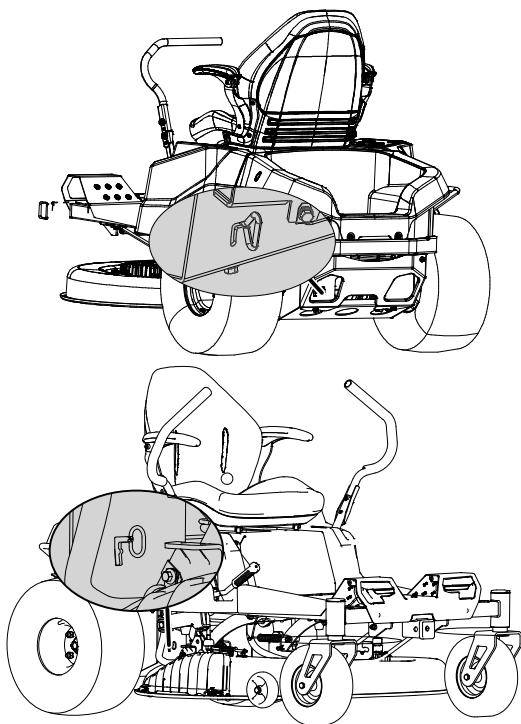
1. Pull the neutral bypass knobs outwards and then downwards to unlock the wheel.
2. Move the neutral bypass knobs back into position to lock the wheels.

▲ WARNING

Never drive mower with the neutral bypass knob working. Always install the neutral bypass knob to the original position before driving! Failure to re-install the knob could cause serious damage to your mower and void mower warranty!

▲ WARNING

Never pull the neutral bypass lever outside when the machine is working on the slope!



8 UNPACK THE MACHINE

▲ WARNING

Make sure that you correctly assemble the machine before use.

▲ WARNING

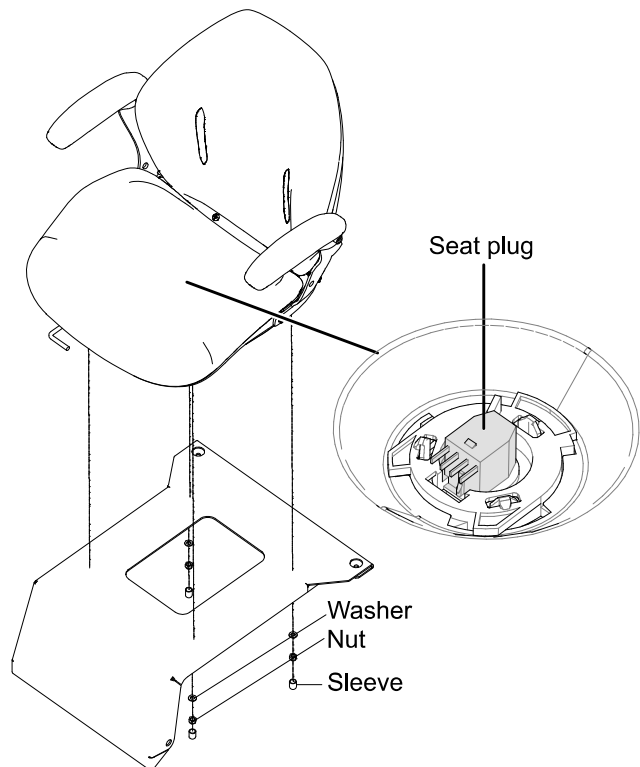
- If parts of the machine are damaged, do not use the machine.
- If you do not have all the parts, do not operate the machine.
- If parts are damaged or missing, contact the service center.

1. Open the package.
2. Read the documentation provided in the box.
3. Remove all the unassembled parts from the box.
4. Remove the machine from the box.
5. Discard the box and packing material in compliance with local regulations.

▲ WARNING

For your personal safety, do not insert battery before the tool is assembled completely.

9 INSTALL THE SEAT



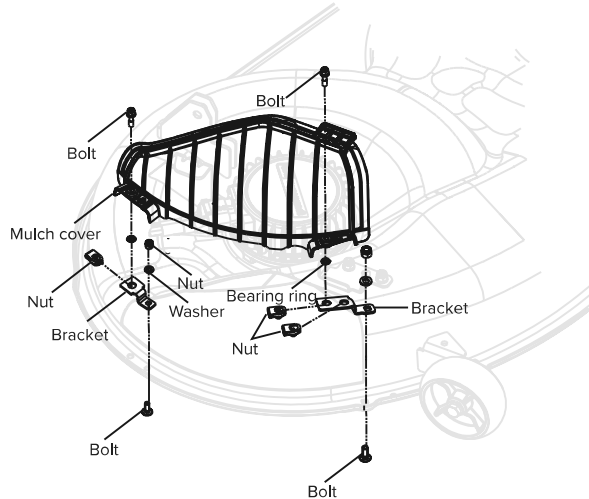
1. Place the seat assembly over the mounting brackets and align holes as shown.
2. Connect the seat plug to the machine.

3. Install the washers and nuts and tighten securely.
4. Attach the sleeve to the nut.
5. Make sure it is securely seated.

10 INSTALL THE ACCESSORIES

1. Mulch cover

10.1 INSTALL THE MULCH COVER



The mower is configured for side discharge when shipped. If mulching is desired:

1. Place the mulch cover on the tab on the mower housing.
2. Align the holes in the mulch cover and the holes in the mower housing.
3. Install and tighten the bolts, screws, fixation clamps and bearing ring as shown.

11 OPERATION

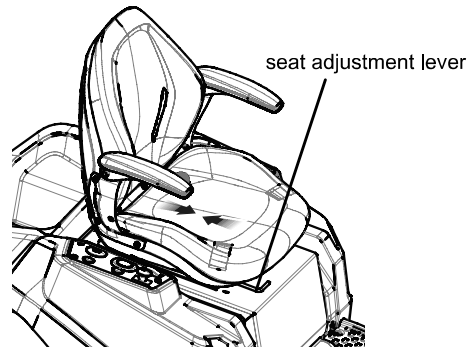
▲ WARNING

Wear eye protection during operation.

11.1 BEFORE OPERATION

11.1.1 ADJUST THE SEAT

Push steer control levers outward into PARK BRAKE position before you adjust the seat.



1. Sit down on seat and lift the seat adjustment lever.
2. While holding the lever, slide the seat to the desired position.
3. Release the lever and make sure the seat is locked in position before operating the mower.

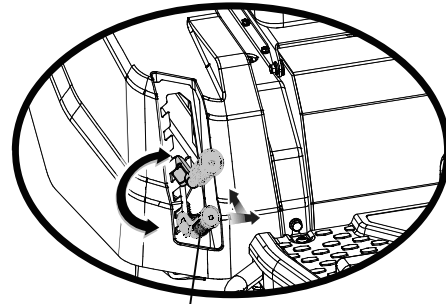
▲ WARNING

Be sure the seat is locked into place before operating the mower. A seat that is not secure can cause the operator to shift and lose control of the mower and result in possible death or serious personal injury.

11.1.2 ADJUST THE DECK CUTTING HEIGHT

Before using the mower, raise the deck height to the cutting position best suited for your lawn.

Deck height is adjustable from 1.5-4.5" inches. Deck should be raised while mowing is in progress to avoid stumps, rocks or other obstacle that can damage mower deck.



Deck height adjustment lever

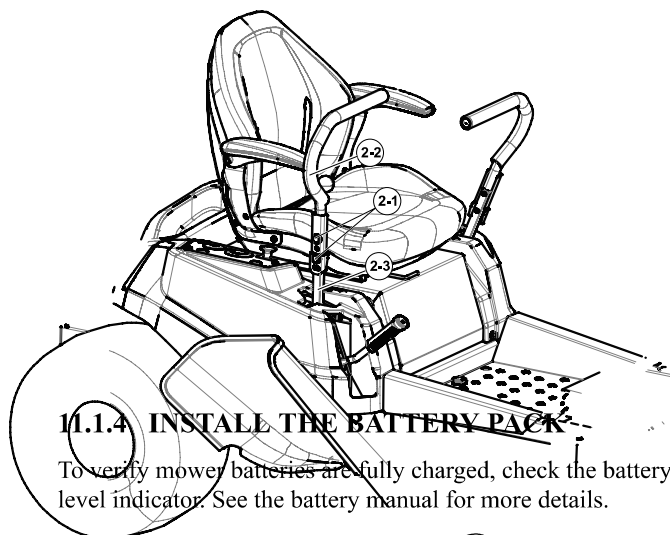
1. Stop the mower and disengage blades.
2. Turn key to OFF position and set the parking brake.
3. To raise the cutting deck, grasp the deck height adjustment lever, push left to disengage from slot, move toward the back of the mower, then push right into slot to secure.
4. To lower the cutting deck, grasp the deck height adjustment lever, push left to disengage from slot, move toward the front of the mower, then push right into slot to secure.

▲ CAUTION

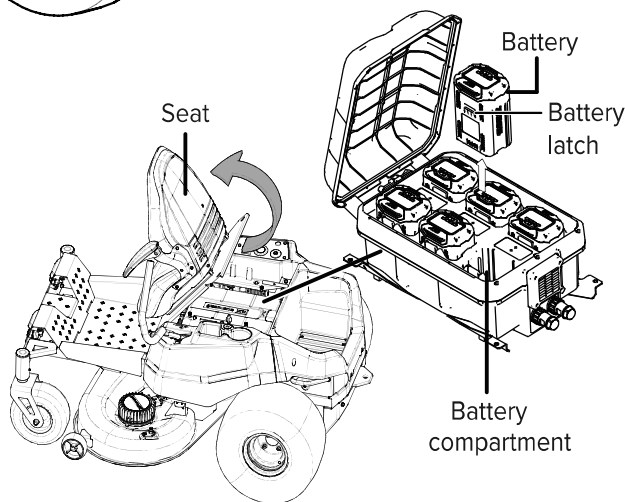
Hold the deck height adjustment lever firmly when setting the deck height and only release when it is secure in the desired slot. Quickly letting go of the lever may create a pinching or pulling hazard to the operator's hand.

11.1.3 ADJUST THE STEERING CONTROL LEVER

The steering control levers (2) can be adjusted for operator comfort. By loosening the cap screws (2-1) that attaches the upper control lever (2-2) to the lower lever (2-3), the upper control lever can be pivoted to fit the operator's personal preference. The steering control levers should be adjusted so that they align with each other when in the neutral position.

**11.1.4 INSTALL THE BATTERY PACK**

To verify mower batteries are fully charged, check the battery level indicator. See the battery manual for more details.



1. Lift the seat panel.
2. Lift the battery compartment cover.
3. Install the battery pack into the battery compartment.

▲ WARNING

Align the ribs of the battery with the battery port. Make sure that the battery latch clicks into the battery compartment smoothly.

11.1.5 BEFORE OPERATING THE MACHINE

- Ensure work area is clear of children, bystanders, and pets.
- Clear the work area of objects that may be thrown by the mower blades.
- Check brake operation.
- Check tire pressure.
- Check for loose fasteners.
- Check to make sure all guards are in place and working properly.
- Clean debris from mower.
- Test safety interlock system.
- Adjust seat to desired position.
- Verify battery charge level.

11.1.6 SAFETY START INTERLOCK SYSTEM

The machine is equipped with a safety start interlock system consisting of the park brake switches, seat switch, and deck blades ON and OFF switch.

The mower's safety start interlock system is also designed to protect the operator and others from accidental injury due to unintentional traction drive system starting.

Check mower safety start interlock system daily, prior to operation. This system is an important mower safety feature. It should be repaired immediately if it malfunctions. The machine incorporates a separate seat switch which will stop the drive system and deck motors when the operator is unseated for any reason while the mower is operating. This is a safety feature designed to prevent runaway or accidental entanglement.

▲ WARNING

The safety interlock system must not be disconnected or bypassed. Doing so could cause the machine to operate unexpectedly, resulting in personal injury.

To inspect the system:

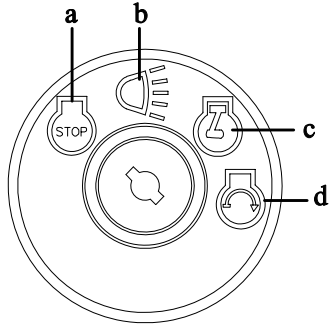
1. The operator must be on the seat when testing the seat switch.
2. Turn the key to start the machine.
3. Pull the steering control levers to the parking slots.
4. Pull up on the PTO switch to engage the motor.
5. Slowly raise off of the seat. The deck blade system should stop.
6. If the deck blade system fails to stop when the operator is off of the seat and if the cause cannot be determined, contact your Greenworks dealer immediately.

11.2 OPERATE THE MACHINE

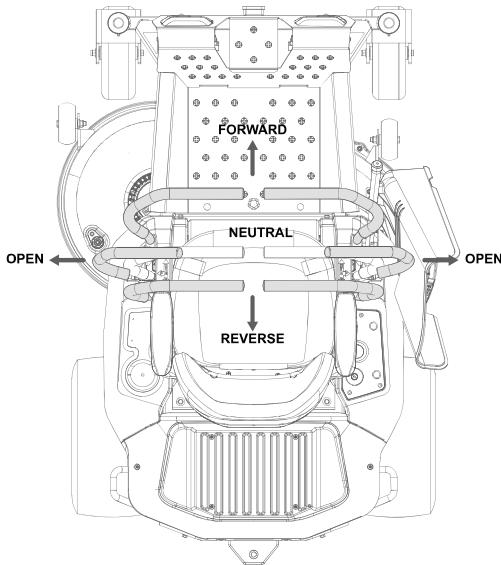
11.2.1 START THE MACHINE

▲ WARNING

Clear the area of bystanders before operating the mower. If anyone enters the mowing area, stop immediately and do not return to mowing until the bystanders leave the area.



a	Stop / Off
b	On (with lights)
c	Run
d	Start



1. Raise the mower deck to its highest position.
2. Insert start key and turn to start position (d).

i NOTE

The buzzer alarms for one time, the machine is **READY TO GO**, then you can drive the machine even without blade working.

3. Release the parking brake.

i NOTE

The key will return back to (c) position automatically. Wait for 4 seconds until the display shows normally.

4. Place steering control levers in forward (F) position and drive to desired mowing location.

i NOTE

Turn the headlight on by turning the key to the position (b) when you power on the machine.

▲ WARNING

Use caution when crossing over gravel paths or driveways. Before crossing, disengage the blades and raise the cutting deck to the highest position to minimize the possibility of ricochet. Drive slowly to avoid loss of traction and control.

i NOTE

Do not attempt to change the direction of operation while the mower is in motion. Always come to a complete stop before changing the mower direction.

▲ WARNING

Steering control levers will spring back towards neutral position if you release them, but you still need to control them manually to reach neutral position.

11.2.2 STOP THE MACHINE

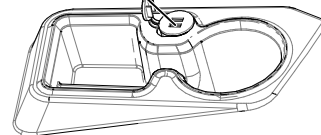
▲ DANGER

Never make sudden stops or reverse direction, especially when maneuvering on a slope. The steering is designed for sensitive response. Rapid movement of the steering control levers in either direction could result in a reaction of the machine that can cause serious injury.

1. Return drive control levers to the Neutral position. Push drive control levers outward into park brake position.
2. Push down on the PTO switch to turn blades off.
3. Turn the key to OFF position (a).

11.2.3 USE THE USB PORT

USB port



The USB charging port provides charging power of 5 Volts DC at up to 2.1 amps for your cell phone, MP3 player, or other USB devices. Consult the owner's manual for your device for specific charging requirements.

Connect one end of a USB cable (not provided) to your device and the other end to the USB charging port on the mower, to begin charging your device.

i NOTE

Attempting to charge devices rated more than 2.1 amps could damage the USB charging port and/or the mower.

i NOTE

The USB port is only powered when the machine starts.

▲ WARNING

Never use headphones or any electronic device, such as a smart phone or tablet, while operating the mower. Distracted operation can result in an accident that could result in death or serious personal injury to the operator or a bystander.

11.2.4 ELECTRIC TAKE OFF (ETO) SOCKET FOR CONNECTING ACCESSORIES

The machine can be used together with other attachments such as the blower.

11.2.5 OPERATION SUGGESTIONS

▲ DANGER

Prior to operation, the operator should be thoroughly familiar with the proper use and operation of the equipment, should read the manual completely and thoroughly, and should have attempted slow moving maneuvers to become familiar with the operation of the equipment before attempting normalspeed operation. An inexperienced operator should not mow on slopes or on uneven terrain.

▲ WARNING

If you lose steering control while operating the machine, place the steering control levers in the park brake position immediately and turn key to the "OFF" position. Inspect the machine and consult your Greenworks Commercial dealer to resolve the problem before continuing to operate.

▲ WARNING

The unit's steering control levers are very responsive. For smooth operation, move levers slowly, avoiding sudden movements. Skill and ease of operation come with practice and experience. The machine can spin very rapidly. Use caution when making turns and slow down before making sharp turns.

Inexperienced operators may have a tendency to oversteer and lose control. Slow-moving practice maneuvers are recommended to become familiar with these characteristics before attempting normal-speed operation.

▲ WARNING

Sharp depressions or raised obstacles (such as gutters or curbs) should not be directly approached at high speed in an attempt to "jump" them as the operator could be thrown from the equipment. Approach at a slow speed and angle one drive wheel at the obstruction. Continue at an angle until the wheel clears and then pivot the opposite wheel around.

When turning on soft or wet turf, keep both wheels rolling either forward or backward. Pivoting on one stopped wheel can damage turf. Keep blades sharp. Many problems with incorrect cutting patterns are due to dull blades or blades which have been sharpened incorrectly. Blade sharpness should be checked daily.

▲ DANGER

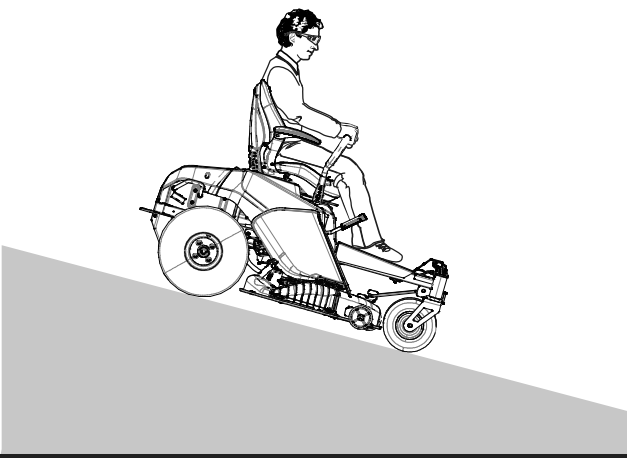
Never work with blades while key is in the ignition switch. Always place deck blade switch in the disengaged position, place steering control levers in the park brake position and turn key to the OFF position and remove key from switch. Block up mower when you must work under it. Wear gloves when handling blades. Always check for blade damage if mower strikes a rock, branch, or another foreign object during mowing.

- **Direct grass discharge to right**, away from unmowed area. Select a mowing pattern that directs grass discharge towards the outside the mowing area. Generally, this means using a pattern utilizing left turns because side discharge is to the right. In any case, avoid throwing grass discharge onto unmowed area because grass is then mowed "twice." Mowing twice puts an unnecessary load on the unit and reduces mowing efficiency.
- **When mowing a lawn for the first time**, cut grass slightly longer than normal to avoid scalping uneven terrain. When possible, it is best to use the cutting height that was used in the past. When cutting grass taller than six inches, you may want to mow the lawn twice to achieve a better quality of cut.
- **During normal mowing**, cut only about 1.5" of the grass blade. Cutting more than that is not recommended unless grass is sparse or it is the end of the mowing season.
- **Alternate mowing pattern between cuts** to keep the grass growing straight and better dispersion of the clippings.
- **Remember, grass grows at different rates** at different time of the year. Mow more often in the early spring to maintain the same cutting height. As the growth rate slows in mid summer, mow less frequently. If you cannot mow at a regular interval, mow at a high cutting height at first, then mow again two days later at a lower cutting height.
- **Raise the cutting height of the mower** if the cutting width of the mower is wider than the previous mower. This ensures that uneven turf is not cut too short.
- **Raise the cutting height of the mower** if the grass is slightly taller than normal or if it contains a high degree

of moisture. Then mow it again with the cutting height set lower.

- **If the machine's forward motion must be stopped** 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.
- **Charge the battery immediately** if the battery power of the machine is lower than 5%.
- **Allow motors 30 minutes to cool down.** If drive motor exceeds programmed temperature, the motor speed will decrease. If temperature continues to increase, drive will shut down at a higher programmed temperature.

11.3 SLOPE OPERATION



- Travel in the manufacturer recommended direction on slopes. Use caution while operating near drop-offs.
- Do not operate machine under any condition where traction, steering, or stability is in question. Tires could slide even if the wheels are stopped.
- Always keep the machine in gear when going down slopes. Do not coast downhill.
- Use extreme caution when operating on slopes.
- Do not remove or modify any wheels.
- Watch for holes, ruts, bumps, rocks or other hidden objects. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
- Remove obstacles such as rocks, tree limbs, garbage etc.
- Keep all movement on slopes slow and gradual. Do not make sudden changes in speed or direction.
- Avoid starting and stopping on a slope. If tires lose traction, disengage the blades and proceed slowly straight down the slope.
- Mow a safe distance (minimum of 10 feet, or 3 meters) away from drop-offs, retaining walls, drainage ditches, embankments, water, and other types of hazards to avoid a wheel dropping over the edge or the ground breaking away. This will reduce the risk of the machine suddenly rolling over, which could cause either serious injury or death.

- Use a walk-behind, push mower or hand-held trimmer on slopes and near drop-offs, retaining walls, drainage ditches, embankments and water.
- Do not mow on wet grass. Reduced traction could cause sliding and loss of steering control.
- Do not tow on slopes. The weight of the towed equipment may cause loss of traction and control.
- If the mower's tires lose traction when operating on slopes, disengage the deck drive, place the steering control levers in the park brake position, press the push button switch, remove the magnetic bar and get help.
- Never make sudden starts, stops, turns, or reverse direction, especially when maneuvering on slopes. The steering is designed for sensitive response. Rapid movement of the steering control levers in either direction could result in a reaction of the machine that can cause serious injury.
- Never stop suddenly while backing down slopes. This action may result in a reaction of the machine that can cause serious physical injury.
- The Greenworks mower is capable of operating horizontally (traverse) on moderate slopes. When operating on slopes up to 15 degrees, take care of any conditions that may cause the mower drive tires to lose traction, resulting in a possible loss of control of the machine. An operator should not operate on a slope until he is thoroughly familiar with the equipment.

Do not operate on slopes greater than 15 degrees.

Refer to Slope Guide, when determining the degree of slope to be mowed. It is strongly recommended that the operator drive the machine off of the slope, using extreme caution, if any sign of loss of traction is detected. Wait until the condition that caused the problem is resolved before attempting to operate on the slope again. Terrain conditions can affect traction, resulting in possible loss of control of the machine. Some of the conditions to be aware of are:

1. Wet terrain
2. Depressions in the ground (e.g., holes, ruts, washouts)
3. Mounds of dirt
4. Certain types of soil (e.g., sand, loose dirt, gravel, clay)
5. Grass type, density, and height
6. Extremely dry conditions
7. Tire pressure

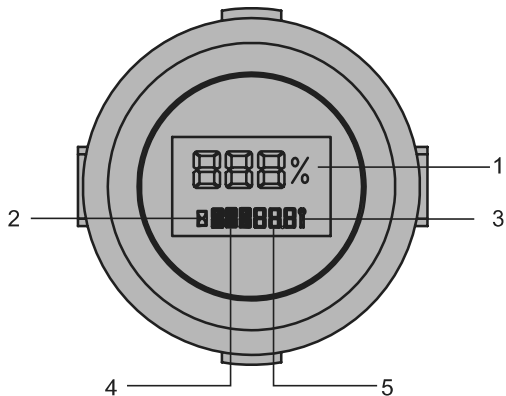
The attachments mounted to the mower will also affect the way it handles on a slope. Be aware that each attachment's characteristics vary.

These are just a few examples of situations where caution must be used when operating on a slope. There are many other possibilities too numerous to mention. Remember to always exercise extreme caution while operating on any slope.

11.4 DIGITAL DISPLAY

The function of the digital display, located on the control panel, is to provide electrical system information to the operator. It gives detailed information in the form of pattern, codes and number.

11.4.1 DIGITAL DISPLAY



#	Name	Meaning
1	888%	Battery remaining capacity
2	⌚	Hourglass
3	🔑	Controller fault/ battery fault/ motor fault/ Vehicle fault
4	⊠⊠⊠	Fault position
5	888	Fault code/ total working hours

11.5 FAULTS

The Canbus system will take action to protect the user and machine when it detects an issue. When it acts to turn off the machine or a component, it will indicate that a fault has occurred, and that fault will be shown on the digital display. All electrical faults have a letter code followed by a number. The first letter describes the system that caused the fault according to this chart:

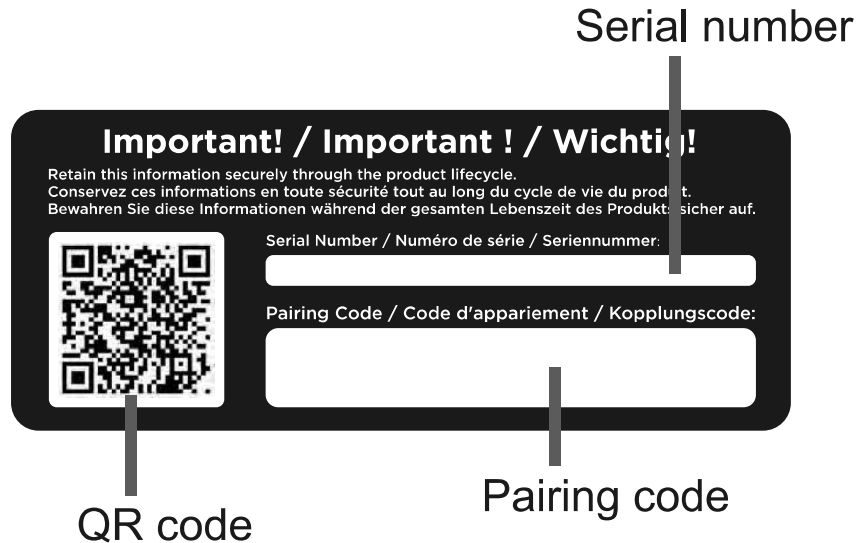
11.5.1 FOR RZ SERIES

TR	Right Driver Controller and motor
TL	Left Driver Controller and motor
PMU	Power management unit (in the battery cabin)
MR	Right Blade Controller and motor
ML	Left Blade Controller and motor

12 APP OPERATION TIPS

12.1 MOBILE APPLICATION

Find the serial number, pairing code and QR code in the vehicle matching label on your QUICK START GUIDE.



12.2 REGISTRATION AND LOGIN

Scan the QR code and download the app and login in.

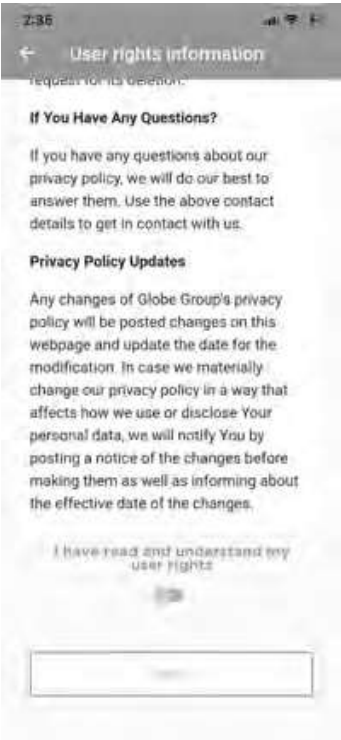
Step 1. Create an account and then log in.



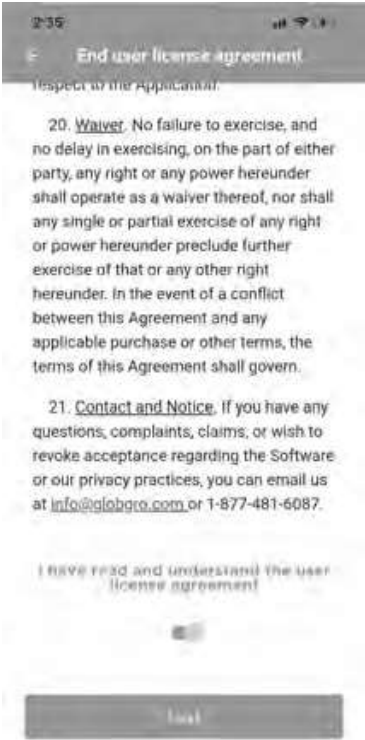
Step 2. Fill in the registration information (with * is required), and then click the "next" button.



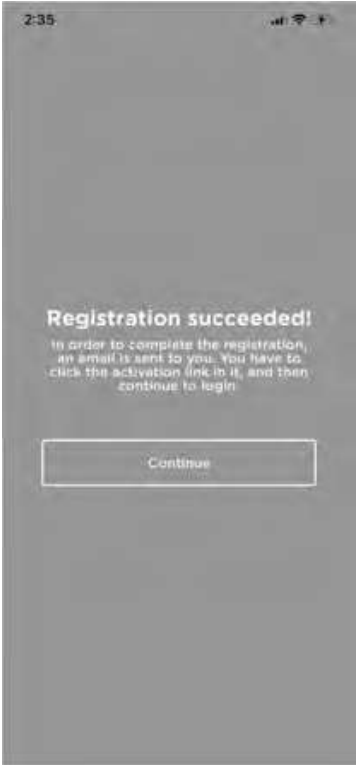
Step 3. Confirm User Rights.



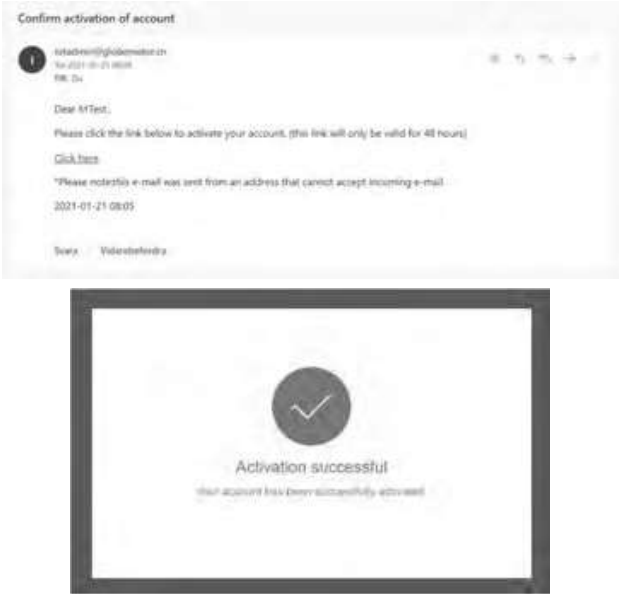
Confirm End User License Agreement.



Step 4.1. Activate the account email, click "Continue".



Step 4.2. Open the email and click "Click here" to get to the log in interface.

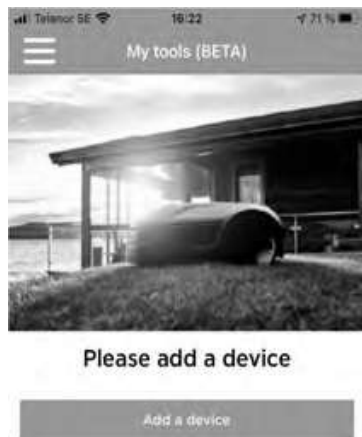


Step 5. Log in.



12.3 ADD A DEVICE

Step 1. Add a device of Greenworks tools.



Step 2. Find category of vehicle according to your device type, then click button "Pair" (Vehicle).

