

OPERATOR'S MANUAL

Battery-Powered Lithium-Ion Rider

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WARNING

**READ AND FOLLOW ALL SAFETY RULES AND INSTRUCTIONS IN THIS MANUAL
BEFORE ATTEMPTING TO OPERATE THIS MACHINE.
FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY.**

NOTE: This Operator's Manual covers several models. Features may vary by model. Not all features in this manual are applicable to all models and the model depicted may differ from yours.



⚠ WARNING

⚠ This symbol points out important safety instructions which, if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in personal injury. When you see this symbol. **HEED ITS WARNING!**

⚠ WARNING

California Proposition 65

This product contains a chemical known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

⚠ DANGER

This machine was built to be operated according to the safe operation practices 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 machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

READ ALL INSTRUCTIONS

1500 Watt-Hours Lithium-Ion Battery System



Servicing requires extreme care and knowledge of the system and must be performed only by a qualified service technician. For repair or service take the tractor to your nearest authorized service dealer. Always use original equipment manufacturer's (OEM) replacement parts when servicing.

General Operation

- | | | |
|---|---|---|
| 1. Read, understand, and follow all instructions on the rider and in the manual(s) before attempting to assemble and operate. Keep this manual in a safe place for future and regular reference and for ordering replacement parts. | 10. Always wear safety glasses or safety goggles during operation and while performing an adjustment or repair to protect your eyes. Thrown objects which ricochet can cause serious injury to the eyes. | 24. Never leave a running rider unattended. Always turn off blade(s), turn power key to OFF position and remove before dismounting. |
| 2. Be familiar with all controls and their proper operation. Know how to stop the rider and disengage them quickly. | 11. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts. Loose fitting clothes and jewelry can be caught in movable parts. Never operate this rider in bare feet or sandals. | 25. Use extra care when loading or unloading the rider into a trailer or truck. This rider should not be driven up or down ramp(s), because the rider could tip over, causing serious personal injury. The rider must be pushed manually on ramp(s) to load or unload properly. |
| 3. Never allow children under 14 years of age to operate this rider. Children 14 and over should read and understand the instructions and safe operation practices in this manual and on the rider and should be trained and supervised by an adult. | 12. Be aware of the cutting deck and attachment discharge direction and do not point it at anyone. Do not operate the cutting deck without the discharge cover or entire grass catcher in its proper place. | 26. Motors may become hot and can cause a burn. Do not touch. |
| 4. Never allow adults to operate this rider without proper instruction. | 13. Do not put hands or feet near rotating parts or under the cutting deck. Contact with the blade(s) can amputate hands and feet. | 27. Check overhead clearances carefully before driving under low hanging tree branches, wires, door openings etc., where the operator may be struck or pulled from the rider, which could result in serious injury. |
| 5. Do not charge or operate the rider in the rain or wet conditions. | 14. A missing or damaged discharge cover can cause blade contact or thrown object injuries. | 28. Your rider is designed to cut normal residential grass of a height no more than 10". Do not attempt to mow through unusually tall, dry grass (e.g., pasture) or piles of dry leaves. Dry grass or leaves may contact hot surfaces and/or build up on the rider deck presenting a potential fire hazard. |
| 6. In case of a system fault or a complete loss of battery power the rider can freewheel. Depress the brake pedal to maintain control and stop the rider. Restart the rider. If the problem persists, contact your authorized service dealer. | 15. Stop the blade(s) when crossing gravel drives, walks, or roads and while not cutting grass. | 29. Use only accessories and attachments approved for this rider by the rider manufacturer. Read, understand and follow all instructions provided with the approved accessory or attachment. |
| 7. To help avoid blade contact or a thrown object injury, keep bystanders, helpers, children and pets at least 75 feet from the rider while it is in operation. Stop rider if anyone enters the area. | 16. Watch for traffic when operating near or crossing roadways. This rider is not intended for use on any public roadway. | 30. Data indicates that operators, age 60 years and above, are involved in a large percentage of rider-related injuries. These operators should evaluate their ability to operate the rider safely enough to protect themselves and others from serious injury. |
| 8. Thoroughly inspect the area where the equipment is to be used. Remove all stones, sticks, wire, bones, toys, and other foreign objects which could be picked up and thrown by the blade(s). Thrown objects can cause serious personal injury. | 17. Do not operate the rider while under the influence of alcohol or drugs. | 31. If situations occur which are not covered in this manual, use care and good judgment. Contact your customer service representative for assistance. |
| 9. Plan your mowing pattern to avoid discharge of material toward roads, sidewalks, bystanders and the like. Also, avoid discharging material against a wall or obstruction which may cause discharged material to ricochet back toward the operator. | 18. Mow only in daylight or good artificial light. | |
| | 19. Never carry passengers. | |
| | 20. Do not turn the key off and coast downhill. | |
| | 21. Turn off blade(s) before traveling in reverse. Back up slowly. Always look down and behind before and while backing to avoid a back-over accident. | |
| | 22. Slow down before turning. Operate the rider smoothly. Avoid erratic operation and excessive speed. | |
| | 23. Turn off blade(s), set parking brake, press Start/Stop button and wait until the blade(s) come to a complete stop before removing grass catcher, emptying grass, unclogging chute, removing any grass or debris, or making any adjustments. | |

Slope Operation

Slopes are a major factor related to loss of control and tip-over accidents which can result in severe injury or death. All slopes require extra caution. If you cannot back up the slope or if you feel uneasy on it, do not mow or drive on it.

For your safety, use the slope gauge included as part of this manual to measure slopes before operating this rider on a sloped or hilly area. If the slope is greater than 12 degrees as shown on the slope gauge, do not operate this rider on that area or serious injury could result.

Do:

1. Set the parking brake when sitting on an incline with the power key off.
2. Mow up and down slopes, not across. Exercise extreme caution when changing direction on slopes.
3. Watch for holes, ruts, bumps, rocks, or other hidden objects. Uneven terrain could overturn the rider. Tall grass can hide obstacles.
4. Use slow speed. Choose a low enough speed setting so that you will not have to stop while on the slope. Tires may lose traction on slopes even though the brakes are functioning properly. This rider uses regenerative braking on the drive motor to help slow it down.
5. Follow the manufacturer's recommendation for wheel weights or counterweights to improve stability.
6. Use extra care with grass catchers or other attachments. These can change the stability of the rider.
7. Keep all movement on the slopes slow and gradual. Do not make sudden changes in speed or direction. Rapid engagement or braking could cause the front of the rider to lift and rapidly flip over backwards which could cause serious injury.
8. Avoid starting or stopping on a slope. If tires lose traction, turn off the blade(s) and proceed slowly straight down the slope.

Do Not:

1. Do not turn on slopes unless necessary; then, turn slowly and gradually downhill, if possible.
2. Do not turn the power key off on an incline without setting the parking brake.
3. Do not mow or drive near drop-offs, ditches or embankments. The rider could suddenly turn over if a wheel is over the edge of a cliff, ditch, or if an edge caves in.
4. Do not try to stabilize the rider by putting your foot on the ground.
5. Do not use a grass catcher on steep slopes.
6. Do not mow or drive on wet grass. Reduced traction could cause sliding.
7. Do not press the Start/Stop button and coast downhill. Over-speeding may cause the operator to lose control of the rider resulting in serious injury or death.
8. Do not tow heavy pull behind attachments (e.g. loaded dump cart, lawn roller, etc.) on slopes greater than 5 degrees. When going down hill, the extra weight tends to push the rider and may cause you to lose control (e.g. rider may speed up, braking and steering ability are reduced, attachment may jack-knife and cause rider to overturn).

Children

1. Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the rider and the mowing activity. They do not understand the dangers. Never assume that children will remain where you last saw them.
 - a. Keep children out of the mowing area and in watchful care of a responsible adult other than the operator.
 - b. Be alert and turn rider off if a child enters the area.
 - c. Before and while backing, look behind and down for small children.
 - d. Never carry children, even with the blade(s) shut off. They may fall off and be seriously injured or interfere with safe rider operation.
 - e. Use extreme care when approaching blind corners, doorways, shrubs, trees or other objects that may block your vision of a child who may run into the path of the rider.
 - f. To avoid back-over accidents, always turn off the cutting blade(s) before traveling in Reverse. If equipped, the "Reverse Caution Mode" should not be used when children or others are around.
 - g. Remove key when rider is unattended to prevent unauthorized operation.
2. Never allow children under 14 years of age to operate this rider. Children 14 and over should read and understand the instructions and safe operation practices in this manual and on the rider and should be trained and supervised by an adult.

Towing

1. Tow only with a rider that has a hitch designed for towing. Do not attach towed equipment except at the hitch point.
2. Follow the manufacturers recommendation for weight limits for towed equipment and towing on slopes.
3. Never allow children or others in or on towed equipment.
4. On slopes, the weight of the towed equipment may cause loss of traction and loss of control.
5. The maximum tongue weight on the hitch is 50 lbs. and the maximum towed weight is 250 lbs.
6. Always use extra caution when towing with a rider capable of making tight turns (e.g. "zero-turn" ride-on rider). Make wide turns to avoid jack-knifing.
7. Travel slowly and allow extra distance to stop.
8. Do not press the Start/Stop button and coast downhill.

Service

General Service

1. Remove key and store rider indoors when not in use. Allow motors to cool before storing in any enclosure. Rider should be stored indoors in a dry place, out of reach of children.
2. Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery may create a risk of fire when used with another battery.
3. Do not use the charger in the rain.
4. Before cleaning, repairing, or inspecting, make certain the blade(s) and all moving parts have stopped.
5. Never douse or hose the rider with water. Avoid getting any liquid in the motors and electrical connections. Clean the rider after each use. Refer to cleaning and storage. Do not use solvents or strong detergents.
6. To reduce fire hazard, keep the motor(s) free of grass, leaves and debris build-up.
7. Periodically check to make sure the blade(s) come(s) to complete stop within (5) five seconds after operating the blade on/off button. If the blade(s) do not stop within the this time frame, your rider should be serviced professionally by an authorized service dealer.
8. Check brake operation frequently as it is subjected to wear during normal operation. Adjust and service as required.
9. Check the blade(s) and mounting bolts at frequent intervals for proper tightness. Also, visually inspect blade(s) for damage (e.g., excessive wear, bent, cracked). Replace the blade(s) with the original equipment manufacturer's (O.E.M.) blade(s) only. "Use of parts which do not meet the original equipment specifications may lead to improper performance and compromise safety!"
10. Rider blade(s) are sharp. Wrap the blade or wear gloves, and use extra caution when servicing them.
11. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
12. Never tamper with the safety interlock system or other safety devices. Check their proper operation regularly.
13. After striking a foreign object, stop the rider, remove the key and thoroughly inspect the rider for any damage. Repair the damage before operating the rider.
14. Never attempt to make adjustments or repairs to the rider while the power key is ON.
15. Grass catcher components and the discharge cover are subject to wear and damage which could expose moving parts or allow objects to be thrown. For safety protection, frequently check components and replace immediately with original equipment manufacturer's (O.E.M.) parts only. "Use of parts which do not meet the original equipment specifications may lead to improper performance and compromise safety!"
16. Maintain or replace safety and instruction labels, as necessary.

17. This product has an *Average Useful Life* of seven (7) years, or 270 hours of operation. At the end of the *Average Useful Life* have the rider inspected annually by an authorized service dealer to ensure that all mechanical and safety systems are working properly and not worn excessively. Failure to do so can result in accidents, injuries or death.
18. Do not dispose of the battery(ies) in a fire. The cell may explode. Check with local codes for proper disposal instructions.
19. Do not touch the motor(s). These parts can get hot from operation, even after the rider is turned off.
20. Exercise care in handling batteries in order not to short the battery with conductive materials such as rings, bracelets, and keys. The battery or conductor may be hot and cause burns.
21. For continued protection against risk of injury or electric shock, do not replace blown fuses. Please call authorized service personnel.

General Electric Safety

1. Do not expose the rider to rain or wet conditions.
2. Do not handle the rider with wet hands.
3. Do not operate the rider in the rain, in wet conditions or on wet surfaces.
4. To reduce the risk of electric shock, avoid body contact with grounded conductors, such as metal pipes or wire fences.
5. Do not operate the rider in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.

Battery Charger Safety

⚠ WARNING

Only use a Delta-Q battery charger (model # ICC650-048-CAN/part # 940-0029) to charge batteries. DO NOT attempt to charge any other batteries with a Delta-Q battery charger. Other types of batteries may burst, causing fire, personal injury or property damage.

1. A nameplate on the charger indicates the voltage used. Never connect the charger to an AC voltage that differs from this voltage.
2. An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of fire, electric shock or electrocution.
3. Do not use multiple extension cords
4. Make sure the extension cord is heavy enough to carry the current drawn by the charger. An undersized extension cord will cause a drop in line voltage, resulting in a loss of power and overheating. If in doubt, use the next heavier gauge cord. The smaller the gauge number, the heavier the cord.

MINIMUM WIRE SIZE FOR EXTENSION CORDS FOR 120 VOLT APPLIANCES USING 0-6 AMPS

Cord Length (ft.)	25	50	100	150
Wire Size (AWG)	16	16	16	14

5. Make sure the cords are in good condition. Inspect the power cord and extension cord periodically. Look closely for deterioration,

cuts or cracks in the insulation. If a cord is damaged in any manner while plugged in, disconnect the cord from both the outlet and the charger. Do not use a damaged cord. Damaged cords should be repaired or replaced.

6. Do not abuse cords. Never pull or carry the charger by a cord. Keep cords away from heat, oil, water, sharp edges, and moving objects. Always grasp the plug when disconnecting a cord.
7. Never modify a plug, cord or outlet in any way.
8. Ground Fault Circuit Interrupter (GFCI) protection should be provided on the circuit(s) or outlet(s) to be used with this charger. For an extra measure of safety, use receptacles with built-in GFCI protection.
9. Do not place the battery charger where cords might be stepped on, tripped over or subjected to damage.
10. Do not charge batteries in the rain or in wet conditions. Keep the battery charger in a cool and dry area.
11. Keep the battery charger away from all liquid.
12. Do not allow small metal items or material such as steel wool, aluminum foil or other foreign particles into the charger port.
13. Do not probe the charger with conductive material. There is a risk of electric shock.
14. Do not cover the battery charger. The battery charger may overheat.
15. Do not allow the battery or battery charger to overheat. If they are warm, allow them to cool down. Only charge batteries in temperatures between 32° and 104° F (0° and 40° C).
16. Always unplug the battery charger when it is not in use.

Battery Safety

1. Do not expose the battery to fire or to temperatures over 176° F (80° C). Doing so could cause an explosion.
2. Handle batteries with care. Do not short the battery with conductive materials, such as rings, bracelets, keys, etc. Shorting the battery may cause personal injury, damage to the battery or a fire.
3. Do not attempt to charge a cracked or damaged battery.
4. Do not use or charge a wet battery or a battery that shows any evidence of corrosion.

5. Do not use a damaged or modified battery. Doing so could result in a fire, explosion or personal injury.

⚠ WARNING

The battery may present a risk of fire or chemical burn if misused. Do not disassemble, overheat or incinerate the battery.

⚠ WARNING

Leakage from the Power Cell may occur under extreme usage, charging or temperature conditions or if the Power Cell is damaged, crushed or punctured. This leakage indicates a failure of the Power Cell and the Power Cell should be properly disposed of per local hazardous material regulations.

IF the Power Cell leakage gets on your skin or eyes, follow these steps:

- Immediately wash the area with soap and water.
- Immediately flush the eyes with clean water for a minimum of 20 minutes and seek immediate medical attention.

If the leakage gets on your clothing or shoes, remove, isolate and wash the contaminated clothing thoroughly.

⚠ WARNING

Only use a Delta-Q battery charger (model # ICC650-048-CAN/part # 940-0029) to charge batteries. DO NOT attempt to charge any other batteries with a Delta-Q battery charger. Other types of batteries may burst, causing fire, personal injury or property damage.

FCC Statement (Bluetooth® Models only)

⚠ CAUTION








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









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

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

Safety Symbols

This page depicts and describes safety symbols that may appear on this product. Read, understand, and follow all instructions on the rider before attempting to assemble and operate.

Symbol	Description
	READ THE OPERATOR'S MANUAL(S) Read, understand, and follow all instructions in the manual(s) before attempting to assemble and operate.
	WARNING — THROWN OBJECTS This rider may pick up and throw and objects which can cause serious personal injury. Stay clear. Keep bystanders, helpers, children and pets at least 75 feet from the rider while it is in operation.
	WARNING — BYSTANDERS Keep bystanders, helpers, children and pets at least 75 feet from the rider while it is in operation.
	DANGER — ROTATING BLADE(S) Never carry passengers. Never carry children, even with the blade(s) OFF.
	WARNING — ROTATING BLADE(S) Do not put hands or feet near rotating parts or under the cutting deck. Contact with the blade(s) can amputate hands and feet. Be sure blade(s) and power are off before placing hands or feet near blade(s).
	WARNING — ROTATING BLADE(S) Do not put hands or feet near rotating parts or under the cutting deck. Contact with the blade(s) can amputate hands and feet. Be sure blade(s) and power are off before placing hands or feet near blade(s). Always remove the power key when not in use.
	WARNING — SLOPE OPERATION Go up and down slopes, not across. Use extra caution on slopes. Do not mow or drive on slopes greater than 12°/21%. If rider stops going uphill, stop blade(s) back down slowly. max 10°/17%

Symbol	Description
	WARNING — ELECTRIC SHOCK Do not charge rider in rain or wet locations. Do not use battery operated rider in rain.
	WARNING — ELECTRIC SHOCK Do not charge rider in rain or wet locations. Do not use battery operated rider in rain.
	DANGER — SLOPE OPERATION Do not operate this rider where it could tip or slip. Avoid sudden turns. Use low speed.
	DANGER — SERVICE Many components on this rider should only be serviced by an authorized service dealer. Read this Operator's Manual before attempting to service this rider.
	DANGER — ROTATING BLADE(S) Always look down and behind before and while backing to avoid a back-over accident. To avoid a back-over accident, keep children away from the rider while it is in operation. Mowing in reverse is not recommended.
	WARNING — THROWN OBJECTS This rider may pick up and throw and objects which can cause serious personal injury.
	WARNING — ROTATING BLADES Do not put hands or feet near rotating parts or under the cutting deck. Contact with the blade(s) can amputate hands and feet.
	DANGER — GUARDS, SHIELDS, SWITCHES, ETC. Keep safety devices (Guards, Shields, Switches, Etc.) in place and working.

⚠ WARNING

Your Responsibility — Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.

SAVE THESE INSTRUCTIONS!

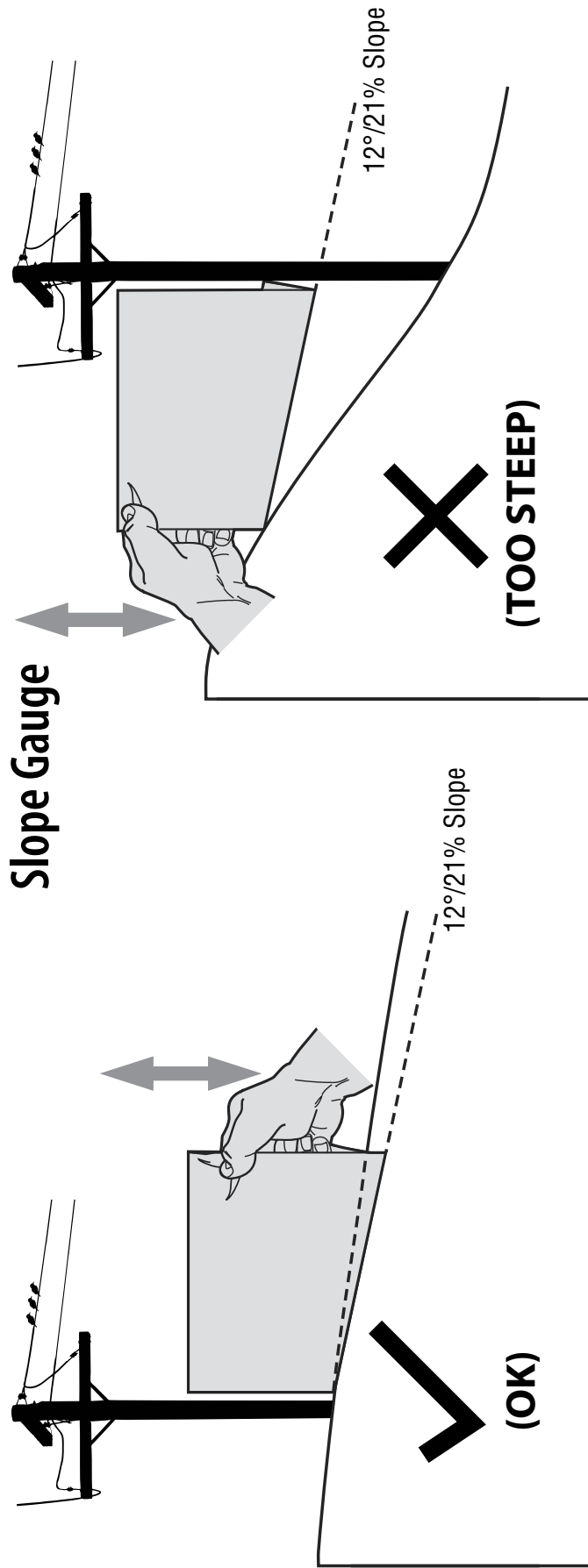


Figure 1

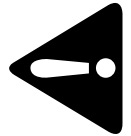
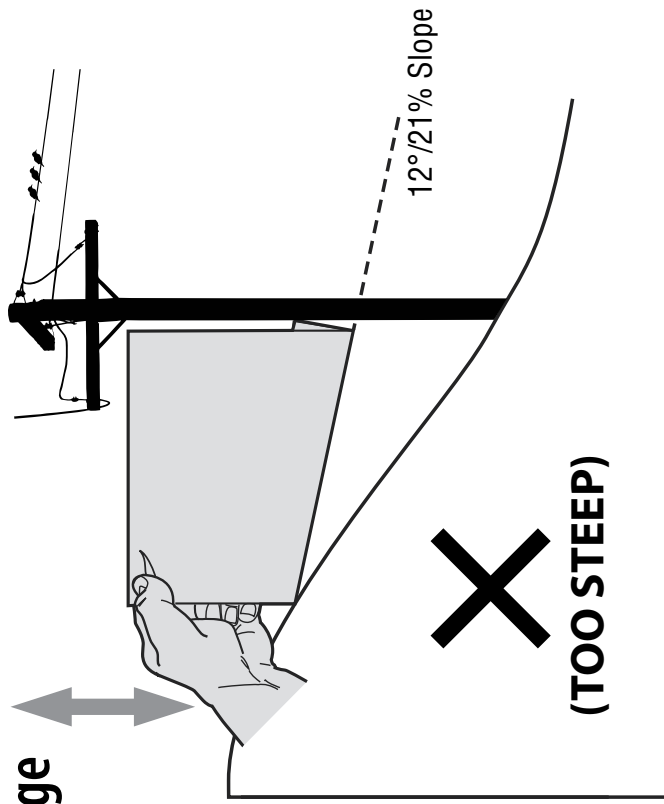
12°/21% dashed line

**USE THIS SLOPE GAUGE TO DETERMINE
IF A SLOPE IS TOO STEEP FOR SAFE OPERATION!**

To check the slope, proceed as follows:

1. Remove this page and fold along the dashed line.
2. Locate a vertical object on or behind the slope (e.g. a pole, building, fence, tree, etc.)
3. Align either side of the slope gauge with the object (See Figure 1 and Figure 2).
4. Adjust gauge up or down until the left corner touches the slope (See Figure 1 and Figure 2).
5. If there is a gap below the gauge, the slope is too steep for safe operation (See Figure 2 above).

Figure 2



WARNING! Slopes are a major factor related to tip-over and roll-over accidents which can result in severe injury or death.

Do not operate machine on slopes in excess of 12 degrees/21 percent. All slopes require extra caution. If you cannot back up the slope or if you feel uneasy on it, do not mow or drive on it. Always mow up and down slopes, never across the face of slopes.

Thank You

Thank you for purchasing this product. It was carefully engineered to provide excellent performance when properly operated and maintained.

Please read this entire manual prior to operating the equipment. It instructs you how to safely and easily set up, operate and maintain your machine. Please be sure that you, and any other persons who will operate the machine, carefully follow the recommended safety practices at all times. Failure to do so could result in personal injury or property damage.

All information in this manual is relative to the most recent product information available at the time. Review this manual frequently to familiarize yourself with the machine, its features and operation. Please be aware that this Operator's Manual may cover a range of product specifications for various models. Characteristics and features discussed and/or illustrated in this manual may not be applicable to all models. We reserve the right to change product specifications, designs and equipment without notice and without incurring obligation.

If you have any problems or questions concerning the machine, phone your local authorized service dealer or contact us directly. We want to ensure your complete satisfaction at all times.

Throughout this manual, all references to *right* and *left* side of the machine are observed from the operating position.

Contents of Crate

- | | | |
|---------------------------------|-------------------------|-------------------------------------|
| • Rider (1) | • Operator's Manual (1) | • Steering Wheel/Shaft Assembly (1) |
| • Steering Pedestal Cap (1) | • Rear Hitch Plate (1) | • Seat Assembly (1) |
| • Discharge Chute Assembly (1) | • Mulch Plug (1) † | • Front Bumper (1) † |
| • Hardware Pack (1) | • Battery Charger (1) | • Battery Charger Manual (1) |
| • Product Registration Card (1) | | |

† — If Equipped

Note: This Operator's Manual covers several models. Rider features may vary by model. Not all features in this manual are applicable to all rider models and the rider depicted may differ from yours.

Note: All references in this manual to the left or right side and front or back of the rider are from the operating position only. Exceptions, if any, will be specified.

Note: Some components may come already assembled. If they are already assembled, skip ahead to the next step.

Contents of Hardware Pack

Before beginning installation, remove all the contents from the crate and all the hardware from the pack to make sure everything is present. Hardware is listed below.

- Hitch Plate
- Seat Mounting Bracket (w/ two shoulder bolts & lock nuts installed)

Recommended Tools for Assembly

- 3/8" wrench and/or socket
- 7/16" wrench and/or socket
- 1/2" wrench and/or socket
- 9/16" wrench and/or socket
- Phillips screw driver
- 1/4" or 3/8" drive ratchet

Manually Moving the Tractor

The rider can be moved as long as the parking brake is not set. Do not tow or push the rider over 10 mph.

Installing the Steering Wheel Assembly

If the steering wheel assembly for your rider did not come already installed, follow the steps below:

1. Slide the pedestal cap (a) onto the steering shaft (b) so that when the steering shaft (b) is installed on the rider, the pedestal cap (a) will be upright as shown in Figure 2-1.

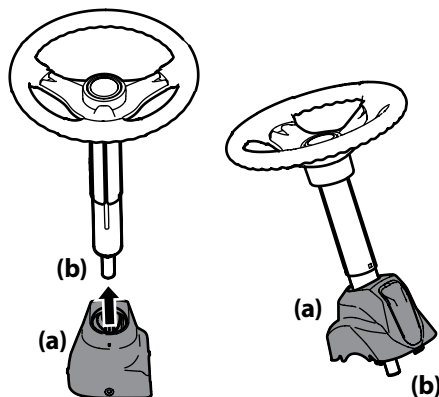


Figure 2-1

2. Remove the shoulder bolt and lock nut from the steering shaft and retain for later steps. See Figure 2-2.

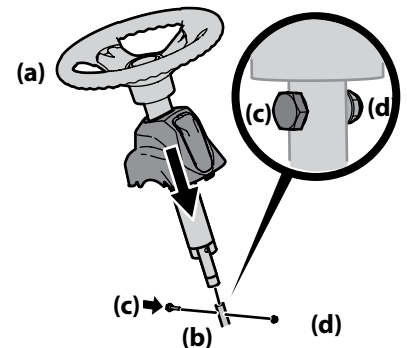


Figure 2-2

3. With the steering wheel assembly upright and positioned over the lower steering shaft on the rider, align the steering wheel so that with the rider wheels straight, the large opening on the steering wheel is facing forward.

- Lower the steering wheel assembly (a) onto the lower steering shaft (b) and secure with the shoulder bolt (c) and lock nut (d) previously removed. See Figure 2-2.
- Tighten the shoulder bolt and lock nut using a $\frac{9}{16}$ " wrench or socket and $\frac{7}{16}$ " wrench or socket.
- Remove the pedestal cap mount screw factory installed and located on the rider's steering console. Retain the screw for later instructions. See Figure 2-3

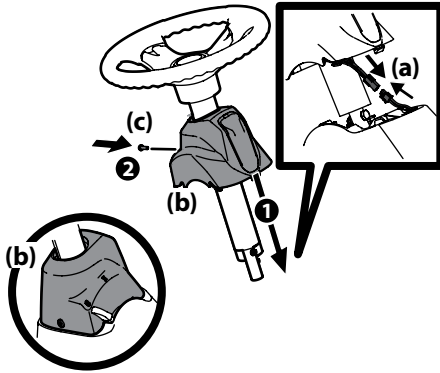


Figure 2-3

- Connect the headlight wire terminals (a). Slide the pedestal cap (b) down onto the rider and slightly rotate to the right to clip into place. Secure the pedestal cap (b) with the screw (c) previously removed. See Figure 2-3.

Attaching the Seat

If the seat for your rider was not attached at the factory, follow the applicable instructions below to attach it.

- Remove the shoulder bolts (a) and lock nuts (b) from the seat mounting bracket (c) included in your hardware pack. See Figure 2-4.

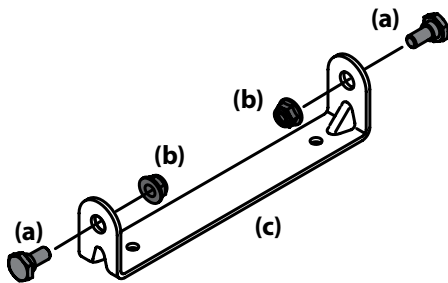


Figure 2-4

- Remove the two self-tapping bolts (a) factory installed on the rider. See Figure 2-5.

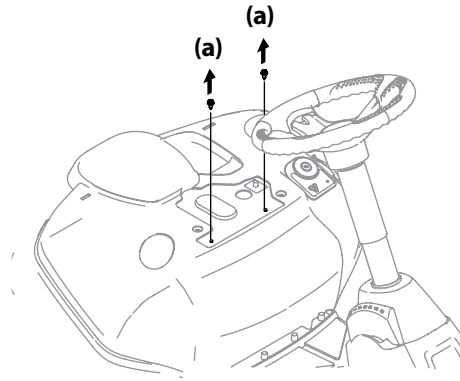


Figure 2-5

- Align the seat bracket (a) in place over the holes from where the self-tapping bolts (b) were removed, as shown in Figure 2-6.

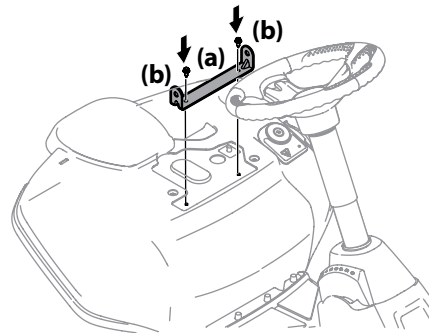


Figure 2-6

- Using a $\frac{1}{4}$ " drive ratchet with a $\frac{3}{8}$ " socket, secure the seat bracket (a) with the self-tapping bolts (b) removed in step 2. See Figure 2-6.

CAUTION

Do not use any type of power tool (e.g. impact gun or electric drill with nut driver attached) when tightening the self-tapping bolts to attach the seat bracket.

- Position the seat assembly over the seat mounting bracket, aligning the holes provided.

- Install the two shoulder bolts (a) and lock nuts (b) removed from the seat mounting bracket (c) in Step 1. See Figure 2-7.

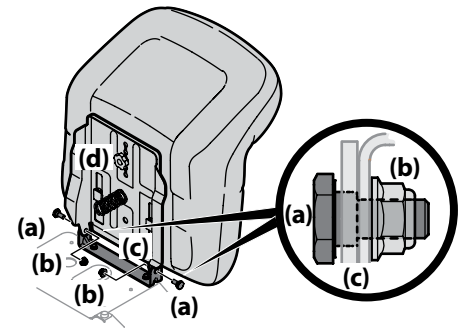


Figure 2-7

Note: Make sure that the bolt's shoulder is completely recessed into the seat bracket when securing the lock nut.

- To adjust the position of the seat, loosen the adjustment knob (d) on the bottom of the seat. Slide the seat forward or backward as desired. Securely retighten the adjustment bolt (d). Refer to Figure 2-7.

Installing the Deck Chute

WARNING

Never operate this rider without either the mulch plug or deck chute installed.

- Remove the wing knobs (a) installed on the mowing deck and retain for later installation. See Figure 2-8.

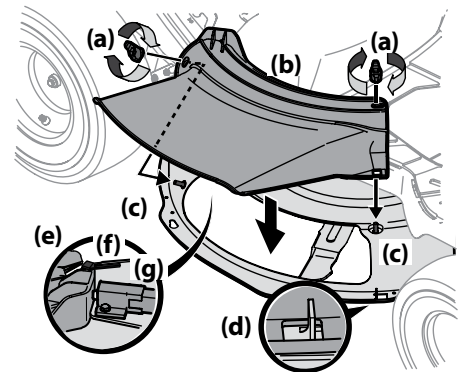


Figure 2-8

- Install the deck chute (b) into the deck discharge opening on the deck. The rear of the chute (b) should be under the tab (f) on the rear deck bracket (g). The studs (c) on the deck surface will fit through the holes on the upper portion of the deck chute (b). The small tab (d) on the deck lip area will fit through the square cutout on the lower portion of the deck chute (b). See Figure 2-8.

Important: Make certain that the upper-rear portion of deck chute (b) is depressing the safety switch (e) located on the deck surface and under the tab (f) on the rear deck bracket (g). The blade(s) will not start without the deck chute (b) properly in place.

- Secure the deck chute (b) by tightening the wing knobs (a) removed in step 1. See Figure 2-8.

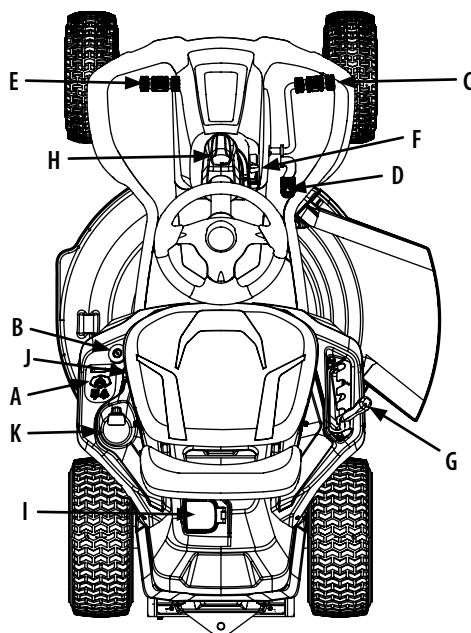


Figure 3-1

Note: This Operator's Manual covers several models. Rider features may vary by model. Not all features in this manual are applicable to all rider models and the rider depicted may differ from yours.

Note: References to LEFT, RIGHT, FRONT, and REAR indicate that position on the rider when facing forward while seated in the operator's seat.

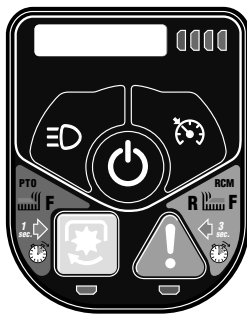
Vehicle Control Module (VCM) (A)

⚠ WARNING

Never leave a running machine unattended. Always disengage PTO, set parking brake, stop rider and remove power key to prevent unintended starting.

The vehicle control module (VCM) is located on the left fender of the rider seated in the operator's position

The VCM is the location of several control buttons for your rider. The VCM includes the START/STOP button, PTO (blades ON/OFF) button, Reverse Caution Mode (RCM) button, Headlight button, Cruise Control button, LCD Screen and the Battery Level Indicator.



⚠ CAUTION

Prior to operating the rider, refer to both Safety Interlock Switches and Starting The Rider in the Operation section of this manual for detailed instructions regarding the VCM and operating the rider in REVERSE CAUTION MODE.

Start/Stop Button



The start/stop button is used to start and stop the rider when the key switch is in the ON position. To start the rider, press the start/stop button for two seconds (two beeps). To stop the rider, press the start/stop button for one second (one beep).

PTO (Blades ON/OFF) Button



The PTO button is used to engage the blades. To operate, press the PTO button for one second. The green indicator light below the PTO button is illuminated when there is power to the cutting deck and the LCD Screen displays "CUT DECK ON." Pressing the PTO button again will disengage power to the cutting deck. The green indicator light is not illuminated when there is no power to the cutting deck.

Reverse Caution Mode (RCM) Button

⚠ CAUTION

Prior to operating the rider, refer to the Operation section of this manual for detailed instructions regarding operating the rider in REVERSE CAUTION MODE.



Located on the VCM, the RCM button allows the rider to be operated in reverse with the blade(s) engaged. To activate the RCM, press the RCM button down for three seconds. When activated, the red indicator light is illuminated. To de-activate the RCM, press the RCM button again. When the RCM is not activated, the red indicator light is not illuminated. Refer to the Operation section of this manual for more information on operating the rider in the reverse caution mode.

Note: Mowing in reverse is not recommended.

⚠ WARNING

Use extreme caution while operating the rider in the REVERSE CAUTION MODE. Always look down and behind before and while backing. Do not operate the rider when children or others are around. Stop the rider immediately if someone enters the area.

Headlight Button



The headlight button is used to turn the headlights on or off.

Cruise Control Button



Pressing the cruise control button while the rider is in motion allows the rider to remain at a constant ground speed without applying pressure to the forward drive pedal, the LCD Screen displays "CRUISE ON" when the cruise control is activated. The cruise control can be disengaged by pressing either the cruise control button, the brake pedal or the forward drive pedal. Refer to the Operation section of this manual for detailed instructions regarding the cruise control feature.

Note: Cruise control will not engage at the rider's fastest ground speed. If the operator should attempt to do so, the rider will automatically decelerate to the fastest optimal mowing ground speed.

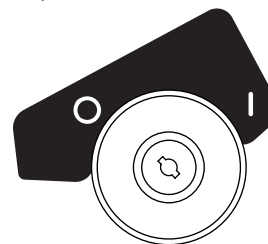
Note: Cruise control will not engage in reverse.

LCD Screen & Battery Level Indicator

HOURS XXXX.X

The LCD display & battery level indicator are used to provide instructions, warnings and information about your rider systems and the battery level of your rider.

Key Switch (B)



The key switch is located on the left fender and sends power to the VCM when the switch is in the ON (I) position. The rider cannot be started unless the key switch is in the ON (I) position. Turning the switch to the OFF (O) position turns the rider off and stops the flow of power to the VCM.



Note: Before your rider can be started, the safety label covering the key switch must be removed. This label is in place to prevent unintended starting when the rider is on display. Peel off the label to access the key switch.

Forward Drive Pedal (C)

The forward drive pedal is located on the right side of the steering column, along the running board. Press the forward drive pedal forward to cause the rider to travel forward. Ground speed is also controlled with the forward drive pedal. The further forward the pedal is pressed, the faster the rider will travel. The pedal will return to its original/neutral position when it is released.

Reverse Drive Pedal (D)

The reverse drive pedal is located on the right side of the steering column along the running board. Ground speed is also controlled with the reverse drive pedal. The further rearward the pedal is pressed, the faster the rider will travel. The pedal will return to its original/neutral position when it is released.

Brake Pedal (E)

The brake pedal is located on the left side of the steering column, along the running board. Depress the pedal all the way down to engage the disc brake and bring the rider to a complete stop.


Note: The brake pedal must be completely depressed to start the rider. Refer to Safety Interlock Switches for more information.

Parking Brake Lever (F)

To set the parking brake, fully depress the brake pedal. Move the parking brake lever all the way back and into the parking brake position. Release the brake pedal to allow the parking brake to engage.

To release the parking brake, depress the brake pedal and move the parking brake lever forward and out of the parking brake position. Release the brake pedal.

Deck Lift Lever (G)

- 
- 1 Located on your rider's right fender, the deck lift lever is used to change the height of the cutting deck (5 positions). To use, move the lever to the left, then place in the notch best suited for your application. The lowest position is "1" and the highest position is "5"
 - 2
 - 3
 - 4 Position "1" is approximately a 1" cutting height, Position "5" is approximately a 4" cutting height and the change in height is approximately $\frac{3}{4}$ " between each position.
 - 5

Headlight (H)

The headlight is ON whenever the key switch is ON and the headlight button is pressed. To turn the headlight OFF, press the headlight button again.

Charging Port (I)

The charging port is located on the rear of the rider. To access the charging port, lift up on the charging port cover.

USB Charging Port (J)



The USB charging port is located on the left console and can be used to charge your phone or power up other USB devices.

⚠ WARNING

Do not have any devices plugged into your USB charging port when starting the rider. Doing so may cause damage to your device.

Cup Holder (K)

The cup holder is located to the left of the operator's seat.

Operation

⚠ WARNING

Avoid Serious Injury or Death

- Know location and function of all controls.
- Remove objects which could be thrown by the blade(s).
- Go up and down slopes, not across.
- Use extra caution on slopes. Do not mow or drive on slopes greater than 12°/21%. Avoid sudden turns. Use low speed.
- Always engage the parking brake when turning the key switch off on an incline.
- Do not operate machine where it could tip or slip.
- If machine stops going uphill, stop blade(s) and back down slowly.
- Before leaving operator's position, disengage blade(s), engage parking brake, shut off and remove key.
- Be sure blade(s) and power are off before placing hands or feet near blade(s).
- Keep safety devices (guards, shields, switches, etc.) in place and working.
- Keep bystanders away.
- Allow machine to cool before storing.
- Keep machine free of debris.

Read Operator's Manual

Safety Interlock Switches

This rider is equipped with a safety interlock system for the protection of the operator. If the interlock system should ever malfunction, do not operate the rider. Contact an authorized service dealer.

- The safety interlock system prevents the rider from operating the rider unless the operator is in the seat with the brake pedal fully depressed or the parking brake set and the drive pedal in the NEUTRAL position..
- The rider will not operate with the charger cord plugged into the charging port and/or the charging port cover open or removed.
- The rider will not operate unless the discharge chute, mulch plug or bagger chute is in place and properly installed.
- The rider will automatically shut off the blade(s) and drive motors if the operator leaves the seat.

Note: To restart the rider, follow the proper starting procedures.

⚠ WARNING

Do not operate the rider if the safety interlock system is malfunctioning. This system was designed for your safety and protection.

Engaging the Parking Brake

To engage the parking brake:

1. Fully depress the brake pedal and hold it down with your foot.
2. Move the parking brake lever back into the parking brake position.
3. Release the brake pedal to allow the parking brake to engage.

To release the parking brake:

1. Depress the brake pedal and move the parking brake lever forward out of the parking brake position.

Setting the Cutting Height

Select the height position of the cutting deck by placing the deck lift lever in any of the five (5) different cutting height notches on the right side of the fender.

⚠ WARNING

Keep hands and feet away from the discharge opening of the cutting deck.

Refer to Leveling the Deck in the Product Care section of this manual for more detailed instructions regarding deck adjustment.

Starting the Rider

⚠ WARNING

Do not operate the rider if the interlock system is malfunctioning. This system was designed for your safety and protection.

1. Unplug the charging cord (if necessary). If the cord is still plugged in a reminder will display on the VCM when the key switch is turned on.

UNPLUG CORD

2. Sit in the operator's seat. A reminder will display on the VCM if the operator is not in the seat when the key switch is turned on.

SIT IN SEAT

3. Insert the power key into the key switch.
4. Fully depress the brake pedal or set the parking brake. If the brake is not engaged a reminder will display on the VCM when the key switch is turned on.

PRESS BRAKE

5. Turn the power key clockwise to the ON (I) position.
6. Press the start/stop button down for two seconds (two beeps).

Stopping the Rider

⚠ WARNING

If you strike a foreign object, stop the rider, turn the power key to OFF and remove. Thoroughly inspect the machine for any damage. Repair the damage before restarting and operating.

1. If the blade is engaged, press the PTO button to disengage the PTO.
2. Press the start/stop button for one second (one beep) or turn the power key counter-clockwise to the OFF (O) position.
3. Remove the key from the key switch to prevent unintended starting.

Driving the Rider

⚠ WARNING

Avoid sudden starts, excessive speed and sudden stops.

⚠ WARNING

Do not leave the seat of the rider without first pressing the PTO button to turn off the blade(s), depressing the brake pedal and engaging the parking brake. If leaving the rider unattended, also turn the power key to the OFF position.

⚠ WARNING

Always look down and behind before and while backing up to avoid a back-over accident.

1. To travel FORWARD, slowly press the forward drive pedal to travel FORWARD until the desired speed is reached.
2. To travel in REVERSE, slowly press the reverse drive pedal until the desired speed is reached.
3. The rider is brought to a stop by releasing the forward or reverse drive pedal and/or depressing the brake pedal.

⚠ WARNING

Before leaving the operator's position for any reason, disengage the blade(s), engage the parking brake, turn the key switch to OFF position and remove the power key.

Reverse Caution Mode (RCM)

The REVERSE CAUTION MODE button allows the tractor to be operated in reverse with the blade(s) (PTO) engaged.

Note: Mowing in reverse is not recommended.

⚠ WARNING

Use extreme caution while operating the tractor in the REVERSE CAUTION MODE. Always look down and behind before and while backing. Do not operate the tractor when children or others are around. Stop the tractor immediately if someone enters the area.

To use the REVERSE CAUTION MODE:

Note: The operator MUST be seated in the tractor seat.

1. Start the rider as previously instructed.
2. Press and hold the RCM button down for three seconds until the red indicator light illuminates. The red indicator will remain on as long as the REVERSE CAUTION MODE is on.
3. Once activated (indicator light ON), the rider can be driven in reverse with the cutting blade(s) (PTO) engaged.
4. Always look down and behind before and while backing to make sure no children are around. After resuming forward motion, press the RCM button to return to normal mowing operation.

The REVERSE CAUTION MODE will remain activate until:

- a. The RCM button is pressed or
- b. The operator leaves the seat.

Driving on Slopes

Refer to the SLOPE GAUGE in the Important Safe Operation Practices section to help determine slopes where you may operate the rider safely.

⚠ WARNING

Do not mow or drive on inclines with a slope in excess of 12°/21% (a rise of approximately 2.1 feet for every 10 feet). The rider could overturn and cause serious injury.

1. Mow up and down slopes, NEVER across.
2. Exercise extreme caution when changing direction on slopes.
3. Watch for holes, ruts, bumps, rocks, or other hidden objects. Uneven terrain could overturn the rider. Tall grass can hide obstacles.
4. Avoid turns when driving on a slope. If a turn must be made, turn down the slope. Turning up a slope increases the chance of a roll-over.
5. Avoid stopping when driving up a slope. If it is necessary to stop while driving up a slope, start up slowly and carefully to reduce the possibility of flipping the rider over backward.

Engaging the PTO

Engaging the PTO transfers power to the cutting deck. To engage the blade(s), proceed as follows:

Press the PTO button for one second. When activated the green indicator light under the PTO button is illuminated.

Mulching (If equipped)

Mulching is a process of recirculating grass clippings repeatedly beneath the cutting deck. The ultra-fine clippings are then forced back into the lawn where they act as a natural fertilizer. Refer to the Assembly & Set-up section of this manual for instructions on how to install the mulch kit (if equipped).

Using the Deck Lift Lever

To raise the cutting deck, move the deck lift lever to the left, then place it in the notch best suited for your application. Refer to Setting the Cutting Height in this section.

Mowing

⚠ WARNING

To help avoid blade contact or a thrown object injury, keep bystanders, helpers, children and pets at least 75 feet from the machine while it is in operation. Stop machine if anyone enters the area.

⚠ WARNING

Plan your mowing pattern to avoid discharge of materials toward roads, sidewalks, bystanders and the like. Also, avoid discharging material against a wall or obstruction which may cause discharged material to ricochet back toward the operator.

The following information will be helpful when using the cutting deck with your rider:

1. Do not mow or drive at high ground speed, especially if a mulch kit or grass collector is installed.
2. For best results it is recommended that the first two laps be cut clockwise with the discharge facing towards the center of your lawn. After the first two laps, reverse the direction to discharge to the outside for the balance of cutting. This will give a better appearance to the lawn.
3. Do not cut the grass too short. Short grass invites weed growth and yellows quickly in dry weather.
4. Under heavier conditions it may be necessary to go back over the cut area a second time to get a clean cut.
5. Do NOT attempt to mow heavy brush and weeds and extremely tall grass. Your rider is designed to mow lawns, NOT clear brush.
6. Keep the blade sharp and replace the blade when worn. Refer to Cutting Blade in the Service section of this manual for proper blade sharpening instructions.

	Prior to Use	Every 10 Hours	Every 25 Hours	Every 50 Hours	Prior to Off-Season Storage
Lube Front Axles & Rims			✓		✓
Lube Pedal Pivot Points		✓			✓
Lubricate Steering Rack Teeth & Pinion Gear			✓		
Check Blade(s)	✓	✓			
Charge Battery	✓				✓
Check Hardware	✓				

Note: This Operator's Manual covers several models. Rider features may vary by model. Not all features in this manual are applicable to all rider models and the rider depicted may differ from yours.

⚠ DANGER

The electrical components on this rider are not serviceable. Please contact an authorized service dealer for any service needs.

⚠ DANGER

Have your rider serviced by qualified service personnel using only identical replacement parts. This will ensure that the safety of the rider is maintained.

Post-Operation Rider Care

After each operation of the rider, the following procedures should be implemented to extend the life of your rider and ensure safe operating conditions.

⚠ DANGER

Failure to follow these recommendations may result in serious injury to yourself or others and may cause damage to the rider.

Cleaning the Underside of the Deck

⚠ WARNING

To prevent serious injury, do not use water to clean the rider, battery or battery charger. Do not use strong detergents. Household cleaners that contain aromatic oils such as pine and lemon, and solvents such as kerosene, can damage plastic.

The underside of rider deck should be cleaned after each use as grass clippings, leaves, dirt and other debris will accumulate. This accumulation of grass clippings, etc., is undesirable as it will promote rust and corrosion.

1. Remove any buildup of grass and leaves on or around the motor (**DO NOT USE WATER**). Wipe the rider clean with a dry cloth.
2. If debris is allowed to build up on the underside of the machine, tilt the rider forward or on its side and clean with a suitable tool.

Important: Do not use a pressure washer or garden hose to clean your rider. These may cause damage to electric components or the electric motor. The use of water will result in shortened life and reduce serviceability.

Cleaning the Rider

⚠ WARNING

If the rider has been recently run, metal surfaces will be hot and can cause burns to the skin. Let the rider cool for at least five minutes. Exercise caution to avoid burns.

Your rider should be cleaned after each use and under certain conditions, i.e. dry conditions and/or mulching situations, additional cleaning may be necessary.

One of the best ways to keep your rider running efficiently and to reduce fire risk is to regularly remove debris buildup from the rider. Follow the recommendations below and contact your authorized dealer with any questions.

- Allow the machine to cool in an open area before cleaning.
- Do not use water on any part of the rider. Doing so can cause damage to the rider's electrical components and motor. The use of compressed air and/or leaf blower or a brush, damp sponge or rag will help keep the rider clean.
- Clean around fuses, all wiring and harnesses, etc.
- Clean the top of the rider deck. See Figure 4-1.

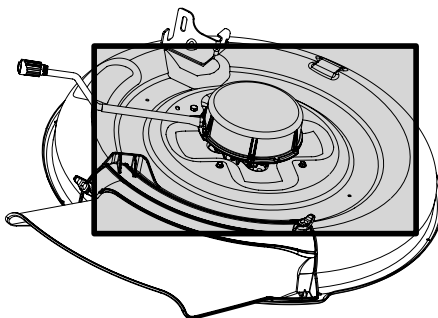


Figure 4-1

- Clean around and near the transmission, axle and the fan area. See Figure 4-2.

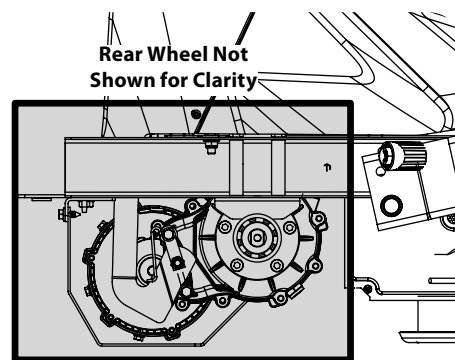


Figure 4-2

- Debris can accumulate anywhere on the rider, especially on horizontal surfaces. Additional cleaning may be necessary when mowing in dry conditions or when mulching.
- Excess lubrication can become collection sites for debris. Immediate repair and cleaning up excess lubrication can help reduce fire hazards.
- In addition to cleaning the rider before operating and storing, do not attempt to mow unusually tall grass (10" or higher), dry grass (e.g., pasture) or piles of dry leaves. Dry grass or leaves may build up on the rider deck presenting a potential fire hazard.

Storing the Rider

- Allow the machine to cool in an open area before storing.
- Do not park the rider near any flammable materials (wood, cloth or chemicals) or any open flames or other potential source of ignition (furnace, water heater or any other type of heater).
- Remove all combustible materials from the rider before storing. Empty cargo boxes, grass catchers or containers.
- Fully charge the batteries and recharge the batteries every 30 days when in storage.

Removing The Rider From Storage

1. Fully charge the batteries and inflate the tires to the recommended pressures.
2. Drive the rider without a load to make certain all the rider systems are functioning properly.

Maintenance

⚠ WARNING

Before performing any maintenance or repairs, disengage blade(s) PTO, set parking brake, turn key switch to OFF position and remove power key to prevent unintended starting.

Lubrication

Pivot Points & Linkage

Lubricate all the pivot points on the drive system, parking brake and lift linkage at least once a season with light oil.

Rear Wheels

The rear wheels should be removed from the axles once a season. Lubricate the axles and the rims well with an all-purpose grease before re-installing them.

Front Axles

Each end of the rider's front pivot bar may be equipped with a grease fitting. Lubricate with a grease gun after every 25 hours of rider operation.

Lubricate Rack & Pinion

Once per season, or every 25 hours of operation, it will be necessary to lubricate the steering rack teeth and pinion gear (a) located under the front of the rider. Using standard automotive grease, apply grease to the front side of the steering rack teeth and pinion gear (a), as indicated in Figure 4-3.

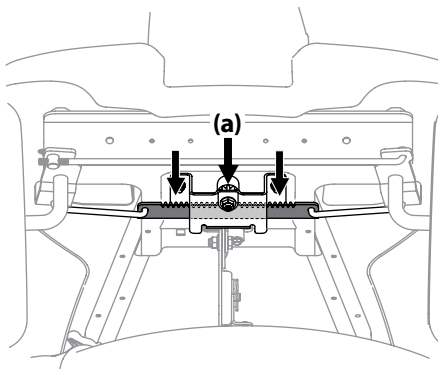


Figure 4-3

Battery Storage

1. The batteries should be stored with a full charge. Discharged batteries can freeze faster than charged batteries in cold temperatures.
2. The battery charger should remain connected to the charging port on the rider when not in use.
3. If keeping the charger connected during off-season storage is not possible, the batteries should be fully charged once every month.

Note: It will take approximately 4 hours to fully charge the batteries. Leaving the batteries connected to the charger for more than 4 hours will not damage the batteries.

4. Batteries should not be kept in a discharged state. Permanent damage to the batteries can occur.
5. Fully recharge the batteries before returning to service.

Charging the Batteries

Note: If at any time you get a charger fault when charging your battery, follow these procedures:

1. Turn the power key off.
2. Unplug the charger from the rider.
3. Unplug the charger from the power source.
4. Plug the charger back into the power source.
5. Plug the charger back into the rider.
6. If the problem persists contact qualified service personnel.

⚠ WARNING

California Proposition 65

This product contains a chemical known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

⚠ WARNING

The batteries contain corrosive fluid and toxic material — HANDLE WITH CARE. Keep away from children. Do not puncture, disassemble, mutilate, or incinerate. Explosive gases could be vented during charging or discharging. Charge in a well ventilated area, away from sources of ignition.

⚠ WARNING

Recharge only with the charger provided with this rider. A charger that is not suitable for this machine may damage the batteries or create the risk of fire.

⚠ WARNING

Do not charge or operate the rider in the rain or in wet conditions.

Note: Rechargeable batteries degrade with time and use. The batteries may eventually need to be replaced. To have the batteries replaced, contact your authorized Service Dealer.

Note: Replace batteries if battery capacity drops below 50% of initial capacity

Note: Using old or faulty batteries could cause a system fault that results in loss of power

Refer to the manual packed with your battery charger for information and instructions on charging the batteries. Lift the charging port cover (a) up and insert the charging cord (b) into the charging port (c) located in the rear body cover. See Figure 4-1.

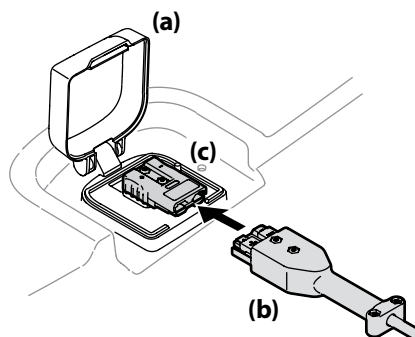


Figure 4-1

Battery Charging Tips

- Use only the battery charger provided with this rider.
- The batteries should be fully charged before the each use.
- It will take approximately 4 hours to fully charge the batteries. Leaving the batteries connected to the charger for more than 4 hours will not damage the batteries.
- The batteries do not develop a memory and do not need to be fully discharged before recharging.
- Always disconnect battery charger (or extension cord, if used) from the electrical outlet first, then disconnect the charging cord from the charging port.
- It is recommended that the rider be charged after each use. Storing batteries in a discharged state could reduce future performance.

Fuses

⚠ CAUTION

For continued protection against risk of injury or electric shock, do not replace blown fuses please call qualified service personnel.

Adjustments

⚠ WARNING

Never attempt to make any adjustments while the key switch is ON, except where specified in the Operator's Manual.

Seat

Refer to the Set-Up & Assembly section of this manual for seat adjustment instructions.

Parking Brake

⚠ WARNING

Never attempt to adjust the brakes while the rider is running. Always disengage blade(s) PTO, set parking brake, turn key switch to OFF position and remove power key to prevent unintended starting.

If the rider does not come to a complete stop when the brake pedal is completely depressed, or if the rider's rear wheels can roll with the parking brake applied, the brake is in need of adjustment. See an authorized service dealer to have your brakes properly adjusted.

Deck

Note: Check the rider's tire pressure before performing any deck leveling adjustments. Refer to Tires, in the Assembly & Set-Up section for more information regarding tire pressure.

Front-to-Rear Levelling

It is possible to adjust the pitch of the cutting deck. The front of the deck should be between 0" (level) and ¼" lower than the rear of the deck. Adjust if necessary as follows:

1. With the rider parked on a firm, level surface, place the deck lift lever in the middle position and rotate the blade so that it is aligned with the front and rear of the rider.

2. Measure the distance from the front of the blade tip to the ground and the rear of the blade tip to the ground. The first measurement taken should be between 0" (level) and 1/4" less than the second measurement. Determine the approximate distance necessary for proper adjustment and proceed, if necessary, to the next step.
3. Locate the flange lock nut (a) on the front end of the PTO lift rod (b). See Figure 4-2.

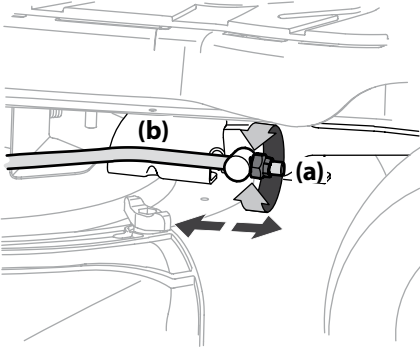


Figure 4-2

- Tighten the flange lock nut (a) to raise the front of the deck.
- Loosen the flange lock nut (a) to lower the front of the deck.

Tires

Refer to the Assembly & Set-Up section for more information regarding tire pressure.

Service

Cutting Deck Removal

To remove the cutting deck, proceed as follows:

1. Remove power key and engage the parking brake.
2. Lower the deck by moving the deck lift lever into the lowest (#1) position on the right fender.
3. Remove the bow-tie cotter pin (a) and flat washer (b) from the deck lift assembly, and retain for reinstallation later. See Figure 4-3.

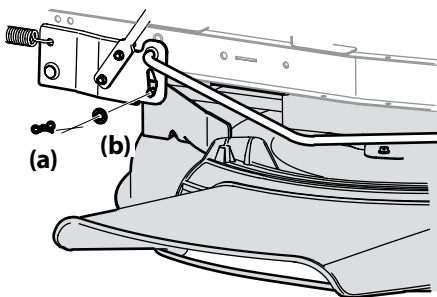


Figure 4-3

4. Disconnect the deck motor(s) from the adapters on the underside of the rider. Rotate the connectors 1/4-turn counterclockwise and pull down. See Figure 4-4.

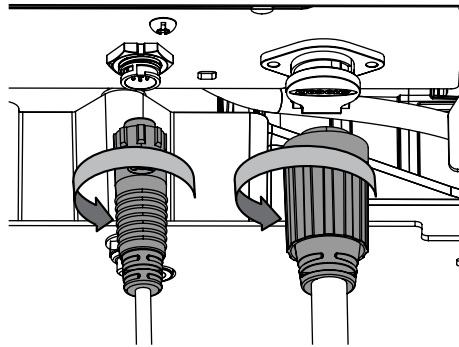


Figure 4-4

5. Remove the remaining bow-tie cotter pins (a) securing the deck to the rider, as shown in Figure 4-5.

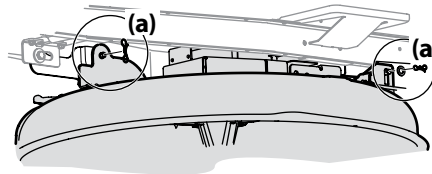


Figure 4-5

Note: When reassembling, the bow-tie clips (a) should be re-installed from the top down.

6. Unplug the wire connector (a) from the safety switch (b) at the rear of the chute opening. See Figure 4-6.

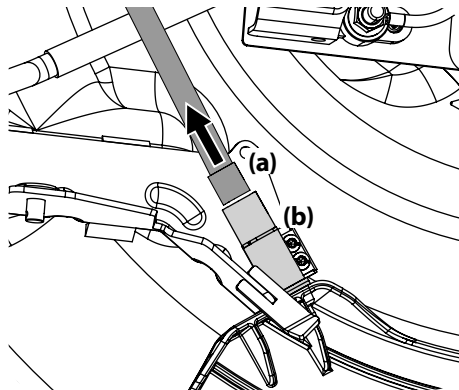


Figure 4-6

7. Move the deck lift lever into the highest (#5) position on the right fender to raise the deck lift arms up and out of the way.
8. Gently slide the cutting deck (from the left side) out from underneath the rider.
9. To re-install the deck, reverse these steps.

Note: Be sure to securely reconnect the wire connector (a) to the safety switch (b) in Figure 4-6, you rider will not start or operate without the safety switch properly connected.

Blade(s)

⚠ WARNING

Shut the rider off, engage parking brake and remove power key before removing the cutting blade(s) for sharpening or replacement. Protect your hands by using heavy gloves when grasping the blade.

⚠ WARNING

Periodically inspect the blade(s) and/or spindle for cracks or damage, especially after you've struck a foreign object. Do not operate the machine until damaged components are replaced.

⚠ CAUTION

If the cutting edge of the blade(s) has previously been sharpened, or if any metal separation is present, replace the blade(s).

The blade(s) may be removed as follows.

Note: It may be easier to change the blade(s) by first removing the deck from beneath the rider, (refer to Cutting Deck Removal earlier in this section) then gently flip the deck over to expose its underside. It is possible to change the blade(s), however, with the deck still attached to the rider. If attempting to change the blade(s) with the deck still installed on the rider, first move the deck lift lever to its highest (#5) position.

1. Remove the mulch plug, deck chute or bagging chute, if equipped, exposing the deck chute opening.
2. Using a block of wood or 2 x 4, insert it into the deck opening and rotate the blade around until it wedges the wood between the deck opening and the cutting blade, as shown in Figure 4-7.

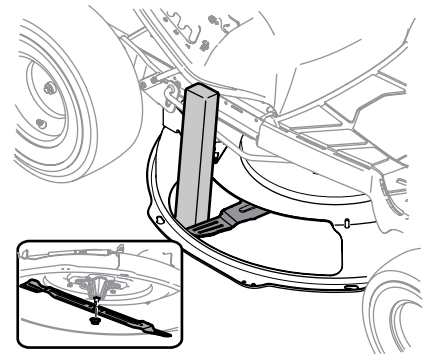


Figure 4-7

3. Remove the hex screw (a) and the blade bell support (b) which holds the blade (c) and the blade adapter (d) to the deck motor. See Figure 4-8.

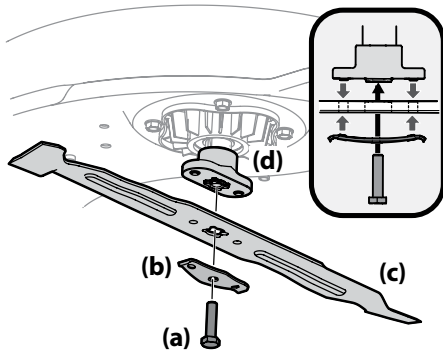


Figure 4-8

4. Remove blade (c) and adapter (d) from the deck motor spindle. See Figure 4-8.
5. To properly sharpen the cutting blade, remove equal amounts of metal from both ends of the blade along the cutting edges, parallel to the trailing edge, at a 25°- to 30° angle. Always grind each cutting blade edge equally to maintain proper blade balance. See Figure 4-9.

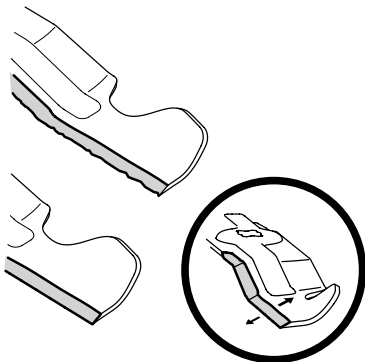


Figure 4-9

6. Test the blade's balance using a blade balancer. Grind metal from the heavy side until it balances evenly.

⚠ WARNING

A poorly balanced blade will cause excessive vibration, may damage the rider and/or result in personal injury.

Note: When replacing the blade, be sure to install the blade with the side of the blade marked "Bottom" (or with a part number stamped in it) facing the ground when the rider is in the operating position.

⚠ CAUTION

Use a torque wrench to tighten the hex bolt to between 450-600 in.-lbs.

Troubleshooting

Excessive Vibration

1. Blade loose or unbalanced
 - Tighten cutting blade and deck spindle
2. Cutting blade damaged, unbalanced or bent.
 - Replace the blade

Uneven Cut

1. Deck not properly leveled
 - Perform front-to-rear deck adjustment
2. Cutting blade dull or damaged
 - Sharpen or replace cutting blade
3. Uneven tire pressure
 - Check and correct tire pressure in all four tires

Rider will not mulch grass

1. Wet grass
 - Do not mulch when grass is wet
2. Excessively high grass
 - Mow once at a high cutting height, then mow again at desired height or make a narrower cutting swath
3. Dull blade
 - Sharpen or replace blade

Tractor stopped or will not start

1. Electrical system fault
 - Shut off and restart tractor
 - If problem persists, contact an authorized service dealer

The blades do not rotate /blades stopped

1. Overload
 - Allow deck motor(s) to cool/raise deck height
2. Low battery
 - Return home, plug into charger

The blade(s) stopped when traveling in reverse

1. Blade(s) stopped
 - Restart blade(s) (PTO)
 - Make sure Reverse Caution Mode is activated

Reduced Speed

1. Low battery
 - Charge battery as instructed in the battery charger manual
2. Overload
 - Raise deck

LCD Screen Messages



Brake Switch Fault: The deck and drive shut off. Power off and restart rider. If problem persists contact qualified service personnel.



Accelerator Pedal Sensor Fault: The deck and drive shut off. Power off and restart rider. If problem persists contact qualified service personnel.



Seat Switch Fault: The deck and drive shut off. Power off rider, sit in seat and restart rider. If problem persists contact qualified service personnel.



Cutting Deck Overload: The deck and drive shut off. Power off the rider, clean under the deck as instructed in the Post-Operation Rider Care section and restart the rider. If problem persists contact qualified service personnel.



Drive Motor Over Current Fault: The deck and drive shut off. Power off, let the rider cool and restart rider. If problem persists contact qualified service personnel.



Drive Motor Control Fault: The deck and drive shut off. Power off and restart rider. If problem persists contact qualified service personnel.



Self Test Fault: The deck and drive shut off. Power off and restart rider. If problem persists contact qualified service personnel.



Electrical Faults: The deck and drive shut off. Power off and restart rider. If problem persists contact qualified service personnel.



Battery Temperature Low: Move the rider to a warm location and allow the battery to warm. If problem persists contact qualified service personnel.

BATTERY
TEMP HIGH

DECK MOTOR
TEMP HIGH

DRIVE MOTOR
TEMP HIGH

High Temperature Faults: Power off, let the rider cool and restart rider. If problem persists contact qualified service personnel.

CLOSE CHARGE
PORT DOOR

Charge Port Door is Open: The rider will come to a stop and shut off. Close the charge port door and restart rider. If problem persists contact qualified service personnel.

LOW BATTERY

Low Battery Warning: The battery is low and should be charged as soon as possible.

SHARPEN
BLADES

Sharpen Blade Warning: When this warning is displayed, the blades should be checked and sharpened.

CHECK TIRE
PRESSURE

Check Tire Pressure Warning: When this warning is displayed check and adjust the tire pressure.

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