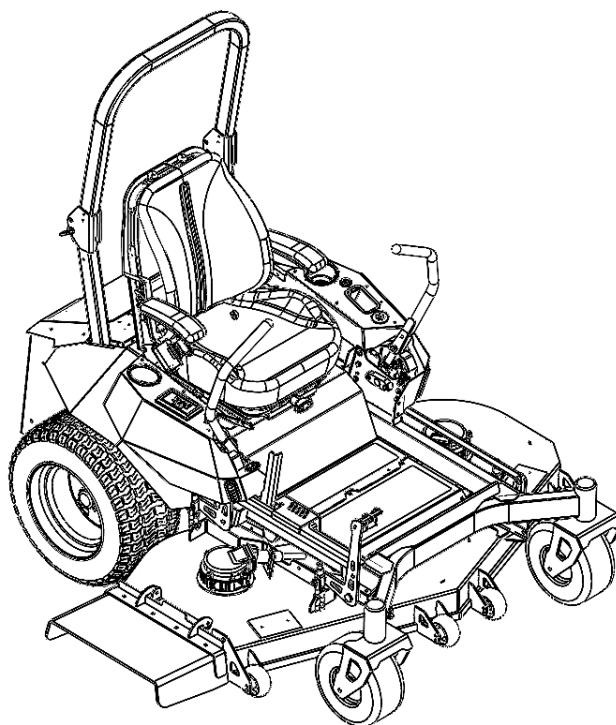




Nemesis-48/60" ZTR Operator's Manual



Mean Green Products, LLC
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General Information.....	3
3 Year Limited Warranty for Nemesis Mowers.....	4
WARRANTY REGISTRATION	Error! Bookmark not defined.
Safety Precautions	7
Safety and Instruction Decals	7
Decals	8
Mower Control Panels.....	13
Right Side Mower Control Panel (With Operator Seated).....	13
Control Display Functions	13
Left Side Mower Control Panel (With Operator Seated).....	17
Operating Instructions.....	18
Operation	18
Using a ramp	19
Slope operation (see page 23)	19
Towing	21
Children.....	21
Safety start interlock system	21
Starting your mower:.....	21
Stopping your mower:.....	21
Driving the mower	22
Operating suggestions	24
Deck cutting height adjustment	26
Anti-scalp wheels	26
Emergency Drive Brake Release Nut for Towing or Manual Pushing	27
Maintenance and Adjustments.....	28
Safe Servicing Practices.....	28
Service	28
Regular Maintenance.....	29
Tires	29
Lubrication.....	29
Electrical system.....	29
Seat adjustment	30
Mower blade maintenance	30
Mower blade removal	30
Mower blade installation	30
Leveling the mower deck.....	31
Electrical System	32
Electrical System Safety.....	32

Electrical System Information.....	32
Component Maintenance	32
Battery Connectors	33
Battery Charger	33
Battery Maintenance.....	33
Battery Charging Procedures and Options	33
Proper Connection and Disconnection of Charger Units:.....	35
Charging Recommendations:.....	35
Disconnecting and Reconnecting the Batteries (LITHIUM MODULES) `	36
Battery Storage	36
ROPS (Roll Over Protection System)	37
Troubleshooting.....	38
Storage	39
New Season Preparation	39
Lithium Energy Module Maintenance and Care	40

General Information

This manual applies to the following Mean Green Products equipment lines:
Mean Green Mowers – 48"– 60" Nemesis NXR Zero Turn Model

To the new owner

The purpose of this manual is to assist owners and operators in maintaining and operating the mower. Please read it carefully; information and instructions furnished can help you achieve years of dependable performance. It is the **owner's responsibility** to make certain that the operators and mechanics read and understand this manual and all decals before operating this machine. It is also the **owner's responsibility** to make certain that the operators and mechanics are qualified and physically able individuals, properly trained in the operation of this equipment. All operators and mechanics must become familiar with the safe operation of the equipment, operator controls and safety signs. Never let children or untrained people operate or service the equipment. Local regulations may restrict the age of the operator. The owner/user can prevent and is responsible for accidents or injuries occurring to themselves, other people or property.

Using this manual

General operation, adjustment and maintenance guidance is outlined for both the experienced and novice Mean Green Mower user. Operating conditions vary considerably and cannot all be addressed individually. Through experience, however, operators should find no difficulty in developing good operating skills suitable to most conditions. Directions used in this manual, for example RIGHT or LEFT, refer to directions when seated on the mower/standing facing forward, unless otherwise stated. Photographs and illustrations used were current at the time of printing, but subsequent production changes may cause your machine to vary slightly in detail. **Mean Green Products reserves the right to redesign and change the machine as deemed necessary, without notification. If a change has been made to your machine which is not reflected in this owner's manual, or the parts manual, see your Mean Green Products dealer for current information and parts.**

Mean Green Products LLC
3 Year Limited Warranty for Nemesis Mowers



WARRANTY REGISTRATION

- 1. Owners must** register the unit by filling out the Warranty Registration Form, provided in the owner's packet. It **MUST** be completed and signed by the authorized dealer and original purchaser.
- 2.** For validation, the completed Warranty Registration Form **MUST** be forwarded to Mean Green Products, within ten (10) days following date of purchase.
- 3.** The date of purchase constitutes delivery.

WHAT IS COVERED BY THIS WARRANTY

Mean Green Products, makes the following warranty to the original purchaser of mowers manufactured by Mean Green Products, LLC. (hand-held products are covered under a separate warranty):

A. Residential and Commercial Use: Mean Green Mowers warranted for **three (3) years or 500 hours total usage (whichever comes first) from date of delivery** on all materials and workmanship.

If the Purchaser discovers within this warranty period **three (3) years** from date of delivery) a defect in materials or workmanship, he must promptly notify Mean Green Products or an authorized dealer, in writing of the defect.

In no event shall such notification be received by Mean Green Products, or an authorized dealer later than for **three (3) years or 500 hours total usage (whichever comes first)** from date of delivery. Within a reasonable time after such notification, Mean Green Products, will correct any defect in material or workmanship on the Mean Green Mower by repairing or replacing part(s) with either new or used replacement parts. Such repair, including parts and labor shall be at the expense of Mean Green Products.

Green Lithium Batteries™ are warranted for a **five (5) year** pro-rated limited warranty or 1,000 hr. usage, whichever comes first to the original owner only.

1st – 2nd year 100% Parts and labor

3rd – 5th year Parts only (cells/BMS)/no labor

NOTE: Failure to properly maintain batteries in storage and keep them from one-half to fully charged will reduce battery life and will void battery warranty.

Provisions of this limited Green Lithium Batteries™ warranty shall not apply due to:

Abuse or neglect such as water damage, loose wiring, or rusted or corroded hardware; lack of proper maintenance; damage caused by improper installation of the battery, dismantling of battery, apparent outside force damage, operator not following manual instructions, expired warranty period, neglect, breakage, sub-zero freezing, fire, explosion, wreckage, the addition of any chemical, operation of the battery in an overcharged, or the operation of the battery in an uncharged condition (use after BMS shuts off battery); and a battery charged by systems other than the original equipment type battery charger.

Provisions that constitute Green Lithium Batteries™ Warranty:

- Battery pack cannot be charged or discharged.
- Liquid leakage.
- Damage to battery pack's case and/or accessories due to conditions caused by the battery.

B. Rental Use: Mean Green Mowers and Green Lithium Batteries™ used in rental applications are **not** covered by warranty.

WHO MUST PERFORM THE WARRANTY SERVICE

All warranty service will be performed by dealers or owner mechanics authorized by Mean Green Products. **Service calls and/or transportation expense** of the product to and from the authorized dealer or owner mechanics for warranty work, will be paid by the owner of the product. For warranty service contact an authorized dealer.

WHAT IS NOT COVERED BY THIS WARRANTY

Mean Green Products, does not warranty:

Some products, components or parts not manufactured by Mean Green Products.

Repairs made by unauthorized persons. Damage caused by use of the Mean Green Mower for purposes other than those for which it was designed. Damages caused by disasters such as fire, flood, wind, and lightning. Damages caused by neglect, abuse, abnormal use, improper or unreasonable use, accident, negligence, or misuse such as water damage. Repairs or replacement resulting from the use of unauthorized parts, accessories or attachments. Repairs or replacement as the result if any alterations or modifications, in the determination of the Mean Green Mower, which adversely affects the operation, performance or durability of the equipment. The Mean Green Mower which has the serial number removed or made illegible. Depreciation or damage caused by normal wear, lack of reasonable and proper maintenance, failure to follow the product's owner's manual operating, maintenance and adjustment instructions or other operational instructions provided by Mean Green Products. Normal maintenance parts and service including, but not limited to, lubricants, blades, blade sharpening, bearings, brake or steering adjustments.

DISCLAIMER OF WARRANTY

The foregoing warranties are in lieu of all other warranties, expressed or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. However, if the Mean Green Mower is purchased as a consumer product, any implied warranty of merchantability or fitness for a particular purpose is limited to the duration of this limited warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

LIMITATION OF REMEDIES

In no case shall Mean Green Products, be liable for any special, incidental, or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability in tort, or any other legal theory.

Such damages include, but are not limited to:

- Loss of profits
- Loss of savings or revenue
- Loss of use of the Mean Green Mower or any associated equipment
- Cost of capital

Cost of any substitute equipment, facilities, services or downtime

The claims of third parties including customers, and injury to property

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

TIME LIMIT

Any action for breach of warranty must be commenced within 60 days of the end of the warranty period.

NO OTHER WARRANTIES

This agreement is understood to be the complete and exclusive agreement between the parties, superseding all prior agreements, oral or written, and all other communications between the parties relating to the subject matter of this agreement.

ALLOCATION OF RISKS

This agreement allocates the risks of product failure between Mean Green Products and the purchaser. This allocation is recognized by both parties and is reflected in the price of the goods.

OWNER'S RESPONSIBILITY

You must maintain your Mean Green Mower following the maintenance procedures described in your owner's manual. Such routine maintenance, whether performed by a dealer or by you, is at your expense. **This machine like any other powered equipment is potentially dangerous unless properly operated.** Any operator **must** be cautious and keep safety in mind at all times. Any operator, prior to using the Mean Green Mower, should thoroughly familiarize himself with the owner's manual regarding operation and safety of the machine, as well as all safety warnings on the machine itself.

www.meangreenproducts.com

**4404 Hamilton Cleves Rd * Unit 2
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513-738-GREN(4736)**

Safety Precautions



This safety alert symbol is used to call attention to a message intended to provide a reasonable degree of **PERSONAL SAFETY** for operators and other persons during the normal operation and servicing of this equipment. **DANGER** (red color) – denotes immediate hazards which WILL result in severe personal injury or death. **WARNING** (yellow color) – denotes a hazard or unsafe practice which COULD result in severe personal injury or death. This manual uses two other words to highlight information. **IMPORTANT** calls attention to special mechanical information and **NOTE**: emphasizes general information worthy of special attention. All operators and mechanics should read this manual and be instructed about safe operating and maintenance procedures. If the operators or mechanics cannot read and understand English, it is the owner's responsibility to explain this material to them.

However, improper use or maintenance by the operator or owner can result in injury. To reduce the potential for injury, comply with these safety instructions and always pay attention to the safety alert symbol, which means DANGER or WARNING - "personal safety instructions." Failure to comply with the instructions may result in personal injury or death. Incorrect usage of this machine may result in severe injury. Personnel operating and maintaining it should be trained in the proper use and should read the manuals completely and thoroughly before attempting to set-up, operate, adjust, or service this machine. It is the **owner's responsibility** to make certain that the operators and mechanics read and understand this manual and all decals before operating this machine. It is also the **owner's responsibility** to make certain that the operators and mechanics are qualified and physically able individuals, properly trained in the operation of this equipment. All operators and mechanics must become familiar with the safe operation of the equipment, operator controls and safety signs. Never let children or untrained people operate or service the equipment. Local regulations may restrict the age of the operator. The owner/user can prevent and is responsible for accidents or injuries occurring to themselves, other people or property. The owner should also ensure that the operator/mechanic know that they are responsible for their own safety as well as the safety of other persons within the vicinity. **Remember**, the operator is responsible for accidents or hazards occurring to other people or their property.

Safety and Instruction Decals

Specific safety warning decals are located on the equipment near the immediate areas of potential hazards. These decals should not be removed or obliterated. Replace them if they become non-readable. The following illustrations show the various decals that are located on the machine. A brief explanation, for those requiring one, is shown to help the operator understand the meanings of these decals.

Read Owner's Manual and Safety Warning Decals before attempting to operate this machine.

Decal Information

- Safety decals must be visible and clear from foreign matter and debris.
- Decals that have been worn off or have become illegible must be replaced.
- When replacement components are installed be sure that current safety signs are affixed to the replaced components.
If an attachment or accessory has been installed, make sure current safety signs are visible. Replacement decals can be ordered from your local dealer..
- Expose the adhesive surface by peeling off the back of the decal and placing it onto a clean dry surface.

Decals

Familiarity of these decals will help in the safe operation of your mower.



Above Seat Pan Decal-

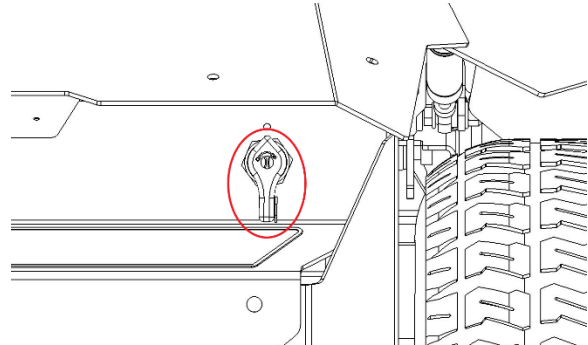
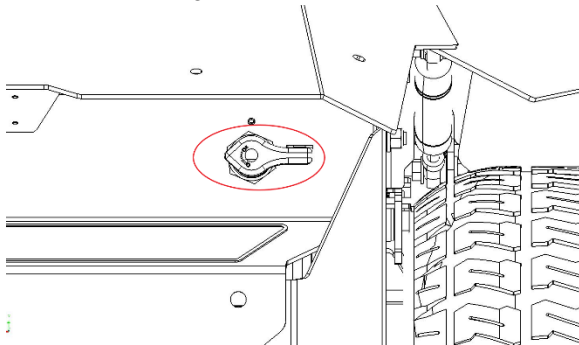
- 1: Read and learn manual before servicing the machine.
- 2: Disconnect machine from battery before servicing.
- 3: Electrical shock hazard present.
- 4: Surfaces may be hot to the touch.

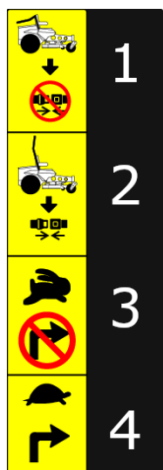
Mower Rear Panel Decal

1. Charger: Uses a 48V charger
2. Patent Decal: Displays the patent of the mower.
3. No Riders: When operating the mower, no person should ride or attempt to ride on the machine to prevent serious injury.
4. Electrical Safety Warning: always switch the main battery disconnect to off while conducting maintenance
5. Battery Disconnect Positions: disconnect switch positions for ON and OFF



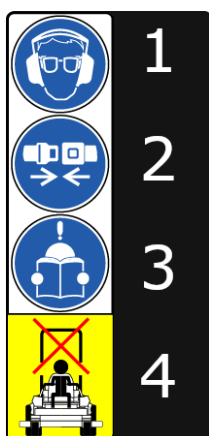
Important: Red Battery Quick Disconnect (found right side battery compartment) ALWAYS disconnect battery cables by turning the battery disconnect switch to OFF position before ANY maintenance is performed on mower unit. The battery disconnect switch is located on the back of the mower on the right side. Turn red switch to OFF and batteries will disconnect.





Rollover Protection System

- 1: When the ROPS is down, do not fasten the seatbelt.
- 2: When the ROPS is up, fasten the seatbelt.
- 3: Do not take sharp turns at high speeds.
- 4: Take sharp turns at slow speeds.



Safety Measures and ROPS

- 1: Wear ear and eye protection when operating the machine.
- 2: Wear your seatbelt when operating the machine.
- 3: Read and learn manual.
- 4: Do not remove the ROPS from the machine.



Electrical Compartment Warnings-

- 1: Attention
- 2: Surfaces may be hot to the touch.
- 3: Do not wash the electrical compartment of the mower.
- 4: Electrical shock hazard.



Mean Green Rear Logo-

Displays the Mean Green logo on the back of the machine.

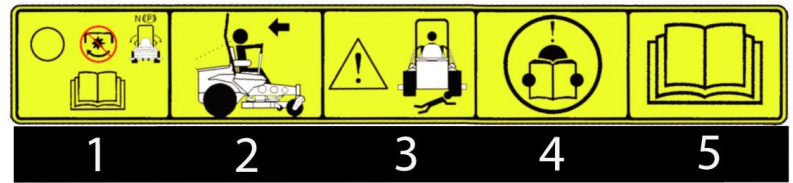
Left Control Panel

- 1: Cup Holder
- 2: USB port
- 3: Cell Phone Holder
- 4: Handlebar operation. Move handlebar forward to move forward. The distance forward will determine how fast the machine will go. Moving the handlebars backwards will put the mower into reverse. Keeping the handlebars in the center area will not move the mower. Placing the handlebars out puts the handlebar in the neutral lock position. This will stop the mower from moving.



Left Control Panel Details

1. Refer to the manual for any questions.
2. Look behind when going in reverse.
3. Watch for small children and objects when backing up.
4. Read and learn the manual before operation.
5. Refer to the manual for any questions.



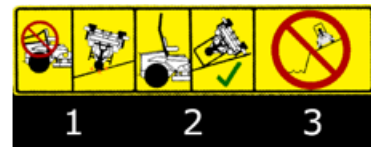
Right Control Panel-

1. 1: Handlebar operation and PTO Switch: Move handlebar forward to move forward. The distance forward will determine how fast the machine will go. Moving the handlebars backwards will put the mower into reverse. Keeping the handlebars in the center area will not move the mower. Placing the handlebars out puts the handlebar in the neutral lock position. This will stop the mower from moving. PTO Switch. Pull up to turn on the blades and push back down to turn blades off.
2. Touch screen control panel
3. Cup Holder



Right Control Panel Safety Icons and Details

1. Placing the ROPS in the down position can result in serious injury or death during rollover.
2. Placing the ROPS in the up position will protect the operator from rollover.
3. Do not mow on steep cliffs or ledges.
4. Do not mow on inclines greater than 15° to prevent rollover.
5. Mow on inclines less than 15° to prevent rollover.
6. Do not mow around people.
7. Do not ride on the machine during operation.
8. When mowing, be sure to keep the chute down to prevent projected objects from the deck from hurting people or damaging property.

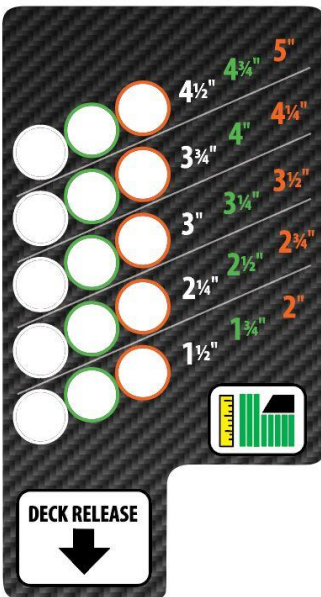




Nemesis Mean Green Side Panel Left & Right-
Displays the Nemesis logo on the side of the mower.



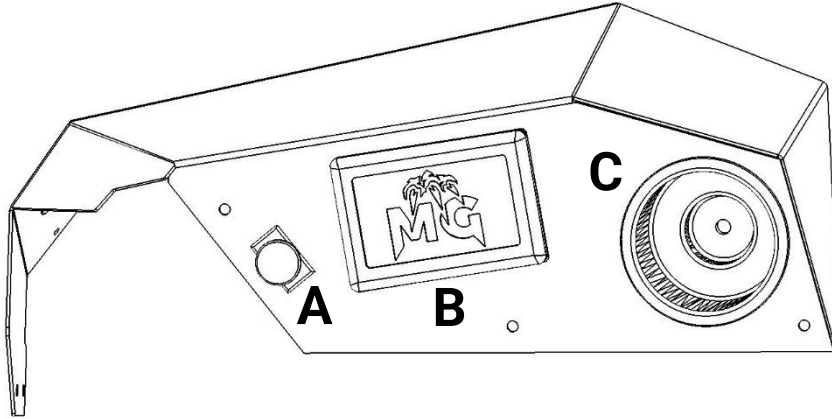
Nemesis Logo



Nemesis Deck Height Decal-
The deck height decal will display different heights that can be set on the NXR mower.

Mower Control Panels

Right Side Mower Control Panel (With Operator Seated)



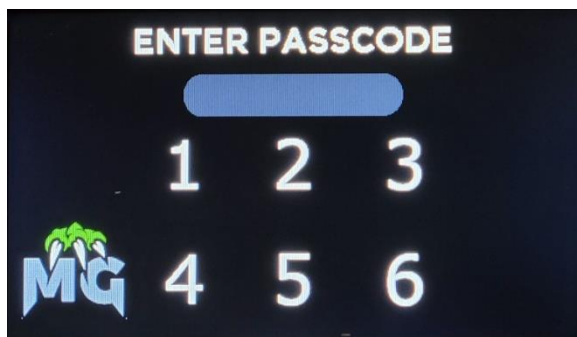
A: PTO Deck Blades ON and OFF Switch: This switch engages the deck blade motors. Pull the switch up to engage blades and push switch down to disengage blade motors. **NOTE: There is a few second delay before blades will start!**

B: Touch Screen Control Display: Shows battery charge level, mower speed, blade speed, and other information about the mower

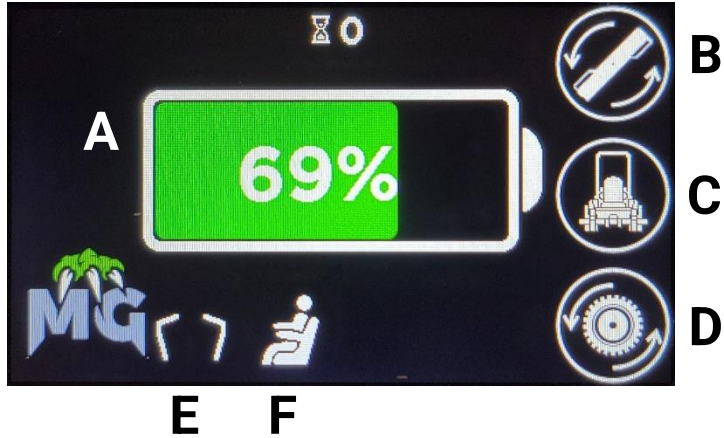
C: Cupholder

Control Display Functions

Startup Passcode: enter the user passcode to unlock the mower



Main Screen: Displays state of charge (A), blade speed control (B), mower settings (C), mower speed (D), control bar status (E), and operator presence (F)



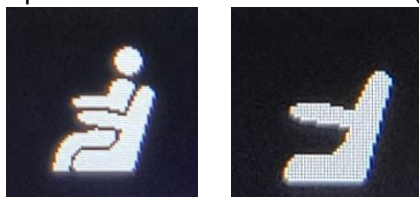
Blade High and Low Speed (B):



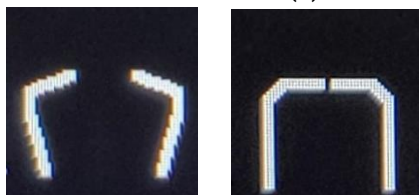
Mower High and Low Speed (D):



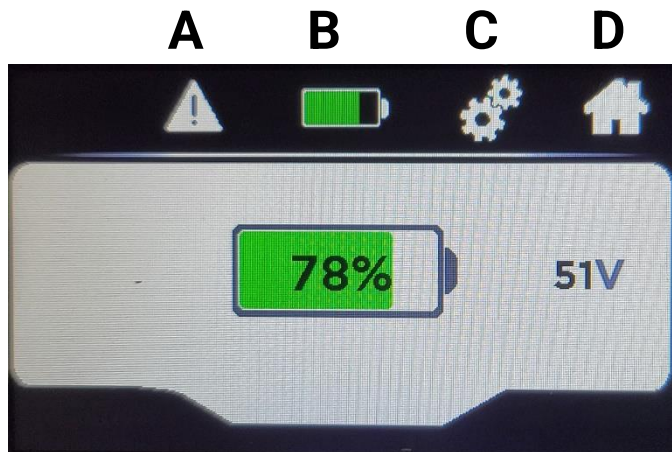
Operator Present and Not Present (E)



Control Bars Out and In (F)

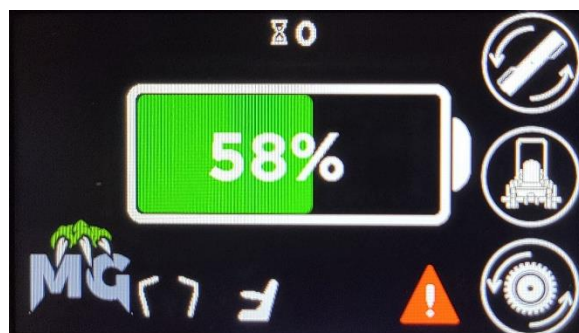


Mower Settings: Faults (A), State of charge and voltage (B and current display below), settings (C), and

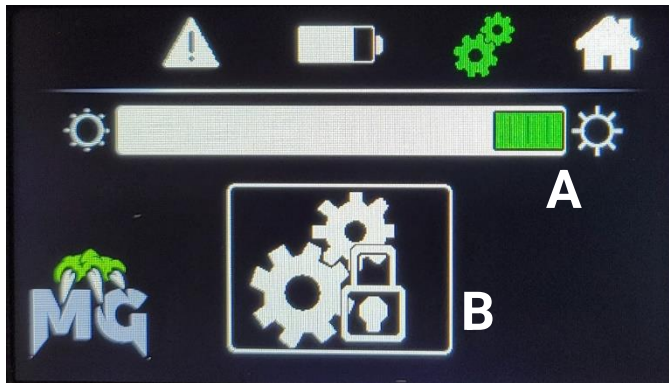


return to main screen (D)

Fault screen: no faults, active fault, and main screen with active fault

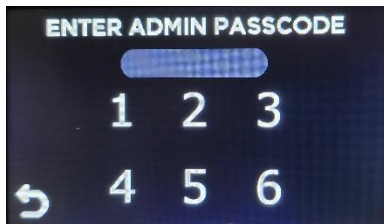


Display brightness slider (A) and Change User Passcode (B)

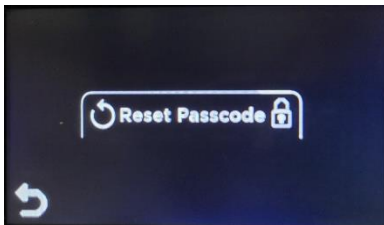


Change User Passcode Steps:

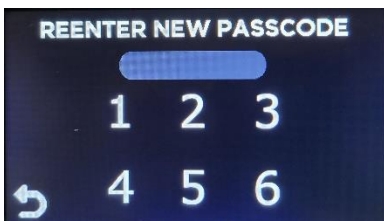
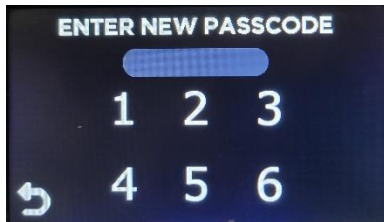
1. Select the Change User Passcode button (B) from the mower settings page.
2. Enter the admin passcode for the mower (this is different from the user passcode).



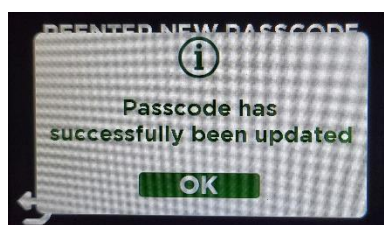
3. Select Reset Passcode



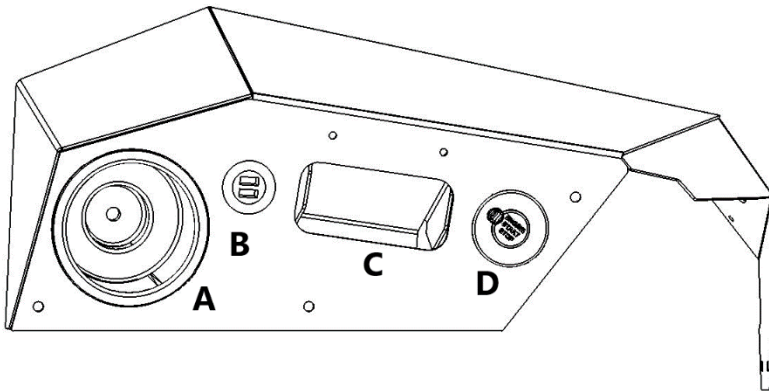
4. Enter a new passcode, then re-enter the same passcode to confirm.



5. New passcode confirmed.



Left Side Mower Control Panel (With Operator Seated)



A: Cupholder

B: USB Charger for portable electronics

C: Cellphone holder

D: On/Off Button: Powers the mower on and off

Operating Instructions

To drive mower forward, push right & left Drive Control Bars forward an equal distance.

To drive mower in reverse, pull right & left Drive Control Bars rearward an equal distance.

Safe Operating Practices

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

Operation

Evaluate the terrain to determine what accessories and attachments are needed to perform the job properly and safely. Only use accessories and attachments approved by the manufacturer. Clean the battery compartment, drive motor compartment, mower deck, seat etc. of all dirt and debris. Keep unit free of grass clippings, leaves and other debris. DO NOT spray under seat or electric components with water to clean unit. Do not use, solvents, hard cleaners, or abrasives. Wear adequate eye and hearing protection when cleaning the unit. Never leave a running machine unattended. Always stop on level ground, disengage deck blade switch, place drive control bars in neutral position, turn mower to off position, and turn the battery disconnect to the OFF position for any reason including emptying the catcher or unclogging the chute. Always remain seated while operating machine. (riding mower models) Always keep safety shields and covers in place. Always maintain a safe distance from people and pets when mowing. Always stop machine if someone enters the area. Avoid injury. Keep area clear of bystanders when engaging deck blade switch. Always operate machine in daylight or with adequate working lights. Follow daily and weekly checklists, making sure electrical connections are secured and bolts are tightened. Always observe traffic laws while driving machine from one location to another. Watch for traffic when operating near or crossing roadways.

Always be alert for hazards such as rocks, metal objects and other debris which may be thrown or entangled by mower blades. Watch out for holes or deep depressions. Inspect area to be mowed for hazards such as rocks, metal objects and other debris which may be thrown or entangled by mower blades. Remove these objects before mowing. Always inspect machine for damage after striking a foreign object. If damage is found, repair machine immediately. Be sure to stop on level ground, disengage deck blade switch, place drive control bars in neutral position, turn mower to OFF position, and turn the battery disconnect to the OFF position! Always wear adequate ear protection, such as earplugs, when operating this equipment as prolonged exposure to uncomfortable or loud noises can cause impairment or loss of hearing. Do not wear radios or music headphones while operating the machinery. Safe operation requires your full attention. 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 when operating this machine. Always wear safety goggles or safety glasses with side shields when operating the mower.

Always be aware of what is behind the machine before backing up. Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing up. When moving in reverse, **SLOWLY** pull right and left Drive Control Bars rearward and avoid sudden movement. Rapid movement of the Drive Control Bars in either direction could result in a reaction of the machine that can cause serious injury.

Never operate a poorly maintained machine. Never attempt high speed maneuvering, especially in crowded, congested areas or on slopes. Never allow persons to operate this machine without proper instruction or allow children to operate machine. Allow only responsible adults who have read and understand these instructions to operate this machine. Never put hands or feet under any part of the machine while it is running. Never carry passengers.

Never direct discharged material toward anyone. Avoid discharging material against a wall or obstruction. Material may ricochet back toward the operator. Always disengage the blades and wait for them to stop before crossing gravel drives, walks or roads. Always keep clear of the mower blades and attachments during their operation. Turn off blades when not mowing. Slow down before turning.

Turn the battery disconnect to the OFF position before removing the grass catcher or unclogging the discharge chute. Never clear the discharge chute with the machine running. Turn mower OFF, turn the battery disconnect to the OFF position, and make sure the blades have stopped before cleaning. Use a stick to clear a plugged discharge area. **DO NOT use your hand!**

Do not operate the machine while under the influence of alcohol or drugs. Exercise caution when loading or unloading the machine onto a trailer or truck. Data indicates that operators, age 60 years and above, are involved in a large percentage of mower-related injuries. These operators should evaluate their ability to operate the mower safely enough to protect themselves and others from serious injury. If any attachment or additional weight is mounted on the rear or side of the unit (depending on model), any rapid movement in either direction could result in a reaction of the machine that can cause serious injury. Clean flammable material from machine. Prevent fires by keeping battery compartment, motor compartment, deck and operator's station clean of accumulated trash, grass clippings, and other debris.

Using a ramp

Use extreme caution when loading and unloading a unit onto a truck or trailer with a ramp. Use only a single, full width ramp; do not use individual ramps for each side of the unit. Having a full width ramp 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. When on a ramp avoid sudden acceleration.

Slope operation (see page 20)

Slopes are a major factor in 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 it. REMINDER: Only operate on slopes of 15 degrees or less.

Use extreme caution when operating on slopes.

- Be extremely careful changing directions on a slope.

Slow down.

- Do not operate where the machine could slip or tip.
- Turn slowly
- Turn on the most level part of the slope
- To maximize traction, it is better to turn the front of the machine uphill, rather than downhill. **If drive tires lose traction, steering control is lost which could cause serious injury or death.**

• If it becomes necessary to turn downhill, turn slowly and gradually. Do not remove or modify the stabilizer 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, 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, 3.05 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 to avoid the ground from breaking away. This will reduce the risk of the machine suddenly rolling over causing 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 to avoid machine rollover and serious injury or death. 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. Do not try to stabilize the machine by putting your foot on the ground. If the mower's tires lose traction when operating on slopes, disengage the deck blade switch, place the drive control bars in the neutral position, ensure engagement of emergency brake, turn the mower to the OFF position 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 Mean Green Mower is capable of operating horizontally (traverse) on moderate slopes. When operating on slopes up to 15 degrees, be aware 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.**

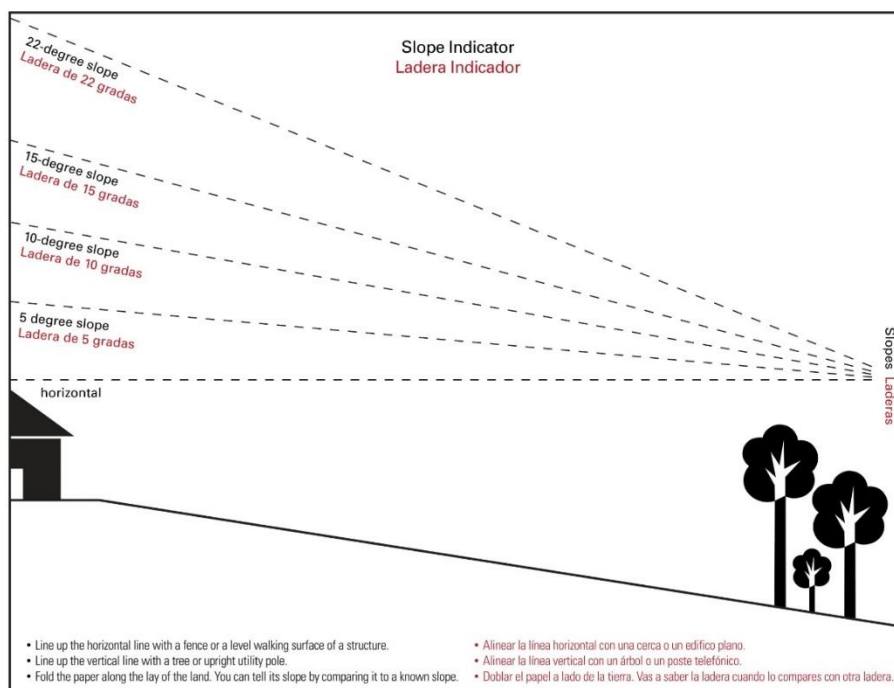
Refer to Slope Guide below when determining the degree of slope to be mowed. It is strongly recommended that the operator drive the machine off of the slope, using extreme caution, if any sign of loss of traction is detected. Wait until the condition that caused the problem is resolved before attempting 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, i.e., holes, ruts, washouts
3. Mounds of dirt
4. Soil type, i.e., sand, loose dirt, gravel, clay
5. Grass type, density, and height
6. Extremely dry conditions of grass
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. Another consideration is to always mow a safe distance (minimum of 10 feet 3.05 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 to avoid the ground from breaking away and always be aware of what is located at the bottom of the slope. This will reduce the risk of the machine suddenly rolling over causing serious injury or death. Extreme caution should be used when there is a hazard located at the bottom of the slope. Some examples are:

1. Water, i.e., lake, river
2. Cliffs, retaining walls
3. Roads, highways
4. Buildings
5. Rocks

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



Towing

On flat, level ground towing capacity is 200lbs. Towing capacity is reduced on slopes. This is due to the safety limits of the braking system. If towing and parking on a slope is required, park parallel to the slope rather than facing the mower/trailer uphill or downhill.

Towing is intended to be intermittent (i.e., towing a garden cart from one location to another), not for job-length durations (i.e., towing a grass collector or yard sweep).

Children

Tragic accidents can occur if the operator is not alert to 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 while mower is on, especially with children present. Children or bystanders may be injured if they move or attempt to operate the machine while it is unattended. Always disengage deck blades & turn mower to OFF position. Keep children out of the mowing area and under the watchful care of a responsible adult other than the operator. Be alert and turn the machine off if children enter the area. Before and while backing, look behind and down for small children. Never carry children, even with the blades 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. Never allow children to operate the machine. Use care when approaching blind corners, shrubs, trees, the end of a fence or other objects that may obscure vision. Never allow children or others in or on towed equipment.

Safety start interlock system

The machine is equipped with a safety start interlock system consisting of the park brake switches, seat switch, and deck blade switch. **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. Call your local dealer, immediately! 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.

To inspect the system:

1. The operator must be on the seat when testing the seat switch.
2. Press the Push Button Start to the ON position and enter passcode.
3. Keep Drive Control Bars in neutral position.
4. Pull Deck Blades to ON position.
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 Mean Green Products Dealer immediately.**

Starting your mower:

1. Press the push button start ON, wait several seconds, and then type in passcode when prompted on the display.
2. Check for the appropriate speed mode by switching High/Low Drive Speed Switch to LOW position. **NOTE: It is always recommended to start out in low mode/ slow speed.**
3. Pull up on PTO Deck Blades On/Off Switch to start cutting blades for mowing.
NOTE: ONLY engage blades when Drive Control Bars are in the NEUTRAL position!
NEVER engage blades when moving!!
4. Push Drive Control Bars Forward for forward motion and pull rearward for reverse motion. Electric Brake will engage .5 seconds after both Drive Control Bars are returned to neutral.

Stopping your mower:

1. Return Drive Control Bars to the Neutral/Stop position.
2. Push down on Deck Blades On/Off Switch to turn OFF the blades.
3. Push button to the OFF position.

NOTE: If operator leaves the seat with mower in the ON position, the unit may need RESET by pressing the push button start from OFF/ON.

Driving the mower



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.

After pressing the push button start to ON position:

To go forward, push both Drive Control Bars forward an equal distance

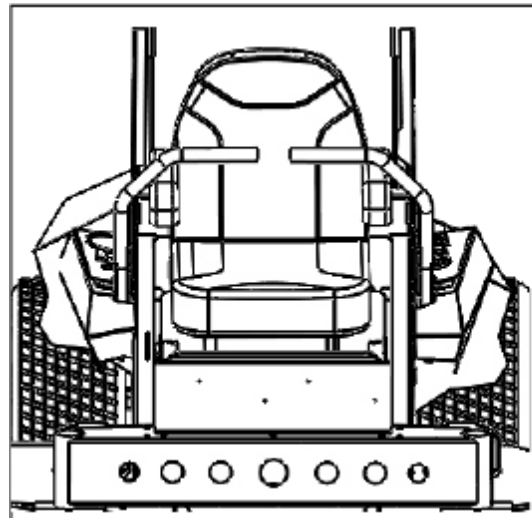
To go in reverse, pull both Drive Control Bars rearward an equal distance

To turn left, move the right Drive Control Bar farther forward from neutral than the left Drive Control Bar.

To turn right, move the left Drive Control Bar farther forward from neutral than the right Drive Control Bar.

Zero radius turn, move one Drive Control Bar forward and the other Drive Control Bar back of neutral. This will allow the drive wheels to counter rotate.

To stop or decrease speed: To stop, move both Drive Control Bars to neutral, middle position. When going forward and want to decrease speed, pull back gently on both Drive Control Bars. When going in reverse and want to decrease speed, push forward gently on Drive Control Bars.



To STOP,
Move right and left drive control bars to neutral, middle position and push bars **OUTWARD** into the neutral slots. When going forward to slow down, pull back gently on both Drive Control Bars. When going in reverse to slow down, push forward gently on right and left Drive Control Bars.

NOTE: Always remember middle is neutral!

For an emergency stop:

When traveling forward or rearward, place the Drive Control Bars in the neutral middle position and push bars outward – this will engage mower safety brakes. Any sudden movement could cause the front of the mower to come off the ground resulting in possible loss of control causing serious injury or death. Turn the push button start to the OFF position. This will shut down the traction drive system and the deck blade system.



WARNING: Always be aware of what is behind the machine before backing up. Do not mow in reverse unless necessary. Always look down and behind before and while backing up.

IMPORTANT: Rapid movement of Drive Control Bars is not recommended as damage to the electric system components may occur.

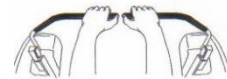
To increase speed, increase the Drive Control Bars distance from neutral. The farther forward the Drive Control Bars are from neutral, the faster the machine will travel forward. The farther back the Drive Control Bars are from neutral, the faster the machine will go in reverse. Also changing the Drive Speed Control Switch from Low to High will increase or decrease the speeds of mower in forward, reverse and turning.

SMOOTH TRAVEL

The lever controls of the Zero Turn are very responsive!

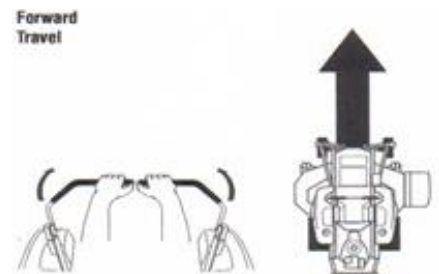
The BEST method of handling the ground speed control levers is in three steps, as shown to the right.

1. Place your hands onto the levers as shown.
2. To go forward gradually push the levers forward with your palms.
3. To speed up move the levers farther forward. To slow down smoothly, slowly move the levers toward neutral.



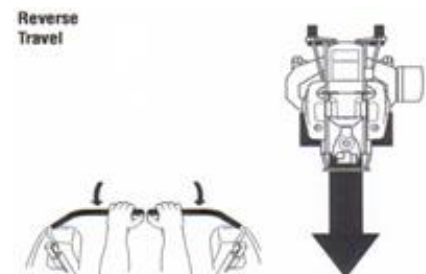
Forward Travel Practice

1. Gradually move both Drive Control Bars FORWARD from Neutral
2. To slow down, gradually move both Control Bars to the neutral position



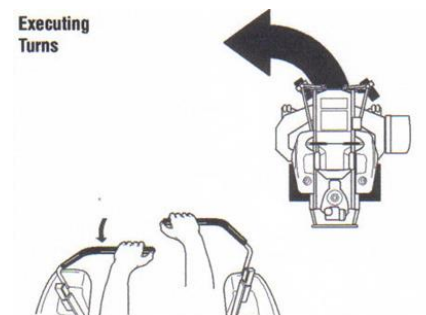
Reverse Travel Practice

1. Check behind the mower for any obstacles, then gradually move both Control bars BACKWARDS from Neutral
2. To slow down, gradually move both Control Bars to the neutral position



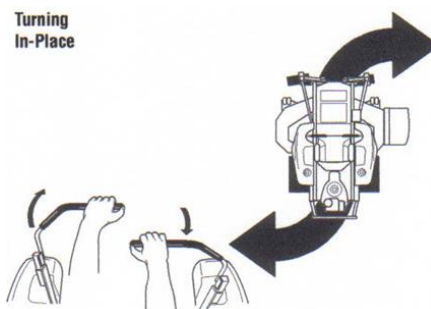
PRACTICE TURNING AROUND A CORNER

While traveling forward bring one handlebar gradually back toward neutral. Repeat several times. NOTE: To prevent pivoting directly on the tire tread, it is best to keep both wheels going at least slightly forward. This will help prevent tearing the grass beneath the pivoting wheel.



PRACTICE TURNING IN PLACE

To turn in place, "Zero Turn", gradually move one handlebar forward from neutral and one handlebar back from neutral simultaneously. Repeat several times. NOTE: Changing the amount each lever is pulled, forward or back, changes the "pivot point" you turn on.



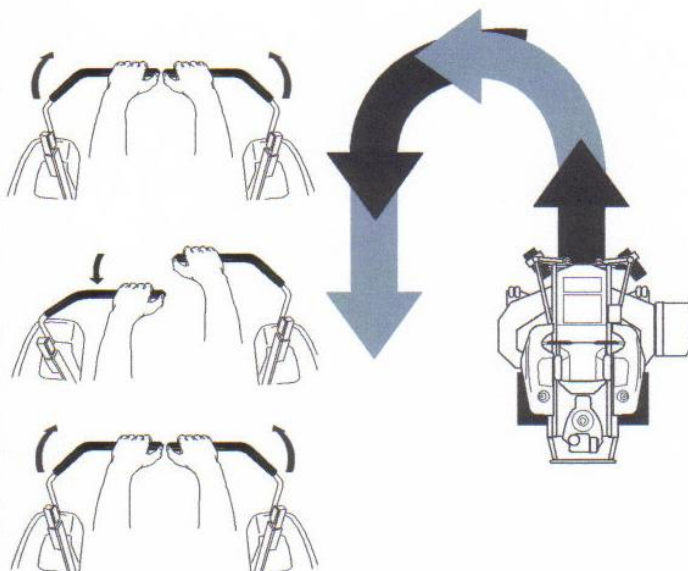
EXECUTING AND END-OF-ROW ZERO TURN

Your Zero Turn Mower's unique ability to turn in place allows you to turn around at the end of a cutting row rather than having to stop and Y-turn before starting a new row.

To execute a left end-of row zero turn:

1. Slow down at the end of the row.
2. Move the RIGHT handle bar lever forward slightly while moving the LEFT handle bar lever back to center and then slightly back from center.
3. Begin mowing forward again.

This technique turns the rider left and slightly overlaps the row just cut – eliminating the need to back up and re-cut missed grass.



Remember: The more you practice, the better your control of the zero-turn mower!

Operating suggestions



DANGER: Prior to operating the mower 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 normal speed operation. An inexperienced operator should not mow on slopes or on uneven terrain and should always mow in Slow Drive Speed.



WARNING: If you lose steering control while operating the machine on a slope, TURN BLADES OFF, return Steering Control Bars to NEUTRAL position for brakes to engage, and Turn mower to OFF position. Call your Mean Green Products dealer to resolve problem before continuing to operate.



WARNING: The unit's steering control bars are very responsive: **Easy does it!** For smooth operation, move controls slowly, avoid sudden movement. 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 over-steer and lose control.** Slow-moving, slow speed practice maneuvers are recommended to become familiar with these characteristics before attempting high speed operation.



WARNING: Sharp depressions or raised obstacles (such as gutters or curbs) should not be directly

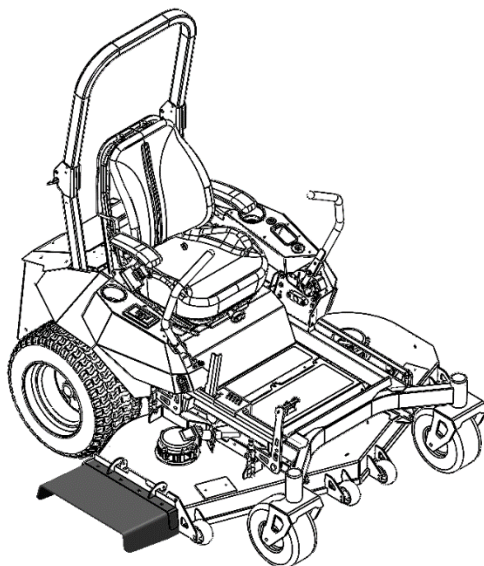
approached at high speed in an attempt to “jump” them as the operator could be thrown from the equipment. Approach at a slow speed and angle one drive wheel at the obstruction. Continue at an angle until the wheel clears and then pivot the opposite wheel around. When turning on soft wet turf, keep both wheels rolling either forward or backward. Pivoting on one stopped wheel can damage turf. This is especially important when mowing. **Keep blades sharp.** Many professional mowing companies have additional sets of blades and change blades twice a day: once in the morning and again at noon. **Many problems with incorrect cutting patterns are due to dull blades** or blades which have been **sharpened incorrectly**. Information on sharpening blades is listed in this manual’s maintenance section. In addition, most communities have individuals or companies which specialize in sharpening mower blades. **Blade sharpness should be checked daily.**



DANGER: Never work with blades while mower is on. Always place deck blade switch in the **disengaged** position, place steering control bars in the neutral position and turn mower to the OFF position and turn the battery disconnect to the OFF position! Block up mower when you **must** work under it. Wear gloves when handling blades. **Always check for blade damage** if mower strikes a rock, a branch, or another foreign object during mowing!

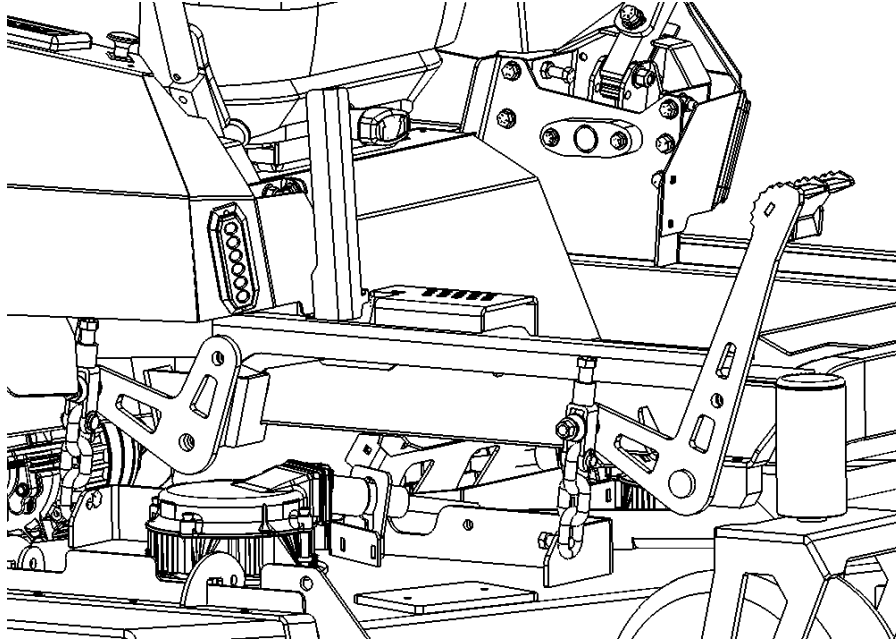
Direct grass discharge to right (with side discharge models), away from un-mown area. Select a mowing pattern that directs grass discharge towards the outside, not towards center, of mowing area. Generally, this means using a pattern utilizing **left turns** because side discharge is to **right**. In any case, avoid throwing grass discharge onto un-mowed 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 1/3 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 direction** 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; 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.

WARNING: Never direct discharge of material from mower deck towards bystanders. Do not operate the mower without the discharge chute (Fig.4A) (with side discharge models).



Deck cutting height adjustment

Deck height is adjustable from 1.5" - 5.25" in. To change the height of the deck, push pedal to furthest forward position until locked. Then place deck height pin in marked hole for desired cutting height. Once pin is firmly placed in position, proceed to push pedal forward and pull back on deck lift lock release lever and slowly lower deck onto set pin.



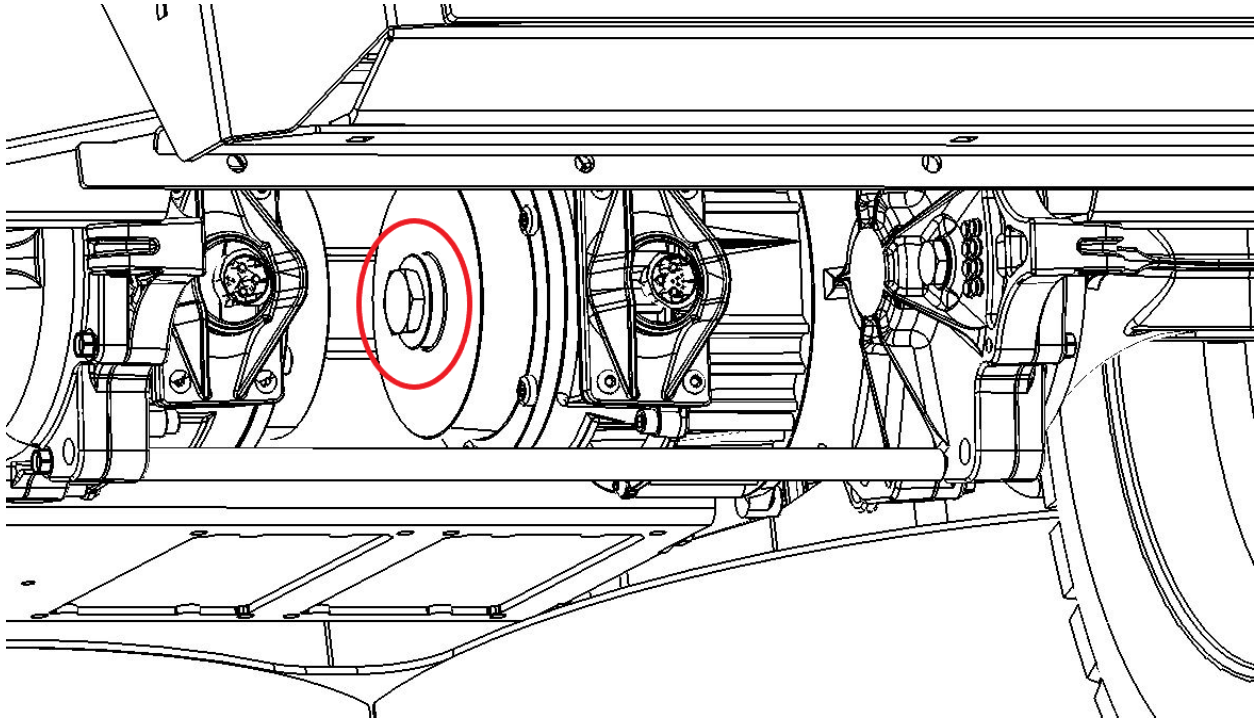
Anti-scalp wheels

Anti-scalp wheel kits are standard on Mean Green Mower units. These anti-scalp wheels 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, in 1/2" increments, using the different axle mount holes in the wheel mount bracket.

Emergency Drive Brake Release Nut for Towing or Manual Pushing

The brakes on the drives can be released so the mower can be pushed or towed. On each drive, loosen the brake bolts with a 1" wrench to be finger loose with no resistance but do not remove the bolt. If necessary, continue to loosen the bolt by ¼ turns until the mower can be pushed.

NOTE: Never drive the mower with the brake released. Always fully tighten the bolts back to the engaged position before driving! Always use a wrench to fully tighten the bolt. Finger tight is NOT sufficient for safe operation. Failure to fully re-engage the brake bolts could cause serious damage to your mower, void mower warranty, and/or cause serious injury!!!!



Maintenance and Adjustments

Safe Servicing Practices

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

NOTE: Always turn mower OFF and turn battery disconnect switch to OFF when any maintenance or repairs are performed on mower unit!

Service

Park the mower on level ground. Make sure that steering control levers are in the neutral position, deck blade switch in OFF position, raise deck, turn mower to OFF position, and turn battery disconnect switch to OFF.

IMPORTANT! Wait for all movement to stop before adjusting, cleaning or repairing. Repairs or maintenance requiring power should be performed by trained maintenance personnel only. Read and observe safety warnings in front of manual. **Any maintenance operation that requires the removal of safety covers must be performed by a trained service technician.**

Before working on or under the deck, make certain to press the push button to OFF and deck blade switch cannot be accidentally started and turn the battery disconnect to OFF by turning switch on back of battery hood.

IMPORTANT! Repairs or maintenance requiring power should be performed by trained maintenance personnel only. Use a stick or similar instrument to clean under the mower making sure that no part of the body, especially arms and hands are under mower. Keep your machine clean and remove any deposits of trash and clippings, which can cause fires and overheating. Allow machine to cool before storing. **Clean flammable material from machine. Prevent fires by keeping battery compartment, deck and operator's station clean of accumulated trash, grass clippings, and other debris.**

Clean battery compartment, drive motor compartment, mower deck, seat etc. of all dirt and debris. **DO NOT spray unit with water.** Do not use, solvents, hard cleaners or abrasives. **Use only compressed air.** Always wear adequate eye protection when servicing the batteries, or when grinding mower blades and removing accumulated debris. Never attempt to make any adjustments or repairs to the mower's drive system, mower deck or any attachment while the traction drive system is running. Repairs or maintenance requiring power should be performed by trained maintenance personnel only. Never work under the machine or attachment unless it is safely supported with jack stands. Make certain machine is secure when it is raised and placed on the jack stands. The jack stands should not allow the machine to move when the traction drive system is running and the drive wheels are rotating. **Use only certified jack stands.** Use only appropriate jack stands, with a minimum weight rating of 2000 pounds (907.2 kg) to block the unit up. Use in pairs only. Follow the instructions supplied with the vehicle stands. Do not touch hot parts of machine. Keep nuts and bolts tight, especially the blade attachment bolts. Keep equipment in good working condition. Never tamper with safety devices. Check their proper operation regularly. Turn the mower to the OFF position before unclogging the discharge chute. Never clear the discharge chute with the machine running. Turn the mower to the OFF position and be sure the blades have stopped before cleaning. Use a stick to clear a plugged discharge area. **Never use your hand!** Stop unit, and allow blades to stop before unclogging chute. Grass collection system components are subject to wear, damage and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary. Exercise caution when working under the deck as the mower blades are extremely sharp. Wear gloves and use extra caution when servicing them. Use only genuine Mean Green Mower parts to ensure that original standards are maintained.

NOTE: Always turn mower OFF and turn battery disconnect switch OFF when any maintenance or repairs are performed on mower unit!

Always disconnect batteries when transporting unit. Keep unit free of grass clippings, leaves and other debris. **DO NOT spray with water to clean unit. Use only compressed air.** Wear adequate eye and hearing

protection when cleaning the unit. Always wear safety glasses and protective gear near batteries. Use insulated tools.

Regular Maintenance

Regular maintenance is the best prevention for costly downtime or expensive, premature repair. The following pages contain suggested maintenance information and schedules which the operator should follow on a routine basis. For more detailed information order the correct parts manual for your unit. Remain alert for unusual noises, they could be signaling a problem. Visually inspect the machine for any abnormal wear or damage. A good time to detect potential problems is while performing scheduled maintenance service. Correcting the problem as quickly as possible is the best insurance.

Daily inspect mower for grass clippings and wire and string tangles. The underside of the mower deck may collect a buildup of grass clippings and dirt, especially when grass is wet or has high moisture content. This build-up will harden, restricting blade and air movement and will probably show a poorer quality of cutting. Therefore, it should be removed routinely. To do this it will be necessary to raise and block the deck, using jack stands or blocks, in the full up position and scrape the build-up from underneath.

Some repairs require the assistance of a trained service mechanic and should not be attempted by unskilled personnel. Consult Mean Green Products or your local dealer when assistance is needed.



Torque Values: WARNING: Particular attention must be given to tightening the drive wheel lug nuts and blade spindle bolts. Failure to correctly torque these items may result in the loss of a wheel or blade, which can cause serious damage or personal injury. Call your Mean Green Products Dealer for assistance. Torque values are given below:

Location	Torque setting (ft-lbs)
Wheel (lug) nuts	65-75
Blade Spindle Bolt	60

Lug nuts only - It is recommended that these be checked after the first 2 hours of operation, initially, every 100 hours and following removal for repair or replacement.

Tires

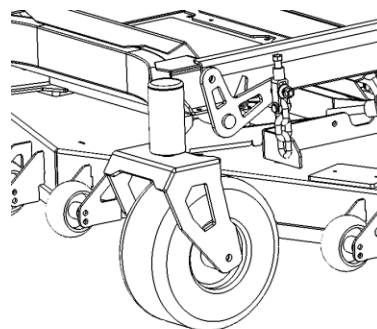
It is important for level mowing that the rear tires have the same amount of air pressure. The recommended pressures are: 12 psi in rear tires. Front tires are either no flat tires (do not require air) OR pneumatic tires with the recommended pressures of 12 psi.

Lubrication

Use SAE multi-purpose grease for front wheel bearings. **IMPORTANT:** Recommended maintenance at the beginning of each mowing season AND every 50 hours of operation.

Electrical system

This mower operates on a 48-volt electrical system. Refer to the *Electrical System* section of this manual for detailed information.

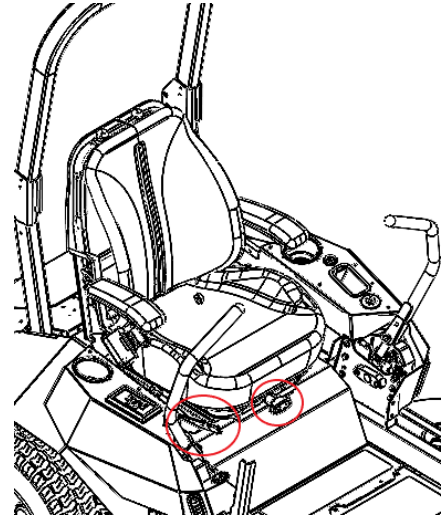


Seat adjustment

The seat can be adjusted forward and rearward by moving the black seat lever (right side between seat and control panel when seated) to the left side. Push the lever towards the center of the mower to unlock and adjust the seat position.

IMPORTANT: Make sure that the seat locks into place after changing positions!

The seat suspension can also be adjusted for operator comfort. Turn the knob clockwise/counterclockwise to match the operator weight or to preferred setting for operator comfort.



Mower blade maintenance

Check the mower blades daily, they are the key to power efficiency and well-groomed turf. Keep them sharp, a dull blade will tear rather than cut the grass, leaving a brown ragged top on the grass within a few hours. A dull blade also requires more power. Replace any blade which is bent, cracked, or broken.

WARNING: Never attempt to straighten a bent blade by heating, or weld a cracked or broken blade as the blade may break and cause serious injury. Replace worn or damaged blades.

DANGER: Never work with blades while mower push button is ON. Turn mower OFF and disconnect battery cables by turning the battery disconnect switch to OFF position! 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 other foreign objects during mowing!

WARNING: Always wear adequate eye protection when grinding mower blades.

Mower blade removal

Use a 9/16" wrench or socket to remove the 3/8" cap screw holding the blade to the motor shaft from underneath. It may be necessary to use a 1-1/4" channel lock pliers to keep the blade adapter from turning while removing blade cap screw. **NOTE:** The blade adapter will come off when the blade cap screw is removed. Touch-up sharpening can be done with a file. Check the blades for balance following grinding. A commercial balancing tool is available through most hardware supply stores, or balancing can be done by placing the blade on an inverted line punch or 1/2" bolt. Blade should not lean or tilt. Spin the blade slowly, blade should not wobble. If blade is out of balance, true it up before reinstalling. Lay the blade on a flat surface and check for distortion. Replace any distorted blade.

Mower blade installation

Do not re-use spindle bolts which have stripped, worn or undercut threads. Make sure that the blade adapter is seated properly on the blade motor shaft before tightening the blade cap screw. Use a 9/16" socket with a torque wrench to re-attach the blade to the motor shaft from underneath. It will be necessary to use a 1-1/4" channel lock pliers to keep the blade adapter from turning. Torque cap screws on motor shafts to 30 foot-pounds when reinstalling blades.

IMPORTANT: The blade sail (curved part) must be pointing upward toward the inside of the deck to ensure proper cutting.

IMPORTANT: When mounting blades, rotate them after installation to ensure blade tips do not touch each other or sides of the mower.

WARNING: Failure to correctly torque the bolt may result in the loss of the blade which can cause serious injury.



WARNING: Mower blades are sharp and can cut. Wear gloves and use extra caution when servicing them.

Leveling the mower deck



WARNING: This procedure will involve working in and under the mower deck. Disconnect battery at the main disconnect prior to beginning this procedure.

A bubble level is required to complete this procedure

1. Park the mower on a flat, level surface and set the deck to 4".
2. **Disconnect the battery at the main disconnect.**
3. Manually push the outer blades to be parallel with mower's forward direction of travel.
4. At each blade tip, measure the height from the floor to the blade tip and record each measurement. There will be four total measurements taken, one for each blade tip. Unless the center blade is bent, it is assumed to be level with respect to the outer blades.
5. If the measurements vary by more than 1/8" from the set height (4"), adjustment and leveling is needed. Begin with the front two blade tips and level them first.
 - a. On each corner that needs leveling, locate the chain which suspends the deck.
 - b. Loosen the jam nut so that the leveling bolt can be turned.
 - c. Turn the leveling bolt clockwise to raise the deck and counterclockwise to lower the deck.
 - d. Measure the blade tip closest to that chain again and check that it is within 1/8" of 4".
 - e. Once the height is set correctly, tighten the jam nut to lock the leveling bolt in place.
 - f. Repeat the other front blade tip.
6. The front of the deck should be slightly lower than the rear.
 - a. On the rear adjustment chains, repeat steps 5a through 5f.
 - b. Place the bubble level on the top of the deck parallel to the blade and continue adjusting the rear chains until the bubble touches line on the back side of the mower.
 - c. This sets the correct angle for the mower deck.
 - d. Measure the rear tips again and check that they are within 1/8" of 4".
7. Double check that all jam nuts on the chain are tightened against the body of the leveling assembly.
8. Rotate the outer blades 90° so they are now perpendicular to the mower's forward direction of travel.
9. Measure the outer blade tip height again to ensure they are within 1/8" of 4".
10. Change the deck height and measure the blade height again to ensure it is within 1/8" of the set height.
11. Reconnect the battery.

Electrical System

Electrical System Safety

Turn mower to OFF position by pressing the push button, wait several seconds until the power LED turns off, disconnect battery cables by turning the battery disconnect switch to OFF and read owner's manual before adjusting or repairing unit. Keep unit free of grass clippings, leaves and other debris. **DO NOT spray water in electrical compartment to clean unit. Use only compressed air or blower.** Wear adequate eye protection when cleaning the unit. Always wear safety glasses and protective gear near batteries. Use insulated tools. Clean battery compartment, drive motor compartment, mower deck, seat etc. of all dirt and debris. **Do not spray battery/electronics compartment with water. Use only compressed air or blower.** Avoid injury. Press the push button start, enter passcode and mower blade will engage when deck switch is engaged, even if drive motor is not turning. Keep area clear of bystanders when engaging blade switch. All maintenance and storage areas should be properly ventilated in accordance with applicable fire codes and ordinances to avoid fire hazards. Never allow flames, sparks or smoking near batteries. Keep batteries out of reach of children. Always keep protective shields, covers and guards in place and securely fastened. If they become damaged, repair or replace immediately. **Never modify or remove safety devices.**

Electrical System Information

The Mean Green Mower is powered by a 48-volt electrical system. It consists of the following components:

1. Deck controllers (3)
2. Deck Motors (3)
3. Drive Controller - right (1)
4. Drive Controller - left (1)
5. Digital battery display (1)
6. Integrated electric transaxle (2)
7. Lithium Energy Modules (LEMs) (1)

Component Maintenance

IMPORTANT: Maintenance for the various electrical components found on the Mean Green Mower should only be performed by a Mean Green Products trained technician.

IMPORTANT: When battery voltage becomes low, the touch screen display will show a "low voltage" warning. When the batteries discharge to this point, they require recharging. **The mower blades should be disengaged and the unit should immediately be returned to the battery charging area to be connected to the battery charger.**



WARNING: Do not attempt to cross roads or railways with low battery levels.

Battery Safety



WARNING: Unplug charger from the wall outlet before connecting or disconnecting from the mower charger port. Always wear safety glasses and protective clothing/gear. Use insulated tools. Prevent the battery terminals from touching any metal mower parts when removing or installing battery. Do not allow metal tools to short between the battery terminals and metal mower parts. Always keep protective battery covers in place.



WARNING: Incorrect battery cable routing could cause damage to the mower and battery cables. This can cause sparks which can cause a battery short circuit which could result in serious personal injury.



WARNING: Always disconnect battery cables by turning the battery disconnect switch to OFF position when transporting the unit or for long-term storage.

Battery Connectors

Always disconnect battery cables by turning the battery disconnect switch to OFF position before performing maintenance on the unit.

Battery Charger

Use only the battery charger provided with the Mean Green Mower. Charger options vary for the Mean Green Mower. Certain models are equipped with an **on and off** switch and others turn on automatically when plugged into outlet. **NOTE: Always plug RED charger plug (fig.S1 pg.25) into RED mower charger plug in mower charging port and THEN plug battery charger into 110-120 volt household GFCI protected outlet. DO NOT USE AN EXTENSION CORD TO PLUG CHARGER INTO OUTLET ALWAYS PLUG CHARGER DIRECTLY INTO GFCI PROTECTED OUTLET!!**

Battery Maintenance

Your Mean Green Mower is powered by 1 Lithium Module (LEMs) which, when maintained properly, will provide years of useful life. For proper care, adhere to the following instructions:



WARNING: Charge only with a Mean Green Mower approved charger. Do not use battery chargers other than those recommended by Mean Green Products. Incorrect battery charging will void warranty and can lead to equipment damage, fire, serious injury or death.

1. Always charge batteries after each use, regardless of how little used. Once charging is complete, charger can be disconnected. Charger may not turn back on once charging is complete. **NOTE AGAIN:** Unplug charger from outlet and then from mower charging port!
2. Check that battery cables are securely tightened to batteries each time you service the battery.
3. Keep grass, dirt and debris from collecting near battery terminals.
4. Batteries are not to remain in a discharged state or damage to the batteries will occur. Immediately charge at least 15 minutes after a complete discharge of battery pack.
5. Charge batteries indoors in a well-ventilated and dry location away from sparks or flames. Never expose charger to rain, vapor or liquid (dry location use only).
6. **Charge only** Lithium Modules (LEMs) provided with the Mean Green Mower.
7. Do not touch un-insulated portion of charger (terminal pins) of output connector. (if applicable on model)
8. Do not use with defective cords and wires. Replace defective cords and wires immediately.

Battery Charging Procedures and Options

LEM48140 lithium modules – approximate weight of 109-120 lbs.



WARNING: Batteries should not be removed from unit unless repair is needed. Use **EXTREME Caution** When Lifting Batteries Out Of Mower Unit. Serious Injury to operator and/or Battery Could Occur If Battery Is Mishandled or Dropped!!



WARNING: Do Not Use An Extension Cord To Recharge Mower! If an extension cord must be used, it must have a minimum of 10 AWG wires and be of the shortest length possible (10-25ft long). Never leave any cords coiled as excessive heat can build up and melt insulation of extension cord wires!

Chargers include: LEMC2348 (Standard Charger)

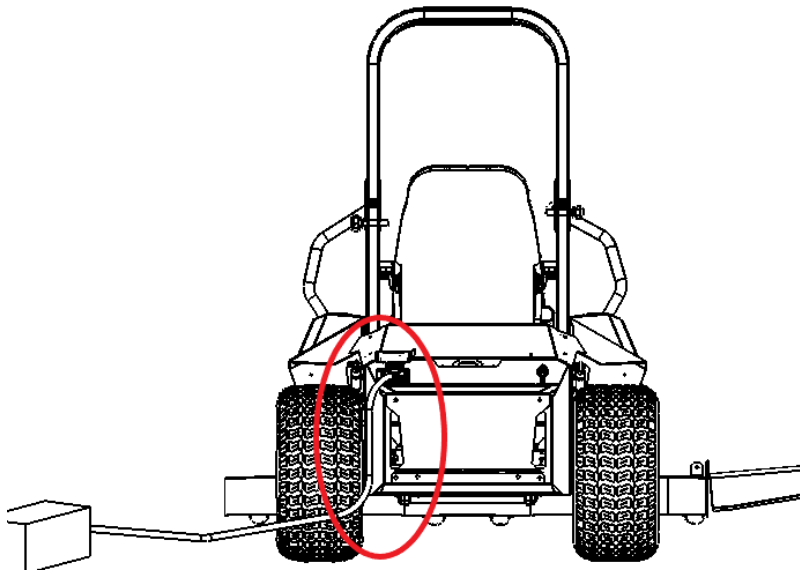
See separate guidelines for each below!

Charger will charge from a Standard 110-120V outlet and charging at 25 amps-48volts. This will be drawing around 13 amps from the 110-120V wall outlet. **NOTE: It is recommended to have a dedicated**

circuit for charging!!  **DO NOT use an extension cords with chargers!!(see note above)**

Pictured below notice the charger has a fan on the top of unit for cooling and 2 cords – 1 from the left side and 1 from the right side. The cord with the RED Anderson Connector plugs into the charging port of

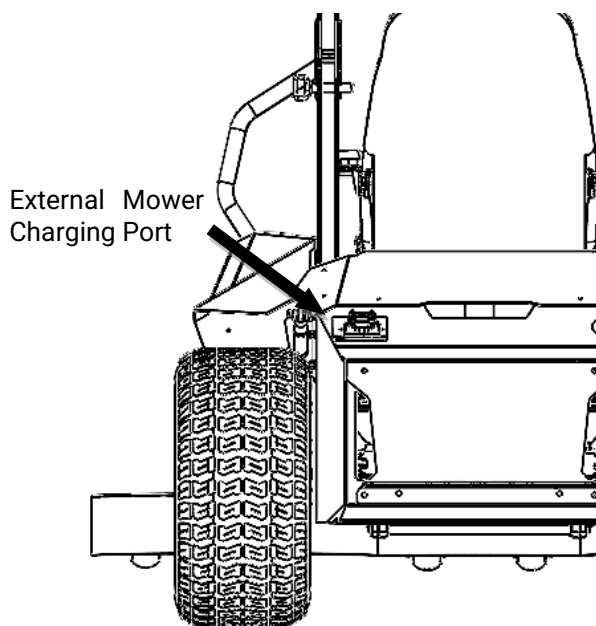
the mower and the second cord plugs into the electrical wall outlet. The charger also has a light on the front of the unit – RED indicates charging and GREEN indicates battery is charged.



Proper Connection and Disconnection of Charger Units:

- 1) Connect the charger to the mower charging port with the Red Anderson Connector. Plug charger into 110-120V or 220-240V wall outlet. You will see a red light on the charger unit and cooling fan will turn on. This will indicate the charger is functioning properly.

NOTE: Mower charging port may be located on left **or** right side of battery compartment depending on model.



When unit is fully charged, the light will turn GREEN and cooling fan will turn off. To disconnect the charger, unplug charger from outlet FIRST then proceed to unplug the charger from mower charging port. **IMPORTANT: IF YOU DO NOT UNPLUG CHARGER FROM WALL OUTLET FIRST, the GREEN light will stay on and the charger may not reset for the next charge. If this occurs, unplug the charger from the wall outlet and wait until the GREEN light turns off (NOTE: this may take up to 40 seconds).NOTE – If you have purchased a charger with a manufacture date of January 2019 or later, the charger will reset without having to unplug the unit from the wall outlet.**

*****Always refer to the Charger Manual for more information about the proper operation of the charger or call Mean Green Customer Service at: 513-738-4736**

Charging Recommendations:



WARNING: Do not smoke while servicing the batteries.



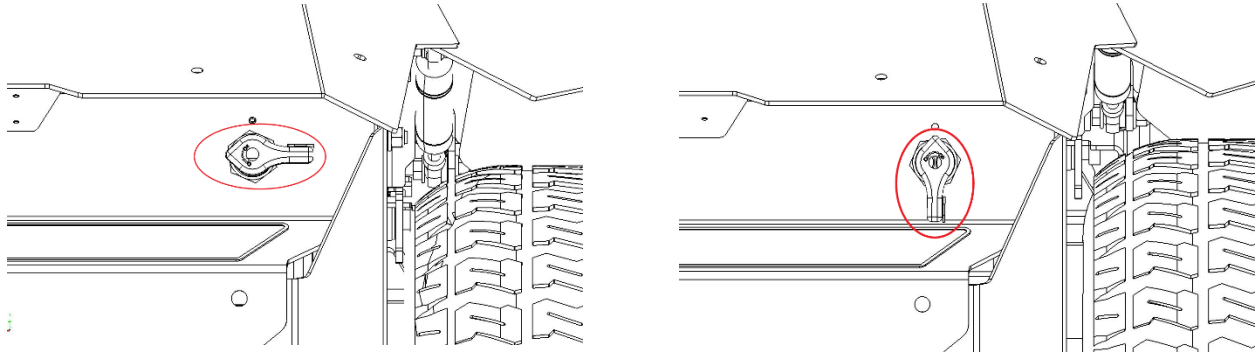
WARNING: Always wear safety glasses and protective clothing near battery. Use insulated tools.

1. Lithium Modules do not develop a memory and need not be fully discharged before recharging.
2. Batteries left uncharged will slowly discharge. Before initial use each spring season, be sure batteries have a full charge before mowing.
3. Batteries should be fully charged every 30 days to maintain battery life.
4. When charging, be sure charger cooling fan inlet and outlet are not blocked.

Disconnecting and Reconnecting the Batteries (LITHIUM MODULES)

NOTE: ALWAYS disconnect the battery by turning the **RED** battery quick disconnect switch to the OFF position on the rear of the mower before **ANY** maintenance is performed on mower unit. To reconnect the batteries, turn the battery quick disconnect switch to the ON position.

Red Battery Quick Disconnect Switch Positions and Location



Battery Storage

See page 40 Lithium Energy Module Maintenance and Care

ROPS (Roll Over Protection System)

To Fold the ROPS:

1. Remove both R-Clips and then pull outward on Hitch Pins.
2. Fold the ROPS slowly rearward.
3. Reinstall Hitch Pins and R-Clips into holes in ROPS frame to lock.



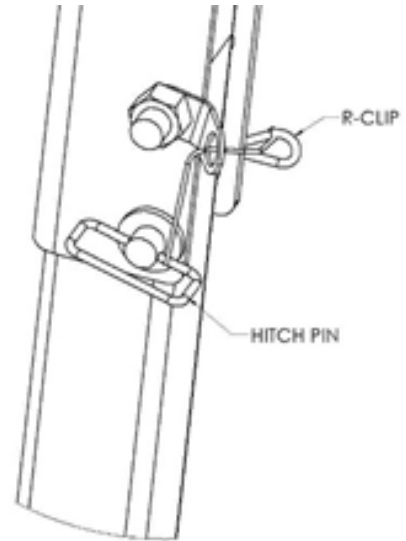
To avoid personal injury: Make sure that both Hitch Pins are properly installed and secured with R-Clips.

To Raise the ROPS to Upright Position

1. Remove both R-Clips and Hitch Pins.
2. Raise ROPS to the upright position.
3. Align Hitch Pin holes, insert both pins and secure with R-Clips.



To avoid personal injury: Make sure that both Hitch Pins are properly installed and secured with R-Clips.



WARNING

Seat Belt

To avoid personal injury:

- Always use the seat belt when any ROPS is installed.
- Do not use the seat belt if a foldable ROPS or a retractable ROPS is down or there is no ROPS.

Adjust the seat belt for proper fit and connect the buckle. This seat belt is auto-locking retractable type.



WARNING

Troubleshooting

Symptoms and Suggested Remedies

FOR ANY ELECTRICAL PROBLEMS

****RESET Mower Electronics by switching the push button to OFF position, wait approximately 5 seconds & then back to ON position. ****

Mower blades stop while mowing

When battery voltage becomes low, the mower blades will stop, although the drive motors will continue to run enabling driver to continue to drive unit. When the batteries discharge to this point, they require recharging. **The unit should immediately be returned to the battery charging area and the unit connected to the battery charger.**

Uneven cutting height

The blade(s) are not sharp. Sharpen the blades. A cutting blade(s) is/are bent. Install new cutting blade(s). The deck is not level - Contact your Mean Green Products Dealer. The underside of the deck is dirty. Clean the underside of the deck. Tires improperly inflated. Adjust air pressure to proper psi (see pg.20) A blade spindle is bent. Contact your Mean Green Products Dealer.

Loss of deck operation

The deck fails to operate with fully charged batteries.

RESET Mower Electronics by Switching Ignition Key to OFF position for approximately 5 seconds & then back to ON position. If this does not remedy the problem - Contact your Mean Green Products Dealer.

Mower will not start

Check that push button is in the ON position (illuminated green).

Check all battery connections in back battery compartment.

Make sure batteries are charged.

Check to see that ALL fuses are not blown or damaged.

Mower drives stop due to low charge & mower will not move or moves in "creep" mode.

Turn blades off, set the push button to OFF position, wait approximately 5 seconds and then back to ON (this resets computer) Drives should now allow several hundred feet of travel. If manual operation is needed to return to charging station or to move mower without battery power, loosen both Emergency Drive Brake Release Bolts to release drive brakes (located beneath the battery compartment) (2 each bolts **SEE "Emergency Drive Brake Release Nut for Towing or Manual Pushing" on Page 28**) and push or tow mower **slowly**.

NOTE: Never drive mower with bolts released. Always tighten bolts back to the engaged position before driving! Failure to re-engage drive bolts could cause serious damage to your mower and void mower warranty!!!!

Storage

When storing the unit at the end of the mowing season, the following steps should be taken to ensure readiness for the next mowing season.

1. Remove all grass, dirt, and trash from mower. **IMPORTANT:** Wash the machine with a mild detergent and **small** amount of water. **Do not pressure wash the machine. DO NOT saturate machine with water!** Avoid excessive use of water, especially near the control switches and mower deck motors (located on deck of mower) **DO NOT** get water in electrical compartment or in battery compartment!!! **IMPORTANT: Excessive water use may void warranty if guidelines are not followed!**
2. Check thoroughly for any worn or damaged parts that need replacing and order them from your dealer.
3. Thoroughly lubricate wheel bearings, according to lubrication instructions.
4. Charge or discharge the batteries to 50-60% state of charge.
5. Do not deflate tires.
6. The mower should be stored in a well ventilated, clean and dry place as the battery charger cannot be used in a wet environment. Always keep the batteries in a 50-60% state of charge while stored. Especially important to prevent battery damage when the temperature is below 32°F (0°C).

New Season Preparation

Before starting the mower following post season storage, the following servicing is required:

1. Clean machine, removing trash and dirt accumulation.
2. Review safety precautions listed in this manual.
3. Check and inflate rear tires to recommended pressure of 12 psi. If No Flat tires on front, no air required. If pneumatic tires on front, recommended pressure is 12 psi.
4. Make sure that batteries are fully charged.
5. Grease front wheel bearings (SAE multi-purpose grease) when applicable.

Lithium Energy Module Maintenance and Care



IMPORTANT: In order to prolong the battery module cycle life and make sure the module stays in good condition, please read the following instructions:

1. Whenever a battery pack is fully discharged and turned off, DO NOT USE IT AGAIN until it is recharged. Over discharge of the battery pack means the battery life will be shortened and the battery may become permanently damaged.
2. Whenever a battery pack is fully discharged and turned off, it is best to recharge the battery as soon as possible, there is no need to fully charge, it will even be beneficial if you only charge the module for 5-10 minutes. It is best to recharge it within 24 hours.
3. If the battery will not be used for a long time (several weeks), please disconnect the battery by turning the Red Battery Quick Disconnect switch on the rear of the mower to the OFF position.
4. For long term storage, please keep the State of Charge (SOC) at around fifty percent of the battery packs fully charged voltage level if possible. To reach that point, you can fully discharge the battery pack and then recharge the pack in only half the charging time.
5. For long term storage, please discharge and recharge the battery pack at least once every 3-6 months.
6. For long term storage and if possible, make sure the storage temperature does not go below -10 degrees Celsius (15 degrees Fahrenheit) or above 55 degrees Celsius (130 degrees Fahrenheit) the best is 15 to 45 degrees C or 60 to 110 degrees F.
7. The best working environment of the battery is 10 to 45 degrees C or 50 to 110 degrees F. Battery modules can be used at -20 to 45 degrees C (-4 to 110 degrees F) for discharge and 0 to 45 degrees C (32 to 110 degrees F) for charge.
8. Avoid severe vibration. Do not throw or drop the battery pack.



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