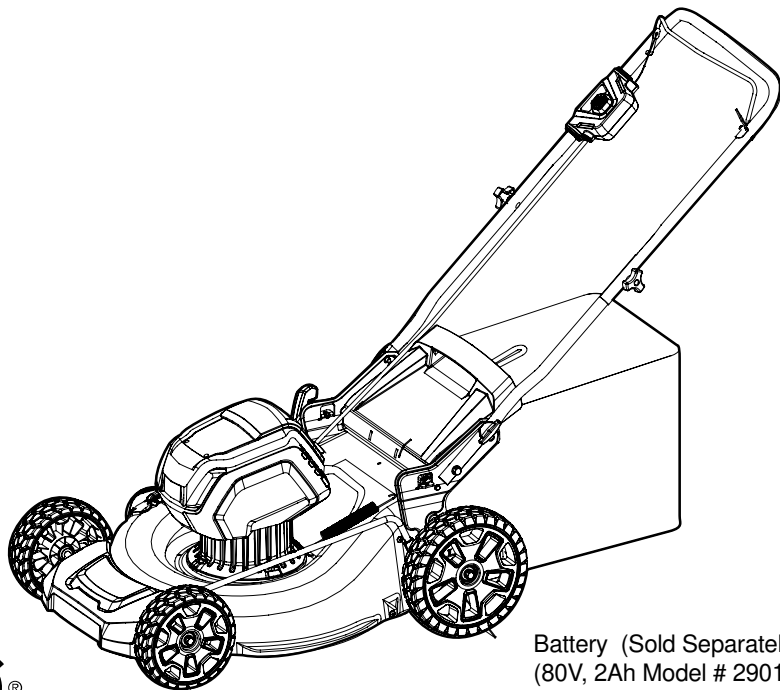


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# **greenworks** *pro*<sup>®</sup>

## 21" 80 V Lithium-Ion Cordless Mower 2500402CTBT



218549



Battery (Sold Separately)  
(80V, 2Ah Model # 2901302)

Charger (Sold Separately)  
(80V Model: 2901402)

### Owner's Manual

**TOLL-FREE HELPLINE: 1 (855) 345-3934**

[www.greenworkstools.com/80V-PRO](http://www.greenworkstools.com/80V-PRO)

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**⚠** Read all safety rules and instructions carefully before operating this tool.

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## PRODUCT SPECIFICATIONS

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### 80 V LITHIUM-ION CORDLESS MOWER

Battery (sold separately).....	80V Lithium-ion
Charge time (with 2901402, sold separately).....	30 minutes
No-load speed .....	2800 RPM
Height adjustments.....	1 3/8 - 3 3/4" (3.5 - 9.5 cm)
Functions.....	3-in-1: Mulch, side discharge or rear bag
Unit weight (without battery).....	59.83 lbs (27.14 kg)



# SAFETY INFORMATION

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## GENERAL SAFETY RULES

### READ ALL INSTRUCTIONS CAREFULLY

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#### **⚠ WARNING**

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

---

#### **⚠ DANGER**

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

---

#### **⚠ WARNING**

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

---

#### **⚠ WARNING**

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

---

#### **⚠ WARNING**

- For safe operation, read and understand the instruction manual.
  - To reduce the risk of electric shock, do not expose to water or operate on wet ground.
  - Replace damaged parts immediately.
  - Remove the battery pack before servicing or removing the blade.
  - Do not reach under the blade guard.
  - Do not operate on inclines greater than 15°.
  - Do not operate within 100 ft. of people or animals. Do not mow when children or others are around.
  - Keep safety devices (guards, shields, switches etc.) in place and in good working order.
  - Look down and behind before and while moving backwards.
  - Remove objects that could be thrown by the blade.
  - To reduce the risk of eye injury, always wear eye protection.
  - To reduce the risk of injury, inspect catcher assembly frequently and replace with the recommended replacement if there are signs of wear or deterioration.
  - To reduce the risk of injury to persons, remove the battery pack when not in use.
  - Meet CPSC blade safety requirements.
-

# SAFETY INFORMATION

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- Do not recharge batteries in a confined or unvented area.
  - Do not smoke, strike a match, or cause a spark in the vicinity of the battery during charging.
  - Store indoors, and do not expose to rain or water, avoid direct sunshine.
  - Double insulation - When servicing, use only identical replacement parts.
  - For use only with Greenworks 80V battery and charger.  
See instruction manual for additional battery packs.
- Carefully read all instructions on the mower and in the manual before attempting to assemble and operate the mower. Keep this manual in a safe place for future reference, and consult it regularly.
  - Become familiar with all controls and their proper operation. Know how to stop the mower and how to disengage the power in an emergency.
  - In order to avoid contact with the blade or injury caused by a thrown object, stay in the operating zone behind the handles, and keep children and bystanders at least 100' (30 m) away from the mower while it is in operation. Stop the motor immediately if someone enters the mowing area.
  - Thoroughly inspect the area where the mower is to be used. Remove all stones, sticks, wire, bones, toys, and other objects that could be tripped over or thrown by the blade. Thrown objects can cause serious personal injury.
  - Plan your mowing pattern in such a way as to avoid discharging material toward roads, sidewalks, bystanders, etc. Do not discharge material against a wall or obstruction. Doing so may cause the discharged material to ricochet back toward the operator.
  - Always wear proper eye protection that complies with ANSI Z87.1 in order to protect your eyes while operating or performing any adjustment or repair. Thrown objects that ricochet can cause serious eye injury.
  - Always wear a face mask or a dust mask when operating the mower in a dusty environment.
  - Dress properly. Do not wear loose clothing or jewelry that can get caught in moving parts. The wearing of protective gloves and safety footwear is recommended.
  - Many injuries occur as a result of the mower being pulled over the operator's foot during a fall caused by slipping or tripping. Do not operate this mower in bare feet, or while wearing sandals or lightweight (e.g., canvas) shoes. Do not hold on to the mower if you are falling. Release the handle immediately.
  - Never pull the mower back toward you while you are walking. If you must back the mower away from a wall or an obstruction, first look down and behind in order to avoid tripping, and then follow these steps:
    - Step back from the mower in order to fully extend your arms.
    - Be sure that you are well balanced.
    - Pull the mower back slowly.
  - Do not use the mower for any job except that for which it is intended. Do not force the mower.
  - Do not operate the mower while under the influence of alcohol or drugs.
  - Stay Alert: Do not operate the mower when you are tired. Pay attention to what you are doing. Use common sense.
  - Do not put hands or feet near rotating parts or under the cutting deck. Contact with the blade can amputate hands and feet.
  - Do not attempt to adjust the wheels or the cutting height while the motor is running.

# SAFETY INFORMATION

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- Avoid dangerous environments. Do not operate the mower in the rain or in wet or damp grass.
- Mow only in daylight or in good artificial light. Do not rush a mowing job.
- Stop the blade when crossing gravel driveways, walkways, or roads.
- If the mower starts to vibrate excessively, stop the motor and check for the cause immediately. Vibration is generally a warning of trouble.
- Stop the motor and wait until the blade comes to a complete stop before removing the grass catcher or unclogging the chute. The cutting blade will continue to rotate for a few seconds after the motor is shut off. Do not place any part of your body in the blade area until you are sure that the blade has stopped rotating.
- Never operate mower without a proper trail shield, discharge cover, grass catcher, switch control, or other safety device in place and in working order. Do not operate the mower with damaged safety devices. Doing so can result in injury.
- Don't force the lawn mower. It will do the job better and safer at the rate for which it was designed.
- Always store your lawn mower indoors. When not in use, the lawn mower should be stored indoors in a dry and locked place, out of reach of children.
- Maintain your lawn mower. Keep cutting edges sharp and clean to ensure the best performance and safe operation.
- If lawn mower strikes a foreign objects follow these steps:
  - Stop lawn mower, release the bail lever.
  - Remove the battery.
  - Inspect for damage.
- Repair any damage before restarting and operating the lawn mower.
- Do not charge lawn mower in rain or in wet location.
- Remove or disconnect battery before servicing, cleaning or removing material from lawn mower.
- Inspect lawn mover cord periodically and if damaged , have it repaired by an authorized service facility.
- Use identical replacement blades only
- Do not open or mutilate the battery . Mutilated batteries can release corrosive electrolytes which can cause damage to the eyes or skin. It may be toxic if swallowed.
- When using, keep out of water, direct sunlight and do not expose to rain.
- Store indoors, and do not expose to rain or water, avoid direct sunshine.

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## **⚠ WARNING**

To reduce the risk of damage and danger, never clean the tool with pressure washer or under running water.

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## **⚠ WARNING**

Store indoors only. Always remove the battery from mower when cleaning or storing the tool.

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# SAFETY INFORMATION

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## CHILD SAFETY

Tragic accidents can occur if the operator is not aware of the presence of children.

- Keep children out of the mowing area and under the watchful care of a responsible adult.
- Do not allow children under the age of 14 to operate this mower. Children who are 14 years of age and older must read and understand the operating instructions and safety rules in this manual, and must be trained and supervised by a parent.
- Stay alert, and turn the mower off if a child or any other person enters the mowing area.
- Look behind and down for small children before and while moving backwards.
- Use extreme care when approaching blind corners, doorways, shrubs, trees, or other objects that may obscure your view of a child who may run into the path of the mower.

## BATTERY & CHARGER

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### CAUTION

Use only greenworks approved replacement batteries, other batteries may cause injury or damage to the mower. Use only with GREENWORKS 80V battery.

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## BATTERY SAFETY RULES

- Battery powered tools do not have to be plugged into an electrical outlet; therefore, they are always in operating condition. Be aware of possible hazards when not using your battery powered tool or when changing accessories. Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- Do not place battery powered tools or their batteries near fire or heat. This will reduce the risk of explosion and possibly injury.
- Do not crush, drop or damage battery pack. Do not use a battery pack or charger that has been dropped or received a sharp blow. A damaged battery is subject to explosion. Properly dispose of a dropped or damaged battery immediately.
- Batteries can explode in the presence of a source of ignition, such as a pilot light. To reduce the risk of serious personal injury, never use any cordless products in the presence of an open flame. An exploded battery can propel debris and chemicals. If exposed, flush with water immediately. Do not charge the battery in a damp or wet location. Following this rule will reduce the risk of electric shock.
- For best results, your battery powered tool should be charged in a location where the temperature is more than 42.8°F (6° C) but less than 104°F (40°C). To reduce the risk of serious personal injury, do not store outside or in vehicles.
- Under extreme usage or temperature conditions, battery leakage may occur. If liquid comes in contact with your skin, wash immediately with soap and water. If liquid gets into your eyes, flush them with clean water for at least 10 minutes, then seek immediate medical attention. Following this rule will reduce the risk of serious personal injury.
- When the battery pack is not in use, keep it away from other metal objects like: paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause sparks, burns, or a fire.

# SAFETY INFORMATION

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- Always remove the battery pack from your tool when you are assembling parts, making adjustments, cleaning, or when not in use. Removing the battery pack will prevent accidental starting that could cause serious personal injury.
- Always remove battery pack before storing the device. When the battery becomes fully charged, unplug the charger from the power supply and remove the battery pack from the charger.
- Always wear eye protection with side shields marked to comply with ANSI Z87.1, along with hearing protection. Failure to do so could result in objects being thrown into your eyes and other possible serious injuries.
- Keep the battery pack dry, clean, and free from oil and grease. Always use a clean cloth when cleaning. Never use brake fluids, gasoline, petroleum-based products, or any solvents to clean the battery pack.

## PROPER BATTERY CARE

### Off-season storage

To obtain the longest possible battery life, we suggest the following:

- Remove the battery pack from the charger once it is fully charged and ready for use.

For battery pack storage longer than 30 days:

- Store the battery pack where the temperature is below 80°F (26°C) and away from moisture.
- Store battery packs in a 30% - 50% charged condition.
- Every two months of storage, charge the pack as normal.

## QUICK BATTERY CHARGING PROCEDURE

- NOTE: The battery is not shipped fully charged. It is recommended to fully charge it before first use to ensure that maximum run time can be achieved. This lithium-ion battery will not develop a memory and may be charged at any time. It takes 60 minutes to fully charge the battery.
- Plug the charger into an AC power outlet.
- Insert the battery pack into the charger.

## CHARGER SAFETY RULES

- Charge the mower battery in a dry area that is protected from the weather. Do not expose the mower or the charger to rain. Do not charge the battery in a wet location. Operate the battery charger in temperatures between 42.8°F (6° C) and 104°F (40°C). In order to reduce the risk of electric shock, use only the charger that is provided by the manufacturer to charge the battery.
- DO NOT MISUSE THE CHARGE CORD. Never carry the charger by the cord. Do not disconnect the charger from the outlet by pulling the charger cord.
- Do not use a damaged charger. Replace the charger cords or the charger immediately.
- Keep the mower and the charger away from water, heat sources (radiators, heaters, stoves, etc.), flames, and chemicals.
- Make sure the battery pack is secured in the charger before beginning operation.

# SAFETY INFORMATION

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- The battery pack will become slightly warm to the touch while charging. This is normal and does not indicate a problem.
- Do not place the charger and battery pack in an area of extreme heat or cold. They will work best at normal room temperature.
- When batteries become fully charged, unplug the charger from the power supply and remove the battery pack.

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## **⚠ WARNING**

When transporting or servicing unit, always remove the battery.

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## **⚠ WARNING ( PROPOSITION 65 )**

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

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

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

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## **SERVICE**

Servicing requires extreme care and knowledge and should be performed only by a qualified service technician. For service we suggest that you return the product to your nearest **AUTHORIZED SERVICE CENTER** for repair. When servicing, use only identical replacement parts.











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## **SAVE THESE INSTRUCTIONS**



# SYMBOLS




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

SYMBOL	NAME	DESIGNATION/EXPLANATION
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watts	Power
min	Minutes	Time
~	Alternating Current	Type of current
---	Direct Current	Type or a characteristic of current
$n_0$	No Load Speed	Rational speed, at no load
	Class II Construction	Double-insulated construction
/min	Per Minute	Revolutions, strokes, surface speed, orbits etc., per minute
	Safety Alert	Precautions that involve your safety.
	Wet Conditions Alert	Do not expose to rain or use in damp locations
	Read The Operator's Manual	To reduce the risk of injury user must read and understand operator's manual before using this product.
	Eye Protection	Always wear safety glasses with side shields that are marked to comply with ANSI Z87.1.
	Keep Hands and Feet Away	Keep hands and feet away from blade and cutting area.
	No Reach	Do not reach hands or feet under mower deck.
	No Slope	Do not operate on inclines greater than 15°. Mow across the face of slopes, never up and down.
	Keep Bystanders Away	Keep all bystanders at least 100 ft. away.
	Ricochet	Pay attention that bystanders are not injured through foreign objects thrown from the mower.

# SYMBOLS

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

SYMBOL	SIGNAL	MEANING
	<b>DANGER</b>	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
	<b>WARNING</b>	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
	<b>CAUTION</b>	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.
	<b>CAUTION</b>	(Without Safety Alert Symbol) Indicates a situation that may result in property damage.

## SERVICE

Servicing requires extreme care and knowledge and should be performed only by a qualified service technician. For service we suggest you return the product to your nearest **AUTHORIZED SERVICE CENTER** for repair. When servicing, use only identical replacement parts.

---

## WARNING

To avoid serious personal injury, do not attempt to use this product until you have read this Owner's Manual thoroughly and understand it completely. If you do not understand the warnings and instructions in this Owner's Manual, do not use this product. Call the Toll-free Helpline (1-855-345-3934) for assistance.

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## WARNING



The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and, when needed, a full face shield. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always use eye protection which is marked to comply with ANSI Z87.1.

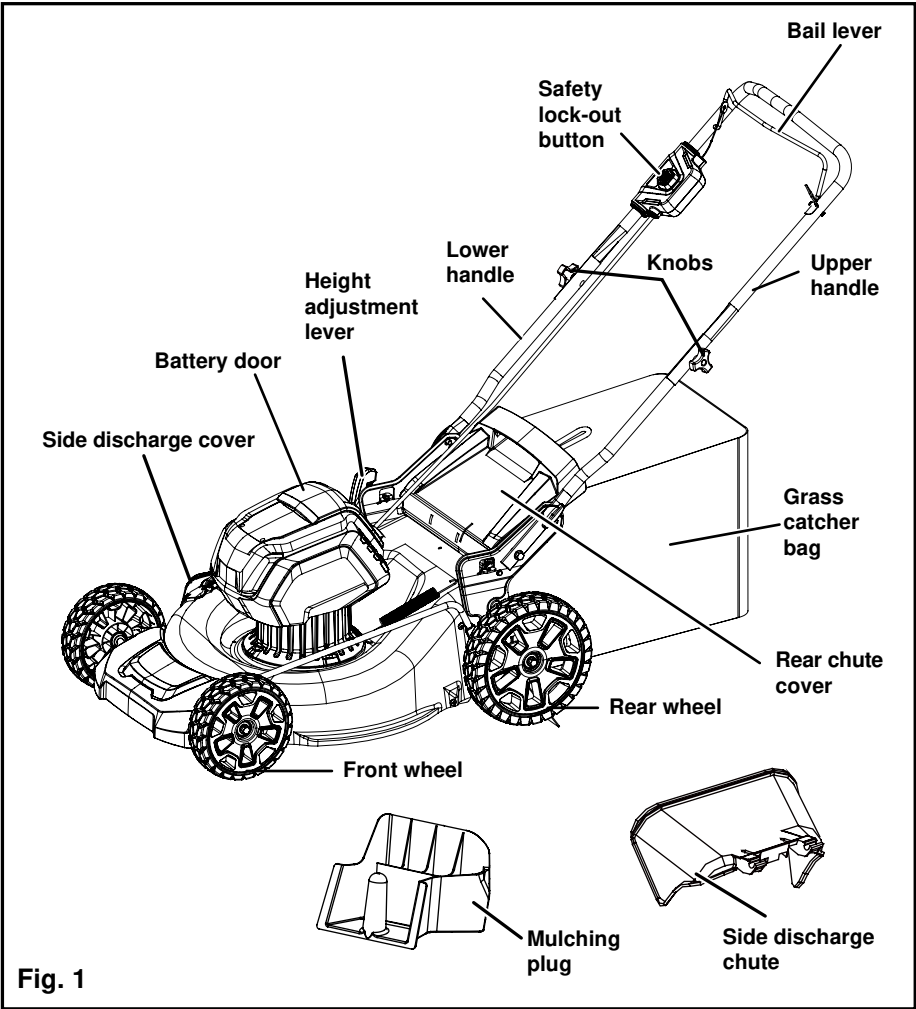
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## SAVE THESE INSTRUCTIONS

# KNOW YOUR LAWN MOWER

Read this operator's manual and safety rules before operating your lawn mower. Compare the illustration in Figure 1 to your lawn mower in order to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference.



# ASSEMBLY INSTRUCTIONS

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## UNPACKING

- Carefully remove the product and any accessories from the box. Make sure that all items listed in the packing list are included.
- Inspect the product carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the product.
- If any parts are damaged or missing, please call 1 (855) 345-3934 for assistance.

## PACKING LIST

- |                 |                        |
|-----------------|------------------------|
| • Lawn mower    | • Grass catcher bag    |
| • Knobs x 2     | • Side discharge chute |
| • Bolts x 2     | • Owner's Manual       |
| • Mulching plug |                        |

---

## **⚠ WARNING**

If any parts are damaged or missing do not operate this product until the parts are replaced. Using a product with damaged or missing parts could result in serious personal injury.

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## **⚠ WARNING**

Do not attempt to modify this product or create accessories not recommended for use with this product. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

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## **⚠ WARNING**

Do not insert battery until assembly is complete and you are ready to mow. Failure to comply could result in accidental starting and possible serious personal injury.

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## **⚠ WARNING**

To prevent accidental starting that could cause serious personal injury, always remove the battery pack from the product when assembling parts.

---

---

## **⚠ WARNING**

Never operate the mower without the proper safety devices in place and working. Never operate the mower with damaged safety devices. Operation of this product with damaged or missing parts could result in serious personal injury.

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# ASSEMBLY INSTRUCTIONS

## UNFOLDING AND ADJUSTING LOWER HANDLE (See Figure 2)

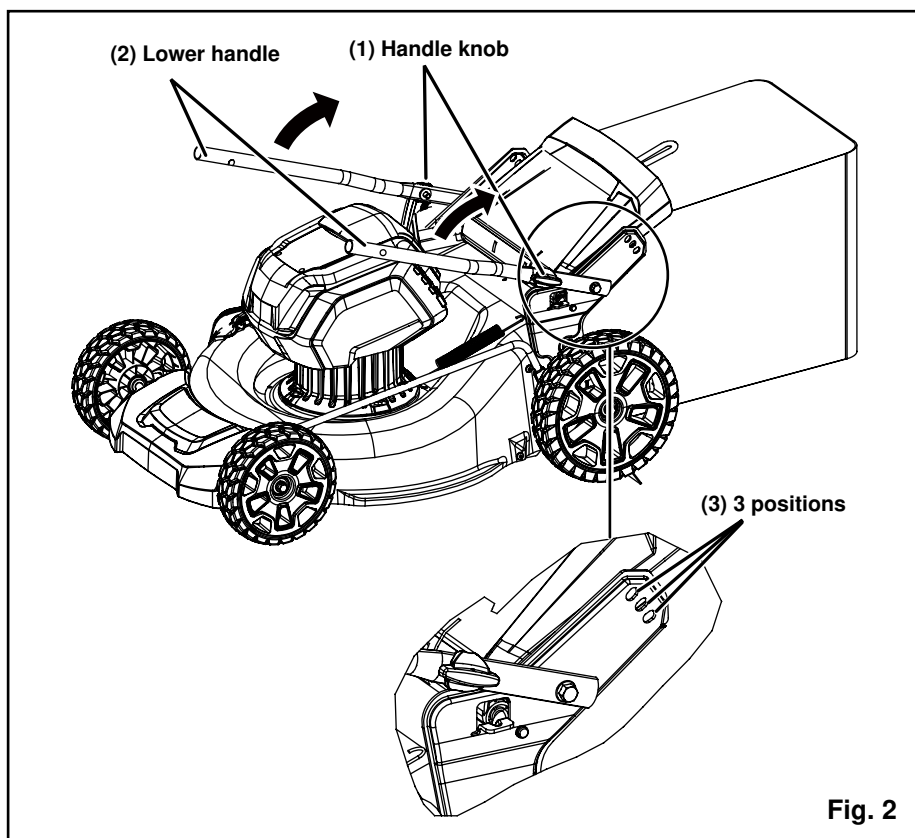
### **⚠ WARNING**

Folding or unfolding the handle improperly can damage the cables, causing an unsafe operating condition.

- Do not damage the cables when folding or unfolding the handle.
- If a cable is damaged, contact an Authorized Service Dealer.

- Pull and rotate the handle knobs (1) 90° on both sides to loosen the lower handles (2) on both sides.
- Move the lower handles to the operating position. You may raise or lower the handle to a position comfortable for you. There are 3 positions (3) for you to choose. Release the handle knobs to lock the lower handle into position.

*Note: Ensure both sides are set at the same position for proper assembly.*



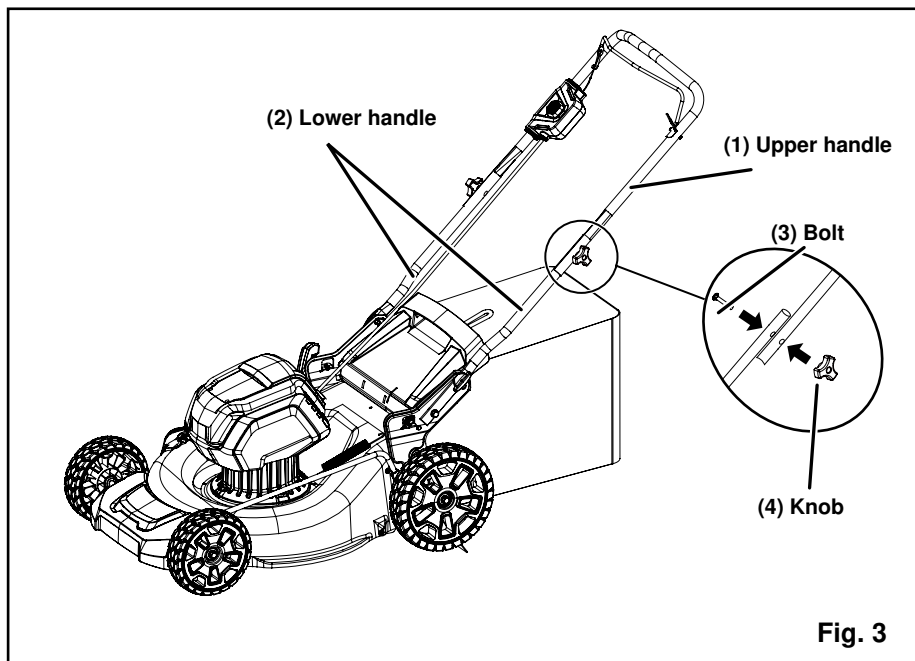
**Fig. 2**

# ASSEMBLY INSTRUCTIONS

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## INSTALLING THE UPPER HANDLE *(See Figure 3)*

- Align the mounting holes on the upper handle (1) and the lower handle (2). Insert the carriage bolts (3) and use the knobs (4) to tighten them. Repeat the operation on the other side.



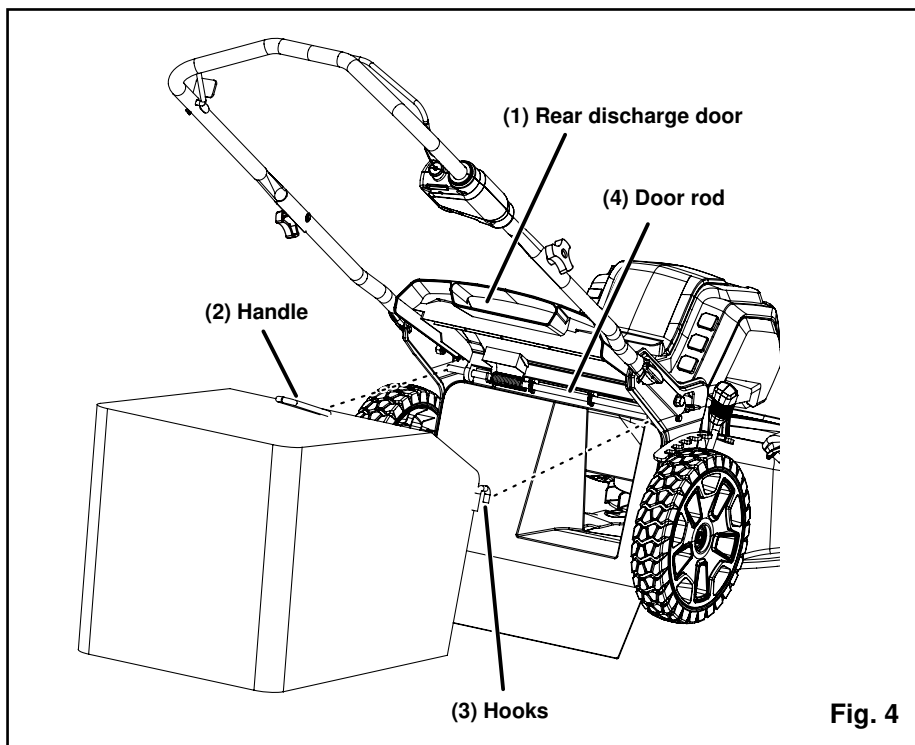
# ASSEMBLY INSTRUCTIONS

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## INSTALLING THE GRASS CATCHER BAG (See Figure 4)

- Lift the rear discharge door (1).
- Lift the grass catcher by its handle (2) and place under the rear discharge door so that the hooks (3) on the grass catcher are seated on the door rod (4).
- Release the rear discharge door. When installed correctly, the hooks on the grass catcher will extend through the openings on the rear discharge door.

*NOTE: When using the grass catcher, do not install either the side discharge deflector or the mulching plug.*

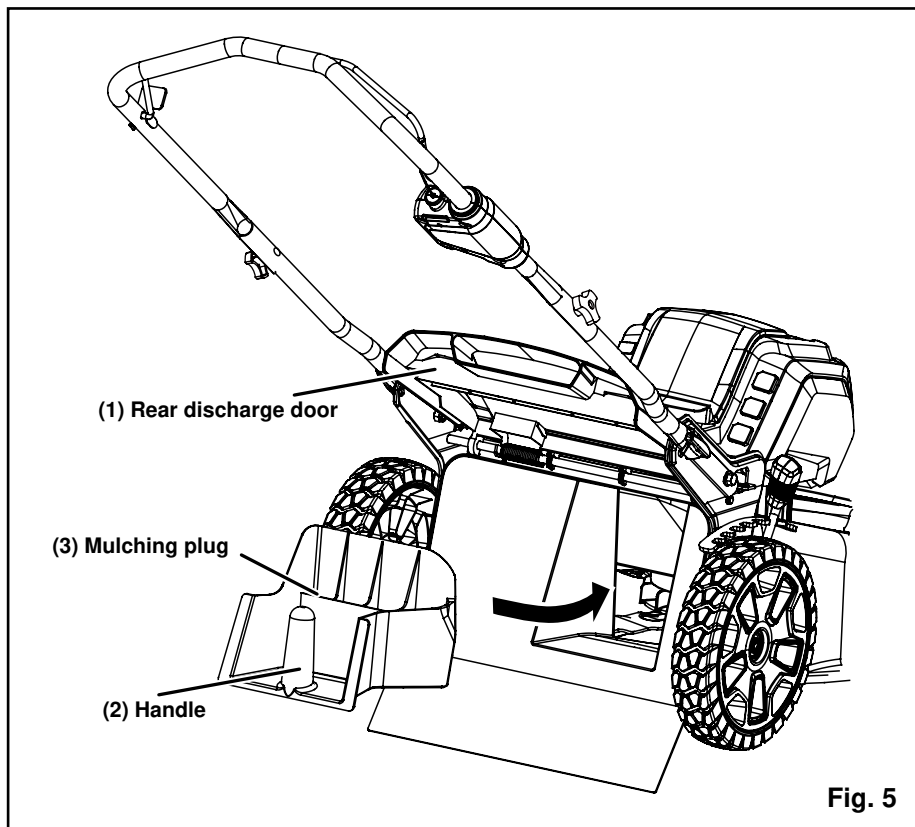


# ASSEMBLY INSTRUCTIONS

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## INSTALLING/REMOVING THE MULCHING PLUG (See Figure 5)

- To remove the mulching plug, lift the rear discharge door (1).
- Grasp the handle (2) of the mulching plug and pull the mulching plug out using the handle.
- The mulching plug (3) is inserted at an angle, so it requires some force to remove it.
- The mulching plug must be removed in order to install the grass catcher bag.
- The mulching plug must be re-installed when the grass catcher bag is removed.



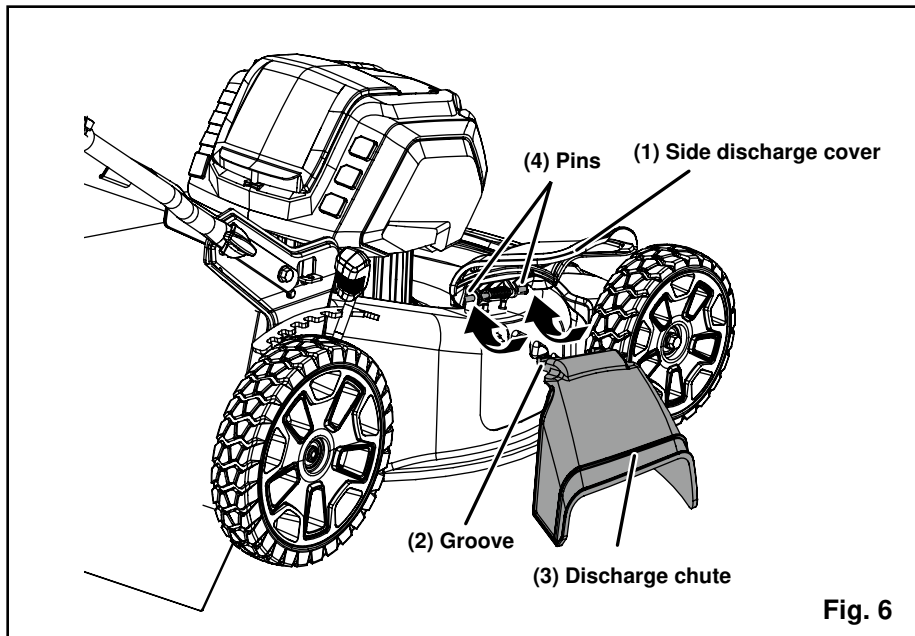


# ASSEMBLY INSTRUCTIONS

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## INSTALLING SIDE DISCHARGE CHUTE (See Figure 6)

- Lift the side discharge cover (1).
- Align the grooves (2) on the discharge chute (3) with the pins (4) on the underside of the discharge cover.
- Lower the discharge chute until the hooks on the mower deck are secured in the openings in the discharge chute.
- Release the side discharge cover.

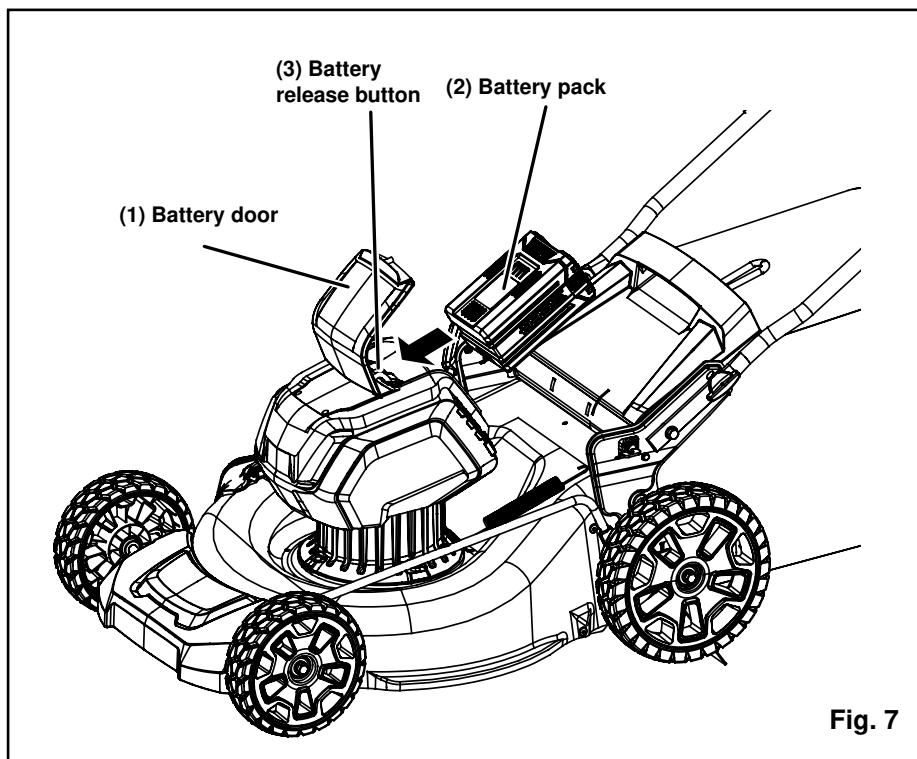


# ASSEMBLY INSTRUCTIONS

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## TO INSTALL BATTERY PACK *(See Figure 7)*

- Lift and hold up the battery door (1).
- Align the battery (2) with the mower's battery port.
- Make sure the battery release button (3) snaps in place and that battery is fully seated and secure in the mower before beginning operation.
- If the machine is not going to be used immediately, remove the battery.
- Close the door.



## TO REMOVE BATTERY PACK *(See Figure 7)*

- Release the bail lever to stop the mower.
- Open the battery door.
- Press the battery release button (3) on the mower. This will cause the battery to raise out of the tool slightly.
- Remove battery from the mower.

# OPERATING YOUR LAWN MOWER

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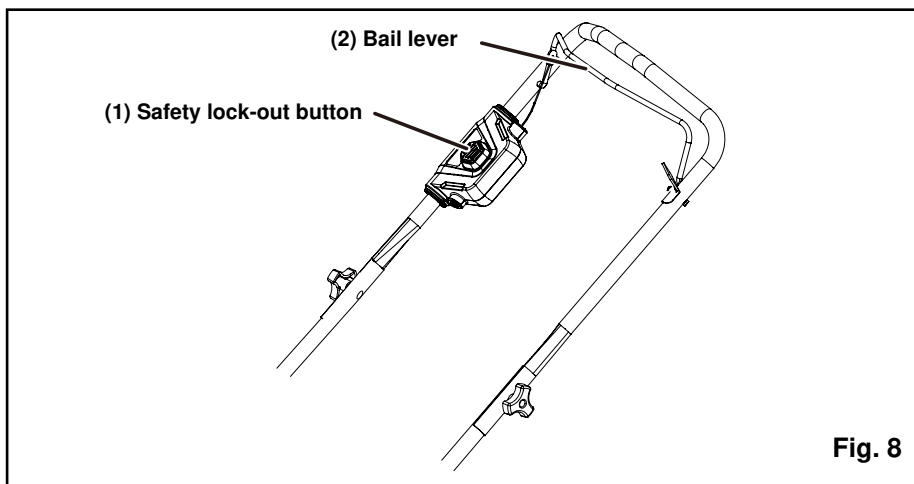
## STARTING/STOPPING THE MOWER *(See Figure 8)*

### To start the motor:

- Open the battery door.
- Insert the battery.
- Press and hold the safety lock-out button (1).
- Pull the bail lever (2) upward to the handle to start the mower and release the button.

### To stop the motor:

- Release the bail lever.



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## **⚠ CAUTION**

Do not attempt to override the operation of the safety lock-out button or bail lever.

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## **⚠ WARNING**

The operation of any mower can result in foreign objects being thrown into the eyes, which can cause severe eye damage. Always wear safety glasses while operating the mower and while performing any adjustments or repairs.

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## **⚠ WARNING**

Ensure that other people and pets remain at least 100 feet (30 m) away when the mower is in use.

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**INSPECT THE CUTTING AREA.** Remove all stones, sticks, wire, bones, and other debris that might be thrown by the rotating blades.

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# OPERATING YOUR LAWN MOWER

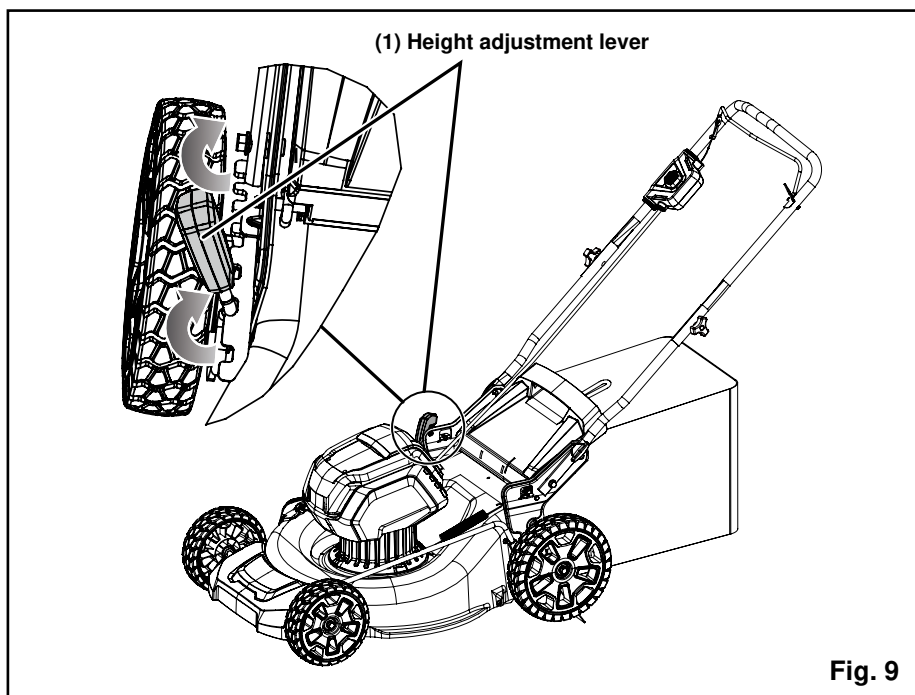
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## CUTTING HEIGHT ADJUSTMENT *(See Figure 9)*

When shipped, the wheels on the mower are set to a low-cutting position. Before using the mower for the first time, raise the cutting position to the height best suited for your lawn. The average lawn should be between 1 1/2" to 2" (3.8 to 5 cm) during cool months and between 2" and 3 1/2" (5 cm to 8.3 cm) during hot months.

### To adjust the blade height:

- To raise the blade height, grasp the height adjustment lever (1) and move it toward the back of the mower.
- To lower the blade height, grasp the height adjustment lever (1) and move it toward the front of the mower.



# OPERATING YOUR LAWN MOWER

## SLOPE GAUGE (See Figure 10)

### ⚠ WARNING

Slopes are a major factor related to accidents involving slips and falls, which can result in severe injury. Operating the mower on a slope requires extra caution. If you feel uneasy on a slope, do not mow it. For your safety, use the slope gauge that is included as part of this manual to measure slopes before operating this unit on a sloped or hilly area.

- Mow across the face of a slope, and never up and down. Exercise extreme caution when changing direction on a slope.
- Watch for holes, ruts, rocks, hidden objects, or bumps that may cause a slip or a trip. Tall grass can hide obstacles.
- Always be sure of your footing. If you feel like you are losing your balance, release the blade/motor control handle immediately. The blade will stop rotating within 3 seconds.
- Do not mow near drop-offs, ditches, or embankments, because you could lose your footing or balance.
- Do not mow a slope that has an angle of greater than 15°, as determined using the slope gauge.
- Do not mow wet or damp grass. Unstable footing can cause slipping.

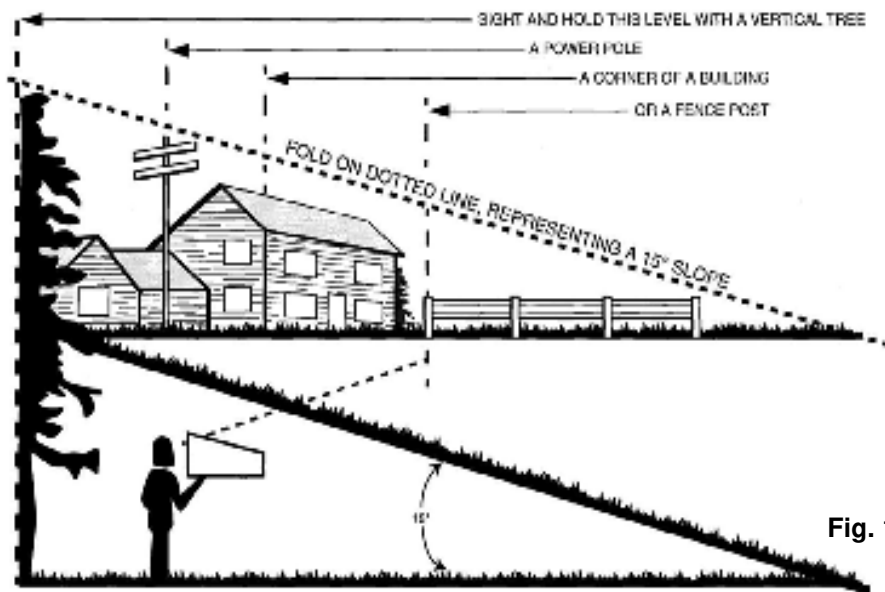


Fig. 10

### ⚠ WARNING

Do not mow a slope that has an angle of greater than 15° (a rise of approximately 2 1/2 feet [0.75 m] every 10 feet [3 m]). Mow across the face of a slope, and never up and down.

# OPERATING YOUR LAWN MOWER

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## MOWING TIPS

*NOTE: A sharp blade will greatly enhance the performance of the mower, especially when cutting high grass. Be sure to check the blade and to sharpen it at least once per year, as described in the Maintenance section.*

- Verify that the lawn is free of stones, sticks, wires, and other objects that could damage the blades or the motor. These objects could be accidentally thrown by the mower in any direction, and could cause serious personal injury to the operator and to others. In order to prevent electric shock, do not operate the mower in damp or wet conditions.
- Do not mow in circles. Travel back and forth across the lawn.
- When cutting thick grass, reduce walking speed in order to allow for a more effective cut and a proper discharge of the clippings.
- For a healthy lawn, always cut off one-third or less of the total length of the grass. The average lawn should be approximately 1 1/2 to 2" (3.8 to 5 cm) long during cool months, and between 2" to 3 1/4" (5 cm to 8.3 cm) long during hot months. If there is growth, the lawn should be cut in the fall.

## MULCHING TIPS

*NOTE: INSPECT THE AREA WHERE THE MOWER IS TO BE USED, AND REMOVE ALL STONES, STICKS, WIRE, BONES, AND OTHER DEBRIS THAT MIGHT BE THROWN BY THE ROTATING BLADE.*

- Release the bail lever to turn the mower OFF when crossing any graveled area (stones can be thrown by the blade).
- Set mower to the highest cutting height when mowing on uneven ground or in tall weeds.
- For effective mulching, do not cut wet grass, because it tends to stick to the underside of the deck, preventing proper mulching of grass clippings. New or thick grass may require a narrower cut. The ground speed should be adjusted to the condition of the lawn. If mowing has been delayed and the grass has been allowed to grow longer than 4" (10 cm), mow the lawn twice in order to reduce the grass height to a maximum of 3 1/4" (8.3 cm).
- Walk at a steady pace. Overlap the cutting rows. Do not let the grass get too tall. If the grass gets too long, start at the highest cutting position and work down to the desired cutting height.

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## **⚠ WARNING**

If you strike a foreign object, stop the motor and remove the battery. Thoroughly inspect the mower for any damage. Repair any damage before operating the mower. Excessive vibration of the mower during operation is an indication of damage. Thoroughly inspect the mower and repair any damage before operating the mower.

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# OPERATING YOUR LAWN MOWER

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## **EMPTYING THE GRASS CATCHER BAG** *(See Figure 11)*

- Stop mower, allow blades to completely stop, and remove the battery.
- Lift the rear discharge cover.
- Lift the grass catcher bag by its handle to remove from mower.
- Empty grass clippings.
- Lift the rear discharge cover and reinstall the grass catcher bag as described earlier in this manual.



**Fig. 11**

# MAINTENANCE

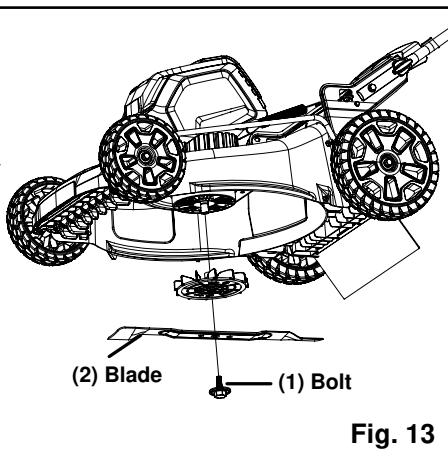
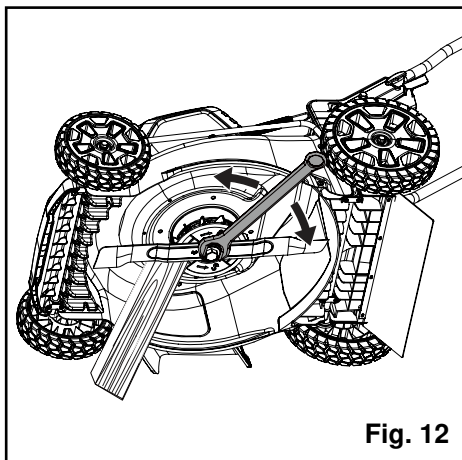
## REPLACING THE CUTTING BLADE (See Figure 12-13)

### **⚠ WARNING**

Always protect your hands by wearing heavy gloves and/or wrapping the cutting edges with rags or other materials when performing any maintenance on the blades. ALWAYS remove the battery when servicing or transporting the mower.

Use only a GREENWORKS replacement blade (Item#: 2903402).

- REMOVE BATTERY.
- While wearing leather padded gloves, wedge a block of wood between the blade and the mower deck in order to prevent the blade from turning when the bolt (1) is being removed.
- Using an adjustable wrench or 27 mm socket, loosen the bolt (1) and remove the blade (2). Turn the bolt "COUNTERCLOCKWISE" to loosen it and "CLOCKWISE" to tighten it.
- Remove the bolt (1) and the blade (2).
- To re-install the blade, position the blade with the cutting edges toward the ground. Assemble the bolt as shown. Using a 27 mm socket or wrench, turn the blade nut "CLOCKWISE" in order to secure the blade.



**NOTE:** Be sure to replace the parts in the exact order in which they were removed. When installing the cutting blade, verify that it is installed with the curved ends pointing toward the mower deck, and not toward the ground. Refer to the schematic drawing on page 31 of this manual.



# MAINTENANCE

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## CLEANING THE MOWER

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### **W A R N I N G**

In order to reduce the risk of electric shock, do not expose the mower to water. The underside of the mower deck should be cleaned after each use, because grass clippings, leaves, dirt, and other debris will accumulate, which will cause rust and corrosion.

---

Remove any build-up of grass and leaves on or around the motor cover (do not use water). Occasionally wipe the mower clean with a dry cloth. If debris builds up on the underside of the mower during use, stop the motor, disconnect it from the battery, and then tilt the mower on its side, and scrape it clean using an appropriate tool.

# MAINTENANCE

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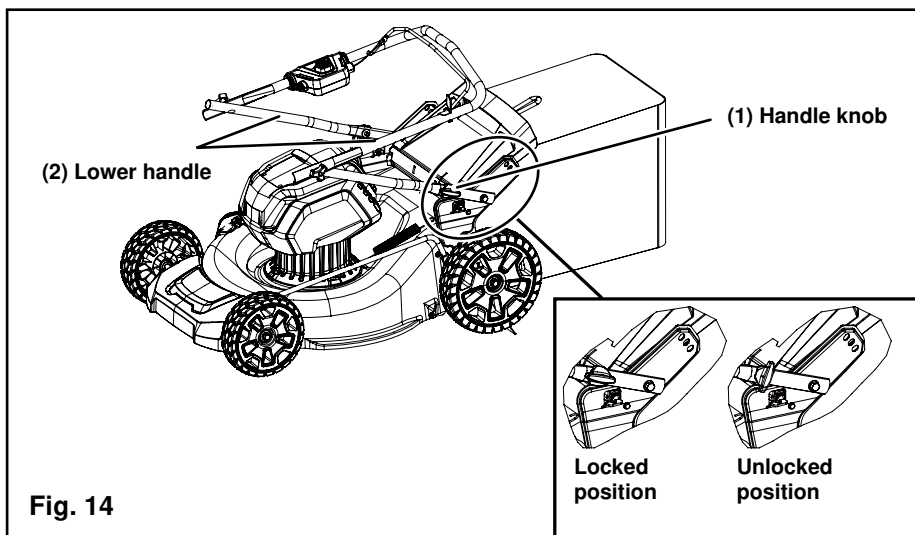
## STORING THE MOWER

The following steps should be taken in order to prepare the lawn mower for storage.

- Clean the mower as described in the previous section.
- Inspect the blade, and replace it or sharpen it, if required (refer to the Maintenance section).
- Store the mower in a dry, clean location. Do not store it next to corrosive materials, such as fertilizer or rock salt.
- Store the mower indoors, in a cool, dry place, out of the reach of children. Do not cover the lawn mower with a solid plastic sheet. Plastic coverings trap moisture around the mower, which causes rust and corrosion.

**The handle may be folded away completely for storage. (See Figure 14)**

- Pull and rotate the handle knobs (1) 90° on both sides to loosen the lower handles (2) on both sides. Fold the lower handle forward. Make sure not to bend or kink the power cord.



- Remove the battery and store it in a cool dry location, if possible. Charge the battery every two months when not in use in order to increase its life.
- Remove the battery and store in a secure location out of the reach of children.

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## **⚠ WARNING**

This battery must be charged every 2 months while in storage to maintain maximum capacity.

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# SERVICE

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## STORING THE MOWER ON VERTICAL FUNCTION

- When servicing the mower, use only identical replacement parts that are available from the manufacturer. In order to obtain replacement parts, call the toll-free helpline, at 1 (855) 345-3934. The use of parts that do not meet the original equipment specifications may lead to improper performance, and may compromise safety.
- Before cleaning, repairing, or inspecting, verify that the blade and all moving parts have come to a complete stop. Remove the battery when making any adjustments or when any of the four wheels must be lifted off the ground.
- Follow the instructions for lubricating and changing accessories.
- Keep the handles dry, clean, and free of oil and grease.
- In order to reduce the risk of fire, keep the motor free of grass, leaves, and debris build-up.
- Check the blade and motor mounting bolts for proper tightness frequently. Visually inspect blade for damage (e.g., bent, cracked, or worn).
- For best and safest performance, maintain the mower with care. Keep the mower blade sharp and clean. Mower blades are sharp, and can cut. Wrap the blades or wear gloves, and use extra caution when servicing.
- Keep all nuts, bolts, and screws tight in order to be sure that the equipment is in safe working condition.
- Never tamper with safety devices. Check them regularly for proper operation.
- After striking a foreign object, stop the motor. Thoroughly inspect the mower for any damage. Repair any damage before operating the mower.
- The grass catcher components, discharge cover, and trail shield are subject to wear and damage, which could expose moving parts or allow objects to be thrown. As a safety precaution, check these components frequently, and immediately replace any parts that show signs of wear, or that are cracked or broken. Use original equipment manufacturer's (OEM) parts only, as listed in this manual.
- When it is not in use, store the mower indoors in a dry area, and out of the reach of children.

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## **⚠ WARNING**

**ALWAYS REMOVE BATTERY WHEN SERVICING OR TRANSPORTING THE MOWER.**

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# ENVIRONMENTALLY SAFE BATTERY DISPOSAL

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The batteries used in this mower's battery pack contain the following toxic and corrosive material:  
LITHIUM-ION.



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## **▲ WARNING**

Toxic materials must be disposed of in a specified manner in order to prevent contamination of the environment. Before disposing of damaged or worn out Lithium-Ion battery packs, contact your local waste disposal agency for information and specific instructions. Take the battery to a local recycling and/or disposal centre that is certified for disposal. If the battery pack cracks or breaks, whether it leaks or not, do not recharge it and do not use it. Dispose of it and replace it with a new battery pack. **DO NOT ATTEMPT TO REPAIR IT!**

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Follow these instructions in order to avoid injury and the risk of fire, explosion, or electric shock, and to avoid damage to the environment:

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

# TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
The mower does not start.	The battery is not charged.	Charge the battery.
	The switch is defective.	Replace the switch (call the tollfree helpline, at 1 (855) 345-3934
	Grass jammed between the deck and blade.	Remove battery; check under deck for jams.
	The battery is not fully inserted in the mower.	Check the connection between the battery and the mower. Make sure the battery clicks into place.
	Battery may require service or replacement.	Call toll free helpline, at 1 (855) 345-3934 or replace battery.
The mower cuts the grass unevenly.	The lawn is rough or uneven.	Check the mowing area.
	The cutting height is not set properly.	Move the wheels to a higher setting.
The mower does not mulch properly.	Wet grass clippings are sticking to the underside of the deck.	Wait until the grass dries before mowing.
	The mulching plug is missing.	Install the mulching plug.
The mower is hard to push.	The grass is too tall, or the cutting height is too low.	Raise the cutting height.
	The rear of the grass catcher bag is dragging in thick grass.	Empty the grass clippings from the grass catcher bag.
The mower is excessively noisy and vibrates.	The motor shaft is bent.	Stop the motor, and inspect for damage.
	The blade is unbalanced.	Repair before restarting. If vibration persists, call the toll free helpline 1 (855) 345-3934.

# WARRANTY

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LIMITED FOUR (4) YEAR CONSUMER WARRANTY ; ONE (1) YEAR COMMERCIAL WARRANTY. GREENWORKS™ hereby warranties this product, to the original purchaser with **proof of purchase**, against defects in materials, parts or workmanship. GREENWORKS™, at its own discretion will repair or replace any and all parts found to be defective, through normal use, free of charge to the customer. This warranty is valid only for units which have been used for personal use that have not been hired or rented for industrial/ commercial use, and that have been maintained in accordance with the instructions in the owners' manual supplied with the product from new.

**\*\*WARRANTY IS NOT TRANSFERABLE AND ONLY AVAILABLE TO THE ORIGINAL PURCHASER WITH ORIGINAL PURCHASE RECEIPT OR PROOF OF PURCHASE**

## **ITEMS NOT COVERED BY CONSUMER WARRANTY:**

1. Any part that has become inoperative due to misuse, commercial use, abuse, neglect, accident, improper maintenance, or alteration; or
2. The unit, if it has not been operated and/or maintained in accordance with the owner's manual; or
3. Normal wear, except as noted below;
4. Routine maintenance items such as lubricants, blade sharpening;
5. Normal deterioration of the exterior finish due to use or exposure
6. Operating methods other than those indicated in the product owner's manual
7. Exposure of the product to soot and smoke, rain, snow, chemical agents, bird droppings, sea water, sea breeze, salt, or other environmental phenomena

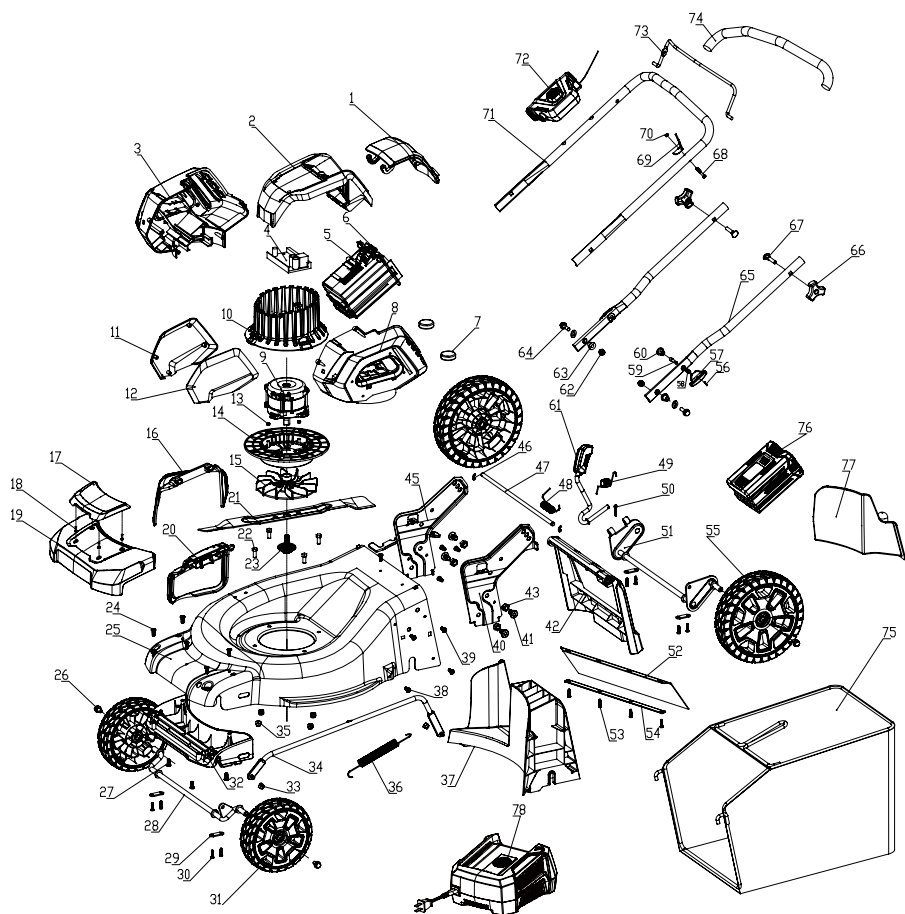
## **GREENWORKS HELPLINE:**

Warranty service is available by calling our toll-free helpline at 1-855-345-3934.

## **TRANSPORTATION CHARGES:**

Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. It is the purchaser's responsibility to pay transportation charges for any part submitted for replacement under this warranty unless such return is requested in writing by GREENWORKS.

# EXPLODED VIEW



# PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY
1	341071179	Battery door	1
2	341081179	Upper cover	1
3	341041179	Left cover	1
4	362011179	PCB board	1
5	341321179	Battery fixed box	1
6	34110811-2	Battery release button	1
7	23120302	Magnet	2
8	341051179	Right cover	1
9	361011179	80V Motor	1
10	341031179	Lower base	1
11	341171179	Decorative cover (right)	1
12	341161179	Decorative cover (left)	1
13	3220537	Nut M6	4
14	341181179-1	Motor base	1
15	341191179-1	Fan	1
16	341241179	Side discharge chute	1
17	341221179	Decorative cover (front)	1
18	3220345	Screw	4
19	341061179	Bumper	1
20	311081179	Side discharge cover assembly	1
21	333041179	21" blade	1
22	32226592	Bolt M8x20	4
23	341261179	Bolt	1
24	3220951	Screw	5
25	333011179	21" Deck	1
26	32202390	Bolt M8x16	4
27	32204113	Screw	4
28	311021179	21" Front wheel axle	1
29	33307470	Sheet	4
30	32204113	Screw	8
31	341281179	8" Wheel assembly	2
32	341021179	Dash panel	1
33	3220343	Nut M6	2
34	333031179	Height adjustment link bar	1
35	32243563	Nut	4
36	332011179	Height adjustment tension spring	1
37	341011179	Back panel	1
38	3220551	Screw	4
39	3220951	Screw	11
40	333021179	Height adjustment bracket (left)	1



# PARTS LIST


ITEM NO.	PART NO.	DESCRIPTION	QTY
41	3221637	Bolt M10x20	4
42	341251179	Rear cover	1
43	32910131	Nut M10	4
45	311031179	Height adjustment bracket (right)	1
46	3290506	Split washer	2
47	332021179	Axle (rear cover)	1
48	332111179	Torsinal spring (rear cover)	1
49	33401222	Torsinal spring	1
50	3290135	Cotter pin	1
51	311011179	21" Rear wheel axle	1
52	342011179	Rear shield	1
53	3220505-1	Screw	4
54	332041179	Press board (rear shield)	1
55	341271179	10" Wheel	2
56	332061179	Spring pin	2
57	341201179	Knob	2
58	332051179	Compressed spring	2
59	332071179	Limit pillar	2
60	332081179	Fixed base (limit pillar)	2
61	311111179	Height adjustment bar assembly	1
62	32201467	Nut M8	2
63	332101179	Washer	2
64	32202606	Bolt M8x30	2
65	333091179	Lower handle	2
66	3410835-4	Knob	2
67	3220436	Bolt	2
68	32208250	Screw M5x30	1
69	33323250-1	Stop sheet	1
70	3220439	Nut M5	1
71	333051179	Upper handle	1
72	311071179	Switch box assembly	1
73	333061179	Bail lever	1
74	342021179	Soft grip	1
75	312011179	Grass catcher bag assembly	1
76	311021009	Battery (sold separately)	
77	341351179	Mulching plug	1
78	311011010	Charger (sold separately)	



**Greenworks Tools  
PO Box 1238  
Mooresville, NC 28115**

**TOLL-FREE HELPLINE: 1 (855) 345-3934**

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