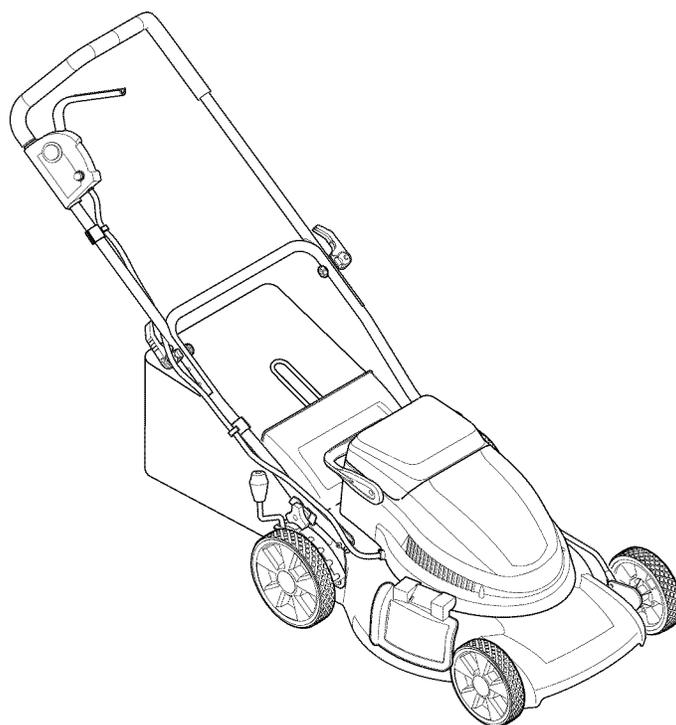


# OPERATOR'S MANUAL



## 3-in-1 Battery Mower

### **⚠ WARNING**

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

---

MTD LLC, P.O. BOX 361131 CLEVELAND, OHIO 44136-0019

---

## Thank You

Thank you for purchasing an Electric Mower manufactured by MTD. It was carefully engineered to provide excellent performance when properly operated and maintained.

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

All information in this manual is relative to the most recent product information available at the time of printing. Review this manual frequently to familiarize yourself with the machine, its features and operation. Please be aware that this Operator's

Manual may cover a range of product specifications for various models. Characteristics and features discussed and/or illustrated in this manual may not be applicable to all models. We reserve the right to change product specifications, designs and equipment without notice and without incurring obligation.

If you have any problems or questions concerning the machine, phone your local authorized MTD service dealer or contact us directly. MTD's Customer Support telephone numbers, website address and mailing address can be found on this page. We want to ensure your complete satisfaction at all times.

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

---

## Table of Contents

<i>Safe Operation Practices</i> .....	3	<i>Service</i> .....	17
<i>Assembly &amp; Set-Up</i> .....	8	<i>Troubleshooting</i> .....	19
<i>Controls</i> .....	12	<i>Parts List</i> .....	20
<i>Operation</i> .....	13	<i>Warranty</i> .....	Back Cover
<i>Maintenance &amp; Adjustment</i> .....	15		

---

## Record Product Information

Before setting up and operating your new equipment, please locate the model plate on the equipment and record the information in the provided area to the right. You can locate the model plate by standing at the operator's position and looking down at the rear of the deck. This information will be necessary, should you seek technical support via our web site, Customer Support Department, or with a local authorized service dealer.

### MODEL NUMBER

### SERIAL NUMBER

---

## Customer Support

**Please do NOT return the machine to the retailer or dealer without first contacting our Customer Support Department.**

If you have difficulty assembling this product or have any questions regarding the controls, operation, or maintenance of this machine, you can seek help from the experts. Choose from the options below:

- ◇ Visit us on the web at [www.mtdproducts.com](http://www.mtdproducts.com)
- ◇ Call a Customer Support Representative at (800) 800-7310 or (330) 220-4683
- ◇ Write us at MTD LLC • P.O. Box 361131 • Cleveland, OH • 44136-0019



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

When you see this symbol. **HEED ITS WARNING!**



**DANGER:** This machine was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. This machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

## Children

Tragic accidents can occur if operator is not alert to presence of children. Children are often attracted to mower and mowing activity. They do not understand the dangers. Never assume that children will remain where you last saw them.

1. Keep children out of the mowing area and under watchful care of a responsible adult other than the operator.
2. Be alert and turn mower off if a child enters the area.
3. Before and while moving backwards, look behind and down for small children.
4. Use extreme care when approaching blind corners, doorways, shrubs, trees, or other objects that may obscure your vision of a child who may run into the mower.
5. Never allow children under 14 years old to operate a power mower. Children 14 years old and over should read and understand operation instructions and safety rules in this manual and should be trained and supervised by a parent.
4. Never allow children under 14 years old to operate this machine. Children 14 years old and over should read and understand the instructions in this manual and should be trained and supervised by a parent. Only responsible individuals who are familiar with these rules of safe operation should be allowed to use this machine.
5. Thoroughly inspect the area where the equipment is to be used. Remove all stones, sticks, wire, bones, toys and other foreign objects which could be tripped over or picked up and thrown by the blade. Thrown objects can cause serious personal injury. Plan your mowing pattern to avoid discharge of material toward roads, sidewalks, bystanders and the like. Also, avoid discharging material against a wall or obstruction which may cause discharged material to ricochet back toward the operator.
6. To help avoid blade contact or a thrown object injury, stay in operator zone behind handles and keep children, bystanders and pets at least 75 feet from mower while it is in operation. Stop machine if anyone enters area.
7. Always wear safety glasses or safety goggles during operation and while performing an adjustment or repair to protect your eyes. Thrown objects which ricochet can cause serious injury to the eyes.
8. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts. Shirts and pants that cover the arms and legs and steel-toed shoes are recommended. Never operate this machine in bare feet, sandals, slippery or light weight (e.g. canvas) shoes.
9. Do not put hands or feet near rotating parts or under cutting deck. Contact with blade can amputate hands and feet.
10. A missing or damaged discharge cover can cause blade contact or thrown object injuries.
11. Many injuries occur as a result of the mower being pulled over the foot during a fall caused by slipping or tripping. Do not hold on to the mower if you are falling; release the handle immediately.

## Operation

### General Operation:

1. Read this operator's manual carefully in its entirety before attempting to assemble this machine. Read, understand, and follow all instructions on the machine and in the manual(s) before operation. Be completely familiar with the controls and the proper use of this machine before operating it. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. This machine is a precision piece of power equipment, not a plaything. Therefore, exercise extreme caution at all times. Your unit has been designed to perform one job: to mow grass. Do not use it for any other purpose.
3. Don't force lawn mower — it will do the job better and safer at the rate for which it was designed.

12. Never pull the mower back toward you while you are walking. If you must back the mower away from a wall or obstruction first look down and behind to avoid tripping and then follow these steps:
  - a. Step back from mower to fully extend your arms.
  - b. Be sure you are well balanced with sure footing.
  - c. Pull the mower back slowly, no more than half way toward you.
  - d. Repeat these steps as needed.
13. Do not operate the mower while under the influence of alcohol or drugs.
14. Stay alert — Watch what you are doing. Use common sense. Do not operate lawn mower when you are tired.
15. The motor/blade control handle is a safety device. Never attempt to bypass its operation. Doing so makes the safety device inoperative and may result in personal injury through contact with the rotating blade. The motor/blade control handle must operate easily in both directions and automatically return to the disengaged position when released.
16. Do not charge the mower in rain, or in wet conditions.
17. Never operate the mower in rain or wet grass. Always be sure of your footing. A slip and fall can cause serious personal injury. If you feel you are losing your footing, release the motor/blade control handle immediately and the blade will stop rotating within three seconds.
18. Mow only in daylight or good artificial light. Walk, never run.
19. Stop the blade when crossing gravel drives, walks or roads.
20. If the equipment should start to vibrate abnormally, stop the motor and check immediately for the cause. Vibration is generally a warning of trouble.
21. Shut the motor off and wait until the blade comes to a complete stop before removing the grass catcher or unclogging the chute. The cutting blade continues to rotate for a few seconds after the motor is shut off. Never place any part of the body in the blade area until you are sure the blade has stopped rotating.
22. Never operate mower without proper trail shield, discharge cover, grass catcher, motor/blade control handle or other safety protective devices in place and working. Never operate mower with damaged safety devices. Failure to do so, can result in personal injury.
23. Only use parts and accessories made for this machine by manufacturer. Failure to do so can result in personal injury.
24. If situations occur which are not covered in this manual, use care and good judgment. Telephone Customer Support for the name of your nearest dealer.

## Slope Operation:

Slopes are a major factor related to slip and fall accidents which can result in severe injury. Operation on slopes requires extra caution. If you feel uneasy on a slope, do not mow it. For your safety, use the slope gauge included as part of this manual to measure slopes before operating this unit on a sloped or hilly area. If the slope is greater than 15 degrees, do not mow it.

### Do:

1. Mow across the face of slopes; never up and down. Exercise extreme caution when changing direction on slopes.
2. Watch for holes, ruts, rocks, hidden objects, or bumps which can cause you to slip or trip. Tall grass can hide obstacles.
3. Always be sure of your footing. A slip and fall can cause serious personal injury. If you feel you are losing your balance, release the motor/blade control handle immediately, and the blade will stop rotating within three (3) seconds.

### Do Not:

1. Do not mow near drop-offs, ditches or embankments, you could lose your footing or balance.
2. Do not mow slopes greater than 15 degrees as shown on the slope gauge.
3. Do not mow on wet grass. Unstable footing could cause slipping.

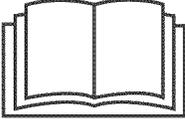
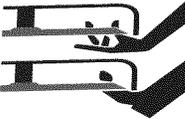
## Service

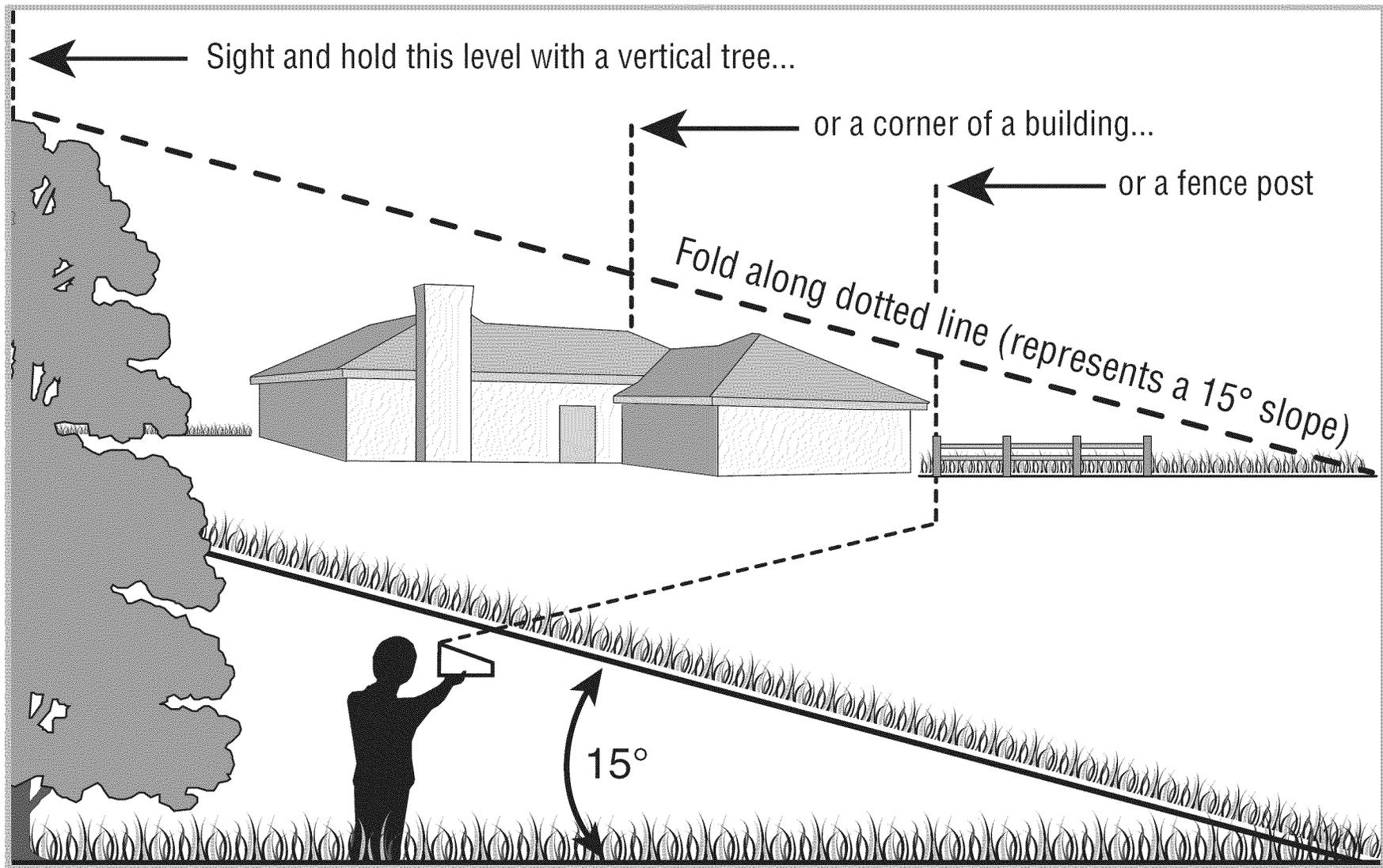
1. If the mower's built-in overload protection switch frequently trips, contact your nearest authorized service dealer for repair.
2. Remove key and store idle lawn mower indoors when not in use. Allow motor to cool before storing in any inclosure. Lawn mower should be stored indoors in a dry, high, or locked-up place, out of reach of children.
3. When servicing use only identical replacement parts listed in this manual. "Use of parts which do not meet the original equipment specifications may lead to improper performance and compromise safety!"
4. Before cleaning, repairing, or inspecting, make certain the blade and all moving parts have stopped. Remove the key to prevent accidental starting.
5. Remove key before servicing, cleaning, or removing material from the lawn mower.
6. Follow instructions for lubricating and changing accessories.
7. Keep handles dry, clean and free from oil and grease.
8. To reduce a fire hazard, keep the motor cover free of grass, leaves and debris build-up.
9. Check the blade and motor mounting bolts at frequent intervals for proper tightness. Also, visually inspect blade for damage (e.g., bent, cracked, and worn). Replace blade with the original equipment manufacturer's (OEM) blade only, listed in this manual.

10. Maintain your mower with care — Keep mower blade sharp and clean for best and safest performance. Mower blades are sharp and can cut, wrap the blade or wear gloves and use extra caution when servicing them.
11. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
12. Never tamper with safety devices. Check their proper operation regularly.
13. Never attempt to make wheel or cutting height adjustments while the motor is running.
14. After striking a foreign object, stop the motor, remove the key, and thoroughly inspect the mower for any damage. Repair the damage before operating the mower.
15. 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. For safety protection, frequently check components and replace immediately with original equipment manufacturer's (OEM) parts only, listed in this manual.
16. According to the Consumer Products Safety Commission (CPSC) and the U.S. Environmental Protection Agency (EPA), this product has an *Average Useful Life* of seven (7) years, or 140 hours of operation. At the end of the *Average Useful Life* have the unit inspected annually by an authorized service dealer to ensure that all mechanical and safety systems are working properly and not worn excessively. Failure to do so can result in accidents, injuries or death.
17. Do not dispose of the battery(ies) in a fire. The cell may explode. Check with local codes for possible special disposal instructions.
18. Do not open or mutilate the battery(ies). Released electrolyte is corrosive and may cause damage to the eyes or skin. It may be toxic if swallowed.
19. Exercise care in handling batteries in order not to short the battery with conducting materials such as rings, bracelets, and keys. The battery or conductor may overheat and cause burns.

## Safety Symbols

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

Symbol	Description
	<p><b>READ THE OPERATOR'S MANUAL(S)</b> Read, understand, and follow all instructions in the manual(s) before attempting to assemble and operate</p>
	<p><b>DANGER — ROTATING BLADES</b> To reduce the risk of injury, keep hands and feet away. Do not operate unless discharge cover or grass catcher is in its proper place. If damaged, replace immediately.</p>
	<p><b>DANGER — BYSTANDERS</b> Do not mow when children or others are around.</p>
	<p><b>DANGER — HAND/ FOOT CUT</b> Keep hands and feet away from rotating parts.</p>
	<p><b>DANGER — THROWN DEBRIS</b> Remove objects that can be thrown by the blade in any direction. Wear safety glasses.</p>
	<p><b>DANGER — SLOPES</b> Use extra caution on slopes. Do not mow slopes greater than 15°.</p>
	<p><b>WARNING— ELECTRICAL SHOCK</b> Do not operate the mower in the rain.</p>



**Use this page as a guide to determine slopes where you may not operate safely.**



**WARNING:** Do not operate your lawn mower on such slopes. Do not mow on inclines with a slope in excess of 15 degrees (a rise of approximately 2-1/2 feet every 10 feet). A riding mower could overturn and cause serious injury. Operate riding mowers up and down slopes, never across the face of slopes. Operate walk-behind mowers across the face of slopes, never up and down slopes.

## Contents of Carton

- One Battery Mower
- One Operator's Manual
- One Charger
- One Side Discharge Chute
- Two Toggle Clamps
- One Grass Bag
- Two Cord Guides
- One Battery

**NOTE:** All references to the left and right side of the mower are from the operator's position behind the mower.

## Unpacking the Unit

1. Cut the corners of the carton and lay the sides flat on the ground. Remove all packing inserts.
2. Move the mower out of the carton.
3. Make certain the carton has been completely emptied before discarding it.

## Cutting Height Adjustment

The cutting height adjustment lever is located above the rear right wheel. See Fig. 3-1.

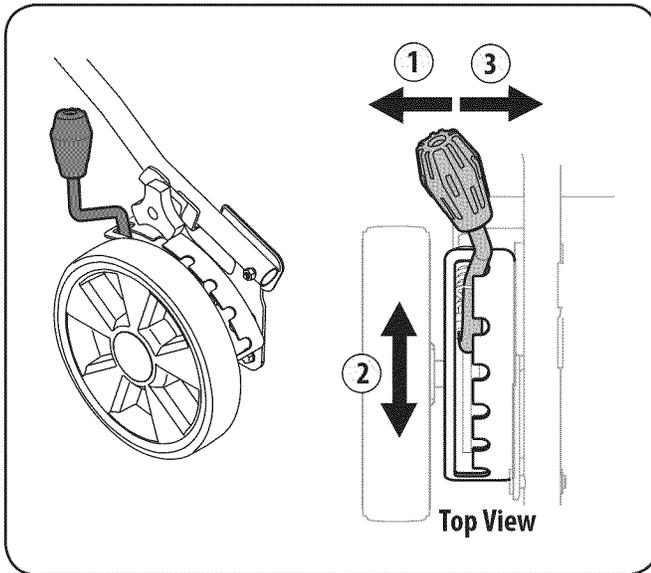


Figure 3-1

1. Pull the lever out and away from the mower.
2. Move the lever forward or back for desired cutting height.
3. Release lever towards mower deck.

## Handle Assembly

1. Raise the cutting height adjustment to the highest setting. See Fig. 3-1.
2. To assemble the lower handle:
  - a. Pivot the lower handle backward. See Fig. 3-2A.
  - b. Place the bolts in the lower handle in the slots of the handle bracket. See Fig. 3-2B.
  - c. Make sure the bolts in the lower handle are fully positioned in the slots of the handle bracket. See Fig. 3-2C.

**NOTE:** Make sure motor cord is clear of wing knobs before tightening.

- d. Tighten the lower handle wing knobs. See Fig. 3-2D.

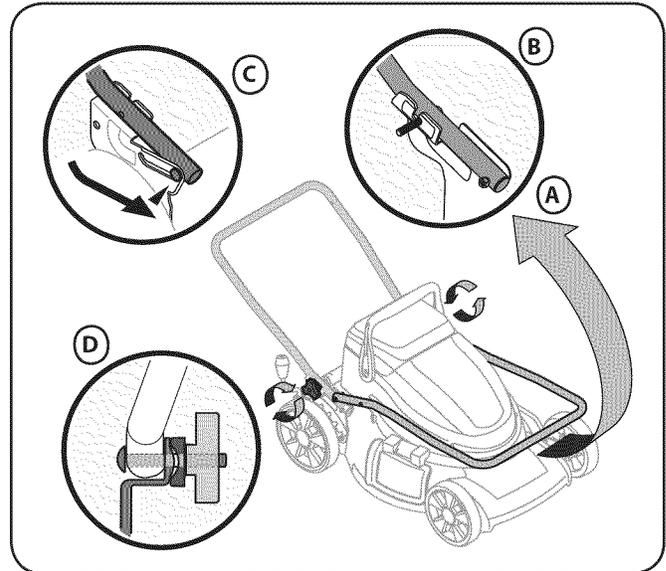
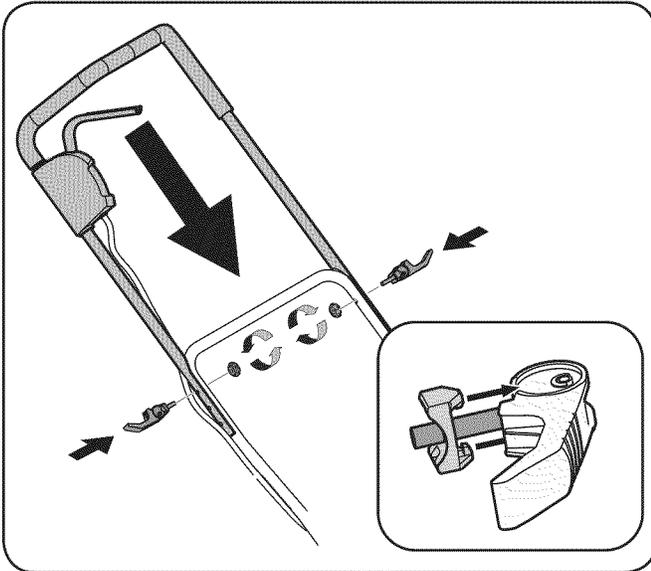


Figure 3-2

5. Place the upper handle onto the lower handle, keeping the motor cord over the handles. See Fig. 3-3.
  - a. For the lowest setting, line up the top holes of the upper handle with the holes on the lower handle.
  - b. For the medium setting, line up the middle holes of the upper handle with the holes on the lower handle.
  - c. For the highest setting, line up the bottom holes of the upper handle with the holes on the lower handle.

**NOTE:** Make certain the clips on the clamp retainers are inside the grooves of the clamp seats. See Fig. 3-3 inset.

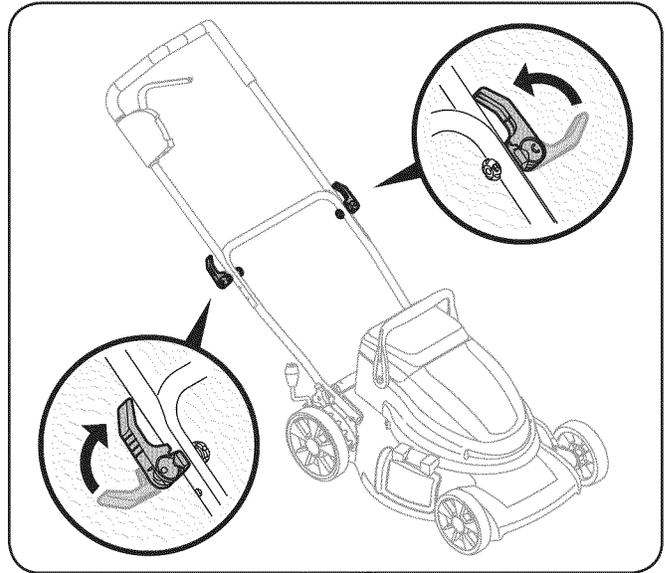


**Figure 3-3**

4. Insert toggle clamps packed separately with the mower into the holes for the selected height. See Fig. 3-3.

5. Tighten the clamps. See Fig. 3-4.

**NOTE:** Leave space between clamp and clamp seat. If clamp will not tighten, loosen wing knob half turn. If clamp is not firmly seated when engaged, tighten wing knob half turn until clamp is firmly seated when engaged.

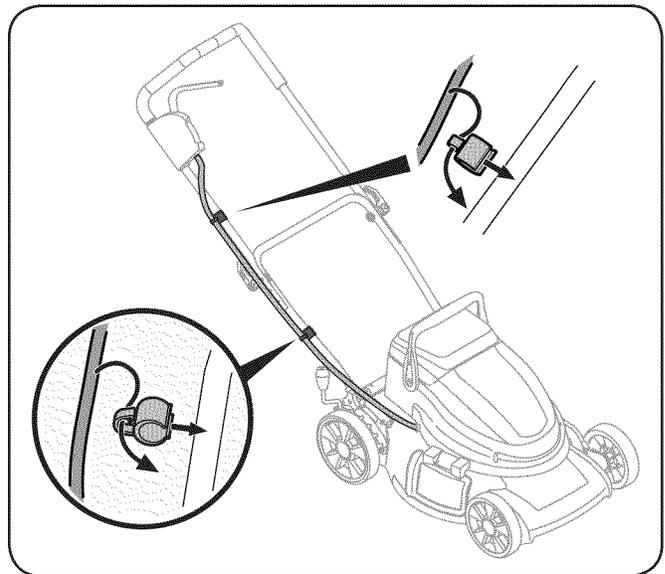


**Figure 3-4**

### Cord Guide

Make sure the cord between the motor/blade control lever and the mower sits in the cord holders on the upper and lower handles.

1. Snap one cord guide onto the lower handle and the other cord guide onto the upper handle. See Fig. 3-5.
2. Secure the motor cord in the cord guide clamps.



**Figure 3-5**

## Grass Collection

1. To assemble the grass catcher, secure the plastic channels of grass bag over frame rods. See Fig. 3-6.

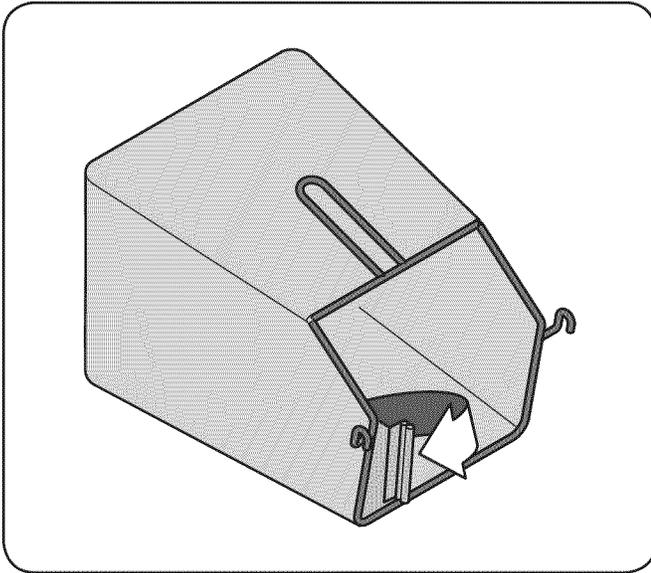


Figure 3-6

2. Follow steps below to attach grass catcher:
  - a. Lift rear discharge door.
  - b. Remove rear mulching baffle. See Fig. 3-7.

**NOTE:** Swing the mulching baffle to the right side of the mower and then slide out.

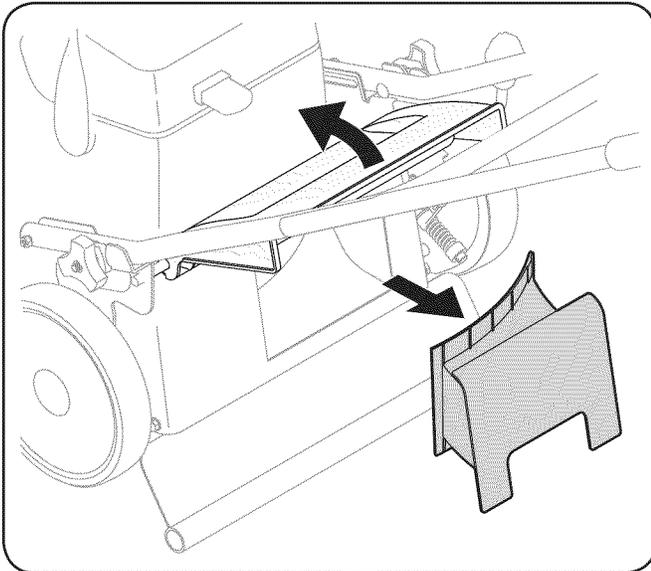


Figure 3-7

- c. Place grass catcher on the pivot rod. Let go of discharge door so that it rests on the grass catcher. See Fig. 3-8.

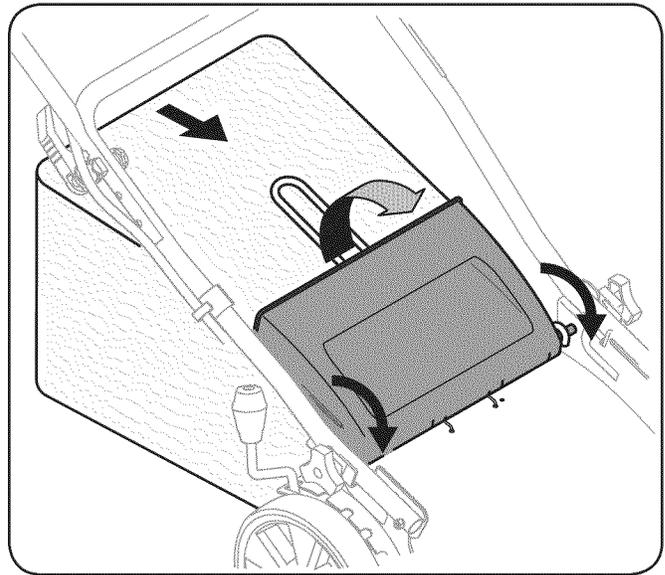


Figure 3-8

To remove grass catcher, lift rear discharge door on the mower. Lift grass catcher up and out, off of the pivot rod. Release rear discharge door to allow it to close rear opening of mower.



**WARNING:** Never operate mower unless the hooks on the grass catcher are firmly seated on the pivot rod and the rear discharge door rests firmly against top of the grass catcher.

## Side Discharge

For side discharge, you will need to have the rear mulching baffle installed below the rear discharge door.

1. On the right side of the mower, lift the mulch baffle.
2. Slide the hooks of the side discharge chute under hinge pin on mulch baffle assembly. See Fig. 3-9.

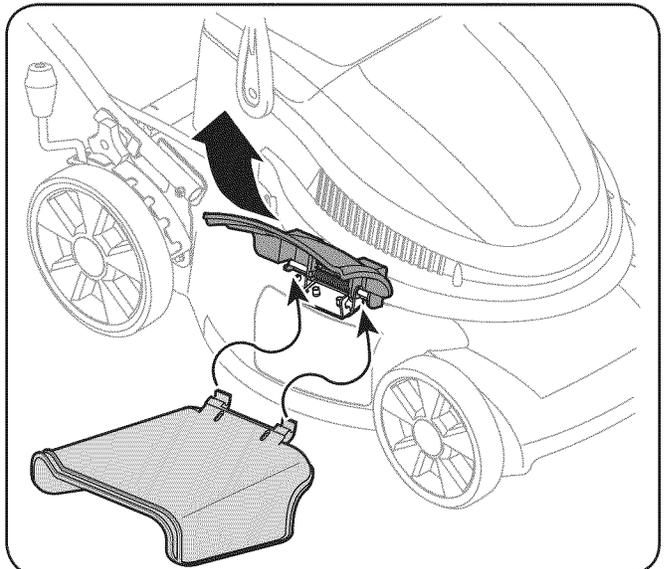


Figure 3-9

- Secure the tabs of the side discharge chute onto the hooks below the side mulching baffle. See Fig. 3-9.

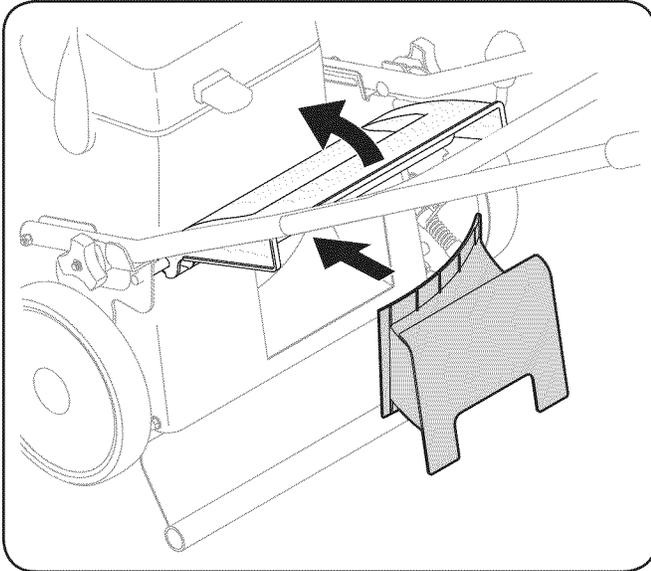
**NOTE:** Do not remove side mulch baffle at any time, even when you are not mulching.

## Mulching

To mulch, you will need the rear mulching baffle installed below the rear discharge door.

If converting to mulching from the grass collection mode:

- Remove grass catcher.
- Install rear mulching baffle. See Fig. 3-10.



**Figure 3-10**

If converting to mulching from side discharge:

- Remove side discharge chute.
- Make sure the rear mulching baffle is installed. See Fig. 3-10.

## Charging the Battery



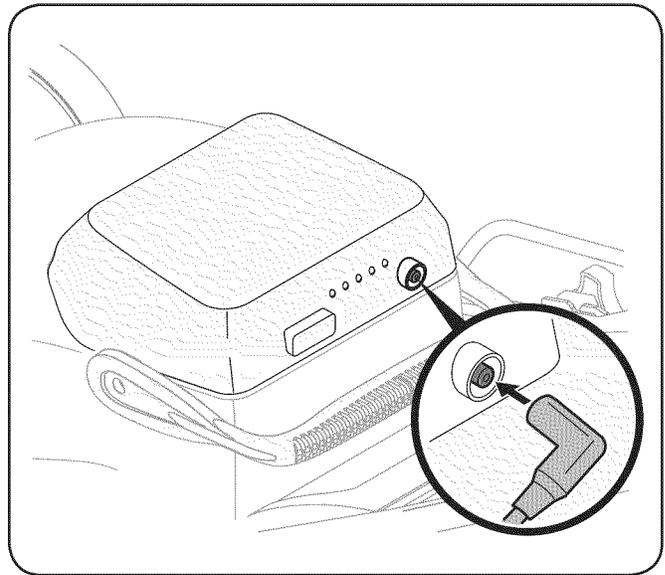
**WARNING:** The battery contains corrosive fluid and toxic material - HANDLE WITH CARE. Keep away from children. Do not puncture, disassemble, mutilate, or incinerate. Explosive gases could be vented during charging or discharging. Use in a well ventilated area, away from sources of ignition.

**IMPORTANT:** Use only with battery pack 725-05089.

**Charge the mower for 14 hours before initial use.** Charge mower indoors in a dry area out of the weather. DO NOT charge in rain or wet locations.

**IMPORTANT:** Use only the battery charger provided with this mower.

Plug the battery charger into the battery first, and then into any standard 110/120 volt household electrical outlet. See Fig. 3-11 for battery charging location.



**Figure 3-11**

**NOTE:** If an extension cord is required, use one that is at least wire size 16 AWG. Connect the extension cord to charger before plugging extension cord into electrical outlet.

**NOTE:** You may charge the battery with the battery removed from the mower.

**IMPORTANT:** Always recharge battery fully. It takes 14 hours to recharge a completely discharged battery. A flashing light on the battery charger indicates the battery is less than 80 percent charged; a solid green light indicates the battery is 80 to 100 percent charged. A full charge will be achieved in less than 14 hours if the batteries were only partially discharged.

**NOTE:** It is recommended that the mower be charged once every two months during storage.

**IMPORTANT:** Always disconnect battery charger (or extension cord, if used) from the electrical outlet first, then disconnect battery charger from battery.

**NOTE:** It is recommended that the mower be charged immediately after it has been discharged. Storing batteries in a discharged state could reduce future performance.

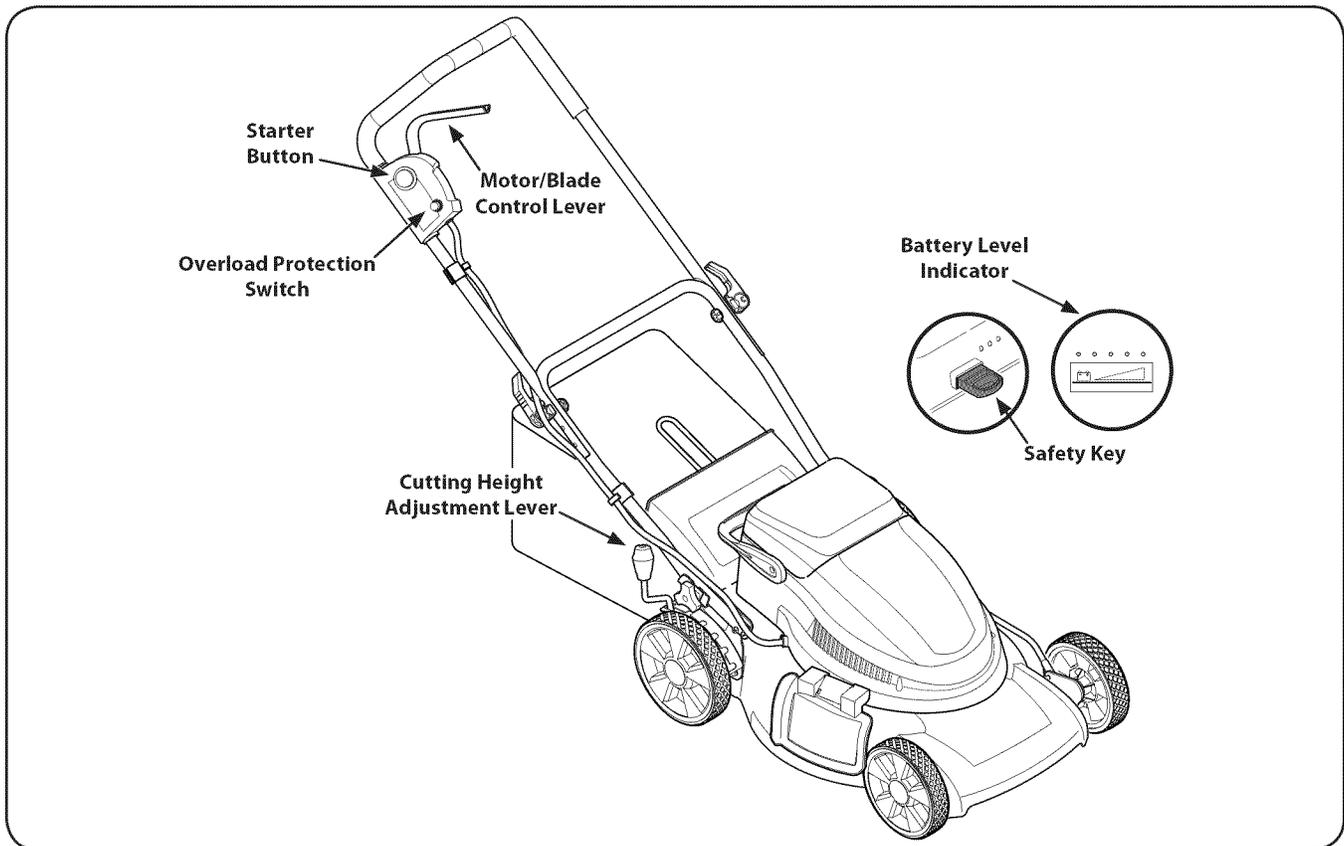


Figure 4-1



**WARNING:** Read, understand, and follow all instructions and warnings on the machine and in this manual before operating.

### Motor/Blade Control Lever



**WARNING:** The motor/blade control lever is a safety device. Never attempt to bypass its operations.

The motor/blade control lever is located on the upper handle of the mower. The motor/blade control lever engages and disengages the motor and blade.

### Overload Protection Switch

The mower is equipped with an overload protection switch, located on the motor/blade control. This overload protection switch may pop out when too much strain is placed on the motor. Refer to the Maintenance & Adjustments Section to reset this switch.

### Cutting Height Adjustment Lever

The cutting height adjustment lever is located above the right rear wheel. To adjust the cutting height, refer to the Assembly Section.

### Starter Button

The starter button is located on the upper handle of the mower. Engaging the motor/blade control lever with the starter button pressed will start the mower.

### Battery Level Indicator

The battery level indicator is located on the battery. The indicator shows the condition of the battery and is on when the motor is on. The indicator lit all the way to the right indicates the battery is fully charged; as the indicator is lit more toward the left, it indicates the battery is discharging. See Fig. 4-1 inset.

**IMPORTANT:** If the far left red light illuminates, the batteries will need to be recharged before further use. Continued operation before charging may shorten the life of the batteries.

### Safety Key

The safety key must be present and inserted before the motor can be started.

## Starting Motor and Blade



**WARNING:** Avoid accidental starting. Make sure you are in the operating position behind the mower when using it. To avoid serious injury, the operator and unit should be in a stable position while starting.

1. Insert safety key. Refer to Fig. 5-1.

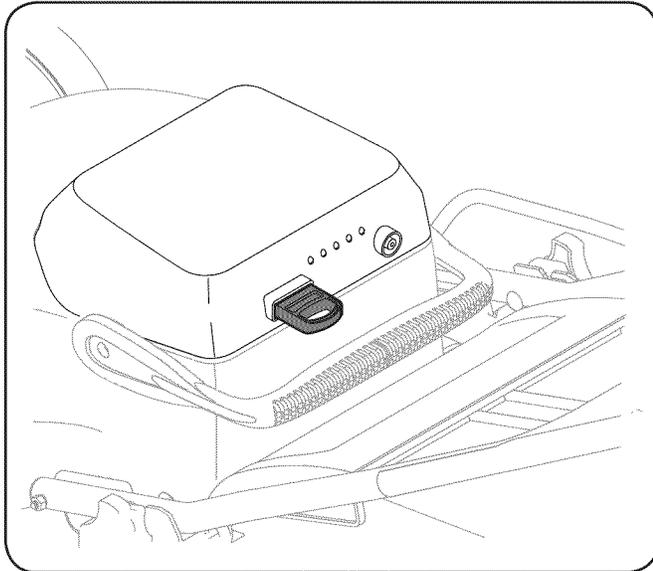


Figure 5-1

2. Stand behind the mower, in the operating position.

3. Press the starter button and hold it in. See Fig. 5-2.

**NOTE:** Starting the mower's motor also engages the blade.

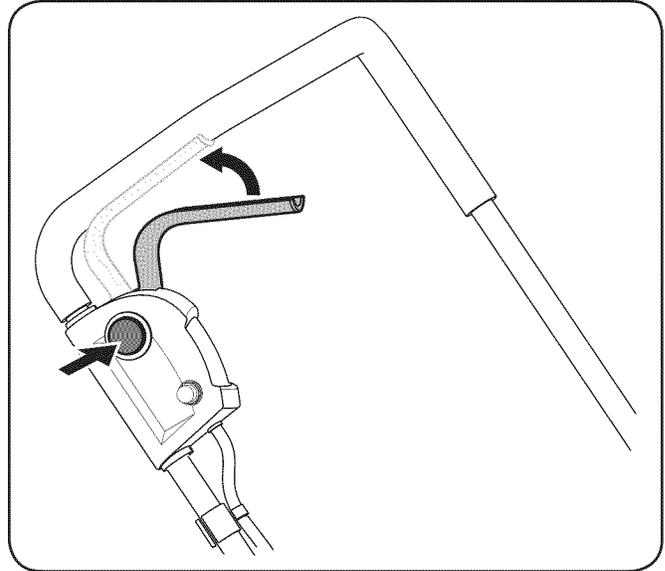


Figure 5-2

4. While holding the starter button in, squeeze the motor/blade control lever against the upper handle to start the motor and engage the blade. See Fig. 5-2.

**NOTE:** The mower's motor will NOT start if you fail to hold the starter button in while pivoting the motor/blade control handle upward.

5. Release the starter button.

## Stopping the Motor



**WARNING:** The blade continues to rotate for a few seconds after the motor is shut off. If motor does not come to a stop when the motor/blade control handle is released, remove the safety key and contact an authorized service dealer.

1. Release the blade/motor control lever to stop the motor and blade.
2. Remove the safety key to prevent accidental starting when equipment is unattended.
3. Charge the mower.

## Using Your Lawn Mower

Be sure that lawn is clear of stones, sticks, wires, or other objects which could damage the lawn mower or motor. Such objects could be accidentally thrown by the mower in any direction and cause serious personal injury to the operator and others.



**WARNING:** If you strike a foreign object, stop the motor, and remove the key. Thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower. Excessive vibration of the mower during operation is an indication of damage. The unit should be promptly inspected and repaired.



**WARNING:** The operation of any lawn mower can result in foreign objects being thrown into the eyes, which can damage your eyes severely. Always wear safety glasses while operating the mower, or while performing any adjustments or repairs on it.

- When using the side discharge, the most effective mowing pattern is one that allows the clippings to discharge towards the uncut part of the lawn.
- DO NOT use mower in the rain.
- For a healthy lawn, always cut off one-third or less of the total length of the grass.

## Using as Mulcher

To set up the mulching attachments see the “Assembly & Set-Up” section. For effective mulching, do not cut wet grass. If the grass has been allowed to grow in excess of four inches, mulching is not recommended.

## Using Side Discharge

Attach the side discharge chute following the instructions in the “Assembly & Set-Up” section. When using the side discharge, the most effective mowing pattern is one that allows the clippings to discharge towards the uncut part of the lawn.

## Using Grass Catcher

You can use the grass catcher to collect clippings while you are operating the mower.

1. Attach grass catcher following instructions in the “Assembly & Set-Up” section. Grass clippings will automatically collect in bag as you run mower. Operate mower till grass bag is full.
2. Stop motor completely by releasing the blade/motor control handle. Make sure that the unit has come to a complete stop.
3. Lift discharge door and pull grass bag up and away from the mower to remove the bag. Dispose of the grass clippings and reinstall the bag when complete.



**WARNING:** If you strike a foreign object, stop the motor, and remove the key. Thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower. Excessive vibration of the mower during operation is an indication of damage. The unit should be promptly inspected and repaired.

## Removing the Battery

If you have two batteries, you can use one battery while the other battery recharges. To remove the battery:

1. Remove the safety key.
2. Move the locking handle from the locked position to the unlocked position. See Fig. 5-3.
3. Lift the battery off the mower base. See Fig. 5-3.



**WARNING:** The battery is heavy. Lift with your legs and not your back.

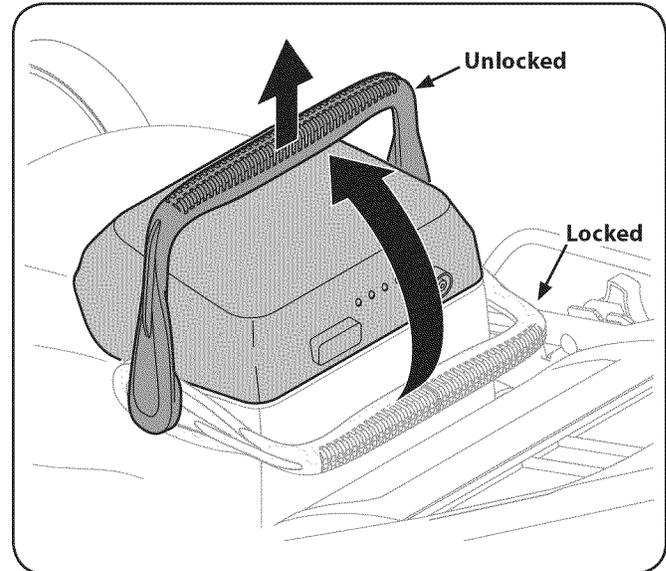


Figure 5-3

To seat the battery, make sure the safety key is removed, place the battery in the battery base and turn the locking handle to the locked position.

**IMPORTANT:** Use only with battery pack 725-05089.

## General Recommendations

- Always observe safety rules when performing any maintenance.
- The warranty on this lawn mower does not cover items that have been subjected to operator abuse or negligence. To receive full value from warranty, operator must maintain the lawn mower as instructed here.
- All adjustments should be checked at least once each season.
- Periodically check all fasteners and make sure these are tight.

**WARNING:** Always stop the motor and remove the battery before cleaning, lubricating or performing any repairs or maintenance on the lawn mower.

## Lubrication

1. Lubricate the wheels at least once a season with light oil (or motor oil). If wheels are removed for any reason, lubricate surface of the pivot arm and inner surface of the wheel with light oil. See Fig. 6-1.

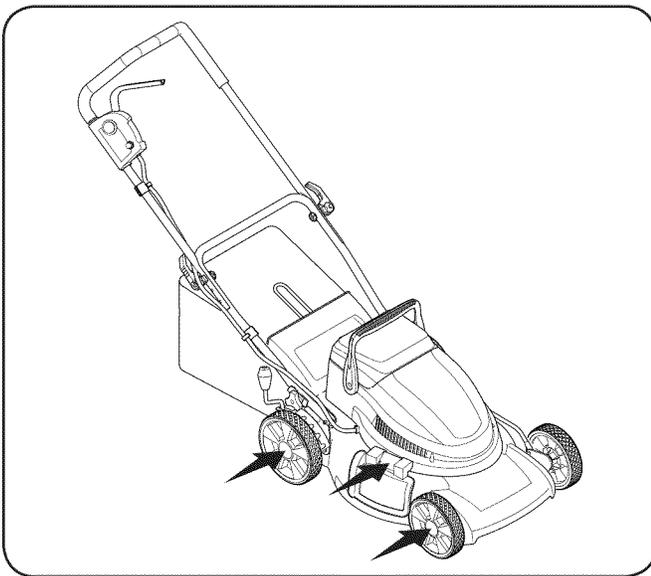


Figure 6-1

2. Lubricate the torsion spring on the side mulch plug periodically with light oil to prevent rust. See Fig. 6-1.

## Deck Care

**WARNING:** To reduce the risk of electric shock, do not expose the mower to water.

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

1. Remove any buildup of grass and leaves on or around the motor cover (do not use water). Wipe the mower clean with a dry cloth occasionally.
2. If debris has built up on the underside of the unit, tilt the mower forward or on its side and scrape it clean with a suitable tool.

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

## Resetting Overload Protection Switch

This mower is equipped with an overload protection switch to prevent overheating damage to the motor.

If the overload protection switch pops out:

1. Release the motor/blade control handle and do NOT restart the mower for at least one minute, allowing the electric motor time to cool.
2. Press the overload protection switch inward to reset. See Fig. 6-2.

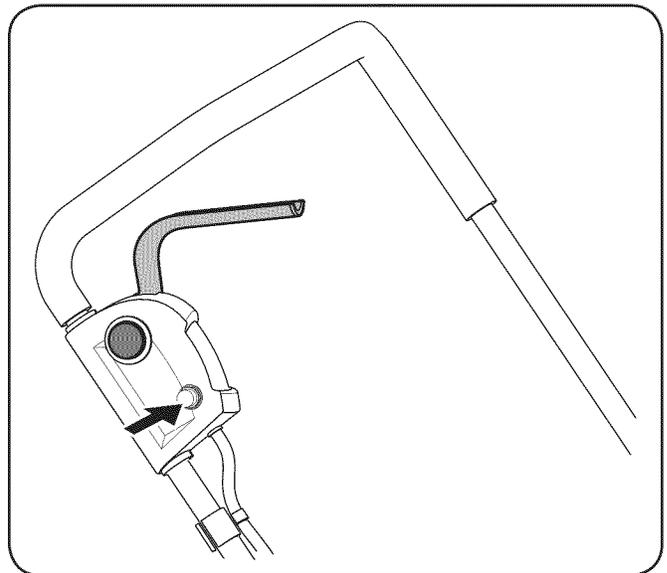


Figure 6-2

If the overload protection switch pops out shortly after resetting:

1. Release the motor/blade control handle and do NOT restart the mower for at least 15 minutes to allow the electric motor extra time to cool.
2. Press the overload protection switch inward to reset.
3. Restart unit.

**NOTE:** If the overload protection switch pops out repeatedly during operation or will not remain in when attempting to reset, you may need to raise the cutting height to reduce the strain on the motor or recharge the battery. If the overload protection switch will not remain in, contact an authorized service center to arrange for repair.

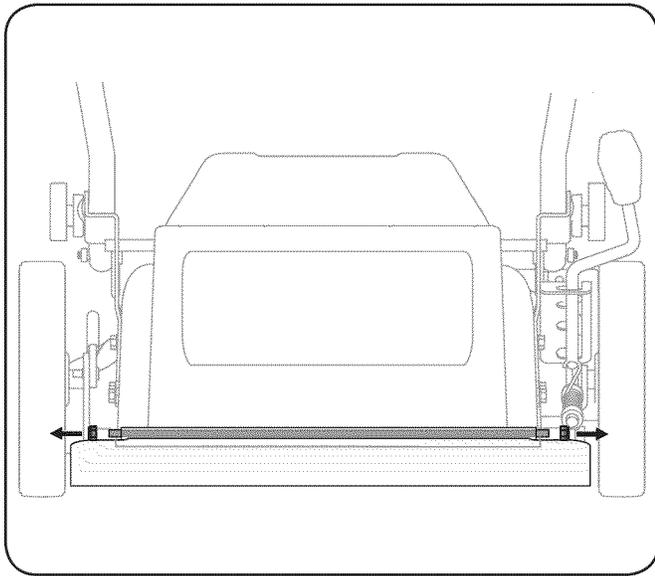
## Replacing Trail Shield



**WARNING:** Never operate mower unless the trail shield is in place and working. Never operate mower with damaged safety devices. Failure to do so, can result in personal injury.

The trail shield is subject to wear and damage which could expose moving parts or allow objects to be thrown. For safety protection, frequently check the trail shield and replace immediately with original equipment manufacturer's (OEM) part only, listed in this manual.

1. Using a 10mm wrench, hold one lock nut in place while the opposite lock nut is loosened and removed. See Fig. 6-3.



**Figure 6-3**

2. Remove the rod running through the trail shield and replace with new shield in the opposite order and manner of removal.

## Battery Care

**IMPORTANT:** Replace with only the identical batteries provided with this mower. The batteries should only be replaced by an authorized service dealer.



**WARNING:** Due to a potential shock hazard, DO NOT attempt to remove the motor/battery shroud. There are no user serviceable parts inside. Contact your nearest Authorized Service Center if repairs are needed.

## Blade Care



**WARNING:** When removing the cutting blade for sharpening or replacement, protect your hands with a pair of heavy gloves or use a heavy rag to hold the blade. Be certain to disconnect the power supply.

Periodically inspect the blade assembly for cracks, especially if you strike a foreign object. Replace when necessary. Follow the steps below for blade service.

1. Stop the motor and remove the safety key from the battery.
2. With the battery handle locked or with the battery removed, turn the mower on its side.
3. Use a block of wood between blade and mower deck to prevent the blade from turning when the bolt is removed.
4. Loosen and remove the blade nut, locking plates, and blade. See Fig. 7-1.

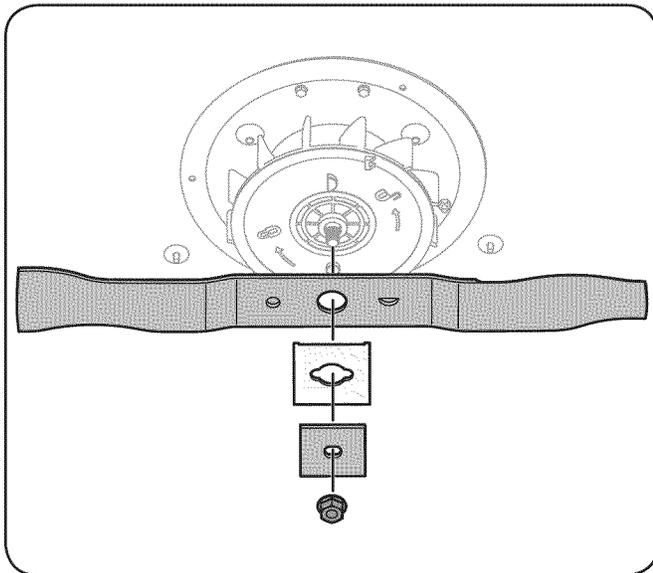


Figure 7-1

5. The blade can be sharpened with a file or on a grinding wheel. Do not attempt to sharpen the blade while it is still on the mower. When sharpening the blade, follow the original angle of grind and grind each cutting edge equally to keep the blade balanced. Balance the blade on a round shaft screwdriver. Remove metal from the heavy side until it balances evenly.



**WARNING:** An unbalanced blade will cause excessive vibration when rotating at high speeds. It may cause damage to mower, and could break causing personal injury.

## Blade Installation

1. Place the cutting blade, locking plates, and blade nut on the motor shaft and thread the blade bolt in finger tight. See Fig. 7-1.

**NOTE:** Make certain to replace the parts in the exact order in which they were removed. When installing the cutting blade, be sure it is installed with the curved ends pointing towards the mower deck and not towards the ground.

2. Torque the blade bolt down using a torque wrench to assure the bolt is tightened properly. The recommended torque for the blade bolt is 240-280 in. lbs.



**WARNING:** The blade hardware is not only used to attach the blade assembly, but is also an insulated safety device and should never be altered in any way. If replacement is necessary, use original equipment parts as shown in the parts list.

To insure safe operation of your unit, all nuts and bolts must be checked periodically for correct tightness.

## Blade Sharpening

To properly sharpen the cutting blades, remove equal amounts of metal from both ends of the blades along the cutting edges, parallel to the trailing edge, at a 25° to 30° angle. See Fig. 7-2.

**NOTE:** It is important that each cutting blade edge be ground equally to maintain proper blade balance. A poorly balanced blade will cause excessive vibration and may cause damage to the mower and result in personal injury. The blade can be tested by balancing it on a round shaft screwdriver. Grind metal from the heavy side until it balances evenly.

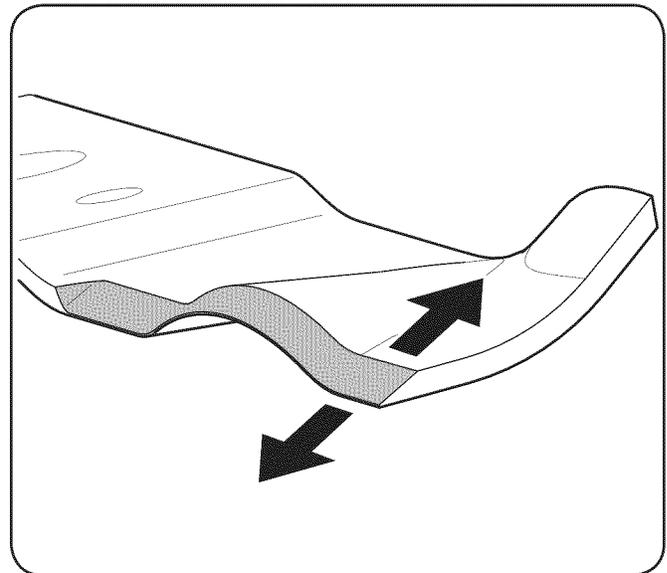


Figure 7-2

## Off-Season Storage

The following steps should be taken to prepare your lawn mower for storage.

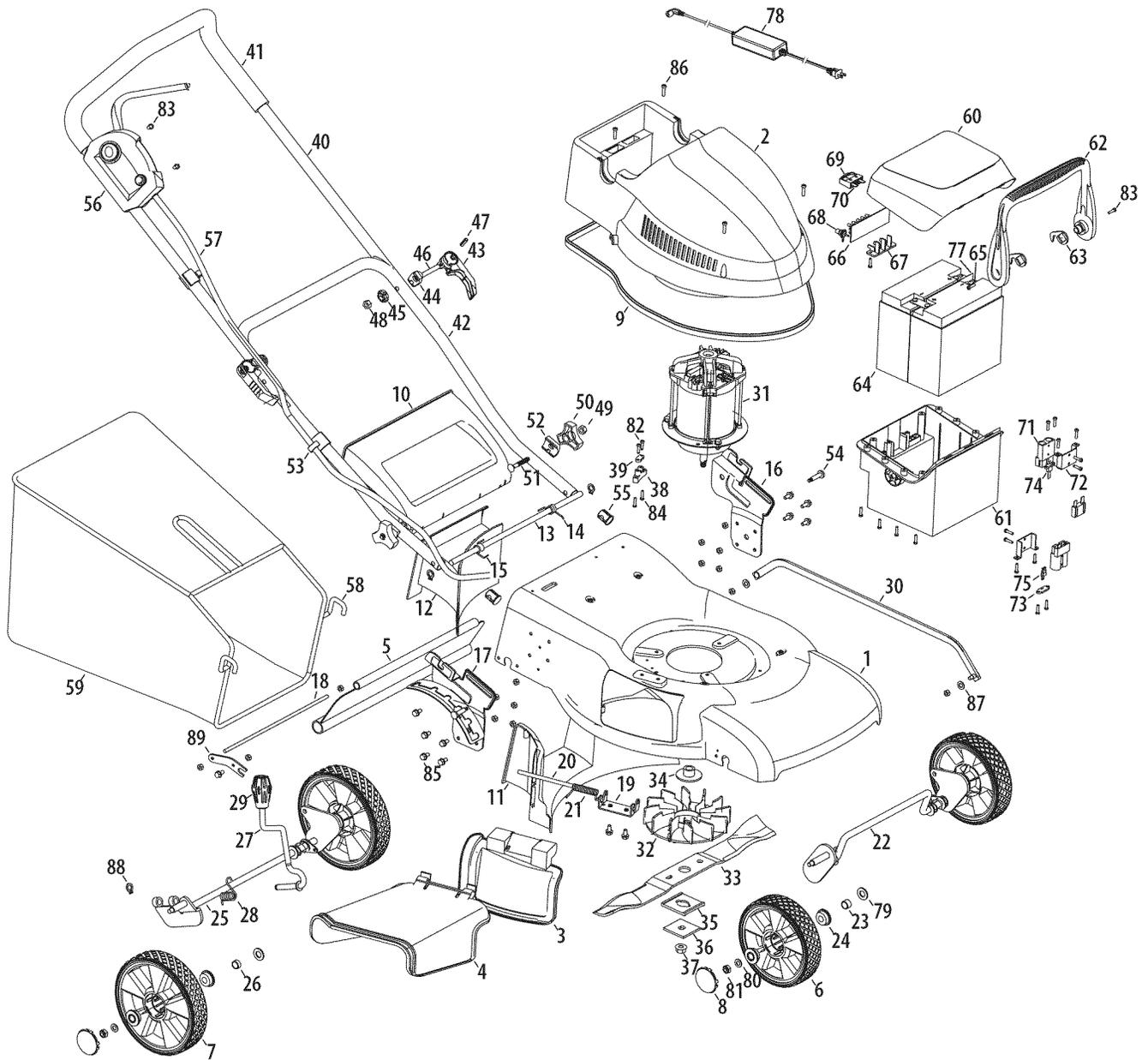
- Clean and lubricate mower thoroughly as described in the lubrication instructions.
- We do not recommend the use of a pressure washer or garden hose to clean your unit.
- Coat mower's cutting blade with chassis grease to prevent rusting.
- Store mower in a dry, clean area. Do not store next to corrosive materials, such as fertilizer.
- Wipe the cord to remove any stains or foreign substance such as oil.
- Store mower fully charged.

**IMPORTANT:** We strongly recommend the mower be charged once every two months during storage.

**IMPORTANT:** Always recharge mower fully. The charger is a two stage charger. The first stage, equalize, supplies a higher voltage to the batteries. This helps speed charge time and balance the charge across the individual batteries. The second stage, float, supplies a lower voltage. This prevents the batteries from experiencing overcharging damage and also "tops off" the battery charge. Depending on battery condition the equalize stage will complete in approximately 8 hours. When the equalize stage is complete the charger's green LED will stop blinking. This starts the float stage. During the float stage the charger's green LED will be on continuously. The float stage will "top off" the batteries in approximately 4-6 hours, again, depending on the condition of the battery. However, a full 14 hour charge is always recommended.

Problem	Cause	Remedy
Mower fails to start	<ol style="list-style-type: none"> <li>1. Key not in switch.</li> <li>2. Motor/blade control disengaged.</li> <li>3. Battery discharged.</li> <li>4. Mower deck clogged with grass and debris.</li> </ol>	<ol style="list-style-type: none"> <li>1. Insert Ignition key.</li> <li>2. Depress starter button, and engage motor blade control.</li> <li>3. Charge battery.</li> <li>4. Unclog mower deck. Make certain blade is free to move.</li> </ol>
Mower stops while mowing	<ol style="list-style-type: none"> <li>1. Discharged battery.</li> <li>2. Cutting too much grass.</li> <li>3. Clogged deck.</li> <li>4. Overload protection switch is tripped.</li> </ol>	<ol style="list-style-type: none"> <li>1. Charge battery.</li> <li>2. Raise cutting height.</li> <li>3. Unclog mower deck. Raise cutting height, or cut a narrower swath.</li> <li>4. Reset the overload protection switch following the instructions in the Maintenance &amp; Adjustments section of this manual.</li> </ol>
Mower cutting grass unevenly	<ol style="list-style-type: none"> <li>1. Lawn rough or uneven.</li> <li>2. Dull blade.</li> </ol>	<ol style="list-style-type: none"> <li>1. Move the wheels to a higher cutting height position.</li> <li>2. Sharpen or replace blade.</li> </ol>
Mower not mulching properly	<ol style="list-style-type: none"> <li>1. Mower deck clogged.</li> <li>2. Wet grass.</li> <li>3. Excessively high grass.</li> <li>4. Dull blade.</li> </ol>	<ol style="list-style-type: none"> <li>1. Unclog mower deck. Make certain blade is free to move.</li> <li>2. Do not mow when grass is wet; wait until later to cut.</li> <li>3. Mow once at a high cutting height, then mow again at desired height or make a narrower cutting swath (1/2 width).</li> <li>4. Sharpen or replace blade.</li> </ol>
Hard to push	<ol style="list-style-type: none"> <li>1. High grass or cutting height too low.</li> <li>2. Rear of mower housing and blade dragging in heavy grass.</li> </ol>	<ol style="list-style-type: none"> <li>1. Raise cutting height.</li> <li>2. Raise cutting height.</li> </ol>
Mower vibrating at higher speed	<ol style="list-style-type: none"> <li>1. Bent motor shaft.</li> <li>2. Cutting blade is unbalanced.</li> <li>3. Blade is loose.</li> </ol>	<ol style="list-style-type: none"> <li>1. Stop the motor, disconnect the power source and inspect for damage. Have repaired by an authorized service dealer.</li> <li>2. Balance the blade by grinding each cutting edge equally.</li> <li>3. Tighten blade bolt to 240-280 in. lbs.</li> </ol>

# Model 18A-212B



For a new battery pack, order part 725-05089.

Ref.	Part Number	Description
1	787-01839A	Deck
2	731-07671	Shroud
3	731-07619	Side Discharge Door
4	731-07620	Side Discharge Chute
5	731-07621	Trail Shield
6	734-04537	Front Wheel
7	734-04548	Rear Wheel
8	731-07512	Wheel Cap
9	721-04378	Seal Line
10	731-07622	Rear Door
11	731-07623	Rear Baffle
12	731-07624	Mulching Plug
13	711-05358	Rear Shaft
14	732-04733	Spring
15	732-04734	Spring
16	787-01824A	Left Bracket
17	787-08125A	Right Bracket
18	711-05325	Trail Shield Pin
19	787-01813	Side Discharge Bracket
20	711-05326	Side Discharge Pin
21	732-04713	Spring
22	611-04181	Front Shaft Assembly
23	741-04464	Front Shaft Bushing
24	741-04474	Bearing
25	611-04182	Rear Shaft Assembly
26	741-04465	Rear Shaft Bushing
27	732-04735	Handle Adjust
28	732-04715	Handle Adjust Spring
29	720-04143	Handle Adjust Knob
30	787-01826	Link Bar
31	724-04095	Motor
32	731-07515	Fan
33	742-04321	Blade
34	736-04486	Flange
35	731-07598	Washer
36	736-04487	Washer
37	712-04237	Blade Nut
38	731-07672	Support
39	731-07673	Strain Relief
40	749-04670A	Upper Handle
41	731-07522	Handle Grip
42	749-04688A	Lower Handle
43	720-04145	Quick Release
44	736-04488	Washer
45	720-04146	Quick Release Knob

Ref.	Part Number	Description
46	710-05151	M8 Screw
47	715-04107	Quick Release Pin
48	712-04257	M8 Nut
49	712-04250	M6 Lock Nut
50	720-04147	Wing Knob
51	710-05082	Screw
52	736-04489	Washer
53	731-07524	Cord Clip
54	714-04088	Pin
55	731-07513	Cap
56	625-04129	Switch Box
57	725-05156	Cord
58	747-05304	Clamp
59	764-04096	Grassbag
60	731-07674	Battery Pack Cover
61	731-07675	Battery Pack Housing
62	731-07676	Handle
63	787-01840	Hook
64	725-05157	Battery
65	725-05158	Connector
66	725-05159	PCB
67	725-05160	PCB Support
68	725-05161	Connector
69	725-05162	Safety Key
70	725-05163	Key Connector
71	725-05164	SA50 Connector
72	725-05165	Supporter
73	731-07678	Supporter
74	725-05170	Connector
75	725-05169	Connector
76	725-05168	Fuse
77	725-05167	Board
78	725-05068	Charger
79	736-04507	Washer
80	736-04506	8mm Washer
81	712-04258	M8 Nut
82	710-05156	ST4.2x16 Screw
83	710-05155	ST4.2x25 Screw
84	710-05154	ST4.8x16 Screw
85	710-05153	M6x12 Screw
86	710-05152	M5 x 12 Screw
87	714-04508	Washer
88	716-04169	10mm Lock Ring
89	787-01841	Support





# MANUFACTURER'S LIMITED WARRANTY FOR



**IMPORTANT:** To obtain warranty coverage owner must present an original proof of purchase and applicable maintenance records to the servicing dealer. Please see the operator's manual for information on required maintenance and service intervals.

The limited warranty set forth below is given by MTD LLC with respect to new merchandise purchased or leased and used in the United States and/or its territories and possessions, and by MTD Products Limited with respect to new merchandise purchased or leased and used in Canada and/or its territories and possessions (either entity respectively, "MTD").

MTD warrants this product (excluding its *Normal Wear Parts and Batteries*, as described below) against defects in material and workmanship for a period of two (2) years, commencing on the date of original retail purchase or lease and will, at its option, repair or replace, free of charge, any part found to be defective in materials or workmanship.

*Normal Wear Parts* are warranted to be free from defects in material and workmanship for a period of thirty (30) days from the date of original purchase or lease. Normal wear parts include, but are not limited to items such as: belts, blades, blade adapters, grass bags, engine oil, air filters, spark plugs and wheels.

*Batteries* have a one-year prorated limited warranty against defects in material and workmanship, with 100% replacement during the first three months. After three months, the battery replacement credit is based on the months remaining in the twelve (12) month period dating back to the original date of original sale or lease. Any replacement battery will be warranted only for the remainder of the original warranty period.

This limited warranty shall only apply if this product has been operated and maintained in accordance with the Operator's Manual furnished with the product, and has not been subject to misuse, abuse, commercial use, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water, or damage because of other peril or natural disaster. Damage resulting from the installation or use of any part, accessory or attachment not approved by MTD for use with the product(s) covered by this manual will void your warranty as to any resulting damage. In addition, MTD may deny warranty coverage if the hour meter, or any part thereof, is altered, modified, disconnected or otherwise tampered with.

**HOW TO OBTAIN SERVICE:** Warranty service is available, WITH PROOF OF PURCHASE AND APPLICABLE MAINTENANCE RECORDS, through your local authorized service dealer. To locate the dealer in your area:

**In the U.S.A.:**

Check your Yellow Pages, or contact MTD LLC at P.O. Box 361131, Cleveland, Ohio 44136-0019, call 1-877-282- 8684 or log on to our website at [www.mtdproducts.com](http://www.mtdproducts.com).

**In Canada:**

Contact MTD Products Limited, Kitchener, ON N2G 4J1, call 1-800-668-1238 or log on to our website at [www.mtdcanada.com](http://www.mtdcanada.com).

Without limiting the foregoing, this limited warranty does not provide coverage in the following cases:

- a. Routine maintenance items such as lubricants, filters, blade sharpening, tune-ups, brake adjustments, clutch adjustments, deck adjustments, and normal deterioration of the exterior finish due to use or exposure.
- b. Service completed by someone other than an authorized service dealer.
- c. MTD does not extend any warranty for products sold or exported outside of the United States and/or Canada, and their respective possessions and territories, except those sold through MTD's authorized channels of export distribution.
- d. Replacement parts and/or accessories that are not genuine MTD parts.
- e. Transportation charges and service calls.
- f. MTD does not warrant this product for commercial use.

**There are no implied warranties, including without limitation any implied warranty of merchantability or fitness for a particular purpose. No warranties shall apply after the applicable period of express written warranty above. No other express warranties beyond those mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product, shall bind MTD. The exclusive remedy is repair or replacement of the product as set forth above. The terms of this warranty provide the sole and exclusive remedy arising from the sale and/or lease of the products covered hereby. MTD shall not be liable for any incidental or consequential loss or damage including, without limitation, expenses incurred for substitute or replacement lawn care services or for rental expenses to temporarily replace a warranted product.**

Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold. **Alteration of safety features of the product shall void this warranty.** You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the misuse or inability to use the product.

This limited warranty shall not extend to anyone other than the original purchaser or to the person for whom it was purchased as a gift.

**HOW LOCAL LAWS RELATE TO THIS WARRANTY:** This limited warranty gives you specific legal rights, and you may also have other rights that vary in different jurisdictions.

**MTD LLC, P.O. BOX 361131 CLEVELAND, OHIO 44136-0019; Phone: 1-800-800-7310, 1-330-220-4683  
MTD Canada Limited - KITCHENER, ON N2G 4J1; Phone 1-800-668-1238**