



CORDLESS TRIMMER + EDGER

24-VOLT MAX* | 2.0 Ah | 10 INCH | 2-IN-1

OPERATOR'S MANUAL

A Division of Snow Joe®, LLC

Model 24V-SB10-LTE-RM

Form No. SJ-24V-SB10-LTE-800E-M-RM

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IMPORTANT! Safety Instructions

All Operators Must Read These Instructions Before Use

⚠ CAUTION!

Before using this cordless tool, carefully read and observe the safety rules and instructions listed below. Before starting work, make sure that you know how to stop the machine in case of an emergency. The incorrect use of this machine could cause serious injury. Keep these instructions in a safe place and on hand so that they can be consulted when required.

⚠ CAUTION!

The cordless grass trimmer + edger should only be used for cutting lawns and for trimming along the borders of flower beds. Other uses of the trimmer + edger that are not indicated in these instructions could damage the trimmer + edger or seriously injure the operator.

GENERAL Safety Rules

⚠ WARNING! When using the cordless grass trimmer + edger basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including the following:

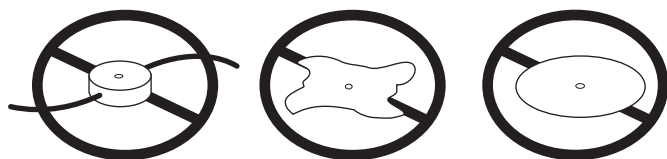
1. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to battery pack, picking up or carrying the appliance. Carrying the appliance with your finger on the switch or energizing appliance that have the switch on invites accidents.
2. Disconnect the battery pack from the appliance before making any adjustments, changing accessories, or storing appliance. Such preventive safety measures reduce the risk of starting the appliance accidentally.
3. Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
4. Use appliances only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
5. When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
6. Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
7. Do not use a battery pack or appliance that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.
8. Do not expose a battery pack or appliance to fire or excessive temperature. Exposure to fire or temperature above 265°F (130°C) may cause explosion.
9. Follow all charging instructions and do not charge the battery pack or appliance outside of the temperature range specified in the instructions. Charging improperly or at temperatures outside of the specified range may damage the battery and increase the risk of fire.
10. Have servicing performed by a qualified repair person using only identical replacement parts. This will ensure that the safety of the product is maintained.
11. Do not modify or attempt to repair the appliance or the battery pack (as applicable) except as indicated in the instructions for use and care.
12. **Replacement parts** – When servicing, use only identical replacement parts.
13. **Avoid dangerous environments** – Do not use appliances in damp or wet locations. Do not use in rain.
14. **Keep children and bystanders away** – Children and other spectators, including pets, should be kept at least 50 feet (15 meters) away from the work area. When the grass is cut, stones and debris contained in the grass can be picked up by the trimmer + edger and dispersed into the air. These flying projectiles can cause blindness or other bodily injury.
15. **Dress properly** – Always wear suitable clothing when using the trimmer + edger to prevent head, hand, or feet injuries. Do not wear loose clothing or jewelry. They can get caught in moving parts.
16. **Use safety glasses** – Also use safety footwear, snug-fitting clothing, protective gloves, hearing and head protection.

17. **Use the right tools** – Do not use tools for any job except that for which they are intended.
18. **Do not force the tool** – It will do the job better and with less likelihood of injury if it is used at the rate for which it was designed.
19. **Do not overreach** – Keep proper footing and balance at all times.
20. **Stay alert** – Watch what you are doing. Use common sense. Do not operate the trimmer + edger when you are tired, or under the influence of alcohol or drugs.
21. **Store idle tools indoors** – When not in use, tools should be stored indoors in a dry and high or locked-up place out of the reach of children.
22. **Maintain tools with care** – Keep cutting edges sharp and clean for best performance and to reduce the risk of injury. Follow instructions for lubricating and changing accessories. Inspect the trimmer + edger periodically and replace if damaged. Repair the trimmer + edger only at an authorized service facility. Keep handles dry, clean, and free from oil and grease.
23. **Checked for damaged parts** – Before continuing to use the trimmer + edger, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for the alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other condition that may affect the trimmer + edger's operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless indicated elsewhere in this manual.

ADDITIONAL SAFETY INSTRUCTIONS FOR GRASS TRIMMER + EDGER

1. Keep guards in place and in working order.
2. Keep hands and feet away from the cutting area.

⚠ WARNING! Never use steel blades or other devices. Use of any other accessories or attachments will increase the risk of injury.



⚠ CAUTION! The safety guard is critical to the safety of the operator and the safety of people standing within a safe distance of the trimmer + edger. The safety guard keeps the trimmer + edger in good working order and must always be in place during operation.

- Do not try to stop the cutting device (SharperBlade™) with your hands. Always let it come to a stop by itself.

⚠ WARNING! After switching off the tool, the cutting device (SharperBlade™) continues to rotate for a few seconds.

- Only use the original type of SharperBlade™. Do not under any circumstances use metal line or nylon line instead of SharperBlade™.
- Do not use the tool to cut grass which is not on the ground. For example, do not cut grass growing on walls or rocks.
- Do not switch on the tool in an enclosed or poorly ventilated space or in the presence of flammable and/or explosive substances such as liquids, gases and powders.
- Only cut during broad daylight or with adequate artificial light.
- Check that all grass cuttings and dirt have been removed from the ventilation vents.
- Do not cross roads or gravel paths while the tool is still running.
- When the tool is not in use, store it in a dry place and out of reach of children.
- After use, remove the battery and check for damage. If you have any doubt about the condition of the tool, contact an authorized service center or call the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).
- Only use the tool according to the instructions given in this manual.
- Check regularly that the screws are tight.
- Do not try to repair the tool or access internal parts. Contact an authorized service center or call the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).

Battery + Charger Safety Instructions

We pay a great deal of attention to the design of every battery pack to ensure that we supply you with batteries that are safe, durable and have a high energy density. The battery cells have a wide range of safety devices. Each individual cell is initially formatted and its electrical characteristic curves are recorded. This data is then used exclusively to be able to assemble the best possible battery packs.

Despite all the safety precautions, caution must always be exercised when handling batteries. The following points must be obeyed at all times to ensure safe use. Safe use can only be guaranteed if undamaged cells are used. Incorrect handling of the battery pack can cause cell damage.

IMPORTANT! Analyses confirm that incorrect use and poor care of high-performance batteries are the main factors responsible for personal and/or product damage.

⚠️WARNING! Use only approved replacement batteries; other batteries may damage the cordless trimmer + edger and cause it to malfunction, which can lead to serious personal injury.

⚠️WARNING! Do not use a battery pack or appliance that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.

Do not modify or attempt to repair the battery pack except as indicated in the instructions for use and care.

Have your battery pack serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the battery pack is maintained.

⚠️CAUTION! To reduce the risk of injury, charge the Snow Joe® iON+ 24V lithium-ion battery pack only in its designated Snow Joe® iON+ 24V lithium-ion charger. Other types of chargers present risk of fire, personal injury and damage. Do not wire a battery pack to a power supply plug or car cigarette lighter. Such misuse will permanently disable or damage the battery pack.

- **Avoid dangerous environments** – Do not charge the battery pack in rain, snow or in damp or wet locations. Do not use the battery pack or charger in the presence of explosive atmospheres (gaseous fumes, dust or flammable materials) because sparks may be generated when inserting or removing the battery pack, which could lead to a fire.

- **Charge in a well-ventilated area** – Do not block the charger vents. Keep them clear to allow for proper ventilation. Do not allow smoking or open flames near a charging battery pack. Vented gases may explode.

NOTE: The safe temperature range for the battery is 41°F – 105°F (5°C – 40.5°C). Do not charge the battery outside in freezing weather; charge it at room temperature.

- **Maintain charger cord** – When unplugging the charger, pull the plug, not the cord, from the receptacle to reduce the risk of damage to the electrical plug and cord. Never carry the charger by its cord or yank it by the cord to disconnect it from the receptacle. Keep the cord away from heat, oil and sharp edges. Make sure the cord will not be stepped on, tripped over or subjected to damage or stress when the charger is in use. Do not use the charger with a damaged cord or plug. Replace a damaged charger immediately.
- **Do not use an extension cord unless it is absolutely necessary** – Using the wrong, damaged or improperly wired extension cord poses a risk of fire and electric shock. If an extension cord must be used, plug the charger into a properly wired 16 gauge or larger extension cord with the female plug matching the male plug on the charger. Make sure that the extension cord is in good electrical condition.
- **Charger 24VCHRG-AC is rated for 100 – 240 volt AC only** – The charger must be plugged into an appropriate receptacle.

- **Use only recommended attachments** – Use of an attachment not recommended or sold by the battery charger or battery pack manufacturer may result in risk of fire, electric shock or personal injury.

- **Unplug charger when not in use** – Make sure to remove battery packs from unplugged chargers.

⚠️WARNING! To reduce the risk of electric shock, always unplug the charger before performing any cleaning or maintenance. Do not allow water to flow into the charger. Use a Ground Fault Circuit Interrupter (GFCI) to reduce shock hazards.

- **Do not burn or incinerate battery packs** – Battery packs may explode, causing personal injury or damage. Toxic fumes and materials are created when battery packs are burned.
- **Do not crush, drop or damage battery packs** – Do not use the battery pack or charger if they have sustained a sharp blow, been dropped, run over or have been damaged in any way (i.e. pierced with a nail, hit with a hammer, stepped on, etc.).
- **Do not disassemble** – Incorrect reassembly may pose a serious risk of electric shock, fire or exposure to toxic battery chemicals. If the battery or charger are damaged, contact an authorized Snow Joe® + Sun Joe® dealer or call the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563) for assistance.
- **Battery chemicals cause serious burns** – Never let a damaged battery pack contact the skin, eyes or mouth. If a damaged battery pack leaks battery chemicals, use rubber or neoprene gloves to safely dispose of it. If skin is exposed to battery fluids, wash the affected area with soap and water and rinse with vinegar. If eyes are exposed to battery chemicals, immediately flush with water for 20 minutes and seek medical attention. Remove and dispose of contaminated clothing.
- **Do not short circuit** – A battery pack will short circuit if a metal object makes a connection between the positive and negative contacts on the battery pack. Do not place a battery pack near anything that may cause a short circuit, such as paper clips, coins, keys, screws, nails and other metallic objects. A short-circuited battery pack poses a risk of fire and severe personal injury.
- **Store your battery pack and charger in a cool, dry place** – Do not store the battery pack or charger where temperatures may exceed 105°F (40.5°C), such as in direct sunlight or inside a vehicle or metal building during the summer.

Information about the battery

1. The battery pack supplied with your cordless trimmer + edger is only partially charged. The battery pack has to be charged completely before you use the tool for the first time.
2. For optimum battery performance, avoid low discharge cycles by charging the battery pack frequently.
3. Store the battery pack in a cool place, ideally at 77°F (25°C) and charged to at least 40%.
4. Lithium-ion batteries are subject to a natural aging process. The battery pack must be replaced at the latest when its capacity falls to just 80% of its capacity when new. Weakened cells in an aged battery pack are no longer capable of meeting the high power requirements needed for the proper operation of your trimmer + edger, and therefore pose a safety risk.
5. Do not throw battery packs into an open fire as this poses a risk of explosion.
6. Do not ignite the battery pack or expose it to fire.
7. Do not exhaustively discharge batteries. Exhaustive discharge will damage the battery cells. The most common cause of exhaustive discharge is lengthy storage or non-use of partially discharged batteries. Stop working as soon as the performance of the battery falls noticeably or the electronic protection system triggers. Place the battery pack in storage only after it has been fully charged.
8. Protect batteries and the tool from overloads. Overloads will quickly result in overheating and cell damage inside the battery housing even if this overheating is not apparent externally.
9. Avoid damage and shocks. Immediately replace batteries that have been dropped from a height of more than one meter or those that have been exposed to violent shocks, even if the housing of the battery pack appears to be undamaged. The battery cells inside the battery may have suffered serious damage. In such instances, please read the waste disposal information for proper battery disposal.
10. If the battery pack suffers overloading and overheating, the integrated protective cutoff will switch off the equipment for safety reasons.
IMPORTANT! Do not press the ON/OFF switch any more if the protective cut-off has been activated. This may damage the battery pack.
11. Use only original battery packs. The use of other batteries poses a fire risk and may result in injuries or an explosion.

Information about the charger and the charging process












1. Please check the data marked on the rating plate of the battery charger. Be sure to connect the battery charger to a power supply with the voltage marked on the rating plate. Never connect it to a different mains voltage.
2. Protect the battery charger and its cord from damage. Keep the charger and its cord away from heat, oil and sharp edges. Have damaged cords repaired without delay by a qualified technician at an authorized Snow Joe® + Sun Joe® dealer or call the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).
3. Electrical plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with grounded appliances. Unmodified plugs and matching outlets will reduce the risk of electric shock.
4. Keep the battery charger, battery pack and the cordless tool out of the reach of children.
5. Do not use the supplied battery charger to charge other cordless tools.
6. During periods of heavy use, the battery pack will become warm. Allow the battery pack to cool to room temperature before inserting it into the charger to recharge.
7. Do not overcharge batteries. Do not exceed the maximum charging times. These charging times only apply to discharged batteries. Frequent insertion of a charged or partially charged battery pack will result in overcharging and cell damage. Do not leave batteries in the charger for days on end.
8. Never use or charge batteries if you suspect that it has been more than 12 months since the last time they were charged. There is a high probability that the battery pack has already suffered dangerous damage (exhaustive discharge).
9. Charging batteries at a temperature below 41°F (5°C) will cause chemical damage to the cells and may cause a fire.
10. Do not use batteries that have been exposed to heat during the charging process, as the battery cells may have suffered dangerous damage.
11. Do not use batteries that have suffered curvature or deformation during the charging process or those that exhibit other atypical symptoms (gassing, hissing, cracking, etc.).
12. Never fully discharge the battery pack (maximum recommended depth of discharge is 80%). A complete discharge of the battery pack will lead to premature aging of the battery cells.

Protection from environmental influences

1. Wear suitable work clothes. Wear safety goggles.
2. Protect your cordless tool and the battery charger from moisture and rain. Moisture and rain can cause dangerous cell damage.
3. Do not use the cordless tool or the battery charger near vapors and flammable liquids.
4. Use the battery charger and cordless tools only in dry conditions and at an ambient temperature of 41°F – 105°F (5°C – 40.5°C).
5. Do not keep the battery charger in places where the temperature is liable to reach over 105°F (40.5°C).
In particular, do not leave the battery charger in a car that is parked in the sunshine.
6. Protect batteries from overheating. Overloads, overcharging and exposure to direct sunlight will result in overheating and cell damage. Never charge or work with batteries that have been overheated – replace them immediately, if possible.
7. Store the charger and your cordless tool only in dry locations with an ambient temperature of 41°F – 105°F (5°C – 40.5°C). Store your lithium-ion battery pack in a cool, dry place at a temperature of 77°F (25°C). Protect the battery pack, charger and cordless tool from humidity and direct sunlight. Only place fully charged batteries in storage (charged to at least 40%).
8. Prevent the lithium-ion battery pack from freezing.
Battery packs that were stored below 32°F (0°C) for more than 60 minutes must be discarded.
9. When handling batteries, be wary of electrostatic charge.
Electrostatic discharges can damage the electronic protection system and the battery cells. Avoid electrostatic charging and never touch the battery poles.

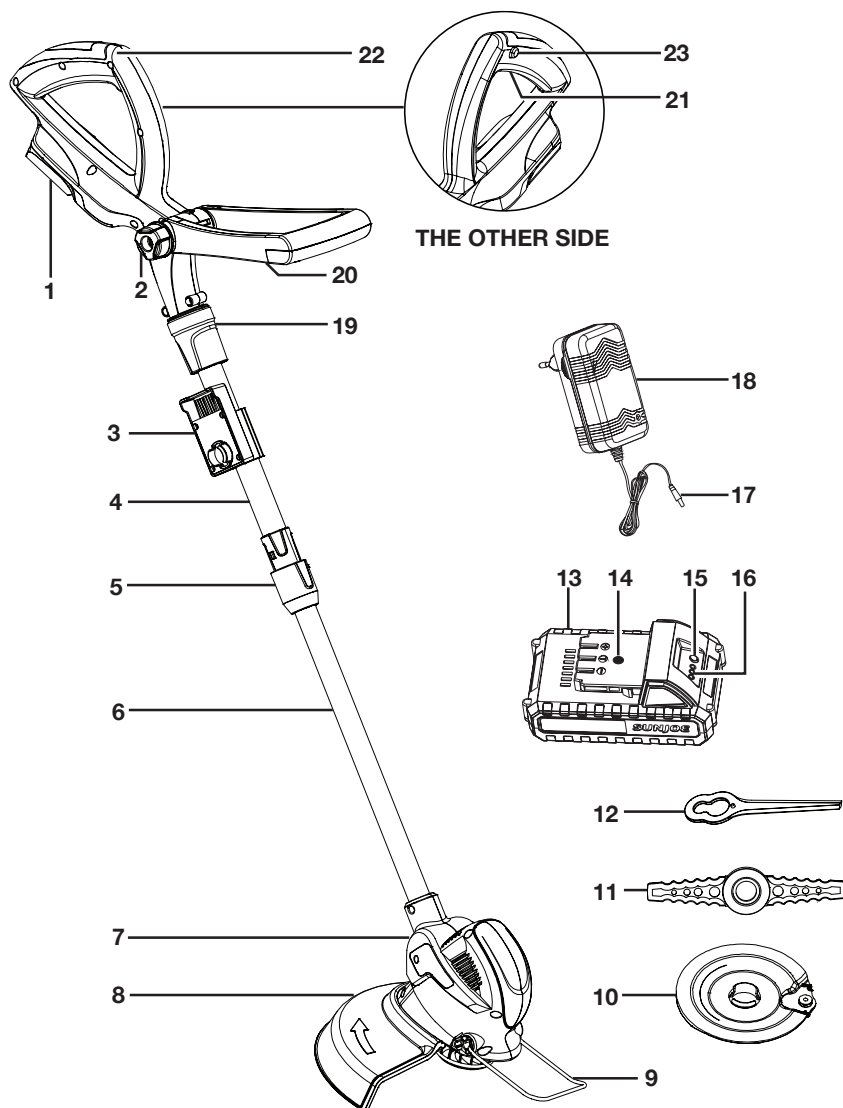
Safety Symbols

The following table 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.

Symbols	Descriptions	Symbols	Descriptions
	READ THE OPERATOR'S MANUAL(S) – Read, understand, and follow all instructions in the user manual(s) before attempting to assemble and operate.		Keep bystanders and children a safe distance away.
	SAFETY ALERT – Indicates a precaution, a warning, or a danger.		WARNING! Do not expose the unit to rain or wet conditions.
	WEAR EYE AND HEARING PROTECTION – For protection against injury, wear ear defenders and safety goggles.		Beware of flying objects and debris.
	Wear safety gloves during use to protect hands.		Wear non-slip footwear that will protect your feet and improve your footing on slippery surfaces.
	Indoor use only. Only use battery charger indoors.		Disconnect the battery pack before any repair or maintenance.
	DANGER! Beware of thrown objects to bystanders. Keep bystanders at least 15 m (50 ft) away from the machine.		

Know Your Cordless Grass Trimmer + Edger

Read the owner's manual and safety instructions carefully before operating the cordless grass trimmer + edger. Compare the illustration below to the cordless trimmer + edger in order to familiarize yourself with the location of the various controls and adjustments. Save this manual for future reference.



1. Battery compartment
2. Handle knob
3. Storage compartment
4. Telescoping pole
5. Telescopic shaft adjustment knob
6. Lower pole
7. Motor housing
8. Safety guard
9. Edger guide + flower guard
10. Trimmer plate
11. SharperBlade™ mini trimmer blade
12. Grass blade
13. iON+ 24V lithium-ion battery (24VBAT-LTE) featuring exclusive EcoSharp® technology
14. Charge socket
15. Push button for battery indicator
16. Battery indicators
17. Charger plug
18. iON+ 24V lithium-ion charger (24VCHRG-AC)
19. Twist-N-Groom™ locking collar
20. Auxiliary handle
21. On/Off switch
22. Handle
23. Safety button

Technical Data

Motor	400 W	No Load Speed	8500 RPM
Battery Voltage Max*	24V D.C.	Cutting Diameter	10 inch (25 cm)
Battery Capacity	2.0 Ah	Rotor	SharperBlade™ mini trimmer blade, Grass blade
Battery Runtime Max	12 min (trims up to 375 sq ft of grass)	Telescoping Pole	36.6 inch to 48.4 inch (93 cm to 123 cm)
Charger Input	100 – 240V AC, 50 – 60 Hz, 50 W	2 Tools In 1	Twist-N-Groom™ rotating head
Charger Output	25.2V D.C. --- 1400 mA	Net Weight	6.5 lbs (2.95 kg)
Charge Time Max	1 hr 20 min		

*Initial no-load voltage, when fully charged, peaks at 24-volts; nominal voltage under typical load is 21.6-volts.

Unpacking

Carton Contents

- Grass trimmer + edger
- Safety guard
- Auxiliary handle with knob and bolt
- SharperBlade™ mini trimmer blade
- Trimmer plate (pre-assembled)
- Grass blades (x10) (pre-assembled)
- Storage compartment (pre-assembled)
- Washer (pre-assembled)
- Screw knob (pre-assembled)
- iON+ 24V lithium-ion battery
- iON+ 24V lithium-ion battery charger
- Manuals with registration card

1. Carefully remove the cordless grass trimmer + edger and check to see that all of the above items are supplied.
2. Inspect the product carefully to make sure no breakage or damage occurred during shipping. If you find damaged or missing parts, DO NOT return the unit to the store. Please call the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).

NOTE: Do not discard the shipping carton and packaging material until you are ready to use the cordless grass trimmer + edger. The packaging is made of recyclable materials. Properly dispose of these materials in accordance with local regulations or save the packaging for long-term product storage.

IMPORTANT! The equipment and packaging material are not toys. Do not let children play with plastic bags, foils, or small parts. These items can be swallowed and pose a suffocation risk!

Battery Pack Operation






The equipment is powered by a lithium-ion battery. The battery pack is completely sealed and maintenance free.

⚠ WARNING! Before first use, the battery requires at least 1 hr 20 min charge time to be fully charged. When the battery is at low capacity, recharge for 1 hr 20 min again before resuming operation.

Battery Charge Level Indicator

The battery pack is equipped with a push button for checking the charge level. Simply press the push button to read off the battery charge level from the LEDs of the battery indicator:

- All 3 level monitoring LEDs are lit: Battery charge level is high.
- 2 level monitoring LEDs are lit: Battery charge level is decreasing. Stop work as soon as possible.
- 1 level monitoring LED is lit: Battery is flat. Stop work IMMEDIATELY and charge the battery. Otherwise the battery's service life will be greatly shortened.

	
Lights	Light Indicators
	Charge level button
	The battery is at 30% capacity and requires charging
	The battery is at 60% capacity and requires charging soon
	The battery is at full capacity

NOTE: If the charge level button does not appear to be working, insert the battery into the charger and charge as needed.

NOTE: Immediately after using the battery pack, the charge level button may display a lower charge than it will if checked a few minutes later. The battery cells "recover" some of their charge after resting.

Charger Operation

⚠ WARNING! Charge only iON+ 24V lithium-ion battery packs with its compatible iON+ 24V lithium-ion charger. Other types of batteries may cause personal injury and damage.

To reduce the risk of electric shock, do not allow water to flow into the charger's AC/DC plug.

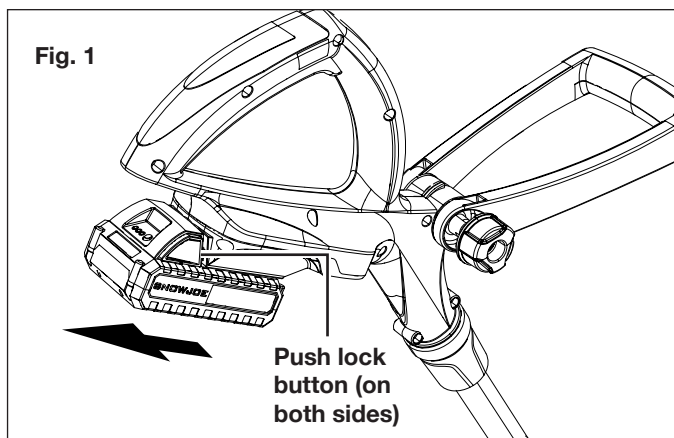
When to Charge the iON+ 24VBAT-LTE Lithium-Ion Battery

NOTE: The iON+ 24VBAT-LTE lithium-ion battery packs do not develop a "memory" when charged after only a partial discharge. Therefore, it is not necessary to run down the battery pack before placing it into the charger.

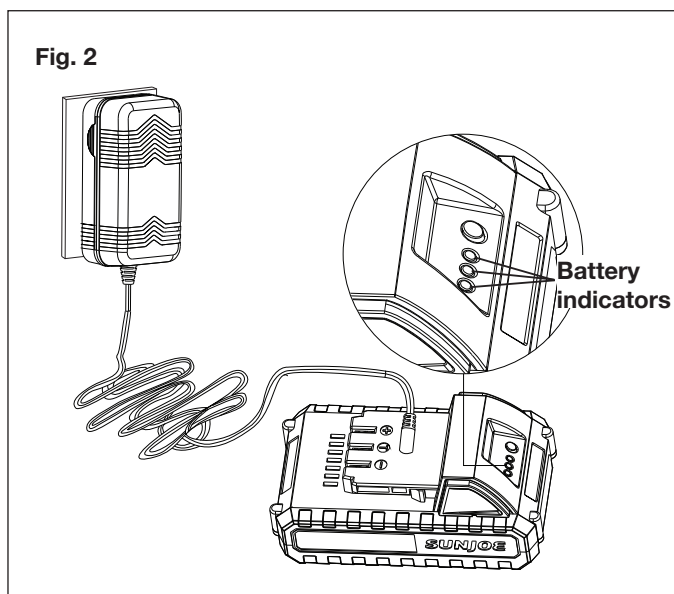
- Use the battery charge indicator lights to determine when to charge your iON+ 24VBAT-LTE lithium-ion battery pack.
- You can "top-off" your battery pack's charge before starting a big job or after a long day of use.

Charging the Battery

1. Press the push lock buttons on the battery to pull the battery pack out of the equipment (Fig. 1).



2. Check that the mains voltage is the same as that marked on the rating plate of the battery charger. Then, plug the charger adapter into an appropriate AC power outlet. Connect the charger plug into the charge socket of the battery to start charging (Fig. 2).



3. The battery will take approximately 1 hr 20 min to charge. The battery indicator LEDs will twinkle and illuminate one by one during the charging process. Unplug the charger immediately when the 3 LEDs are all illuminated.

⚠ CAUTION! FIRE HAZARD. When disconnecting the charger from the battery, be sure to unplug the charger from the outlet first, then disconnect the charger from the battery.

⚠ WARNING! This charger does not automatically turn off when the battery is fully charged. Please take care not to leave the battery plugged into the charger. Switch off or unplug the charger at the mains when charging is complete.

4. Timely recharging of the battery will help prolong the battery's life. You must recharge the battery pack when you notice a drop in the equipment's power.

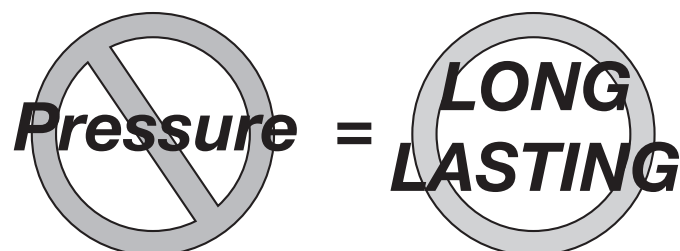
IMPORTANT! Never allow the battery pack to become fully discharged as this will cause irreversible damage to the battery.

Secrets to a Long Lasting SharperBlade™

CONGRATULATIONS! You are about to experience a faster, easier way of grooming your lawn's edge and managing weeds.

First, you will notice that there are obvious differences between your SharperBlade™ and string line, among which are size and shape. These differences require you to operate your trimmer + edger slightly different:

1. Use **MINIMAL** pressure when edging against concrete, brick, or stone. Since the SharperBlade™ is more rigid than string, you may feel the need to put pressure on the blade while edging. The more pressure you apply, the **FASTER** the blade will wear. In contrast, the less pressure you apply against hard surfaces, the **LONGER** the blade will last! The **SECRET** is to keep the blade just off the hard surface.
2. **NEVER FORCE** your SharperBlade™. High speed, along with an impact against any hard surface, may cause the blade to buckle near the center hub, and tear. The **SECRET** is to allow the SharperBlade™ to do **ALL** the work without extra effort.



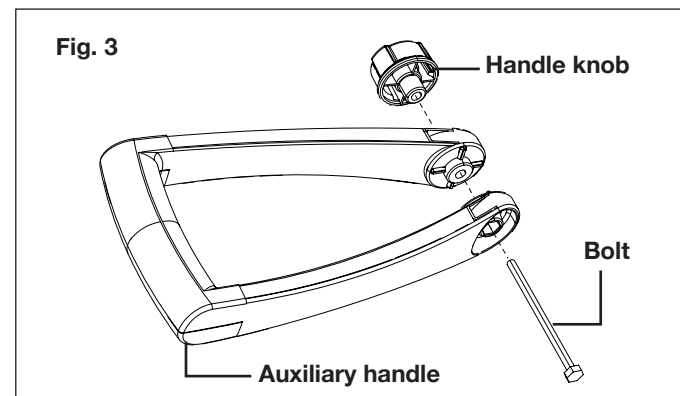
Assembly

Before using the cordless grass trimmer + edger, follow these instructions to assemble.

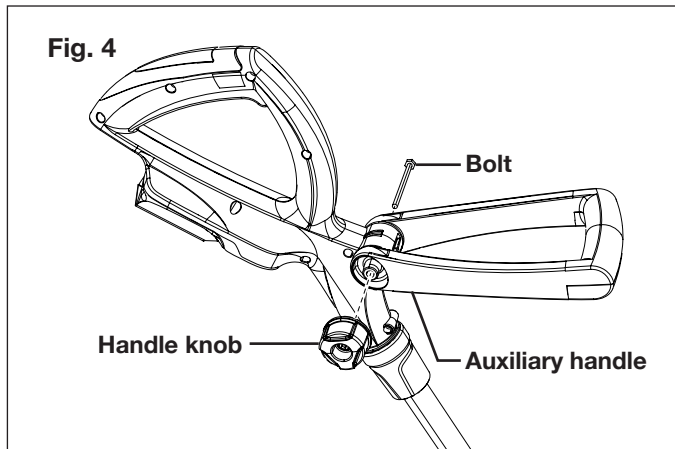
⚠ WARNING! Do not insert the battery until assembly is complete. Failure to comply could result in accidental starting and possible serious personal injury.

Fitting the Auxiliary Handle

1. Remove the handle knob and bolt that come pre-assembled on the auxiliary handle (Fig. 3).



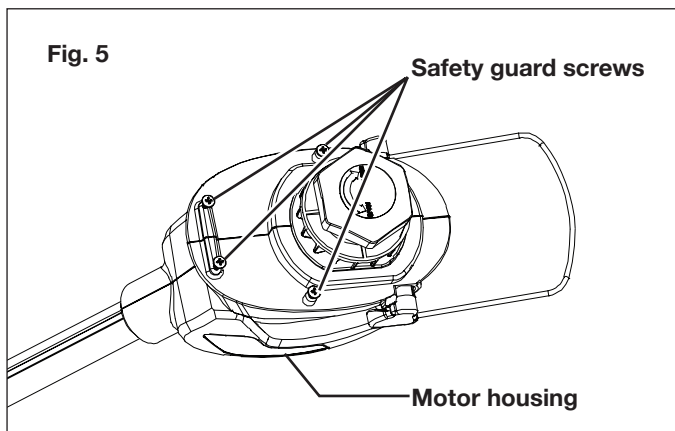
2. Fit the auxiliary handle into position and align the holes. Fix by the bolt and the handle knob. Tighten the handle knob to secure (Fig. 4).



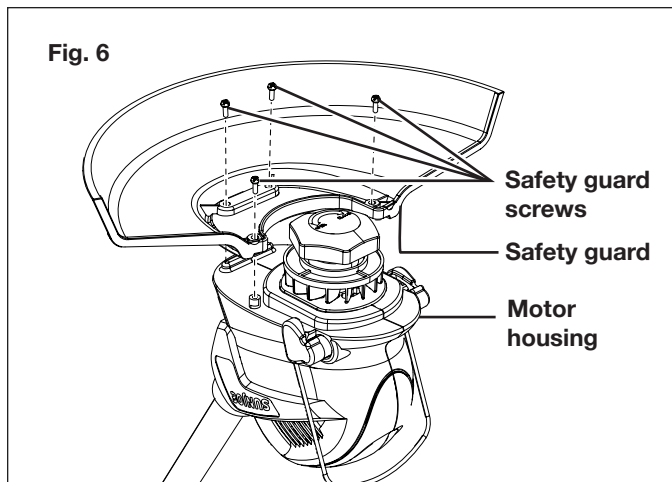
Fitting the Safety Guard

⚠ WARNING! The safety guard must be properly installed. The safety guard provides partial protection from the risk of thrown objects to the operator and other bystanders.

1. Use a screw driver to remove the 4 safety guard screws that pre-assembled on the motor housing (Fig. 5). Retain the screws.

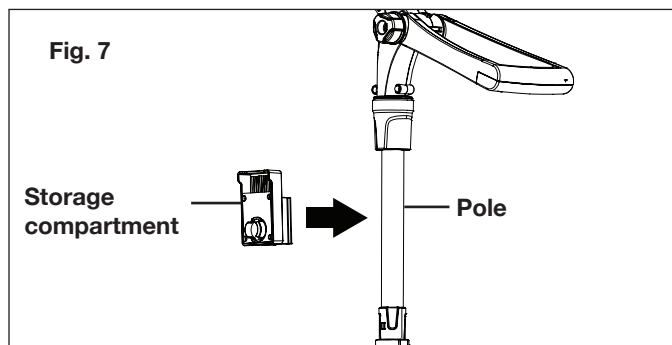


2. Place the safety guard over the motor housing as shown. Align the holes. Fix with the original 4 safety guard screws. Tighten to secure (Fig. 6).

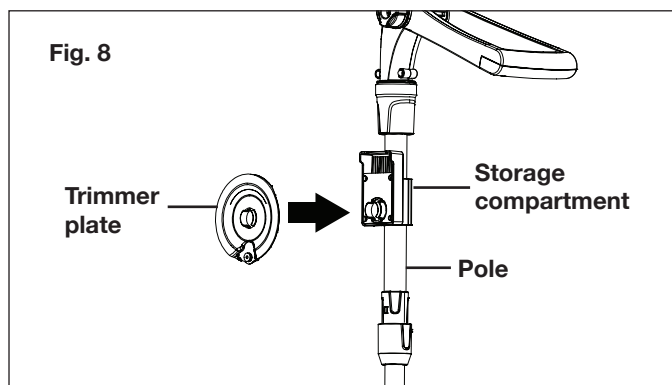


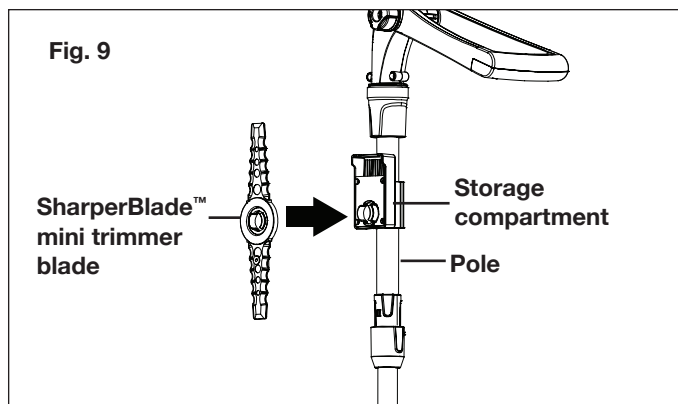
Installing the Storage Compartment

1. To store your grass blades easily, just simply snap the storage compartment onto the pole of the trimmer and edger. Be sure that the storage compartment is right side up to prevent blades from falling out (Fig. 7).



2. The trimmer plate (or SharperBlade™ mini trimmer blade) can be snapped directly onto the compartment for safe storage, when not in use. (Fig. 8-9).

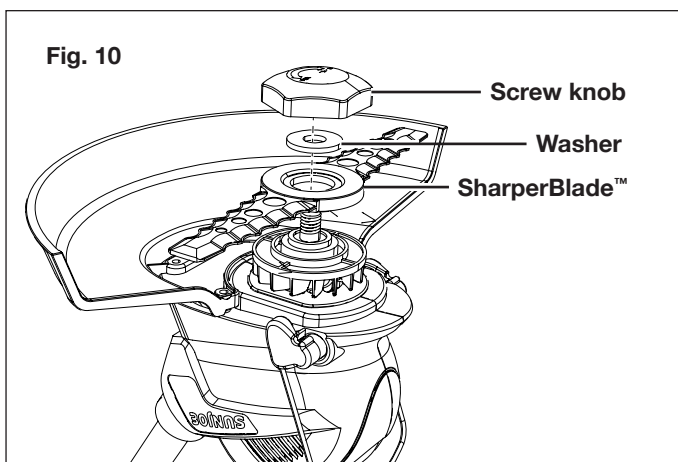




Installing + Changing SharperBlade™ mini trimmer blade

NOTE: When you first purchase your trimmer + edger, the blade will come separately with the machine. Refer only to these instructions for fitting the SharperBlade™ (Step 3). Should you need to replace the blade in the future, follow all the steps in this section.

1. Switch off the machine and remove the battery. Wait until the machine comes to a complete stop.
2. Loosen the screw knob by screwing it counterclockwise. Remove the screw knob to expose the worn blade and the washer (Fig. 10).

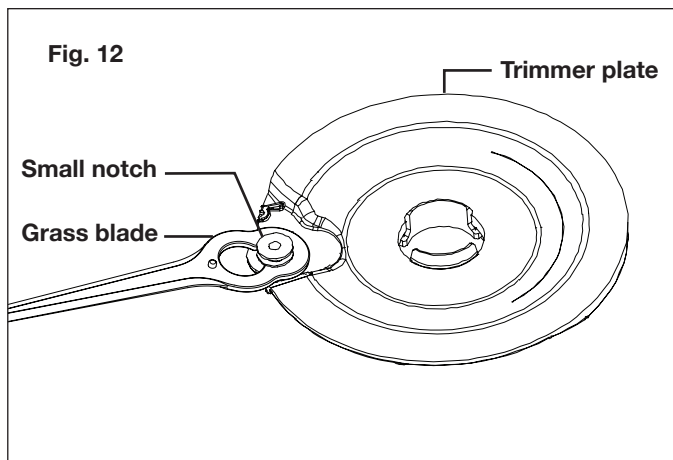
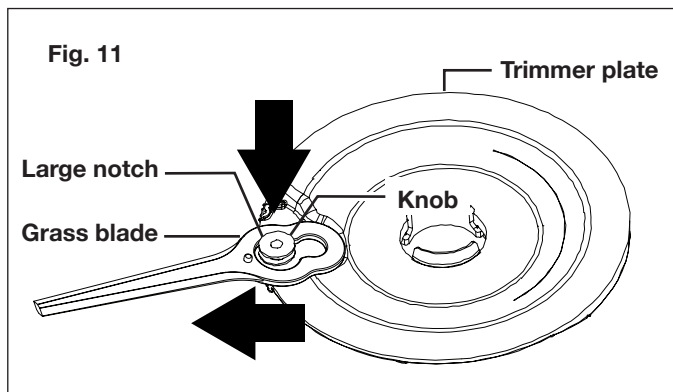


3. Assemble the new SharperBlade™ to the cordless grass trimmer + edger with the washer placed in the middle (Fig. 10). Fix the whole assembly with the screw knob. Twist clockwise to secure.

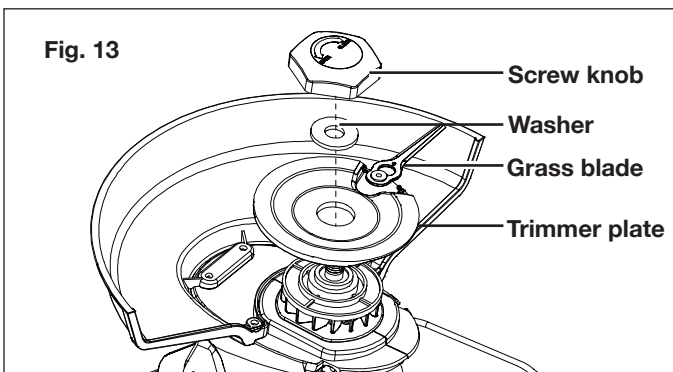
Installing + Changing Grass blade

NOTE: When you first purchase your trimmer + edger, the blade will come separately with the machine. Refer only to the instructions for fitting the grass blade (Step 2-3). Should you need to replace the blade in the future, follow all the steps in this section.

1. Switch off the machine and remove the battery. Wait until the machine comes to a complete stop.
2. Place the large notch of the grass blade over the knob on the trimmer plate (Fig. 11). Pull the grass blade until the knob snaps into the small notch (Fig. 12).



3. Loosen the screw knob by screwing it counterclockwise. Remove the screw knob to expose the blade and the washer (Fig. 13).



4. Assemble the new SharperBlade™ to the cordless grass trimmer + edger with the washer placed in the middle (Fig. 13). Fix the whole assembly with the screw knob. Twist clockwise to secure.

Operation

The cordless grass trimmer + edger is designed to cut grass and weeds under bushes, and on slopes and edges that cannot be reached with the lawn mower. The trimmer + edger must be used outdoors only, at an ambient temperature between 32°F (0°C) and 113°F (45°C).

⚠ WARNING! Remove stones, small sticks and other objects from the cutting area. The SharperBlade™ continues to rotate for a few seconds after the trimmer + edger is switched off. Let the motor come to a complete stop before switching the trimmer + edger back on. Do not rapidly switch the trimmer + edger off and on.

⚠ WARNING! Rocks or debris may ricochet or be thrown into eyes and face, cause blindness, or other serious injury. Never lean over the trimmer head and always wear eye protection.

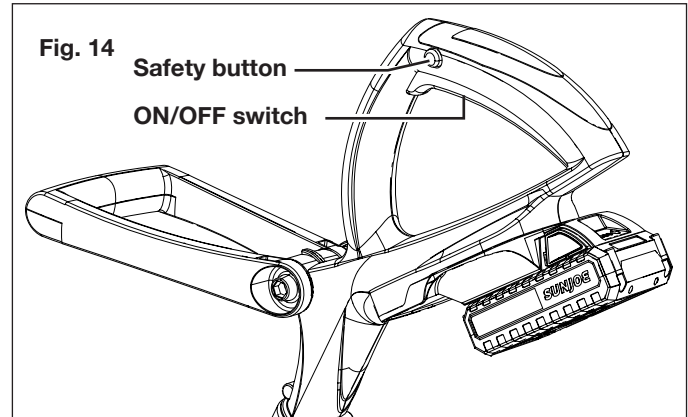
When operating the machine, check for the following:

- Wear eye protection and heavy clothing.
- Hold the rear handle with one hand and auxiliary handle with the other hand.
- Keep the trimmer + edger below your waist level.
- Cut only from your right to your left to ensure debris is thrown away from you. Without bending over, keep the trimmer + edger near and parallel to the ground.

⚠ WARNING! Use only Sun Joe® SharperBlade™ mini trimmer + edger replacement blade (Model SB10-BLD-3PK) or Grass Blade replacement (Model SB10-GBLD-20PK) with this unit. Other products will not work properly and will result in improper cutting head function or can cause serious injury. Do not use other materials such as steel blades, wire, string, rope, etc. Other materials can break off during cutting and become a dangerous missile that can cause serious injury.

ON/OFF Switch

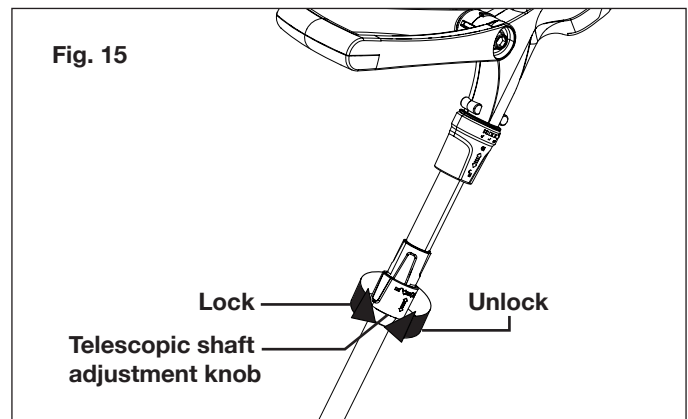
1. Insert the battery into the battery compartment on the back of the machine. Press until it clicks into position. Press and hold the safety button, then squeeze the ON/OFF switch and release the safety button (Fig. 14).



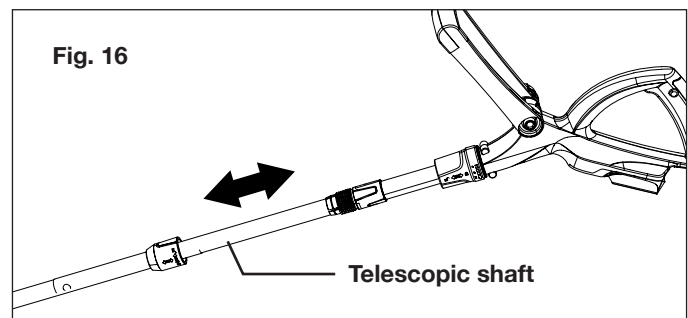
2. To switch OFF, release the ON/OFF switch (Fig. 11). Remove the battery.

Adjusting the Telescoping Shaft

1. Switch off the machine and remove the battery. Wait until the blade comes to a complete stop.
2. Rotate the telescopic shaft adjustment knob as shown to unlock (Fig. 15).



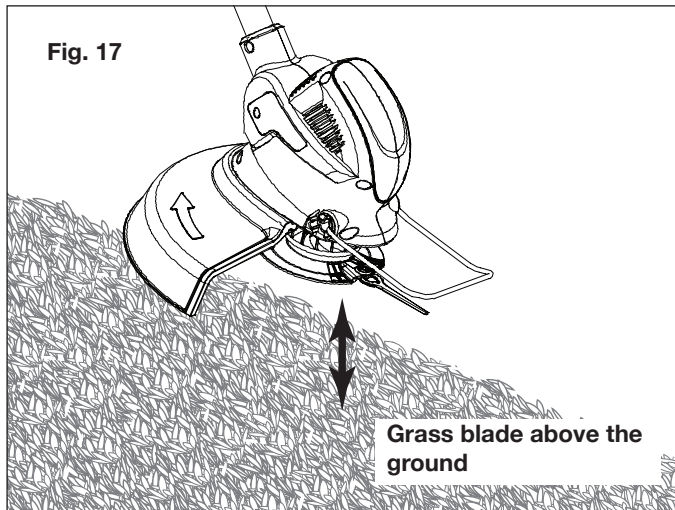
3. Pull and adjust the shaft to a comfortable height (Fig. 16).



4. Tighten the knob to lock the pole (Fig. 15).

Trimming

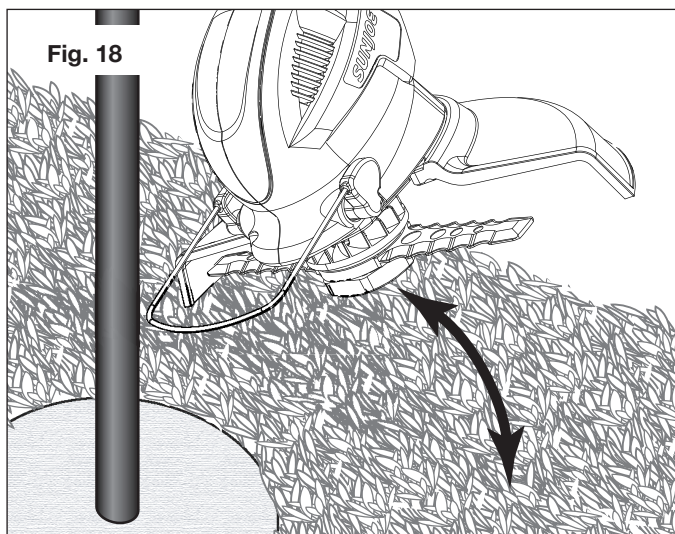
The grass blade is best used for quick trimming tasks and post-mowing touch-ups. Hold the bottom of the trimmer head above the ground and at an angle if desired. Allow only the blade to make contact. Do not force the blade into work area (Fig. 17).



Scalping

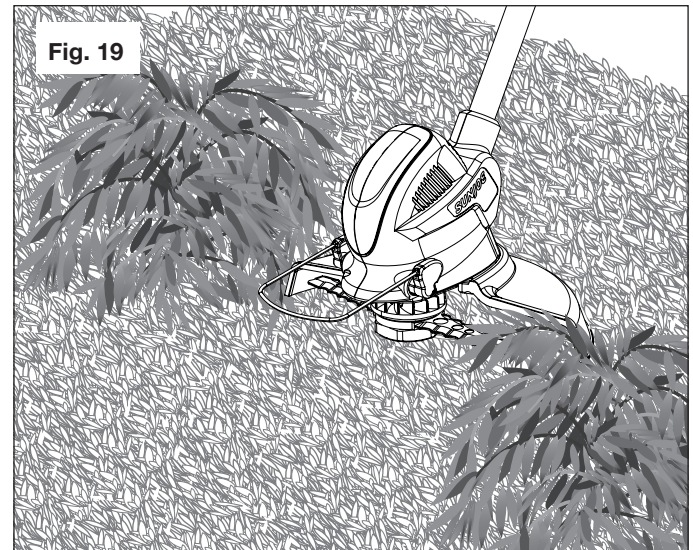
The SharperBlade™ can be used for scalping. The scalping technique removes unwanted vegetation down to the ground. Hold the bottom of the trimmer head about 3 in. (8 cm) above the ground and at an angle. Allow the tip of the SharperBlade™ to strike the ground around trees, posts, monuments, etc.

NOTE: This technique increases SharperBlade™ wear (Fig. 18).



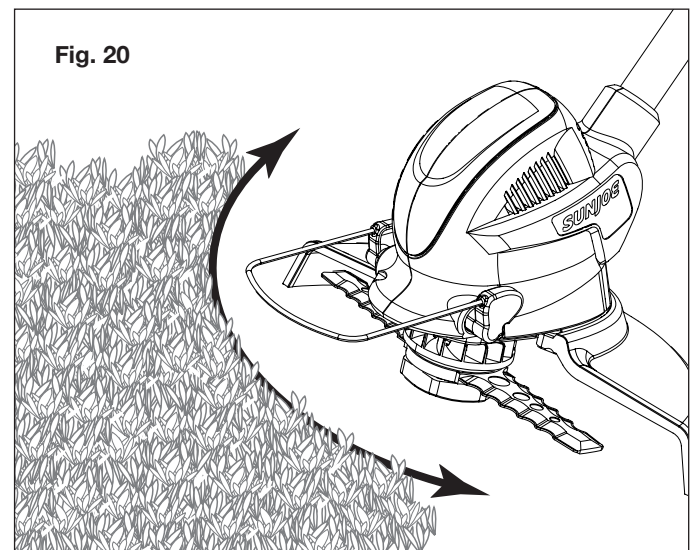
Mowing

Your trimmer is ideal for mowing in places conventional lawn mowers cannot reach. In the mowing position, keep the SharperBlade™ parallel to the ground. Avoid pressing the head into the ground as this can scalp the ground and damage the tool (Fig. 19).



Sweeping

Fanning action can be used for quick and easy clean up. Keep the SharperBlade™ parallel to and above the surfaces being swept and move the tool from side to side (Fig. 20).

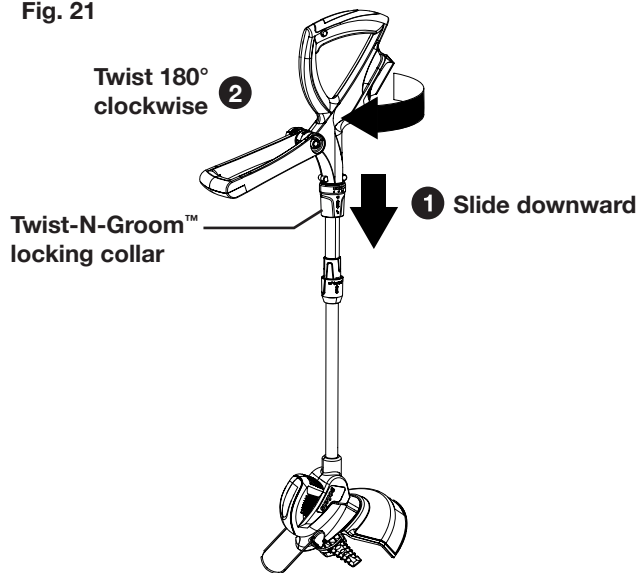


Edging

⚠ WARNING! Because this procedure is close to the On/Off switch, make sure to remove the battery before converting the machine.

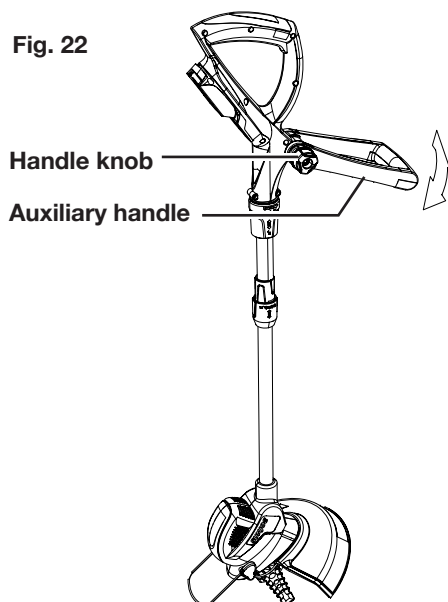
1. To convert your SharperBlade™ trimmer into an edger, slide the Twist-N-Groom™ locking collar downward and twist the handle clockwise to an angle of 180° while holding the pole. Release the collar and ensure it snaps into place (Fig. 21).

Fig. 21



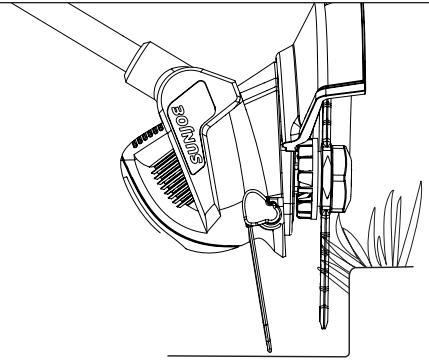
2. Loosen the handle knob and adjust the auxiliary handle by pivoting it to a comfortable position. Tighten the handle knob to secure (Fig. 22).

Fig. 22



3. Use the edge of the guard as a guide when cutting near fences and walls (Fig. 23).

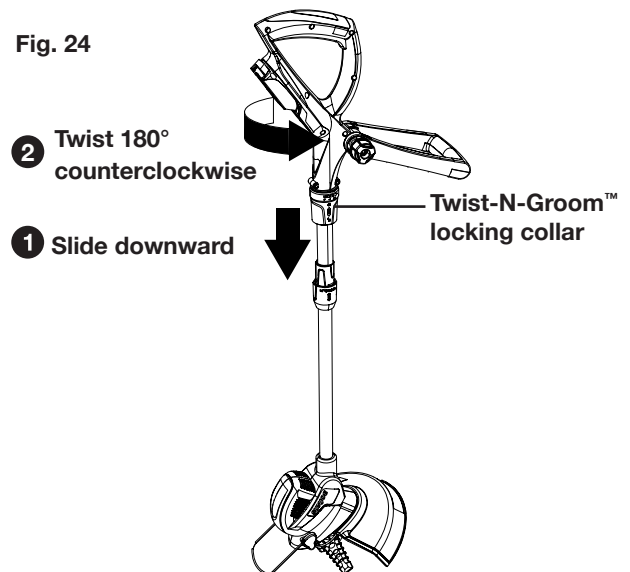
Fig. 23



⚠ WARNING! Do not trim near electrical wires.

4. To convert your edger back to a trimmer, hold the handle, slide the Twist-N-Groom™ locking collar downward and twist the handle counterclockwise to an angle of 180° while holding the pole. Release the collar and ensure it snaps into place (Fig. 24). Adjust the auxiliary handle as needed.

Fig. 24



Maintenance

⚠ WARNING! Before performing any maintenance task, turn off the machine and remove the battery.

⚠ WARNING! Always wear protective gloves during maintenance tasks. Do not carry out maintenance when the engine is running or hot.

- Regular cleaning and maintenance of you grass trimmer + edger will ensure efficiency and prolong the life of your machine.
- After each cutting operation, take apart and clean out the grass and soil from the whole trimmer + edger and guard.
- During operation, keep the air vents clean and free from grass.

- Only use a cloth soaked with hot water and a soft brush to clean the grass trimmer + edger.
- Do not spray or wet the appliance with water.
- Do not use detergents or solvents as these could ruin the trimmer. The plastic parts can easily be damaged by chemical agents.
- If the SharperBlade™ no longer cuts or breaks, have the blade replaced properly.

⚠CAUTION! The SharperBlade™ can inflict deep cuts. Handle with care; use with caution.

- For repairs which have not been explained in these instructions, contact an authorized service center at 1-866-SNOWJOE (1-866-766-9563).

IMPORTANT! Repairs, maintenance, and adjustments to this power tool should be performed only by a qualified repair person using only identical replacement parts. This will ensure that the safety of the product is maintained. Contact your authorized Snow Joe® + Sun Joe® dealer or call the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563) for assistance.

Proper Care for Battery + Charger

⚠WARNING! To reduce the risk of injury, always unplug the charger and remove the battery pack from the charger before performing any maintenance task. Never disassemble the battery pack or charger. Contact your Snow Joe® + Sun Joe® dealer or the Snow Joe® + Sun Joe® customer service center for ALL repairs.

1. To reduce the risk of injury and damage, never immerse your battery pack or charger in liquid or allow any liquid to flow inside these components.
2. Clean out dust and debris from charger vents and electrical contacts by blowing with compressed air.
3. Use only a soft, clean and dry brush to clean the battery pack and charger, keeping away from all electrical contacts. Certain cleaning agents and solvents are harmful to plastics and other insulated parts. Some of these include gasoline, turpentine, lacquer thinner, paint thinner, chlorinated cleaning solvents, ammonia and household detergents containing ammonia. Never use flammable or combustible solvents around battery packs, battery chargers or tools.
4. The iON+ 24VCHRG-AC lithium-ion battery charger has no serviceable parts.

Storage

Follow these recommendations for storing the grass trimmer + edger.

- Clean the grass trimmer + edger thoroughly before storing.
- Store the trimmer + edger in a stable and safe location out of the reach of children. Keep the trimmer + edger in a dry place where the temperature is not too hot or too cold.

- Do not store the grass trimmer + edger resting against the floor. Hang it by the upper handgrip so that the guard does not touch anything. If the guard rests against a surface, its shape and dimensions could be permanently altered, and could render the machine unsafe to use.

Battery + Charger Off-Season Storage

1. Do not expose your battery pack or charger to water, rain or allow them to get wet. This could permanently damage the charger and the battery pack. Do not use oil or solvents to clean or lubricate your battery pack as the plastic casing can become brittle and crack, causing a serious risk of injury.
2. Store the battery pack and charger at room temperature away from moisture. Do not store in damp locations where corrosion of terminals may occur. As with other battery pack types, permanent capacity loss can result if the pack is stored for long periods of time at high temperatures (over 120°F/49°C).
3. iON+ 24VBAT-LTE lithium-ion battery packs maintain their charge during storage longer than other battery pack types. As a general practice, it is best to unplug the battery charger and remove the battery pack when they are not in use. Recharge the battery pack every 6 months to 50% capacity (2 lights on) during off-season storage to maintain optimal battery performance.

Battery Caution + Disposal

Always dispose of your battery pack according to federal, state, and local regulations. Contact a recycling agency in your area for recycling locations.

⚠CAUTION! Even discharged battery packs contain some energy. Before disposing, use electrical tape to cover the terminals to prevent the battery pack from shorting, which could cause a fire or explosion.

⚠WARNING! To reduce the risk of injury or explosion, never burn or incinerate a battery pack even if it is damaged, dead or completely discharged. When burned, toxic fumes and materials are emitted into the surrounding atmosphere.

1. Batteries vary according to device. Consult your manual for specific information.
2. Install only new batteries of the same type in your product (where applicable).
3. Failure to insert batteries in the correct polarity, as indicated in the battery compartment or manual, may shorten the life of the batteries or cause batteries to leak.
4. Do not mix old and new batteries.
5. Do not mix Alkaline, Standard (Carbon-Zinc) or Rechargeable (Nickel Cadmium, Nickel Metal Hydride, or Lithium-Ion) batteries.
6. Do not dispose of batteries in fire.
7. Batteries should be recycled or disposed of as per state and local guidelines.

Service + Support

If your Sun Joe® vv cordless grass trimmer + edger requires service or maintenance, please call the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).

Model + Serial Numbers

When contacting the company, reordering parts, or arranging service from an authorized dealer, you will need to provide the model and serial numbers, which can be found on the decal located on the housing of the unit. Copy these numbers into the space provided below.

Record the following numbers from the housing or handle of your new product:																			
															Model #:				
2	4	V	-	S	B	1	0	-	L	T	E	-	R	M					
															Serial #:				

24VCHRG-AC

Federal Communications Commission (FCC)

⚠ WARNING! Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Class B device:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.


However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Troubleshooting

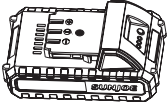
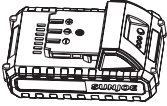
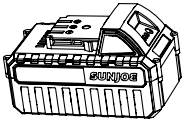
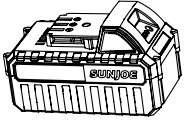

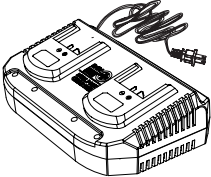
Most difficulties are easy to fix. Consult the troubleshooting table for common problems and their solutions. If you continue to experience problems or need repairs beyond these minor adjustments, please call 1-866-SNOWJOE (1-866-766-9563) for assistance.

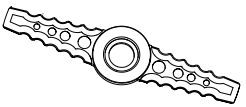
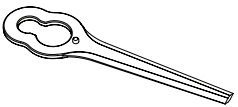

 **WARNING!** Always remove the battery before performing any adjustments, maintenance or repairs to your cordless grass trimmer + edger.

Problems	Possible Solution
Grass trimmer + edger does not start	<ul style="list-style-type: none">• Make sure the battery has enough power and is inserted properly.• Make sure the battery is not overheated.• If the trimmer + edger does not start after completing the checks, contact your authorized Snow Joe® + Sun Joe® dealer or call Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).
Grass trimmer + edger vibrates	<ul style="list-style-type: none">• Remove the SharperBlade™ and clean the slots, carefully remove any grass and weeds and so forth.• If vibration persists after reassembly, replace the SharperBlade™ with a new one.• In the event of the problem not disappearing, Contact your authorized Snow Joe® + Sun Joe® dealer or call Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).

Optional Accessories

⚠ WARNING! ALWAYS use only authorized Snow Joe® + Sun Joe® replacement parts and accessories. NEVER use replacement parts or accessories that are not intended for use with this cordless trimmer + edger. Contact Snow Joe® + Sun Joe® if you are unsure whether it is safe to use a particular replacement part or accessory with your cordless trimmer + edger. The use of any other attachment or accessory can be dangerous and could cause injury or mechanical damage.

Accessories	Item	Model
1 	iON+ 24V 2.0 Ah Lithium-Ion Battery <i>Charge times vary by charger. See website for details</i> <i>Battery Runtime Max: 12 min (trims up to 375 sq ft of grass)</i>	24VBAT-LTE
2 	iON+ 24V 2.5 Ah Lithium-Ion Battery <i>Charge times vary by charger. See website for details</i> <i>Battery Runtime Max: 15 min (trims up to 485 sq ft of grass)</i>	24VBAT-LT
3 	iON+ 24V 4.0 Ah Lithium-Ion Battery <i>Charge times vary by charger. See website for details</i> <i>Battery Runtime Max: 25 min (trims up to 750 sq ft of grass)</i>	24VBAT
4 	iON+ 24V 5.0 Ah Lithium-Ion Battery <i>Charge times vary by charger. See website for details</i> <i>Battery Runtime Max: 30 min (trims up to 915 sq ft of grass)</i>	24VBAT-XR
5 	iON+ 24V Lithium-Ion Battery Quick Charger	24VCHRG-QC
6 	iON+ 24V Lithium-Ion Battery Dual Port Charger	24VCHRG-DPC

Accessories	Item	Model
7 	SharperBlade™ mini replacement blades (3 pack)	SB10-BLD-3PK
8 	Grass Blade replacement blades (20 pack)	SB10-GBLD-20PK
9 	Snow Joe® + Sun Joe® universal wall bracket	SJWB (Fits most Snow Joe® + Sun Joe® tools)

NOTE: Accessories are subject to change without any obligation on the part of Snow Joe® + Sun Joe® to provide notice of such changes. Accessories can be ordered online at sunjoe.com or via phone by contacting the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).



SNOW JOE® + SUN JOE® REFURBISHED GOODS WARRANTY

GENERAL CONDITIONS:

Snow Joe® + Sun Joe® operating under Snow Joe®, LLC warrants this refurbished product to the original purchaser for 90 days against defects in material or workmanship when used for normal residential purposes. If a replacement part or product is needed, it will be sent free of charge to the original purchaser except as noted below.

The duration of this warranty applies only if the product is put to personal use around the household. It is the owner's responsibility to correctly perform all maintenance and minor adjustments explained in the owner's manual.

HOW TO OBTAIN YOUR REPLACEMENT PART OR PRODUCT:

To obtain a replacement part or product, please visit snowjoe.com/help or email us at help@snowjoe.com for instructions. Please be sure to register your unit beforehand to speed up this process. Certain products may require a serial number, typically found on the decal affixed to the housing or guard of your product. All products require a valid proof of purchase.

EXCLUSIONS:

- Wearing parts like belts, augers, chains and tines are not covered under this warranty. Wearing parts can be purchased at snowjoe.com or by calling 1-866-SNOWJOE (1-866-766-9563).
- Batteries are covered in full for 90-days from the date of purchase.

Snow Joe® + Sun Joe® may from time to time change the design of its products. Nothing contained in this warranty shall be construed as obligating Snow Joe® + Sun Joe® to incorporate such design changes into previously manufactured products, nor shall such changes be construed as an admission that previous designs were defective.

This warranty is intended to cover product defects only. Snow Joe®, LLC is not liable for indirect, incidental or consequential damages in connection with the use or misuse of the Snow Joe® + Sun Joe® products covered by this warranty. This warranty does not cover any cost or expense incurred by the purchaser in providing substitute equipment or service during reasonable periods of malfunction or non-use of this product while waiting for a replacement part or unit under this warranty. Some states do not allow exclusions of incidental or consequential damages so the above exclusions may not apply in all states. This warranty may give you specific legal rights in your state.

HOW TO REACH US:

We're here to help Monday through Friday from 9AM to 7PM EST and Saturday and Sunday 9AM to 4PM. You can reach us at 1-866-SNOWJOE (1 866-766-9563), online at snowjoe.com, via email at help@snowjoe.com or tweet us @snowjoe.

EXPORTS:

Customers who have purchased Snow Joe® + Sun Joe® products exported from the United States and Canada should contact their Snow Joe® + Sun Joe® distributor (dealer) to obtain information applicable to your country, province or state. If for any reason, you are not satisfied with the distributor's service, or if you have difficulty obtaining warranty information, contact your Snow Joe® + Sun Joe® seller. If in the event your efforts are unsatisfactory, please reach out to us directly.

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