



OPERATOR'S MANUAL

A Division of Snow Joe®, LLC

CORDLESS 3-IN-1 BLOWER/VACUUM/MULCHER 40-VOLT

Model iONBV-XR

Form No. SJ-iONBV-XR-880E-MR1

IMPORTANT! Safety Instructions

All Operators Must Read These Instructions Before Use

Any electrical appliance can be dangerous if used incorrectly. Some of the safety precautions given in this manual apply generally to many appliances. Other warnings are specific to the use of this cordless blower.

Always follow these safety guidelines. Failure to do so may result in serious bodily injury or death.

⚠ DANGER! This indicates a hazardous situation, which, if not followed, will result in serious injury or death.

⚠ WARNING! This indicates a hazardous situation, which, if not avoided, could result in serious injury or death.

⚠ CAUTION! This indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury.

General Safety

FOR HOUSEHOLD USE ONLY

Before using, be sure that everyone using this tool reads and understands all safety instructions and other information contained in this manual. Save this manual and review it frequently prior to using this tool and when instructing others on the proper operating procedures.

⚠ CAUTION! Wear appropriate hearing protection during use. After long periods of extended use, the noise generated from this appliance may cause hearing loss if your ears are not properly protected.

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

1. **Keep work area clean and well-lit** – Cluttered, dark areas invite accidents.
2. **Replacement parts** – When servicing this unit, use only identical replacement parts. Replace or repair damaged cords immediately.

3. **Keep children, bystanders, and pets away** – All spectators, including pets, should be kept a safe distance away from the work area.
4. **Dress properly** – Do not wear loose clothing or jewelry as such articles can get caught in moving parts. Wear a protective covering to contain long hair. Wearing rubber gloves and substantial non-slip footwear is recommended when working outdoors.
5. **Avoid accidental starting** – Do not carry the blower with your finger on the switch.

⚠ DANGER! Do not manually place objects into the vacuum tube while operating the unit as this can seriously damage the unit and/or harm the operator. Keep both hands on the handles while the power is on.

DO NOT ATTEMPT to remove material or hold material to be vacuumed when the blower vac is on. Make sure the blower vac is off when clearing jammed material from the vacuum tube. Do not pick up the blower vac by the tube or attempt to carry the unit by the tube.

⚠ CAUTION! Moving parts will continue to run for several seconds after turning off the machine.

6. **Moving parts** – Keep hands and feet away from moving parts. Keep guards in place and in proper working order.
7. **Do not force the tool** – It will perform better with less likelihood of personal or mechanical injury if it is used at the rate for which it is designed.
8. **Wear personal protective equipment** – When using this tool, wear safety glasses with side shields or goggles to provide necessary eye protection. Wear ear defenders to prevent hearing damage. Use a face or dust mask if the work environment is dusty.
9. **Disconnect the tool** – Turn off the power switch and remove the battery when it is not in use, before servicing, when transporting or when changing the tube or other accessories.
10. **Store idle tool indoors** – When not in use, the blower should be stored indoors in a dry and high or locked-up place out of the reach of children.
11. **Maintain the blower with care** – Keep the blower tube and the fan area clear and clean for optimal performance and to reduce the risk of injury. Keep the handles dry, clean, and free from oil and grease. Follow the additional recommendations described in the maintenance section of this manual.

- 12. Use the right tool** – Do not use the tool for any job except that for which it is intended.
- 13. Avoid dangerous environments** – Do not use the blower vac in rain, damp, or wet locations. Do not operate the blower vac in gaseous or explosive atmospheres or use the blower vac to pick up flammable or combustible liquids. Motors in these tools normally spark, and the sparks might ignite fumes.
- 14. Stay alert** – Watch what you are doing. Use common sense. Do not operate the blower when you are tired or under the influence of drugs, alcohol, or other medication.

Additional Safety Instructions

- Use extra care when cleaning on stairs.
- Keep firm footing and maintain good balance at all times. Do not overreach. Overreaching can result in loss of balance.
- Turn off all controls before removing battery from the tool.
- Do not use the tool if the power switch does not turn it ON or OFF. Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
- Do not use without the collection bag and/or filters in place.
- Carefully inspect your appliance prior to use and follow all label and marking instructions.
- Keep the end of the blower tube away from your face and body.
- Always turn off the power switch and remove the battery before connecting or disconnecting the vacuum tube or accessories.
- Do not use for wet material.
- Keep all parts of your body away from any moving parts and all hot surfaces of the unit.
- Do not put any object into the tool's openings. Do not use the tool with any opening blocked; keep openings free of dust, lint, hair, or any other object that may reduce air flow.
- Check the work area before each use. Remove all objects such as rocks, broken glass, nails, wire, or string, which can be thrown or become entangled in the machine.
- Service on the product must be performed by qualified repair personnel only. Service or maintenance performed by unqualified personnel could result in injury to the user or damage to the product.
- This blower vac is intended for residential use only. Commercial use of this product is prohibited and will void the manufacturer's warranty.
- Never run the unit without the proper equipment attached. Always ensure the blower tubes are properly installed.

Specific Safety Rules for Blower Vacs


- This tool has been designed for blowing/collecting as well as vacuuming/shredding dry leaves and other dry garden rubbish, such as grass and twigs.
- When operating the unit as a blower, never point the blower nozzle in the direction of people or pets or in the direction of windows. Use extra caution when blowing debris near solid objects, such as trees, automobiles, and walls.
- Be sure to secure the unit when transporting it.
- Never douse or squirt the unit with water or any other liquid. Clean the unit after each use as described in the cleaning and storage section.


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 blower vac and cause it to malfunction, which can lead to serious personal injury.

 **CAUTION!** To reduce the risk of injury, charge the EcoSharp® PRO iBAT40XR lithium-ion battery pack only in its designated lithium-ion charger, the iCHRG40. 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 -4°F (-20°C) to 113°F (45°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 iCHRG40 is rated for 120 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, please 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).
- **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 104°F (40°C), such as in direct sunlight or inside a vehicle or metal building during the summer.

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 50-104°F (10-40°C).
5. Do not keep the battery charger in places where the temperature is liable to reach over 104°F (40°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 50-104°F (10-40°C). Store your lithium-ion battery pack in a cool, dry place at a temperature of 50-68°F (10-20°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.

Information about the battery

1. The battery pack supplied with your cordless blower vac 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 59°F (15°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 cordless blower vac, 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 long-term 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.
4. Keep the battery charger, battery pack(s) 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 50°F (10°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.

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.

Safety Symbols

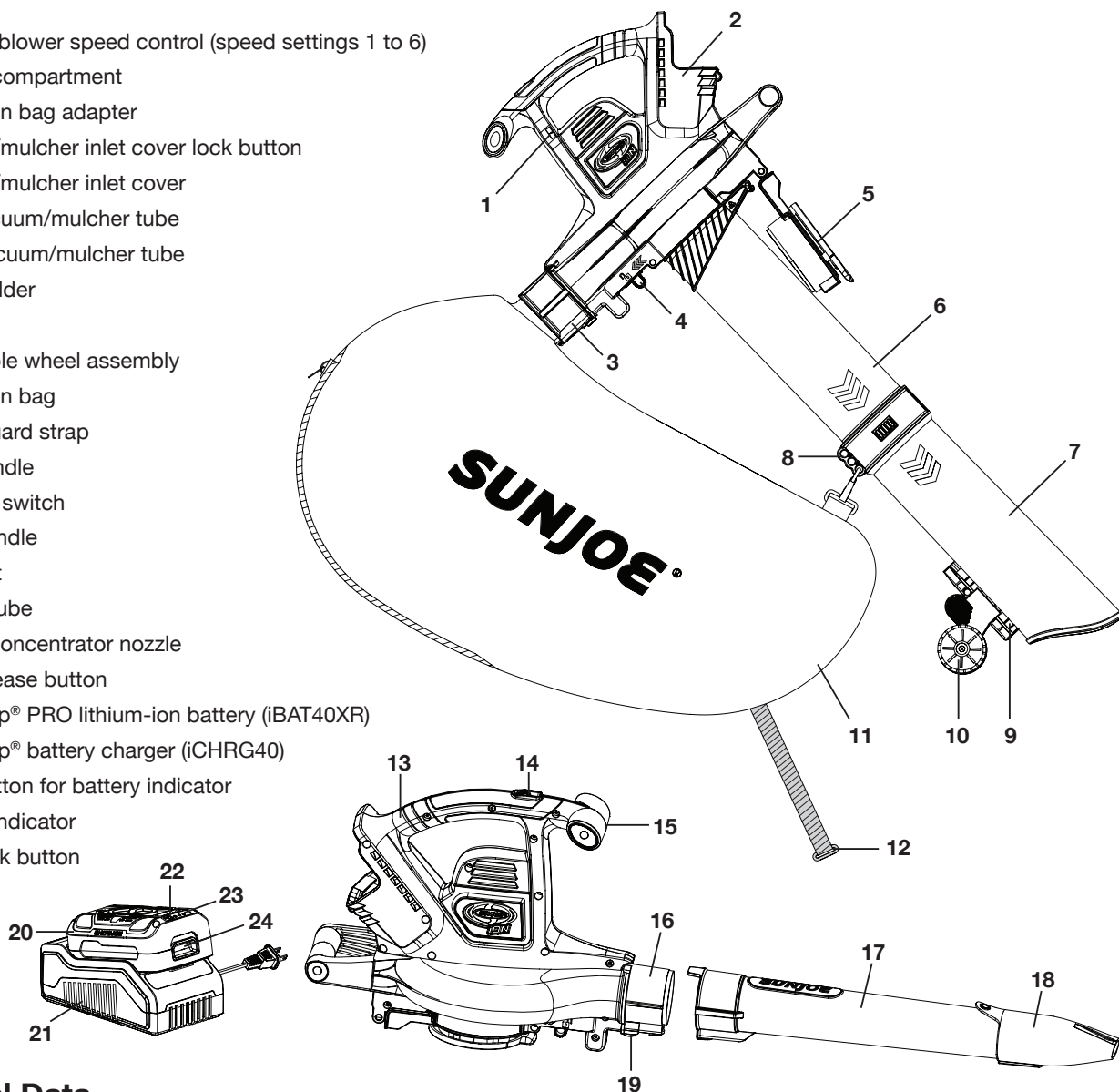
The following table depicts and describes safety symbols that may appear on this product. Read, understand and follow all instructions on the machine before attempting to assemble and operate.

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.
	Beware of flying objects and debris.		Wear hearing protection. Wear eye protection. Wear breathing protection.
	DANGER! Rotating blades pose a serious risk of injury. Keep hands and feet away from openings while the machine is running.		The rotating part will continuously run for several seconds after you turn off the machine.
	Indoor use only. Only use battery charger indoors.		

Know Your Cordless Blower Vac

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

1. Variable blower speed control (speed settings 1 to 6)
2. Battery compartment
3. Collection bag adapter
4. Vacuum/mulcher inlet cover lock button
5. Vacuum/mulcher inlet cover
6. Rear vacuum/mulcher tube
7. Front vacuum/mulcher tube
8. Strap holder
9. Lead rail
10. Adjustable wheel assembly
11. Collection bag
12. Static guard strap
13. Main handle
14. ON/OFF switch
15. Front handle
16. Air outlet
17. Blower tube
18. Blower concentrator nozzle
19. Tube release button
20. EcoSharp® PRO lithium-ion battery (iBAT40XR)
21. EcoSharp® battery charger (iCHRG40)
22. Push button for battery indicator
23. Battery indicator
24. Push lock button



Technical Data

Motor	Brushless	Variable Speed Settings	6
Battery Voltage*	40 V D.C.	Mulch Reduction Ratio	17:1
Battery Capacity	5.0 Ah	Bag Capacity	16 gal (60.5 l)
Charging Time	3 – 3.5 hours (for full charge)	Blower Battery Run Time (with concentrator nozzle)	High speed: 19 mins Low speed: 56 mins
No Load Speed	10,000-15,000 ± 10% rpm	Vacuum Battery Run Time	High speed: 16 mins Low speed: 48 mins
Impeller	Plastic	Weight with Battery	Blower: 8.7 lbs (3.95 kg) Vacuum/Mulcher: 11.6 lbs (5.3 kg)
Mode Conversion	Blower/mulching vacuum		
Air Flow Speed (max.)	200 mph		
Blower Capacity (max.)	300 cfm		
Vacuum Capacity (max.)	350 cfm		

*Initial no-load voltage, when fully charged, peaks at 40 volts; nominal voltage under typical load is 36 volts.

Unpacking

Carton Contents

- Cordless blower vac
- Blower tube
- Blower concentrator nozzle
- Front vacuum/mulcher tube
- Rear vacuum/mulcher tube
- Collection bag
- Wheel assembly
- 40 V 5.0 Ah EcoSharp® PRO battery
- EcoSharp® battery charger
- Manual with registration card

1. Carefully remove the cordless blower vac 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 blower vac. The packaging is made of recyclable materials. Properly dispose of these materials in accordance with local regulations.

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!

Assembly

⚠ WARNING! To avoid serious personal injury, read and understand all safety instructions provided.

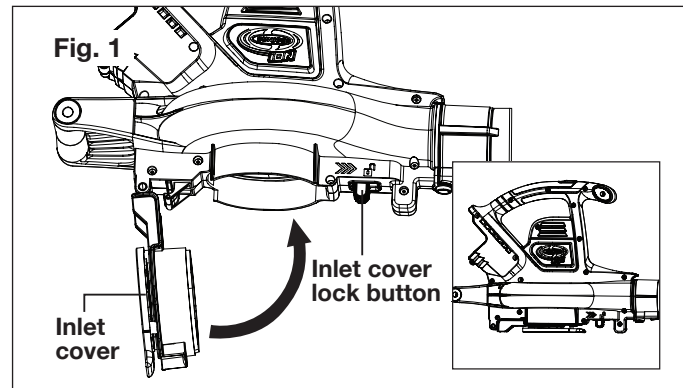
⚠ CAUTION! Do not install the battery before fully assembling the unit.

⚠ WARNING! To prevent serious personal injury, make sure the switch is in the OFF (0) position, the battery is removed and the impeller has come to a complete stop before attaching or removing tubes.

For safety and transportation reasons, the lithium-ion battery is packed separately from the machine and is partially charged. Charge the battery before using the tool following the instructions in the “Charging the battery” section.

Attaching the Blower Tube

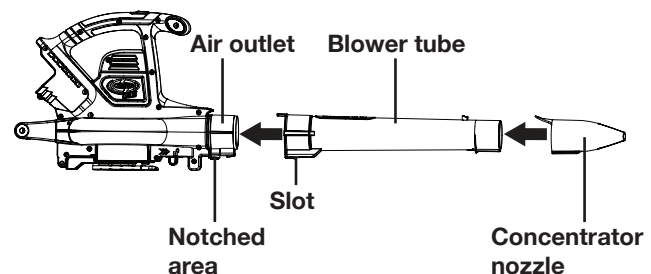
1. Before using the blower function, securely fasten the inlet cover over the air inlet until the lock button snaps into the locked position (Fig. 1).



2. Slide the blower tube forward until the notched area on the blower housing clicks into the slot on the blower tube (Fig. 2).
3. Insert the concentrator nozzle onto the end of the blower tube until it locks into position (Fig. 2).

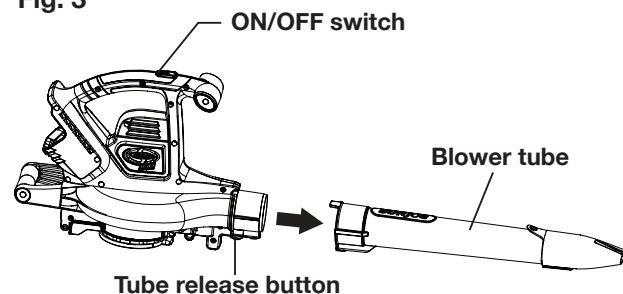
NOTE: The concentrator nozzle is used to increase air flow in tight areas (i.e. around flower beds, under decks, etc.).

Fig. 2



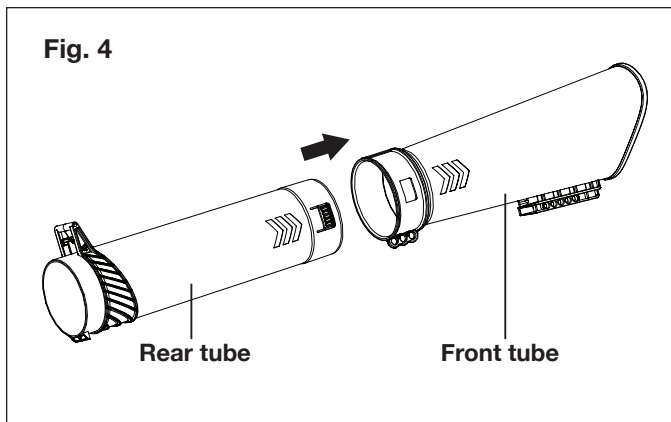
4. To remove the blower tube, turn the ON/OFF power switch to the OFF (0) position and remove the battery.
5. Press the tube release button and remove the blower tube (Fig. 3).

Fig. 3

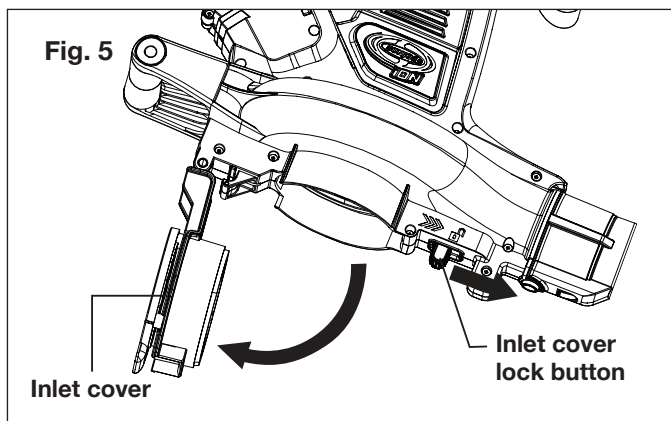


Assemble as a Vacuum/Mulcher

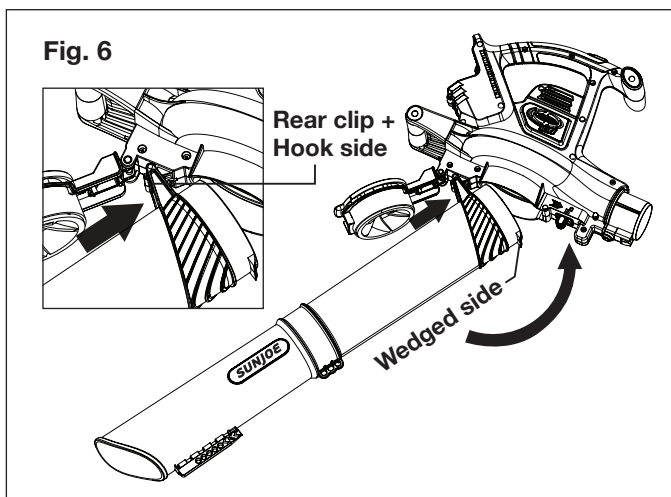
1. Slide the front and rear vacuum/mulcher tubes together until the lock button engages (Fig. 4).



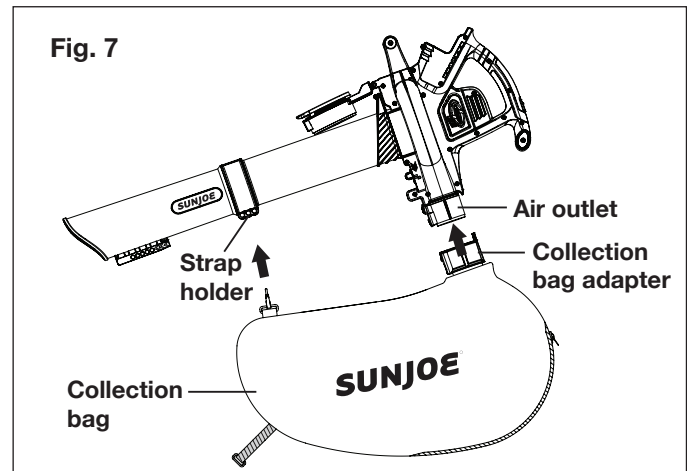
2. Slide the inlet cover lock button forward to disengage the inlet cover. Hold the cover open (Fig. 5).



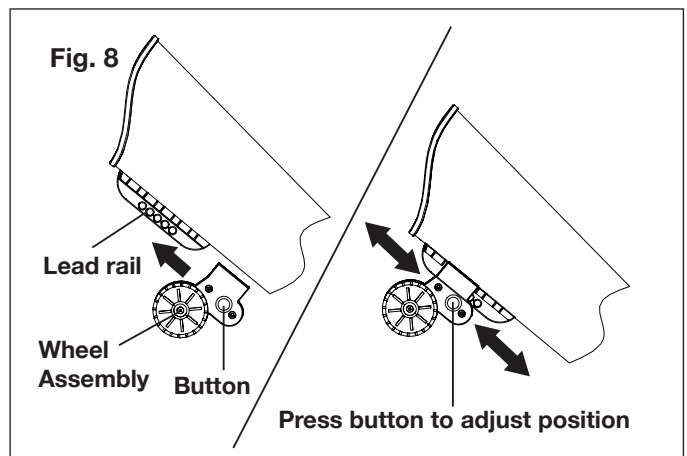
3. With the blower tube removed from the blower housing, insert the "hooked" side end of the vacuum/mulcher tube into the rear clip on the unit. Securely fasten the vacuum/mulcher tube by pushing the "wedged" side end of the vacuum/mulcher tube up until the lock button snaps into the locked position (Fig. 6).



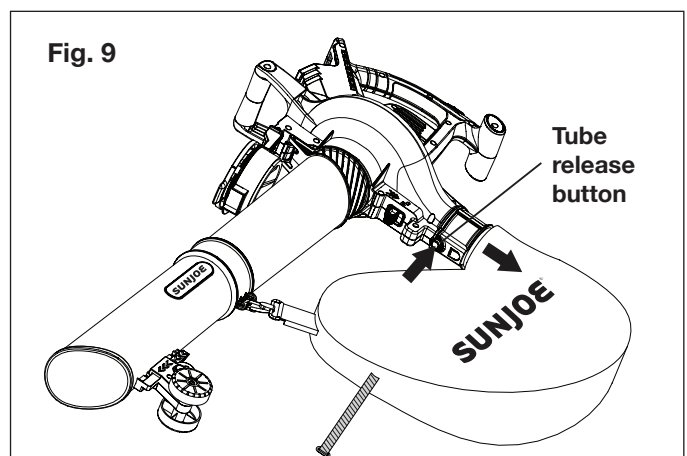
4. Insert the collection bag adapter into the blower air outlet until the collection bag is securely fastened (Fig. 7), then clip the bag to the strap holder.



5. Press the button on the wheel assembly, then slide it onto the lead rail. Adjust the wheel position by pressing the button and sliding the wheel assembly up and down the lead rail until the desired setting is reached (Fig. 8).

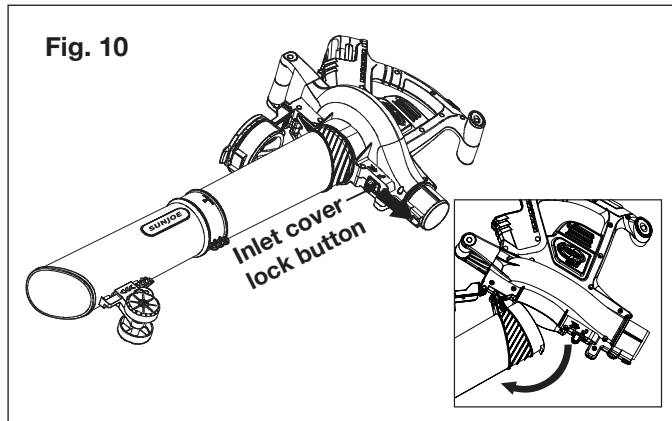


6. To remove the bag, press the tube release button and slide the bag off of the unit. Unclip the bag from the strap holder (Fig. 9).



7. To remove the vacuum/mulcher tube assembly, slide the inlet cover lock button to unlock, then remove the tube assembly from its housing (Fig. 10).

NOTE: It may be necessary to remove the blower tube or vacuum/mulcher tubes to clear a blocked tube or impeller. Make sure to turn off the unit and remove the battery before attempting to clear any obstructions.



Battery Pack Operation

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

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, place the battery pack on the charger and charge as needed.

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 EcoSharp® PRO iBAT40XR lithium-ion battery packs in compatible EcoSharp® iCHRG40 lithium-ion battery chargers. 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.

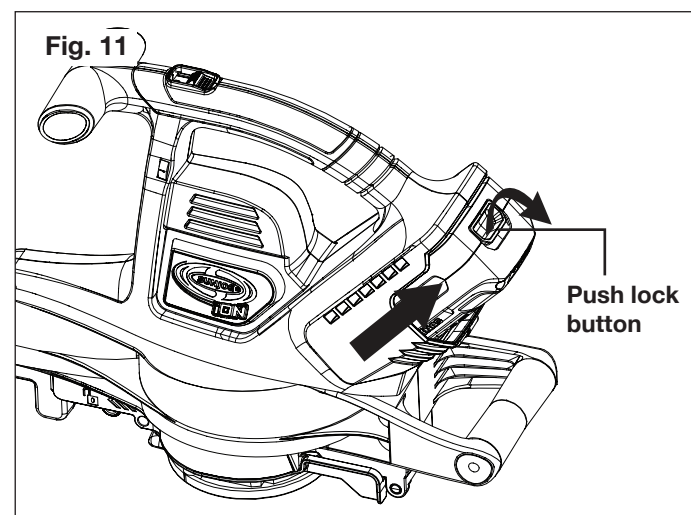
When to Charge the EcoSharp® PRO iBAT40XR Lithium-Ion Battery

NOTE: The EcoSharp® PRO iBAT40XR 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 EcoSharp® PRO iBAT40XR 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.

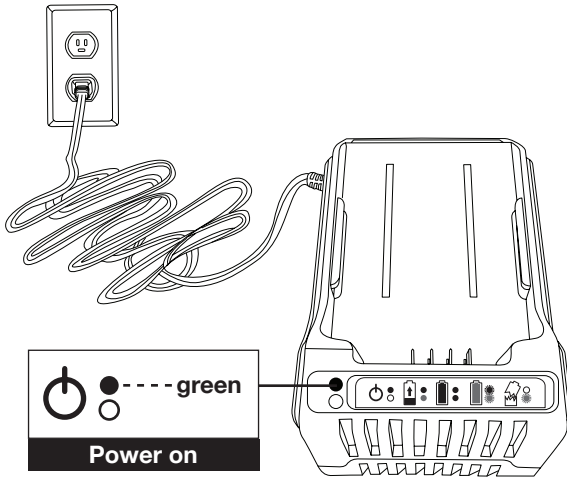
Charging the Battery

1. Slide the push lock button on the battery to release the pack. Pull the battery up and out of the equipment. (Fig. 11).



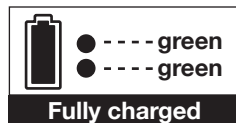
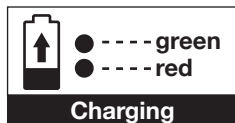
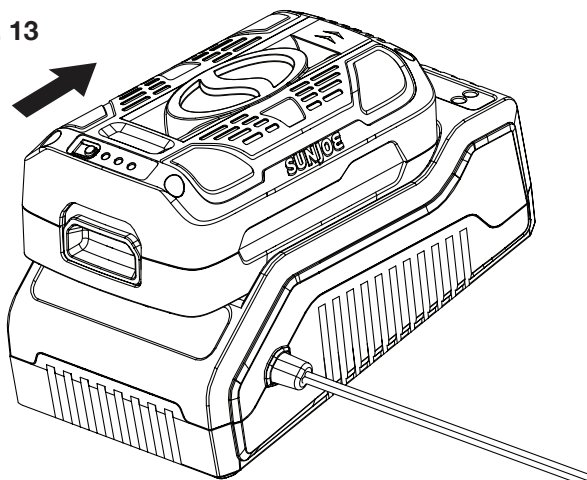
2. Check that the mains voltage is the same as that marked on the rating plate of the battery charger. Then, insert the charger's plug into the electrical wall outlet. When you plug in the charger, the top green light will illuminate and stay green (Fig. 12).

Fig. 12



3. Place the battery pack into the charger by sliding the pack as shown to lock it into position. When you insert the battery into the charger, the bottom red light will illuminate to indicate that the battery is charging (Fig. 13).
4. When the bottom light turns green, the battery is fully charged (Fig. 13).

Fig. 13

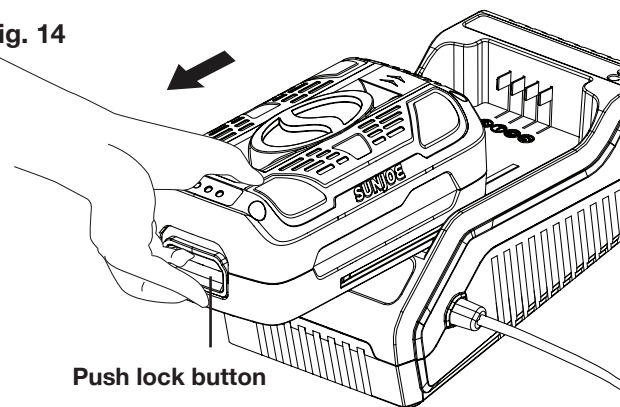


NOTE: If the top light remains green while the bottom light alternately flashes red and green, this indicates a temperature abnormality (i.e. that the battery pack is either too hot or too cold). If there is only a red blinking light, this indicates that something is wrong with the battery. Contact Snow Joe® + Sun Joe® customer service at 1-866-SNOWJOE (1-866-766-9563).

<p>--- Green</p> <p>--- Flashing red/green</p>	<p>--- Flashing red only</p>
<p>Temperature abnormal</p>	<p>Something is wrong</p>

5. A fully discharged pack with an internal temperature in the normal range will fully charge in 3 to 3.5 hours (between 32°F/0°C and 113°F/45°C). Heavily cycled battery packs may take longer to charge completely.
6. If the charging light indicator alternately blinks red and green or the light indicator does not come on at all, check that the battery pack is fully seated into the bay. Remove the pack and reinsert. If the problem persists, 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.
7. When charging is complete, remove the battery from the charger by sliding the push lock button and pulling the battery backward to unlock it from the charger (Fig. 14).

Fig. 14



8. 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.

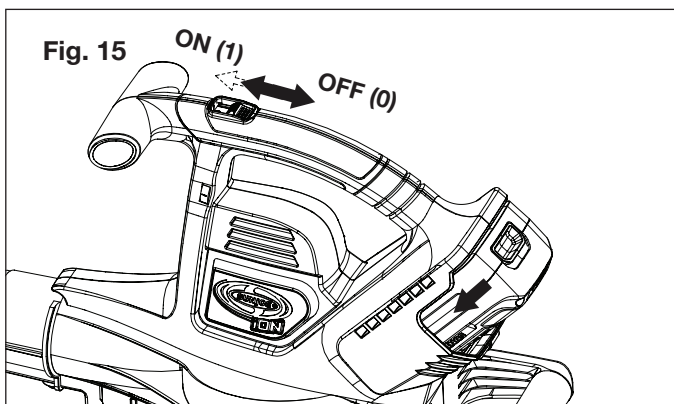
Charging a Hot or Cold Battery Pack

A red and green flashing indicator light on the charger indicates that the battery pack temperature is outside the charging range. Once the pack is within the acceptable range, normal charging will take place and the red light will be continuous. Hot or cold battery packs may take longer to charge.

Lithium-Ion Charging Status		
Battery Pack Temperature	Red Charger Indicator Light	Charging Status
Too hot	Flashing	Not charging
Normal range	Continuous	Normal charging
Too cold	Flashing	Not charging

Starting + Stopping

1. Insert the battery until it clicks and locks into position (Fig. 15).
2. To start the cordless blower vac slide the ON/OFF switch to the ON position (1) (Fig. 15).

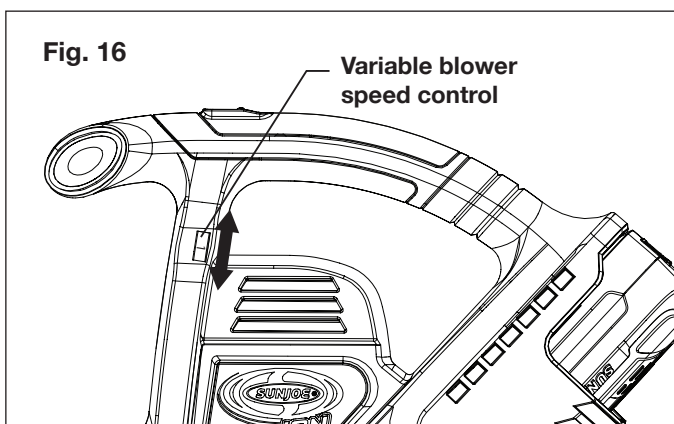


3. To stop the unit, slide the ON/OFF switch to the OFF position (0) (Fig. 15).
4. Slide the push lock button and pull out the battery (Fig. 11).

Speed Control

This unit is equipped with six variable speed settings (1 to 6) (Fig. 16).

- Turn the speed dial to position “1” or “2” for LOW speeds.
- Turn the speed dial to position “3” or “4” for MEDIUM speeds.
- Turn the speed dial to position “5” or “6” for HIGH speeds.



Operating Tips

⚠ WARNING! Use the blower vac only in daylight or good artificial light.

- When using the blower vac, plant your feet firmly on the ground and place one hand on the main handle and the other hand on the front handle.
- Wear personal protective equipment during your work session. This includes boots, safety glasses/goggles, ear defenders, long pants, and a long-sleeve shirt.
- When using the unit as a vacuum/mulcher, make sure the bag is properly installed and zipped closed.
- Make sure the blower tube nozzle is not directed at anyone or any loose debris before starting the unit.
- Verify that the unit is in good working condition. Make sure the tubes and guards are in place and secure.
- Ensure that the vacuum/mulch inlet cover is completely closed and locked.
- Keep a firm grip on both the front and main handle or grips.
- To reduce the risk of hearing loss associated with sound level(s), hearing protection is required.
- Operate this blower vac and other power equipment only at reasonable hours. Avoid use early in the morning or late at night when people might be disturbed. Comply with times listed in local ordinances. Usual recommendations are 9:00 am to 5:00 pm, Monday through Saturday.
- To reduce noise levels, limit the number of pieces of power equipment used at any one time and operate power blowers at the lowest possible speed setting necessary to do the job.
- Use rakes and brooms to loosen debris before blowing.
- In dusty conditions, slightly dampen surfaces.
- Conserve water by using power blowers instead of hoses for many lawn and garden applications, such as cleaning gutters, screens, patios, grills, porches, and gardens.
- Blow debris into a safe, open area away from children, pets, open windows, or freshly washed cars.
- Clean up after using leaf blowers and other lawn equipment. Dispose of debris appropriately.

⚠ WARNING! To avoid serious personal injury, wear ear defenders, goggles, or safety glasses at all times when operating this unit. Wear a face mask or dust mask in dusty locations.

⚠ WARNING! To prevent serious personal injury or damage to the unit, make sure the blower tube or the vacuum/mulcher tubes and the collection bag are in place before operating the unit.

Air Vents

Never cover air vents. Keep them free from obstructions and debris. They must always remain clear for proper motor cooling.

⚠ WARNING! To avoid serious personal injury, tie back long hair and do not wear loose fitting clothing or dangling articles such as scarves, strings, chains, ties, etc. Such items could get drawn into the air vents.

Blower Mode

- Hold the blower firmly with one hand on the main handle and the other hand on the front handle. Sweep from side to side with the nozzle several inches above the ground or floor (Fig. 17).

Fig. 17

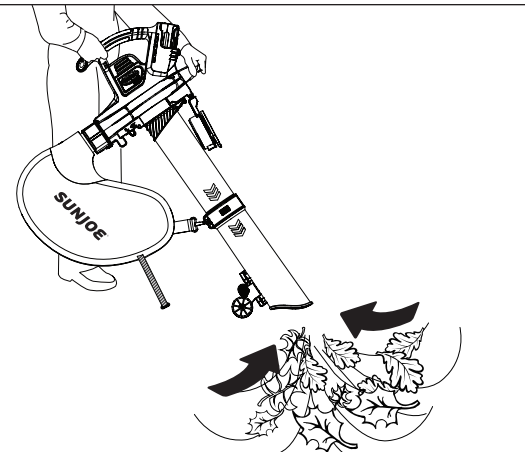


- Slowly advance the unit, keeping the accumulated pile of debris in front of you. Most dry blowing operations are better suited to low speeds rather than high speeds. High speed blowing is best for moving heavier items like large debris or gravel.

Vacuum + Mulcher Mode

- Once you have blown the debris/leaves into a pile, you can convert to vacuum/mulcher mode to collect the debris.
- With a firm hold on the unit, tilt the vacuum/mulcher tubes 2 – 4 in. (5 – 10 cm) from the ground and use a sweeping action to collect light debris. The debris will flow into the bag. Items such as small leaves and twigs will be mulched as they pass through the fan housing. For longer bag life and optimal performance, empty the bag frequently (Fig. 18).
- Move easily from one pile of debris to the next by gliding the vacuum/mulcher along the ground using the adjustable wheel assembly.

Fig. 18



- As the bag fills, suction power will decrease. When this happens, turn the power switch to the OFF (0) position and remove the battery. Remove the bag and empty the debris.
- To remove the bag, press the tube release button (Fig. 9). To empty, hold the plastic handle and grab the nylon handle on the underside of the bag. Turn the bag upside down and shake out any debris and leaves.

⚠ WARNING! Never remove the collection bag without first turning the power switch to the OFF (0) position and remove the battery.

⚠ WARNING! Do not use in vacuum/mulcher mode without the vacuum/mulcher tubes and collection bag in place.

Clearing a Blocked Tube/Impeller

⚠ WARNING! To avoid serious personal injury, be sure the unit is OFF and remove the battery before clearing the impeller.

⚠ WARNING! To avoid serious personal injury, always wear gloves to protect yourself from the impeller blades or other sharp objects.

During the vacuuming/mulching process, certain objects such as cloth, rope, or large diameter sticks may obstruct the fan and block the motor. A thermal protection device, which is built into the blower vac, will cut off the electricity to the motor to prevent damage from overheating.

In the event an obstruction occurs and power is curtailed:

1. Slide the ON/OFF switch to the OFF (0) position until the unit comes to a complete stop.
2. Remove the battery.
3. Remove the blower tube or vacuum/mulcher tubes and the collection bag.
4. Using protective gloves, carefully remove the material blocking the tube or impeller. Inspect the blades to ensure no damage has occurred. Rotate the impeller blades by hand to ensure the blockage is completely cleared.
5. Reinstall the blower tube or vacuum/mulcher tubes and the collection bag.

6. Wait 3 minutes for the motor to cool.
7. Insert the battery and turn the ON/OFF switch to the ON (1) position. The blower vac will resume normal function.
8. Clean the blower tube thoroughly before storing. Store the blower in a dry, well-ventilated place that is inaccessible to children. Keep away from corrosive agents.

Maintenance

To order genuine replacement parts or accessories for the Sun Joe® iONBV-XR 3-in-1 blower vac, please visit snowjoe.com or contact the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).

Cleaning the Unit

⚠ WARNING! To avoid serious personal injury, always turn the unit off and remove the battery before cleaning or servicing.

Use a small brush to clean the outside of the unit. Do not use strong detergents, household cleaners that contain aromatic oils (e.g. pine and lemon), or harsh solvents such as kerosene as these substances can damage the plastic housing or the handles. Wipe off any moisture with a soft, dry cloth.

1. Empty the bag after each use to avoid deterioration and air flow obstruction, which will reduce the performance of the vacuum/mulcher.
2. Wear eye protection and a dust mask. Clean the bag as needed. Turn the bag inside out after initial emptying and vigorously shake out any dust and debris.
3. Wash the bag once a year, or more often if needed. Follow the steps below:
 - i. Remove the bag.
 - ii. Turn the bag inside out.
 - iii. Hang it up.
 - iv. Hose it down thoroughly.
 - v. Leave it hanging to dry.
 - vi. Turn the bag right-side out and reinstall.

Storage

1. Examine the cordless blower vac thoroughly for worn, loose, or damaged parts. Should you need to repair or replace a part, 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.
2. Remove the battery pack from the cordless blower vac before storing.
3. Store the battery with the cordless blower vac indoors in a clean, dry, and locked location out of the reach of children and animals.

Battery Caution + Disposal Information

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® iONBV-XR cordless 3-in-1 blower vac 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 #:	
i O N B V - X R	
Serial #:	

iCHRG40

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.

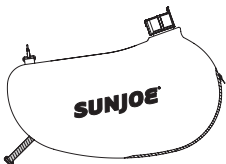
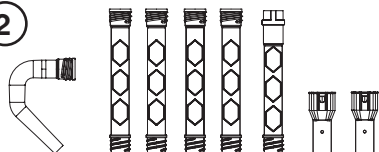
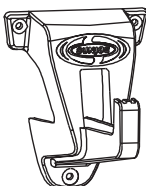
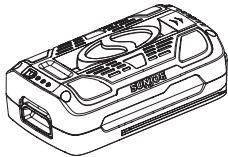
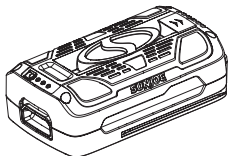
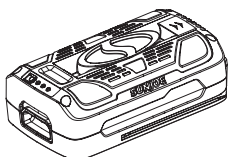
Troubleshooting

⚠️WARNING! Always turn the tool OFF and remove the battery before performing any adjustments, maintenance, or repairs to your cordless blower vac.

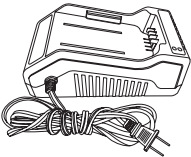
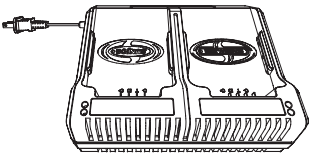
Problem	Possible Cause	Solution
Unit will not blow or mulch	<ol style="list-style-type: none">1. Bag full.2. Blocked tube.3. Blocked impeller.4. Dirty bag.5. Torn bag.6. Bag unzipped.7. Battery loose/not properly secured.	<ol style="list-style-type: none">1. Empty the bag.2. Clear the blockage.3. Clear the blockage.4. Clean the bag.5. Replace the bag.6. Zip up the bag.7. Insert the battery until it clicks and lock into position.
Unit will not start	<ol style="list-style-type: none">1. Battery loose/not properly secured.2. Power switch is in the OFF (0) position.3. Defective power switch.4. Vac tubes are not correctly installed.5. Inlet cover is not closed.6. House circuit may have tripped.	<ol style="list-style-type: none">1. Insert the battery until it clicks and lock into position2. Slide the power switch to the ON (1) position and select your desired speed setting with the speed control switch.3. Call the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).4. Check vac tubes and ensure that they are correctly installed to allow the switch to be engaged.5. Ensure that Inlet cover is fully closed and locked.6. Check wall circuit breaker panel and reset if necessary.

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 blower vac. Contact Snow Joe® + Sun Joe® if you are unsure whether it is safe to use a particular replacement part or accessory with your cordless blower vac. The use of any other attachment or accessory can be dangerous and could cause injury or mechanical damage.

Accessories	Item	Model
1 	16-Gallon (60.5 l) collection bag	iONBV-BAG
2 	Gutter cleaning blower attachment	SBJ6-GA (For use with blower vac models SBJ601E + SBJ603E + SBJ605E + iONBV)
3 	Universal wall bracket with mounting hardware	SJWB (Fits most Snow Joe® + Sun Joe® tools, including blower vac models SBJ601E + SBJ603E + SBJ605E + iONBV)
4 	EcoSharp® 40 V 4.0 Ah Lithium-Ion Battery Charge Time: 2.5 - 3 hours (for full charge) Blower Battery Run Time: high speed 15 min; low speed 45 min. Vacuum Battery Run Time: high speed 13 min; low speed 38 min.	iBAT40
5 	EcoSharp® PRO 40 V 5.0 Ah Lithium-Ion Battery Charge Time: 3 - 3.5 hours (for full charge) Blower Battery Run Time: high speed 19 min; low speed 56 min. Vacuum Battery Run Time: high speed 16 min; low speed 48 min.	iBAT40XR
6 	EcoSharp® PRO 40 V 6.0 Ah Lithium-Ion Battery Charge Time: 4 - 5 hours (for full charge) Blower Battery Run Time: high speed 22 min; low speed 65 min. Vacuum Battery Run Time: high speed 19 min; low speed 57 min.	iBAT40XRP

Optional Accessories

Accessories	Item	Model
<div>7</div> 	EcoSharp® 40 V Lithium-Ion Battery Charger	iCHRG40
<div>8</div> 	EcoSharp® 40 V Lithium-Ion Dual Port Battery Charger	iCHRG40-DPC

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 snowjoe.com or via phone by contacting the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).

NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

NOTES

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SNOW JOE® + SUN JOE® CUSTOMER PROMISE

ABOVE ALL ELSE, Snow Joe® + Sun Joe® are dedicated to you, our customer. We strive to make your experience as pleasant as possible. Unfortunately, there are times when a product does not work or breaks under normal operating conditions. We think it's important that you know what you can expect from us. That's why we created the Snow Joe® + Sun Joe® promise.

OUR PROMISE: Snow Joe® + Sun Joe® warrant new products for two years from the date of purchase. If your product does not work, or there's an issue with a specific part, we will fix this by either sending you a free replacement part or by sending you a new or comparable product at no charge. How cool is that! Before you know it, you'll be back in action cutting, sawing, mowing, washing and...?

PRODUCT REGISTRATION:

Snow Joe®, LLC ("Snow Joe® + Sun Joe®") strongly encourages you to register your purchase. You can register online at snowjoe.com/ProductRegistration, or by printing and mailing in a registration card available online from our website, or calling our Customer Service Department at **1-866-SNOWJOE (1-866-766-9563)**, or by e-mailing us at help@snowjoe.com. Failure to register your product purchase will not diminish your warranty rights. However, registering your purchase will allow Snow Joe® + Sun Joe® to better serve you with any of your customer service needs.

WHO CAN SEEK WARRANTY COVERAGE?

This Warranty is extended by Snow Joe® + Sun Joe® to the owner of this Machine (a "Machine" consists of a product powered by a motor) for residential and personal household use only. This Warranty does not apply to products used for commercial, rental or re-sale purposes. Should ownership of this machine change during the 2-year period, please update the Machine's owner information at snowjoe.com/ProductRegistration.

WHAT IS COVERED?

Snow Joe® + Sun Joe® warrants to the owner that if this Machine fails within 2 years from the date of purchase due to a defect in material or workmanship or as a result of normal wear and tear from ordinary household use, Snow Joe® + Sun Joe® will send a replacement part or product, as needed, free of charge and with free shipping to the original purchaser.

If, in Snow Joe® + Sun Joe®'s sole discretion, the failed Machine cannot be repaired with a part, Snow Joe® + Sun Joe® will elect to either (A) send a new Machine at no charge and with free shipping or (B) refund the full purchase price to the owner.

WHAT IS NOT COVERED?

This Warranty does not apply to the Machines that have been used commercially or in non-household applications. This Warranty does not cover cosmetic changes that do not affect performance. This Warranty is only valid if the Machine is used and maintained in accordance with the instructions, warnings and safeguards contained in the owner's manual. Snow Joe® + Sun Joe® will not be responsible for the cost of any unauthorized warranty repairs. 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.

Wearing parts like belts, augers, chains and tines are not covered under this warranty, and 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.

Repair, replacement or refund of the purchase price are the exclusive remedies of purchaser and the sole liability of Snow Joe® + Sun Joe® under this warranty. No employee or representative of Snow Joe® + Sun Joe® is authorized to make any additional warranty or any modification to this warranty which may be binding upon Snow Joe® + Sun Joe®. Accordingly, purchaser should not rely upon any additional statements made by any employee or representative of Snow Joe® + Sun Joe®. In no event, whether based on contract, indemnity, warranty, tort (including negligence), strict liability or otherwise, shall Snow Joe® + Sun Joe® be liable for any special, indirect, incidental, or consequential damages, including, without limitation, loss of profit or revenue.

Some states do not allow limits on warranties. In such states, the above limitations may not apply to you.

Outside the USA, other warranties may apply.



snowjoe.com

⚠️WARNING! This product or its power cord contains chemicals, including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling. For more information go to www.P65Warnings.ca.gov.

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

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specifically designed to filter out microscopic particles. For more information go to www.P65Warnings.ca.gov.