

## 60V Lithium-Ion Backpack Battery



OPERATOR'S MANUAL

**CHARGE BEFORE FIRST USE** 

Model number:

**BP7615** 

**BP7625** 

15AH/25AH

WARNING: To reduce the risk of injury, the user must read and understand the Operator's Manual before using this product. Save these instructions for future reference.

## **READ ALL INSTRUCTIONS!**



This battery pack has many features for making its use more pleasant and enjoyable. Safety, performance, and dependability have been given top priority in the design of this product making it easy to maintain and operate.

# SAFETY SYMBOLS

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols and the explanations with them deserve your careful attention and understanding. The symbol warnings do not, by themselves, eliminate any danger. The instructions and warnings they give are no substitutes for proper accident prevention measures.

**WARNING:** Be sure to read and understand all safety instructions in this Operator's Manual, including all safety alert symbols such as "DANGER," "WARNING," and "CAUTION" before using this tool. Failure to following all instructions listed below may result in electric shock, fire, and/or serious personal injury.

**WARNING:** The operation of any power tools can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and a full face shield when needed. We recommend a Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields.

**WARNING:** Risk of fire and burns. Do not recharge, disassemble, heat above 212 °F (100 °C), or incinerate. Keep battery out of reach of children and in original package until ready to use. Dispose of used batteries promptly according to local recycling or waste regulations.

# SAFETY INSTRUCTIONS

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

( (	CE marking	CE marking
<u>^</u>	Safety Alert	Indicates a potential personal injury hazard.
	Read & Understand Operator's Manual	To reduce the risk of injury, user must read and understand the operator's manual before using this product. Failure to do so can result in serious injury to the operator and/or bystander.
	Wear Eye Protection	Always wear safety goggles or safety glasses with side shields when operating this product that comply with ANSI Z87.1.
X	Recycle Symbols	Any damaged or disposed electric or electronic devices must be delivered to appropriate collection centres.
		Do not dispose electric tools, batteries/re- chargeable batteries together with household waste material. Electric tools and batteries
Li-lon		that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility. Check with your local authority or retailer for recycling advice and collection point.
		Do not dispose of the battery pack in water.
MAX 45°C		Protect the battery against temperatures above 45°C.
*		Protect the battery against heat and fire.
V	Volt	Voltage
mAh	Milli ampere/ hours.	Battery capacity.
Hz	Hertz	Frequency (cycles per second)

W	Watt	Power
min	Minutes	Time
kg	Kilogram	Weight
lb	Pound	Weight
°F	Fahrenheit temperature	Temperature
°C	Celsius temperature	Temperature

**MARNING:** Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

The term "power tool" in all of warnings listed below refers to corded power tools or battery operated (cordless) power tools.

**WARNING:** To ensure safety and reliability, all repairs should be performed by a qualified service technician.

#### **WORK AREA SAFETY**

- Keep the work area clean and well lit. Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive environments, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.

#### **ELECTRICAL SAFETY**

Use only with charger listed below:

BATTERY PACK	CHARGER
BP7615	CG768E
BP7625	

#### **BATTERY TOOL USE AND CARE**

- Prevent unintentional starting. Ensure the switch is in the off-position before connecting to battery pack, picking up or carrying the power tool. Carrying the power tool with your finger on the switch or energizing power tool that have the switch on invites accidents.
- Disconnect the battery pack from the power tool before making any adjustments, changing accessories, or storing power tool. Such preventive safety measures reduce the risk of starting the power tool accidentally.

- Do not modify or attempt to repair the power tool or the battery pack except as indicated in the instructions for use and care.
  - Do not use a battery pack or power tool that is damaged or modified.

Damaged or modified batteries may exhibit unpredictable behavior resulting in fire explosion or risk of injury.

- Recharge only with the chargers specified by the manufacturer. A charger that is suitable for one type of battery pack may create a rise of fire when used with another type of battery pack.
- Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- Sunseeker batteries are designed specially for Sunseeker power tools. Use the batteries on any other tools may not only damage the batteries and tool but also create a risk of injury and fire.
- 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.
- 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.

#### **SERVICE**

Follow instructions in the maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance instructions may create a risk of shock or injury.

#### SPECIFIC SAFETY RULES

- Know your power tools and battery. Read the operator's manual carefully.
  - Learn the applications and limitations, as well as the specific potential hazards related to the tool. Following this rule will reduce the risk of electric shock, fire, or serious injury.
- Battery tools do not have to be plugged into an electrical outlet; therefore, they are always in operating condition. Be aware of possible hazards when not using your battery tool or when changing accessories. Following this rule will reduce the risk of electric shock, fire or serious personal injury.
- **Do not expose a battery pack or power tool to fire or excessive temperature.** Exposure to fire or temperature above 212 °F (100°C) may cause explosion.
  - Do not dispose of the batteries in a fire. The cells may explode. Check with local codes for possible special disposal instructions.
  - **Do not open or mutilate the battery.** Released electrolyte is corrosive and may cause damage to the eyes or skin. It may be toxic if swallowed.
  - Do not crush, drop or damage the battery pack. Do not use a battery pack or charger that has been dropped or received a sharp blow. A damaged battery is subject to explosion. Properly dispose of a dropped or damaged battery immediately.

- Batteries vent hydrogen gas and can explode in the presence of a source of ignition, such as a pilot light. To reduce the risk of serious personal injury, never use any cordless product in the presence of open flame. An exploded battery can propel debris and chemicals. If exposed, flush with water immediately.
- Do not charge the battery in a damp or wet location. Following this rule will reduce the risk of electric shock.
- Follow all charging instructions and do not charge the battery pack or power tool 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. The specified temperature is greater than 41°F (5° C) and less than 104°F (40° C).
- Under extreme usage or temperature conditions, battery leakage may occur.
  If liquid comes in contact with your skin, wash immediately with soap and water, then neutralize with lemon juice or vinegar. If liquid gets in your eyes, flush them with clean water for at least 10 minutes, and then seek immediate medical attention. Following this rule will reduce the risk of serious personal injury.
- Do not let gasoline, oils, petroleum-based products, etc. come in contact with plastic parts. These substances contain chemicals that can damage, weaken or destroy plastic.
- Have your battery pack serviced by a qualified repairperson using only identical replacement parts. This will ensure that the safety of the battery pack is maintained.
- Save these instructions. Refer to them frequently and use them to instruct others who may use this tool. If you lend someone this tool, lend them these instructions also to prevent misuse of the product and possible injury.

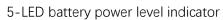
**SAVE THESE INSTRUCTIONS!** 

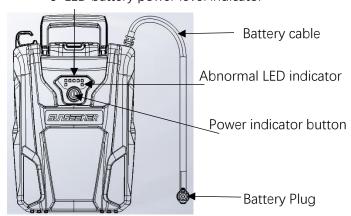
# SPECIFICATIONS

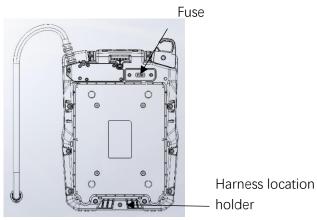
BATTERY	BP7615	BP7625	
Rated Voltage	60V	60V	
Max Capacity	900Wh	1500Wh	
Matched Charger	CG768E	CG768E	
Charging Current	Rapid Charging: 8A Normal Charging: 4A	Rapid Charging: 8A Normal Charging: 4A	
Charging Time	Rapid Charging: Approximately:1.8H Standard Charging: Approximately: 3.9H	Rapid Charging: Approximately:3.0H Standard Charging: Approximately: 6.5H	
Operating Temperature	-20°C ~ +45°C	-20°C ~ +45°C	
Net Weight (Without cable)	6.4 kg	8.1 kg	

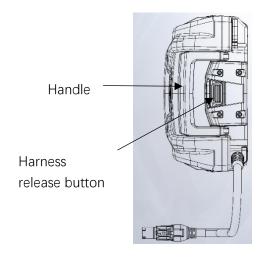
## DESCRIPTION

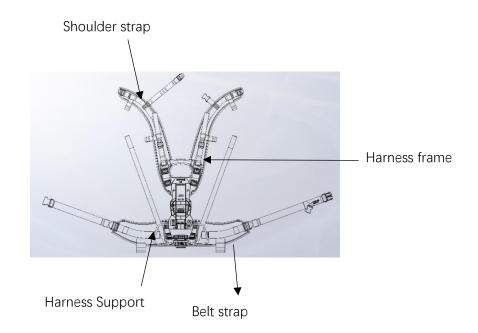
## KNOW YOUR LITHIUM-ION BACKPACK BATTERY (Fig.1)











## OPERATION

### LED INDICATOR ON BACKPACK BATTERY

This lithium-ion backpack battery is equipped with 5-LED battery power level indicator and an abnormal LED indicator to show the battery power level and the error.

When in use, press the power indicator button on the battery to display the battery power level or the battery status. The 5-LED indicator will illuminate one by one from right to left, after all LED indicator were in solid green, then the LED indicator will illuminate as shown below and turn off after 10 seconds. A dead battery causes no LED to shine.

The display may also be used during battery discharge. Briefly press the power indicator button to display the LED indicators

Charge/Battery status	5-LED Indicator				Illustration	
	LED#5	LED#4	LED#3	LED#2	LED#1	
0%-5%	0	0	0	0	•	Solid green
5%-15%	0	0	0	•	•	Solid green
15%-35%	0	0		•	•	Solid green
35%-70%	0	•		•	•	Solid green
70%-100%	•			•	•	Solid green
< 5%	0	0	0	0	-\\\\\\\	Flash green
Error-abnormal temperature	-\( \)	-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	->	-\\(\frac{1}{2}\)	- <u>`</u> Q́-	Flash green

Note: The abnormal LED indicator please refer to trouble-shooting.

#### **BATTERY PROTECTION**

The battery circuitry protects the battery pack from extreme temperature, over- discharge, and over-charge. To protect the battery from damage and prolong its life, the battery pack circuitry will turn off the battery pack if it

becomes overloaded or if the temperature becomes too high during use. This may happen in extremely high torque, binding, and stalling situations.

- When charging, the battery pack will automatically shut down and all the segments of the 5-LED battery power level indicator will turn off when the temperature is over 60°C or below 10°C. Allow the battery pack to reach normal temperature. Charging will begin when battery pack itself returns to 3°C ~ 57°C.
- When discharging, the battery pack will automatically shut down when the temperature is over 60°C or below 10°C. All 5 LEDS will shine green for 10 seconds when the power level indicator button is pressed. The battery will begin normal operation on both conditions that the temperature returns to normal and the power tool is restarted.

**A** WARNING: No heating activity for the battery is allowed under any circumstances.

#### **COLD WEATHER OPERATION**

This Lithium-lon battery pack will provide optimal performance in temperatures between 50°F (10°C) and 80°F (26°C). When the battery pack is very cold, it may "pulse" for the first minute of use to warm itself. Put the battery pack on a tool and use the tool in a light application. After about a minute, the battery pack will have warmed itself and will operate normally.

#### WHEN TO CHARGE THE BATTERY PACK

**NOTICE:** Lithium-lon battery packs are shipped partially charged. Before using the backpack battery for the first time, fully charge it.

It is not necessary to run down the battery pack charge before recharging. The Lithium- ion battery can be charged at any time and will not develop a "memory" when charged after only a partial discharge. Use the 5-LED power level indicator to determine when the battery pack needs to be recharged.

#### HOW TO CHARGE THE BATTERY PACK

Follow the instructions in the Operator's Manual for CG768.

# MOUNTING TO AND DETACHING FROM THE BACKPACK HARNESS (AVAILABLE SEPARATELY)

### To Mount (Fig. 2)

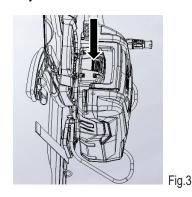
■ Put the battery pack on the harness support, align the harness release button with the harness mounting part, and slide until a clear click sound can be heard. The battery pack is mounted into place.



Fig.2

### To Detach (Fig. 3 & 4)

Push the harness release button on the top of battery, until you hear a clear "click" sound, the battery will be detached from the harness.



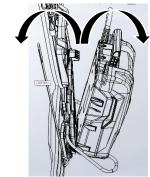
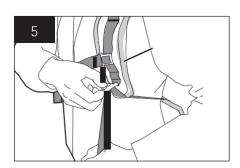


Fig4

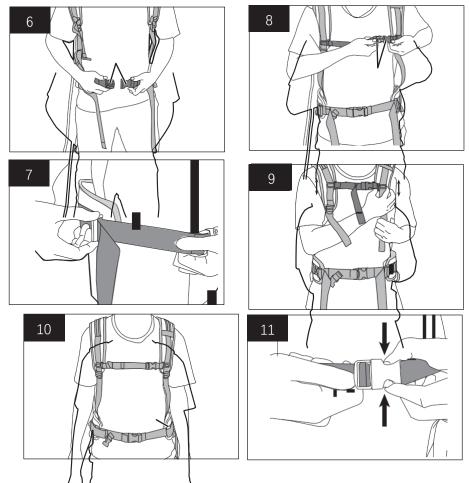
### HOW TO ADJUST THE BACKPACK BATTERY HARNESS

1. Put your arms through the harness shoulder straps to support the backpack battery on your back and temporarily adjust both shoulder straps to comfortable positions, making sure that your shoulders are comfortable (Fig. 5).



2. Snap the waist buckle on the belt strap and adjust its length so that the backpack battery is securely supported by your hips (Fig. 6 & 7).

NOTICE: The backpack battery shouldn't sit too high on your back; it should be positioned closer to your hips than to your shoulders



- 3. Snap the chest buckle and adjust its length if necessary (Fig. 8).
- 4. Readjust the shoulder straps for security and comfort. Making sure that the backpack battery sits securely on your back with the weight supported by the waist strap, and without excess movement when you move (Fig. 9).
- 5. Insert any extra length of the belt strap into the elastic on both sides (Fig. 10).
- 6. To detach the battery from your back, just press the waist and chest buckles to release them and lower the backpack battery (Fig. 11)

**WARNING:** When emergency occurs, release the chest and waist buckles immediately to take off the backpack strap at each side, which is a quick release method.

#### TO ATTACH AND DETACH THE BATTERY PACK FROM THE TOOL

Follow the instructions in the Operator's Manual for the applicable individual 60V products.

**WARNING:** To avoid serious personal injury, always disconnect the battery pack from the tool when cleaning or performing any maintenance.

**WARNING:** When servicing, use only identical Sunseeker replacement parts. Use of any other parts may create a hazard or cause product damage. To ensure safety and reliability, all repairs should be performed by authorized dealer/distributor.

## MAINTENANCE

#### **GENERAL MAINTENANCE**

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use a clean cloth to remove dirt, dust, oil, grease, etc.

**WARNING:** Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc., come in contact with plastic parts. Chemicals can damage, weaken, or destroy plastic, which may result in serious personal injury.

**WARNING:** To reduce the risk of fire, personal injury, and product damage due to a short circuit, never immerse your tool, battery pack or charger in fluid or allow a fluid to flow inside them. Corrosive or conductive fluids, such as seawater, certain industrial chemicals, and bleach or bleach containing products, etc., Can cause a short circuit.

#### **BATTERIES**

The battery pack is equipped with Lithium-Ion rechargeable batteries. The duration of use from each charge will depend on the type of work performed.

The batteries in this manual have been designed to provide maximum trouble-free life. Like all batteries, they will eventually wear out.

**WARNING:** Do not disassemble the backpack battery or attempt to replace the battery cells. Handling of the batteries, especially when wearing rings and jewelry could result in serious burns.

To obtain the longest possible battery life, read and understand the operator's manual thoroughly.

**NOTICE**: It is good practice to unplug the charger and remove the backpack battery from the charger when not in use.

For Lithium-Ion battery pack storage longer than 30 days: Store the Lithium-Ion battery pack where the temperature is below 26°C and free of moisture.

- Store Lithium-Ion battery packs in a 30% 50% charged condition.
- Exterior may be cleaned with a cloth or soft non-metallic brush.

#### BATTERY PACK REMOVAL AND PREPARATION FOR RECYCLING



If your device should become useless some- where in the future or you do not need it any longer, do not dispose of the device together with your domestic refuse, but dispose of it in an environmentally friendly manner.

Please dispose of the device itself at an according collecting/recycling point. By doing so, plastic and metal parts can be separated and recycled. Information concerning the disposal of materials and devices are available from your local

administration.



Batteries do not belong in household waste. As a consumer, you are legally obliged to return used batteries. Batteries must be removed and disposed of in the proper manner at the end of your device's service life. You can dispose of old

batteries at communal collection points or at your dealer/sales outlet.

Electrical devices may not be disposed of in the household waste.

Any damaged or disposed electric or electronic devices must be delivered to appropriate collection centers.

#### Transport packaging disposal

The packaging protects the machine against damage during transport. Packaging materials are usually chosen based on environment aspects and waste treatment principles and are therefore recyclable. Returning the packaging into material circulation saves raw materials and reduces waste production. Parts of packaging (e.g. foils) can be dangerous for children.

Keep parts of the packaging out of reach of children and dispose them as soon as possible.

WARNING: Upon removal of the battery pack for disposal or recycling, cover the battery pack's terminals with heavy-duty adhesive tape. Do not attempt to destroy or disassemble the battery pack or remove any of its components. Lithium-lon batteries must be recycled or disposed of properly. Also, never touch the terminals with metal objects and/or body parts as a short circuit may result. Keep away from children. Failure to comply with these warnings could result in fire and/or serious injury.

# TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION		
The power tools don't work.	■ No electrical contact between the power tool and battery.	■ Reattach the battery to the power tool.		
	■ The battery is depleted.	■ Charge the battery.		
	■ The battery or power tool is too hot.	<ul> <li>Cool the battery pack or power tool until the temperature drops below 60°C. and restart the power tool.</li> <li>Contact with authorized dealer/ distributor for repairing.</li> </ul>		
	■ The battery cable or plug is out of work.			
	■ The voltage of a battery cell is below the lowest protective voltage.	■ Charge the battery pack immediately.		
The battery pack can't be charged.	■ The battery temperature exceeds or reduces below the specified charging temperature range.	• •		
	■ No electrical contact between battery and charger.	■ Reattach the battery pack into the charger.		
	■ The connection between the charger and power supply goes wrong.	■ Reinsert the charger plug into the power supply.		
The 5-LED indicators go out during charging	■ The battery is too hot.	■ Allow the battery pack to reach normal temperature and charging will begin when battery pack itself returns to 3°C - 57°C.		
	■ The battery may be defective.	■ Observe the LED indicator on charger. If the RED LED is flashing or off, the battery is defective.		

Abnormal LED Indicator		Cause	Solution
(Red Color only)			
* * * * . *	3 long flash & 1	Front-end	Check R39/R40 open circuit
-X-X-X-	short flash	sampling error	Replace U3
- <b>★</b> - <b>★</b> - <b>★</b> -	3 short flash & 1	NTC	Check whether the temperature line
<del>-\\\\\-</del> -\-\\\-	long flash	disconnection	contact is poor
			2. Check whether the voltage to ground of
			the 4 core test points
			NTC0/NTC1/NTC2/NTC3 are within the
			range (normal range: 0 ℃-60 ℃/voltage is:
			0.8V-2.3V)
- <del>\</del> \(\)-\(\)-\(\)-	1 long flash & 1	Low Voltage	Ensure timely charging in case of normal
	short flash		discharge under voltage
× × × ×	1 long flash & 3	Short circuit	There is a short circuit on the power side,
-Q <b>QQQ</b> -	short flash	protection	need to exclude the short circuit problem
	1 long flash & 4	Discharge over	Discharge over-current phenomenon exists
-××××	short flash	current	at the power supply side, reducing the
			power of the load and requiring re-
			plugging
* * *	2 long flash & 1	COM Error	Check the COM line for poor contact
-XX <del>X</del> -	short flash		2. Replace the power device or charger has
			been the fault then replace the battery
			pack to protect the motherboard
	2 short flash & 1	Discharge high	Leave the battery pack to cool down until
<b>-</b> ₩₩₩-	long flash	temperature	below 60℃, restart
	2 short flash & 2	Discharge low	Leave the battery pack to warm up until
- <b>☆☆☆</b> -	long flash	temperature	above -10℃, restart
		,	
- <del>`</del> <u></u> → - <del>`</del> <u></u> → -	1 long flash & 2	Cell error	Ensure that each battery cell is connected
	short flash		properly
			Ensure that the voltage difference
			between each battery cell is within 1V
			3. Ensure that the voltage of the lowest
			section of the battery cell is raised for 10
			minutes of charging
			4. Replace the motherboard
			5. Replace the battery cell

NOTE: -X- Long Flash, lasting for 1 second

Short Flash, lasting for 0.2s

Abnormal indicator repetition period: around 1.6s