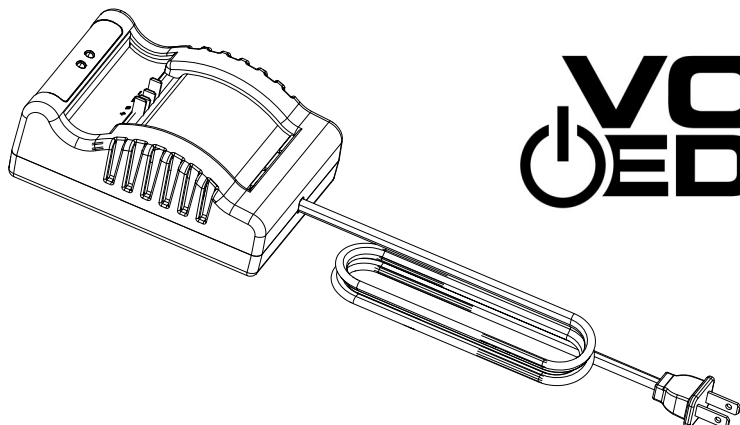


# INSTRUCTION MANUAL



## VOLT EDGE

### 20V, 1A Lithium Battery Charger (5164281)



**WARNING:** To reduce the risk of injury, the user must read and understand the operator's manual before using this product.

#### Instruction Manual for Volt Edge 20V max\* Li-ion Battery Charger

- Maximum initial battery pack voltage (measured without a workload) is 20 volts. Measured under workload, nominal voltage is 18 volts.

The label on your product may include the following symbols.

V volts

A Amperes

Hz Hertz

Ah Amp hours

— Direct Current



Safety Alert Symbol

Wh Watt Hours

~ Alternating Current



Read Owner's Manual

#### Important Safety Instructions - Save These Instructions.

Save these instructions: This manual contains important safety instructions for battery chargers.

**Warning:** Before using charger, read and follow all instructions and cautionary markings on charger, battery pack and product using battery pack.

**Warning:** Shock hazard. Do not allow any liquid to get inside charger.

**Warning:** Burn hazard. To reduce the risk of injury, charge only designated Volt Edge 20Vmax batteries. Other types of batteries may burst causing personal injury and damage.

**Caution:** Under certain conditions, with the charger plugged into the power supply, the charger can be shorted by foreign material. Foreign materials of a conductive nature such as, but not limited to, steel wool, aluminum foil or any buildup of metallic particles should be kept away from charger cavities. Always unplug the charger from the power source when there is no battery pack in the cavity. Unplug charger before attempting to clean.

#### Warning:

- Do not attempt to charge the battery pack with any chargers other than the ones in this manual. The charger and battery pack are specifically designed to work together.
- The chargers are not intended for any uses other than charging designated Volt Edge 20Vmax Lithium-ion batteries. Any other uses may result in risk of fire, electric shock or electrocution.
- Be sure voltage selector is in correct voltage position before plugging in.
- For use in the U.S.A., the voltage selector switch must be placed in the 120 volt position. For use in countries, other than the U.S.A., the voltage selector may need to be placed in other than the 120 volt position. Confirm the voltage available at each country location before using this product.

#### Retain a copy of receipt for your Fimco Product.

As it will be required to validate any warranty service. Volt Edge Chargers are warranted against manufacturer or workmanship defects for One (1) year from date of purchase for home owner usage and 90 days for commercial usage.



[www.fimcoindustries.com](http://www.fimcoindustries.com)

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**WARNING:** Cancer and Reproductive Harm  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Warning: (Continued)

- Do not expose charger to rain or snow.
- Pull by plug, rather than cord, when disconnecting charger. This will reduce the risk of damage to electric plug and cord.
- If the shape of the plug does not fit the power outlet, use an attachment plug adaptor of the proper configuration for the power outlet.
- Make sure that cord is located so that it will not be stepped on, tripped over or otherwise subjected to damage or stress.
- Do not use an extension cord, unless it is necessary. Use of improper extension cord could result in risk of fire, electric shock or electrocution.
- Do not operate charger with damaged cord or plug.
- Do not operate charger if it has received a sharp blow, been dropped or otherwise damaged in any way.
- Do not disassemble the charger.
- Disconnect the charger from the outlet before attempting any cleaning. This will reduce the risk of electric shock. Removing the battery pack will not reduce this risk.
- The charger is designed to operate on standard electric power (120V). Do not attempt to use it on any other voltage.
- The charger is intended to be correctly oriented in a vertical or horizontal position.

## Declaration of Conformity:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

This device complies with:

- Appendix Y to Subpart B of Part 430-Uniform Test Method for Measuring the Energy Consumption of Battery Chargers. DOE energy conservation standards specified in the Code of Federal Regulations at 10 CFR 430.32(z).
- This device complies with CEC, Section 1605.1(w) of energy efficiency standards for federally regulated battery chargers of California Code of Regulations.
- This device complies with NRCAN(EEV), CSA-C381.2-17 May 2017 and Canada's Energy Efficiency Regulations.
- This device complies with cETLus certification based on Conforms to UL STD.1310 Certified to CSA STD.CC22 NO.223.

## Storage Recommendations:

- The best storage place is one that is cool and dry, away from direct sunlight and excess heat or cold.
- Long storage will not harm the battery pack or charger.
- Do not store a battery connected to a charger

## Charging Procedure:

1. Plug the charger into an appropriate outlet before inserting the battery pack. The green LED will flash once indicating the charger is ready to use.
2. Insert the battery pack into the charger.
3. The green LED will flash indicating the battery is being charged.



4. The completion of charger is indicated by the green LED remaining on continuously. The pack is fully charged and may be used at this time or left on the charger.
  - a. Recharge discharged batteries as soon as possible after use or battery life may be greatly diminished. For longest battery life, do not discharge batteries fully. It is recommended that the batteries be recharged after each use.

5. If the battery remains on the charger for more than 2 hours after charging is complete, the green LED will slowly blink.

## Charger Diagnostics:

This charger is designed to detect certain problems that can arise with the battery packs or the power source. Problems are indicated by the red and green LEDs.



### Temperature Delay



When the charger detects a battery that is excessively hot or excessively cold, it automatically starts a Temperature Delay, suspending charging until the battery temperature returns to acceptable temperatures. The red LED will flash indicating the battery is outside the required temperature range and not charging. Once the temperature is within the required range, charging will begin.



### Broken Battery



The charger can detect a weak or damaged battery. The red and green LED will alternate flashing. If you see this warning, do not continue to charge the battery and remove the battery from the charger.

**Important charging notes:**

1. Longest life and best performance can be obtained if the battery pack is charged with the air temperature is between 50°F (10°C) and 80°F (26°C).
2. The charger and battery pack may become warm to the touch while charging. This is normal and does not indicate a problem. Ensure the vents are not blocked to allow cooling.
3. The battery pack should be recharged when it no longer powers the equipment. Do not continue to attempt using the battery if low power is indicated. You may recharge a partially discharged battery pack without damaging the battery pack.
4. Do not freeze or submerge the charger in water or any other liquid.

**Warning:** Shock Hazard. Do not allow any liquid to get inside the charger. Never attempt to open the battery pack for any reason. If the plastic housing of the battery pack breaks for cracks, return to a recycling center and replace the charger.

| TROUBLESHOOTING         |                                        |                                                                                                                                    |
|-------------------------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Problem                 | Possible Cause                         | Possible Solution                                                                                                                  |
| Battery will not charge | Charger not plugged in                 | Plug charger into a working outlet.<br>Check outlet with another device.                                                           |
|                         | Temperature is too hot or too cold     | Move charger and battery to a climate-controlled environment and wait for the product to reach room temperature.                   |
|                         | Battery pack not inserted into charger | Remove battery pack and re-install battery pack.<br>Ensure the bottom edge of the battery is seated first, then push the clips in. |

# Warranty

## LIMITED WARRANTY FOR NEW FIMCO EQUIPMENT

**WHO MAY USE THIS LIMITED WARRANTY.** This limited warranty (the “Limited Warranty”) is provided by Fimco to the original purchaser (“you”) of the Equipment (as defined below) from Fimco or one of Fimco’s authorized dealers. This Limited Warranty does not apply to any subsequent owner or other transferee of the Equipment. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

**WHAT THIS LIMITED WARRANTY COVERS AND FOR HOW LONG.** Fimco warrants that any new Equipment will be free from defects in material and workmanship for a period of **one (1) years** (homeowner), **90 days** (commercial user), after delivery of the Equipment to you (the “Warranty Period”). The Warranty Period is not extended if Fimco repairs or replaces the Equipment.

**WHAT IS NOT COVERED BY THIS LIMITED WARRANTY.** This Limited Warranty does not apply to: (1) used Equipment; (2) any Equipment that has been altered, changed, repaired or treated since its delivery to you, other than by Fimco or its authorized dealers; (3) damage or depreciation due to normal wear and tear; (4) defects or damage due to failure to follow Fimco’s operator’s manual, specifications or other written instructions, or improper storage, operation, maintenance, application or installation of parts; (5) defects or damage due to misuse, accident or neglect, “acts of God” or other events beyond Fimco’s reasonable control; (6) accessories, attachments, tools or parts that were not manufactured by Fimco, whether or not sold or operated with the Equipment; or (7) rubber parts, such as tires, hoses and grommets.

**HOW TO OBTAIN WARRANTY SERVICE.** To obtain warranty service under this Limited Warranty, you must (1) provide written notice to Fimco of the defect during the Warranty Period and within **thirty (30)** days after the defect becomes apparent or the repair becomes necessary, at the following address: Fimco, 1000 Fimco Lane, North Sioux City, SD 57049; and (2) make the Equipment available to Fimco or an authorized dealer within a reasonable period of time. For more information about this Limited Warranty, please call: **800-831-0027**

**WHAT REMEDIES ARE AVAILABLE UNDER THIS LIMITED WARRANTY.** If the conditions set forth above are fulfilled and the Equipment or any part thereof is found to be defective, Fimco shall, at its own cost, and at its option, either repair or replace the defective Equipment or part. Fimco will pay for shipping and handling fees to return the repaired or replacement Equipment or part to you.

**LIMITATION OF IMPLIED WARRANTIES AND OTHER REMEDIES.** THE REMEDIES DESCRIBED ABOVE ARE YOUR SOLE AND EXCLUSIVE REMEDIES, AND FIMCO’S SOLE LIABILITY, FOR ANY BREACH OF THIS LIMITED WARRANTY. TO THE EXTENT APPLICABLE, ANY IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED IN DURATION TO THE WARRANTY PERIOD, AND THE REMEDIES AVAILABLE FOR BREACH THEREOF SHALL BE LIMITED TO THE REMEDIES AVAILABLE UNDER THIS EXPRESS LIMITED WARRANTY. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. IN NO EVENT SHALL FIMCO’S LIABILITY UNDER THIS LIMITED WARRANTY EXCEED THE ACTUAL AMOUNT PAID BY YOU FOR THE DEFECTIVE EQUIPMENT, NOR SHALL FIMCO BE LIABLE, UNDER ANY CIRCUMSTANCES, FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL OR PUNITIVE DAMAGES OR LOSSES, WHETHER DIRECT OR INDIRECT. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.