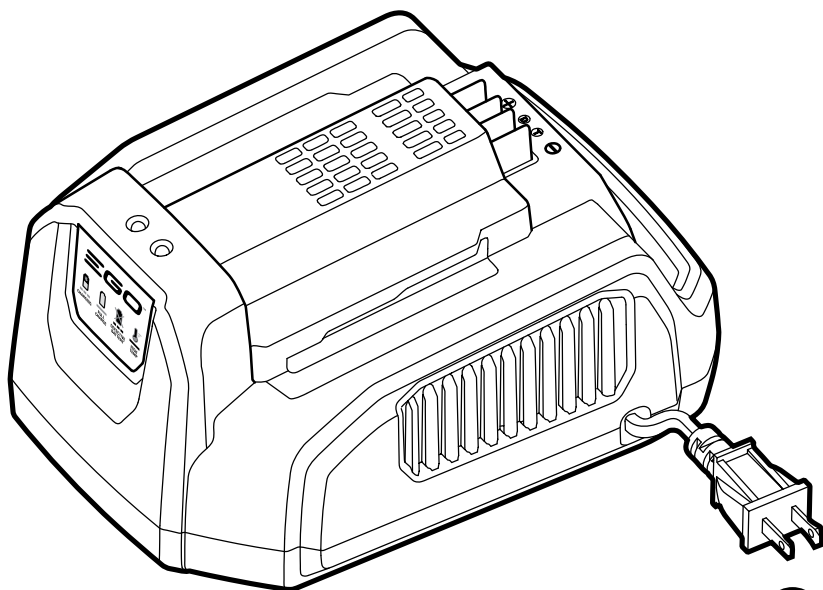


# EGO™

POWER<sup>+</sup> CHARGER



OPERATING MANUAL  
**56-VOLT  
STANDARD  
CHARGER**

MODEL NUMBER CH2100

Español p. 21

**⚠ 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.



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# READ ALL INSTRUCTIONS!



READ & UNDERSTAND  
INSTRUCTION MANUAL

This battery charger 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.

**⚠ 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 chemical: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

## FCC STATEMENT

1. 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.
2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTICE:** 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.

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

**⚠ 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. Always use eye protection which is marked to comply with ANSI Z87.1.



## 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.

V	Volt	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
min	Minutes	Time
~	Alternating Current	Type of current
≡	Direct Current	Type or a characteristic of current
$n_0$	No Load Speed	Rotational speed, at no load

... /min	Per Minute	Revolutions per minute
	Class II Construction	Double-insulated construction
	Wet Conditions Alert	Do not expose to rain or use in damp locations.
	Read Operator's Manual	To reduce the risk of injury, user must read and understand operator's manual before using this product
	Eye Protection	Always wear safety goggles or safety glasses with side shields and a full face shield when operating this product.
	Safety Alert	Precautions that involve your safety.

**⚠ DANGER:** People with electronic devices, such as pacemakers, should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.

**⚠ WARNING:** 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

- **Avoid body contact with grounded surfaces,** such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is grounded.
- **Power tool plugs must match the outlet.** Never modify the plug in any way. Do not use any adapter plugs with grounded power tools. Unmodified plugs and matching outlets will reduce the risk of electric shock.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **Do not abuse the cord.** Never use the cord for carrying, pulling, or unplugging the power tool. Keep the cord away from heat, oil, sharp edges, or moving parts. Damaged or entangled cords increase the risk of electric shock.
- **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- Use charge the EGO lithium-ion battery packs list below:

CHARGER	BATTERY PACKS
CH2100	BA2240 56V Battery 4.0Ah BA1120 56V Battery 2.0Ah



## SERVICE

- **Have your charger serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the charger is maintained.
- **When servicing a charger, use only identical replacement parts. 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.

## SAFETY RULES FOR CHARGER

**⚠ CAUTION:** To reduce the risk of electric shock or damage to the charger and battery, charge only those lithium-ion rechargeable batteries specifically designated on your charger's label. Other types of batteries may burst, causing personal injury or damage.

- **Before using the battery charger,** read all instructions and cautionary markings in this manual and on the battery charger, the battery and the product using the battery to prevent misuse of the products and possible injury or damage.
- **Do not use the charger outdoors or expose it to wet or damp conditions.** Water entering the charger will increase the risk of electric shock.
- **Do not handle charger, including the charger plug and charger terminals with wet hands.**
- **Use of an attachment not recommended or sold by the battery-charger manufacturer may result in a risk of fire, electric shock, or injury to persons.**
- **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- **Do not abuse the cord or charger.** Never use the cord to carry the charger. Do not pull the charger cord to disconnect the plug from a receptacle. Damage to the cord or charger could occur and create an electric shock hazard. Replace damaged cords immediately.

- **Make sure that the cord is located so that it will not be stepped on, tripped over, come in contact with sharp edges or moving parts, or otherwise be subjected to damage or stress.** This will reduce the risk of accidental falls, which could cause injury and damage to the cord, which could then result in electric shock.
- **Keep the cord and charger from heat to prevent damage to housing or internal parts.**
- **Do not allow gasoline, oils, petroleum-based products, etc. to come in contact with plastic parts.** These materials contain chemicals that can damage, weaken, or destroy plastic.
- **Do not operate the charger with a damaged cord or plug, which could cause shorting and electric shock.** If damaged, have the charger repaired or replaced by an authorized service technician at an EGO Service Center.
- **Do not operate the charger if it has received a sharp blow, been dropped, or has otherwise been damaged in any way.** Take it to an authorized service technician for an electrical check to determine if the charger is in good working order.
- **Do not disassemble the charger.** Take it to an authorized service technician when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
- **Unplug the charger from the electrical outlet before attempting any maintenance or cleaning to reduce the risk of electric shock.**
- **Disconnect charger from the power supply when not in use.** This will reduce the risk of electric shock or damage to the charger if metal items should fall into the opening. It will also help prevent damage to the charger during a power surge.
- **Risk of electric shock.** Do not touch the uninsulated portion of output connector or uninsulated battery terminal.
- **Save these instructions.** Refer to them frequently and use them to instruct others who may use this tool. If you lend this tool to someone else, also lend these instructions to them to prevent misuse of the product and possible injury.

## IMPORTANT SAFETY INSTRUCTIONS

- **Save these instructions.** This manual contains important safety and operating instructions for 56V Standard Charger CH2100.
- **Before using the battery charger, read all instructions and cautionary markings on the battery charger, the battery and the product using battery.**

**⚠ WARNING:** When using electric appliances, basic precautions should always be followed, including the following.

- To reduce the risk of injury, close supervision is necessary when an appliance is used near children.
- Only use attachments recommended or sold by manufacturer.
- Do not use outdoors.
- For a portable appliance – To reduce the risk of electrical shock, do not put charger in water or other liquid. Do not place or store appliance where or can fall or be pulled into a tub or sink.

**⚠ CAUTION:** To reduce the risk of injury, charge only lithium-ion rechargeable batteries. Other types of batteries may burst, causing personal injury or damage.



## INTRODUCTION

Congratulations on your selection of a new generation of 56V charger. It has been designed, engineered and manufactured to give you the best possible dependability and performance.

Should you experience any problem you cannot easily remedy, please contact EGO customer service center 1-855-EGO-5656.

This manual contains important information on to the safe assembly, operation and maintenance of your 56V standard charger. Read it carefully before using the charger. Keep this manual handy so you can refer to it at any time.

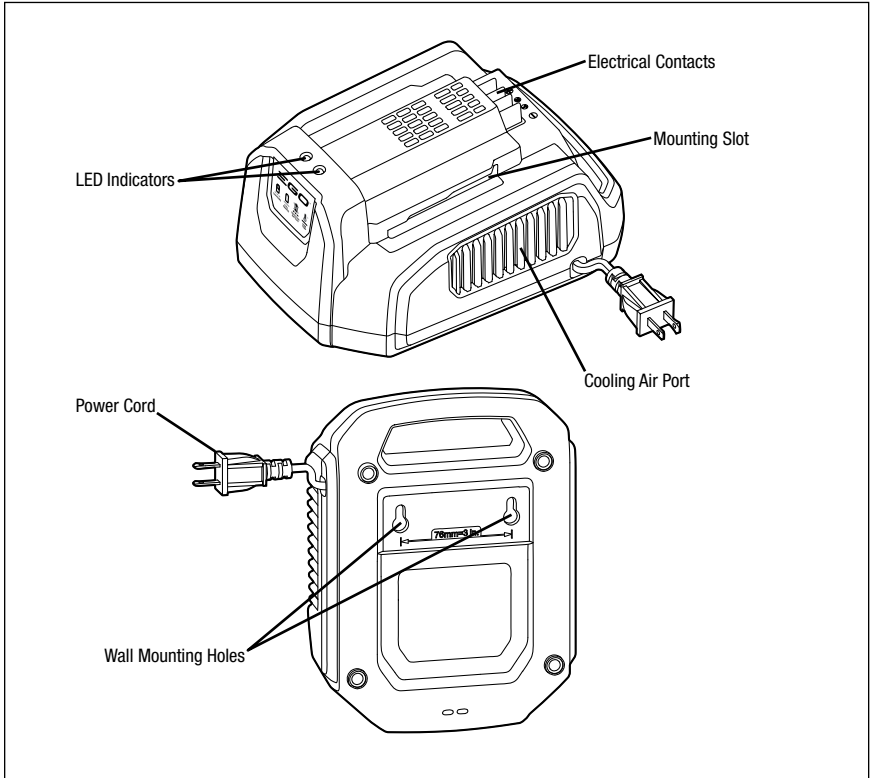
SERIAL NUMBER _____	DATE OF PURCHASE _____
YOU SHOULD RECORD BOTH SERIAL NUMBER AND DATE OF PURCHASE AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE	

## SPECIFICATIONS

Charger Input	120V~60Hz, 210W
Charger Output	56V, max. 4200mAh, Li-ion type rechargeable battery pack
Quick-Charge Time	Approximately 80 minutes for BA2240 battery pack, 40 minutes for BA1120 battery pack.
Optimum Charging Temperature	32°F-104°F (0°C-40°C)
Charger Weight	2.36 lb. (1.07 kg)

# DESCRIPTION

## KNOW YOUR CHARGER (Fig. 1)



**LED INDICATORS:** indicate the charging status.

**MOUNTING SLOT:** guides the battery pack when it is installed on the charger.

**WALL MOUNTING HOLE:** for convenient storage on the wall.

**⚠ WARNING:** The safe use of this product requires an understanding of the information on the tool and in this operator's manual, as well as knowledge of the project you are attempting. Before use of this product, familiarize yourself with all its operating features and safety rules.

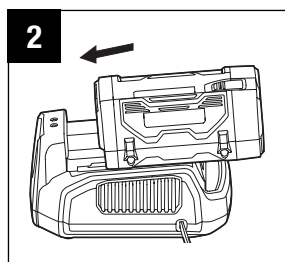
## OPERATION

### HOW TO CHARGE THE BATTERY PACK

**⚠ WARNING:** Do not use the charger outdoors or expose it to wet or damp conditions. Water entering the charger will increase the risk of electric shock.

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





1. Connect the charger to the power supply (120V~, 60Hz).
2. Align the raised ribs of the battery pack with the mounting slots in the charger; slide the battery pack down onto the charger (Fig. 2).
3. The charger will communicate with the battery pack to evaluate the condition of the battery pack.
4. When the battery pack is charging, the green LED on the charger will flash. The power indicator on the battery pack will flash in sequence: red, orange and green. The fan in the charger continuously works to cool the battery pack.
5. When the battery pack is fully charged, the green LED will stop flashing and will shine green continuously. The power indicator on the battery pack will go out. Wait until the cooling fan stops, remove the battery pack from the charger and disconnect the charger from the power supply.
6. The battery pack will fully charge if left on the charger, but it will not overcharge. If the battery pack remains on the charger for one month or more, it will perform self-maintenance and drop to 30% charge capacity. If this occurs, reinstall the battery pack on the charger to recharge it fully.



## NOTICE:

- A significantly reduced run time after fully charging the battery pack indicates that the batteries are near the end of their usable life and must be replaced.
- The charger may warm during charging. This is part of the normal operation of the charger. Charge in a well-ventilated area.

## LED FUNCTIONS OF CHARGER

LED Indicator	Battery Pack	Red LED on the Charger	Green LED on the Charger	Power Indicator on the Battery Pack	ACTION
 <b>CHARGING</b>	Charging	Off	Flashing	Flashing red, orange and green alternatively	Charging
 <b>DEFECTIVE BATTERY</b>	Defective	Flashing	Off	Off	Battery pack or charger is defective
 <b>HIGH TEMP</b>	Cold/Hot Battery	On	Off	Off	Charging will begin when battery pack returns to 37°F (3°C)-135°F (57°C)
 <b>FULL CHARGE</b>	Fully charged	Off	On	Off	Charging is complete. Maintenance charging.
---	Self-maintenance	Off	Intermittently quick flashing	Off	Battery pack is performing self-maintenance or in sleep mode. Reinstall the battery pack on the charger to recharge it fully.

## CHARGING A HOT OR COLD BATTERY PACK

If the battery pack is out of the normal temperature range, the red LED will shine and the green LED will go off. When the battery pack cools down to approximately 135°F (57°C) or warms to more than 37°F (3°C), the charger will automatically begin charging.

## DEFECTIVE BATTERY PACK OR CHARGER

If the charger detects a problem, the red LED will begin flashing and the green LED will go off.

1. If registering as defective, remove and reinsert the battery pack in the charger. If the LEDs still read “defective” a second time, try charging a different battery pack.
2. If a different battery pack charges normally, dispose of the defective battery pack (refer to the instructions in the battery pack manual).
3. If a different battery pack also indicates “defective”, unplug the charger and wait until the red LED goes out, then reconnect the plug to the power supply. If the red LED on charger still display defective, the charge may be defective.

## WALL-MOUNT HOLES

The charger has hanging holes for convenient storage (Fig.1). Install screws in the wall 3 inches (76mm) apart. Use screws sufficiently strong to hold the combined weight of the charger and battery pack (approximately maximum 7.23 lbs.)



## MAINTENANCE

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

**⚠ WARNING:** When servicing, use only identical EGO replacement parts. Use of any other parts may create a hazard or cause product damage.

**⚠ WARNING:** It is not recommended to use compressed dry air as cleaning method of the charger. If cleaning with compressed air is the only method to apply, always wear safety goggles or safety glasses with side shields when using compressed air to clean the tool. If the operation is dusty, also wear a dust mask.

### 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 clean cloths to remove dirt, dust, oil, grease, etc.

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

**⚠ WARNING:** When servicing, use only identical EGO 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 a qualified service technician at an EGO Service Center.

## TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
Charger doesn't work. The red LED flashes red or all the LEDs go out.	Battery pack or charger is defective or bad connection between the battery pack and charger.	<ol style="list-style-type: none"><li>1. Try to remove and reinsert the battery pack in the charger.</li><li>2. Try charging a different battery pack.</li><li>3. Unplug the charger and wait until the red LED goes out, then reconnect the plug to the power supply.</li></ol>
Charger doesn't work and red LED shines red.	Battery pack is too hot or too cold.	Allow the battery pack to reach normal temperature. Charging will begin when battery pack returns to 37°F(3°C)-135°F(57°C)
The charger produces a rhythmic sound and the power indicator on the battery pack is OFF.	The battery pack is over-discharged.	Leave the battery on the charger and check in 30 minutes to see if the power indicator on the battery pack turns on. If yes, the battery pack is activated successfully. If no, the battery pack may be damaged.