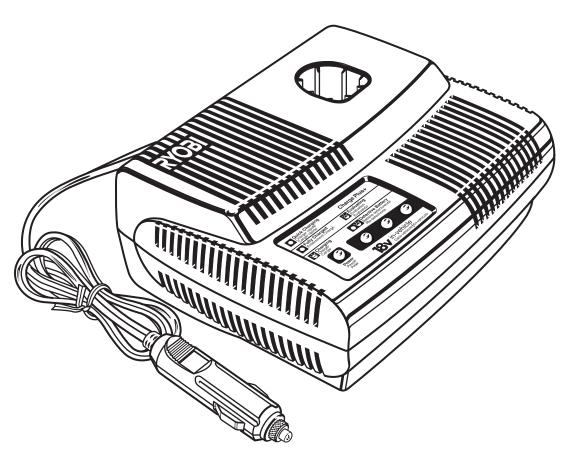


# **OPERATOR'S MANUAL** IN-VEHICLE CHARGER

P130



Fits Ryobi 7.2 Volt-18 Volt battery packs

### BATTERIES SOLD SEPARATELY

Your battery charger has been engineered and manufactured to our high standard for dependability, ease of operation, and operator safety. When properly cared for, it will give you years of rugged, trouble-free performance.

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

Thank you for your purchase.

## SAVE THIS MANUAL FOR FUTURE REFERENCE

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## INTRODUCTION

This tool 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.

## WARRANTY

#### RYOBI® POWER TOOL - LIMITED TWO YEAR WARRANTY AND 30 DAY EXCHANGE POLICY

One World Technologies, Inc., warrants its RYOBI® power tools with the following conditions:

**30-DAY EXCHANGE POLICY:** During the first 30 days after date of purchase, you may either request service under this warranty or you may exchange any RYOBI® power tool which does not work properly due to defective workmanship or materials by returning the power tool to the dealer from which it was purchased. To receive a replacement power tool or requested warranty service, you must present proof of purchase and return all original equipment packaged with the original product. The replacement power tool will be covered by the limited warranty for the balance of the two year period from the date of the original purchase.

**WHAT THIS WARRANTY COVERS:** This warranty covers all defects in workmanship or materials in your RYOBI<sup>®</sup> power tool for a period of two years from the date of purchase. With the exception of batteries, power tool accessories are warranted for ninety (90) days. Batteries are warranted for two years.

**HOW TO GET SERVICE:** Just return the power tool, properly packaged and postage prepaid, to an Authorized Service Center. You can obtain the location of the Service Center nearest you by contacting a service representative at One World Technologies, Inc., P.O. Box 1207, Anderson, SC 29622-1207, by calling 1-800-525-2579 or by logging on to www.ryobitools.com. When you request warranty service, you must also present proof of purchase documentation, which includes the date of purchase (for example, a bill of sale). We will repair any faulty workmanship, and either repair or replace any defective part, at our option. We will do so without any charge to you. We will complete the work in a reasonable time, but, in any case, within ninety (90) days or less.

**WHAT'S NOT COVERED:** This warranty applies only to the original purchaser at retail and may not be transferred. This warranty only covers defects arising under normal usage and does not cover any malfunction, failure or defects resulting from misuse, abuse, neglect, alteration, modification or repairs by other than Authorized Service Centers. One World Technologies, Inc. makes no warranties, representations or promises as to the quality or performance of its power tools other than those specifically stated in this warranty.

**ADDITIONAL LIMITATIONS:** Any implied warranties granted under state law, including warranties of merchantability or fitness for a particular purpose, are limited to two years from the date of purchase. One World Technologies, Inc. is not responsible for direct, indirect, or incidental damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

### WARNING!

**READ AND UNDERSTAND ALL INSTRUCTIONS.** Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

Before using battery charger, read all instructions and cautionary markings in this manual, on battery charger, battery, and product using battery to prevent misuse of the products and possible injury or damage.

#### CAUTION:

To reduce the risk of damage to the charger and battery, charge only nickel-cadmiumrechargeable batteries as specifically designated on the charger. Other types of batteries may burst, causing personal injury or damage.

- Do not use charger outdoors or expose to wet or damp conditions. Water entering charger will increase the risk of electric shock.
- To reduce risk of damage to cigarette lighter connector and cord, pull by cigarette lighter connector rather than cord when disconnecting charger.
- Do not operate charger with damaged cord or cigarette lighter connector – replace it immediately.
- 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. Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to

**damage or stress.** Following this rule will reduce the risk of serious personal injury.

- To reduce the risk of electric shock, unplug charger from outlet before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.
- Do not abuse cord or charger. Never use the cord to carry the charger. Do not pull the charger cord rather than the plug when disconnecting from receptacle. Damage to the cord or charger could occur and create an electric shock hazard. Replace damaged cords immediately.
- Keep cord and charger from heat to prevent damage to housing or internal parts.
- Do not let gasoline, oils, petroleum-based products, etc. come in contact with plastic parts. They contain chemicals that can damage, weaken, or destroy plastic.
- Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a qualified service center.
- Do not disassemble charger. Take it to an authorized service center when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
- If the power supply cord is damaged, it must be replaced only by the manufacturer or by an authorized service center to avoid risk.
- Save these instructions. Refer to them frequently and use them to instruct others who may use this tool. If you loan someone this tool, loan them these instructions also to prevent misuse of the product and possible injury.

# **IMPORTANT SAFETY INSTRUCTIONS** 1. SAVE THESE INSTRUCTIONS

This manual contains important safety and operating instructions for battery charger 1423701, 140237021 or 140237023.

- **2.** Before using battery charger, read all instructions and cautionary markings on battery charger, battery, and product using battery.
- **3.** CAUTION: To reduce the risk of injury, charge only nickel-cadmium rechargeable batteries. Other types of batteries may burst, causing personal injury or damage.

## SYMBOLS

The following signal words and meanings are intended to explain the levels of risk associated with this product.					
SYMBOL	SIGNAL	MEANING			
	DANGER:	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.			
	WARNING:	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.			
	CAUTION:	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.			
	CAUTION:	(Without Safety Alert Symbol) Indicates a situation that may result in property damage.			

#### SERVICE

Servicing requires extreme care and knowledge and should be performed only by a qualified service technician. For service we suggest you return the product to your nearest **AUTHORIZED SERVICE CENTER** for repair. When servicing, use only identical replacement parts.

### **WARNING:**

To avoid serious personal injury, do not attempt to use this product until you read thoroughly and understand completely the operator's manual. Save this operator's manual and review frequently for continuing safe operation and instructing others who may use this product.

### **WARNING**:



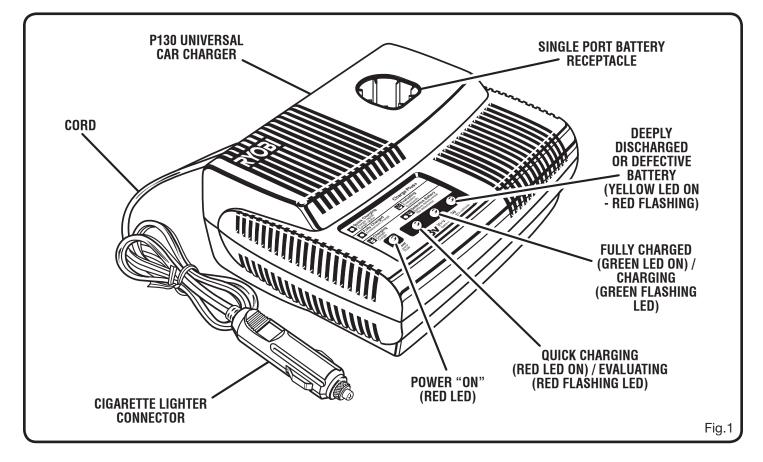
The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and a full face shield when needed. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always use eye protection which is marked to comply with ANSI Z87.1.

## SAVE THESE INSTRUCTIONS

## **FEATURES**

#### **PRODUCT SPECIFICATIONS**

Charger Voltage	7.2 V - 18 V DC
Charger Input	12 V, DC only
Charge Rate	1 hour
Cord Length	3 ft.



#### **KNOW YOUR CHARGER**

See Figure 1.

Before attempting to use this product, familiarize yourself with all operating features and safety rules.

#### THERMAL PROTECTION

Your single-port charger has a thermal protection system that prevents charging batteries that are too hot, which could cause damage to the battery and a loss of run-time.

#### LED DISPLAY

The LED lights located next to each battery port indicate the charge status of each battery.

#### **CIGARETTE LIGHTER CONNECTOR**

Connector used to energize charger using cigarette lighter receptacle or "power point."

## ASSEMBLY

#### UNPACKING

This product has been shipped completely assembled.

- Carefully remove the charger and any accessories from the box. Make sure that all items listed in the packing list are included.
- Inspect the charger carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.
- If any parts are damaged or missing, please call 1-800-525-2579 for assistance.

#### PACKING LIST

In-Vehicle Charger Operator's Manual

## WARNING:

If any parts are missing or damaged do not operate this tool until the missing parts are replaced. Failure to do so could result in possible serious personal injury.

## WARNING:

Do not attempt to modify this tool or create accessories not recommended for use with this tool. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

## **OPERATION**

### WARNING:

Do not allow familiarity with tools to make you careless. Remember that a careless fraction of a second is sufficient to inflict serious injury.

## **WARNING**:

Always wear safety goggles or safety glasses with side shields when operating tools. Failure to do so could result in objects being thrown into your eyes, resulting in possible serious injury.

#### **APPLICATIONS**

You may use this charger for the following purposes:

Portable charging of Ryobi 7.2 Volt-18.0 Volt batteries.

#### CAUTION:

If at any point during the charging process none of the LEDs are lit, remove the battery pack from the charger to avoid damaging the product. DO NOT insert another battery. Return the charger and battery to your nearest service center for service or replacement.

### LED FUNCTIONS OF CHARGER LED WILL BE ON TO INDICATE STATUS OF CHARGER AND BATTERY PACK:

See Figure 2.

- Red Power LED on = Charger is getting power from cigarette lighter receptacle or powerpoint.
- Red LED on = Quick charging mode.
- Green LED flashing = Charging
- Green LED on = Fully charged and in maintenance charge mode.
- Red LED flashing = When battery pack is inserted into charger, indicates hot battery pack or that battery pack is out of normal temperature range or is evaluating.
- Yellow LED on and Red LED flashing = Deeply discharged or defective battery pack.
- Yellow LED flashing = This is a High and Low input voltage shutdown. If the cigarette adapter plug voltage is above 15Vdc or below 10Vdc the charger will stop charging. If input voltage is between 10.5Vdc and 10Vdc, the yellow LED will flash and alarm will sound.

**NOTE:** There is a low input voltage audible alarm for less than 10.5V DC input. The yellow LED will flash. You should start your car to recharge the vehicle battery and/or remove the charger adapter plug to stop the charging before the car battery is completely drained.

■ No LED on = Defective charger or battery pack.

## **OPERATION**

#### **CHARGING A COOL BATTERY PACK**

If battery pack is within normal temperature range, the red LED on charger will come on.

**NOTE:** If the charger does not charge the battery pack under normal circumstances, return both the battery pack and charger to your nearest Ryobi Authorized Service Center for electrical check.

- Charge the battery pack only with the charger provided.
- Make sure the power supply is normal voltage, 12 volts, DC only.
- Connect the charger to the power supply.
- Place the battery pack in the charger aligning raised rib on the battery pack with the groove in the charger. See Figure 3.
- Press down on the battery pack to be sure contacts on the battery pack engage properly with contacts in the charger.
- Normally the red LED on charger will come on. This indicates the charger is in quick charging mode.
- Red LED should remain on for approximately 1 hour then the green LED will come on. Green LED on indicates battery pack is fully charged and charger is in maintenance charge mode.

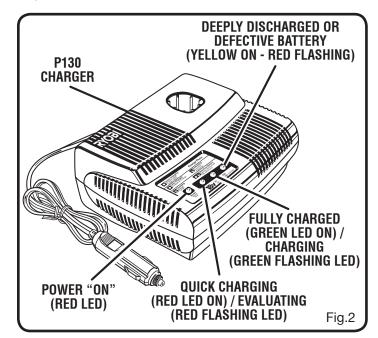
**NOTE:** The green LED will remain on until the battery pack is removed from the charger or charger is disconnected from the power supply.

If the red LED is flashing and yellow LED is on, this indicates a deeply discharged battery pack. When the red LED is flashing, this indicates the battery pack has reached the normal voltage range. Allow the battery pack to remain in charger for 30 minutes. If after 30 minutes the yellow LED is on and the red LED is flashing, this indicates a defective battery pack.

- After normal usage, a minimum of 1 hour of charging time is required to fully recharge battery pack.
- The battery pack will become slightly warm to the touch while charging. This is normal and does not indicate a problem.
- Do not place the charger and battery pack in an area of extreme heat or cold. They will work best at normal room temperature.

**NOTE:** The charger and battery pack should be placed in a location where the temperature is more than  $50^{\circ}$ F but less than  $100^{\circ}$ F.

When batteries become fully charged, unplug the charger from power supply and remove the battery pack.



## **OPERATION**

#### **CHARGING A HOT BATTERY PACK**

When using a tool continuously, the batteries in the battery pack will become hot. You should let a hot battery pack cool down for approximately 30 minutes before attempting to recharge. When the battery pack becomes discharged and is hot, this will cause the red LED to blink. If the red LED continues to blink and the yellow LED comes on, return battery pack to your nearest Ryobi Authorized Service Center for checking or replacing.

**NOTE:** This situation only occurs when continuous use of a tool causes the batteries to become hot. It does not occur under normal circumstances. Refer to "**CHARGING A COOL BATTERY PACK**" for normal recharging of batteries. If the charger does not charge the battery pack under normal circumstances, return both the battery pack and charger to your nearest Ryobi Authorized Service Center for electrical check.

#### **ENERGIZING BATTERY CHARGER**

See Figure 4.

By holding the connector firmly, place connector into a cigarette lighter receptacle or "power point" to energize battery charger, red POWER LED will come on.

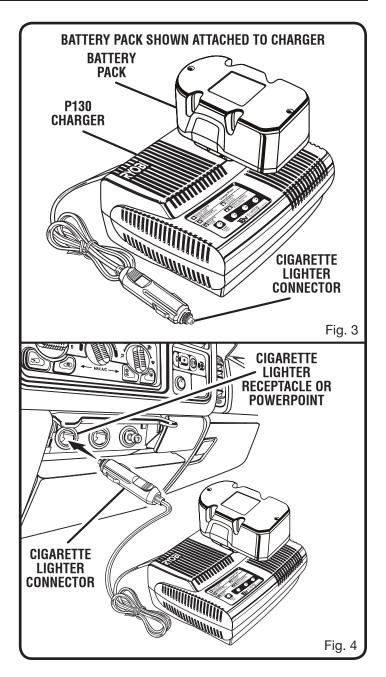
#### USE P130 BATTERY CHARGER ONLY WITH BATTERY PACKS LISTED BELOW

#### TYPE 1 BATTERY PACK NUMBERS (require 1 - 1 1/2 hours to charge)

1400651, 1400652, 1314707, 1400655, 1400671, 1314702, 1400672, 1322401, 130147008, 130224010, 130224007, 1322701, 130227002, 130224028, 1324101, 1323701, 130224011, 130256001, 130255004, 1323303

#### TYPE 2 BATTERY PACK NUMBERS (require 3 - 6 hours to charge)

1400669, 1311146, 1400670, 1311148, 1311145, 1400668



	BATTERY TYPE	RED POWER	RED	GREEN	YELLOW
POWER	W/O Battery Pack	On	Off	Off	Off
Quick Charging	Type 1 Type 2	On On	On Off	Off Flashing	Off Off
Fully Charged	Type 1 and Type 2	On	Off	On	Off
Evaluating	Type 1 and Type 2	On	Flashing	Off	Off
Defective	Type 1 and Type 2	On	Flashing	Off	On after 30 min.
Charger Voltage/ Temperature Shutdown	Type 1 and Type 2	On	Off	Off	Flashing

## MAINTENANCE

### WARNING:

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

### WARNING:

Always wear safety goggles or safety glasses with side shields during power tool operation or when blowing dust. If operation is dusty, also wear a dust mask.

### WARNING:

To avoid serious personal injury, always remove the battery pack from the tool when cleaning or performing any 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 clean cloths to remove dirt, dust, oil, grease, etc.

## WARNING:

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

Only the parts shown on the parts list are intended to be repaired or replaced by the customer. All other parts should be replaced at a Ryobi Authorized Service Center.

#### BATTERIES

The battery pack for this tool is equipped with nickel-cadmium rechargeable batteries. Length of service from each charging will depend on the type of work you are doing.

The batteries in this tool have been designed to provide maximum trouble-free life. However, like all batteries, they will eventually wear out. **Do not** disassemble battery pack and attempt to replace the batteries. Handling of these batteries, especially when wearing rings and jewelry, could result in a serious burn.

To obtain the longest possible battery life, we suggest the following:

Remove the battery pack from the charger once it is fully charged and ready for use.

For battery storage longer than 30 days:

- Store the battery pack where the temperature is below 80°F.
- Store battery packs in a "discharged" condition.

#### BATTERY PACK REMOVAL AND PREPARATION FOR RECYCLING



To preserve natural resources, please recycle or dispose of batteries properly.

This product contains nickel-cadmium batteries. Local, state or federal laws may prohibit disposal of nickel-cadmium batteries in ordinary trash.

Consult your local waste authority for information regarding available recycling and/or disposal options.

### WARNING:

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

# **OPERATOR'S MANUAL** IN-VEHICLE CHARGER

**P130** 

## WARNING:

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

• lead from lead-based paints,

**RAOBI** 

- 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 specially designed to filter out microscopic particles.

### • PARTS AND SERVICE

Prior to requesting service or purchasing replacement parts, please obtain your model and serial number from the product data plate.

- MODEL NUMBER P130
- SERIAL NUMBER

### • HOW TO OBTAIN REPLACEMENT PARTS:

Replacement parts can be purchased online at **www.ryobitools.com** or by calling 1-800-525-2579. Replacement parts can also be obtained at one of our Authorized Service Centers.

### • HOW TO LOCATE AN AUTHORIZED SERVICE CENTER:

Authorized Service Centers can be located online at **www.ryobitools.com** or by calling 1-800-525-2579.

## • HOW TO OBTAIN CUSTOMER OR TECHNICAL SUPPORT:

To obtain Customer or Technical Support please contact us at 1-800-525-2579.

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#### ONE WORLD TECHNOLOGIES, INC.

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