

20V Li-ion Cordless Reciprocating Saw

How to Obtain Warranty Service:

Take the original receipt and product to the place of purchase or mail the original receipt and product to the address found on the web site if purchased on-line. It is recommended you retain all of your receipts covering the purchase and maintenance of your power tool. Pulsar will not deny you warranty coverage as long as proof of purchase or service can be obtained.

PULSAR OBLIGATION UNDER THIS WARRANTY IS EXCLUSIVELY LIMITED TO PRODUCT REPAIR OR REPLACEMENT AND SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, THE EXPENSE OF DELIVERING PRODUCT TO AND FROM REPAIR CENTER, LOSS OR DAMAGE TO PERSONAL PROPERTY, LOSS OF REVENUE, TELEPHONE CHARGES, LOSS OF TIME, OR INCONVENIENCE. SOME STATES, PROVINCES, OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL DAMAGES, SO THE ABOVE LIMITATION 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 OR PROVINCE TO PROVINCE.



20V LI-ION CORDLESS
RECIPROCATING SAW
2.0Ah POWER TOOLS

OWNER'S MANUAL



DO NOT RETURN TO STORE!
HAVE QUESTIONS OR NEED SERVICE
1-866-591-8921
www.pulsar-products.com

PT2120



WARNING! To Reduce The Risk Of Injury, User
Must Read And Understand Instruction Manual.

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WARNING! READ AND CALL SAFETY PRECAUTIONS IN THIS MANUAL BEFORE OPERATION. FAILURE TO COMPLY WITH INSTRUCTIONS IN THIS MANUAL COULD RESULT IN PERSONAL INJURY, PROPERTY DAMAGE, AND/OR VOIDING OF YOUR WARRANTY. PULSAR PRODUCTS, INC. WILL NOT BE LIABLE FOR ANY DAMAGE BECAUSE OF FAILURE TO FOLLOW THESE INSTRUCTIONS.

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- customer will pay any additional charges for expedited shipments.
- Consumer is responsible for labor costs associated with warranted repairs twelve (12) months after the purchase date. Labor rates will only be based on normal working hours.
 - Consumer is responsible for maintaining power tool as specified in the owner's manual. Documentation of this maintenance may be required to cover warranty requests.
 - Consumer is responsible for presenting any problems with the power tool to an authorized Service Center as soon as the problem exists. Warranted repairs will be completed in a reasonable period of time, not to exceed 30 days.

What this Warranty Does Not Cover:

- **Maintenance:** This warranty does not cover any adjustments or repairs not performed by an authorized repair facility.
- **Misuse:** This warranty does not apply if your product has failed due to abuse, misuse, neglect, using incorrect batteries **or lubricants, overloading, over-speeding, improper maintenance, improper storage, unapproved modifications, or has** been operated in any way contrary to the instructions found in the product's owner's manual.
- **Adverse conditions:** This warranty does not apply if your product has failed due to freezing, accident, natural disasters.
- **Product Shipment:** This warranty does not apply to damage resulting from shipping, handling, or warehousing: **Any damage claims to this product caused by shipment must be filed with freighter.**
- **Other exclusions:** This warranty does not apply if your product has been sold "as is" or where the factory applied serial **number has been removed. Refurbished, used, demonstration or floor models are not covered by this warranty.**

Where Warranty is Valid:

For warranty coverage, this product must be purchased from an authorized retailer and the warranty only extends **to the original purchaser in the United States, Canada, or Mexico, Refurbished used, demonstration, or floor models are** not covered by this warranty. Products purchased from on-line auction websites are not covered under this warranty. Products used for commercial use are not covered under this warranty.

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LIMITED WARRANTY

Limited 3 Year Warranty:

From the date of original purchase, warrants to the original purchaser, that each power tool sold, shall be free from defect in material and workmanship, for the items and time period set forth below. Pulsar at its discretion, agrees to repair or replace any defective part that upon examination, inspection, and testing by a authorized service dealer, is found to be defective within the original warranty period. We will also decide upon the use of new or rebuilt parts or comparable product. Any part or product that is replaced, will be retained by us. This warranty period shall not be extended and any repaired product shall be warranted for the remaining period of the original warranty. The consumer is responsible, and shall prepay all transportation costs, including returning items to the factory or warehouse. This warranty is not transferable and proof of purchase must be presented for requesting warranty service. If proof-of-purchase or a receipt is not provided, the product's shipping date by the manufacture will be used to determine the warranty period.

Length of Warranty:

Personal use applications of this power tool are warranted for three (3) years. Proof of purchase and of maintenance must be provided.

- Year 1 - Limited comprehensive coverage on all power tool components and labor.
- Year 2 and 3 - Limited coverage on power tool parts only.

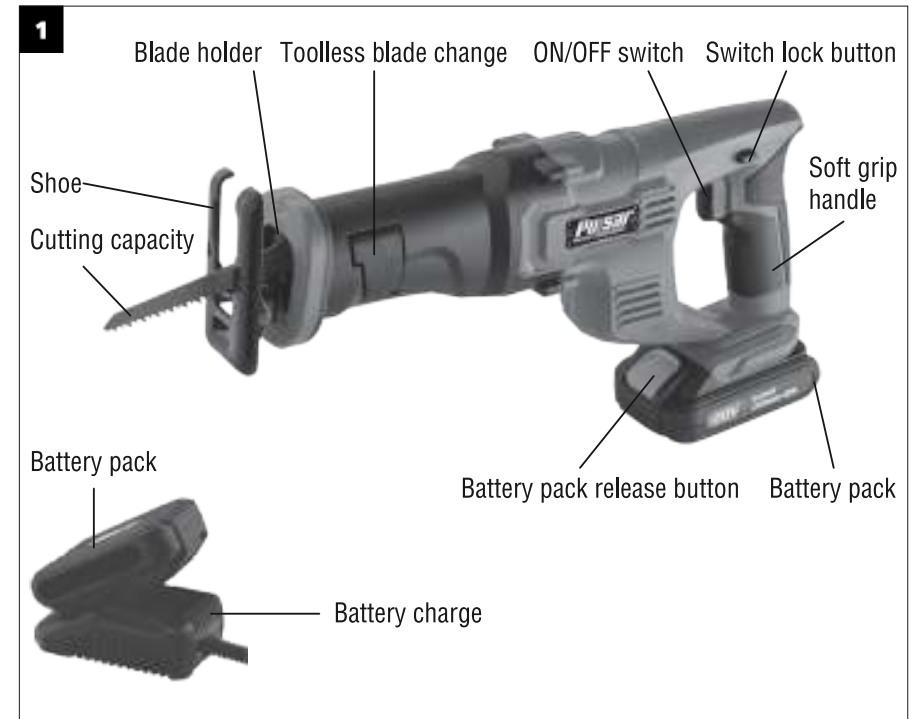
“Personal use” means personal residential household use or recreational use by the retail consumer. “Commercial use” means all other uses including commercial, construction, or other income producing purposes. Once a power tool has been used for commercial purposes, it shall thereafter be considered as a “commercial use” power tool for the purposes of this warranty. Any power tool used for commercial use or rental equipment will not be covered under this warranty.

Consumer Responsibilities:

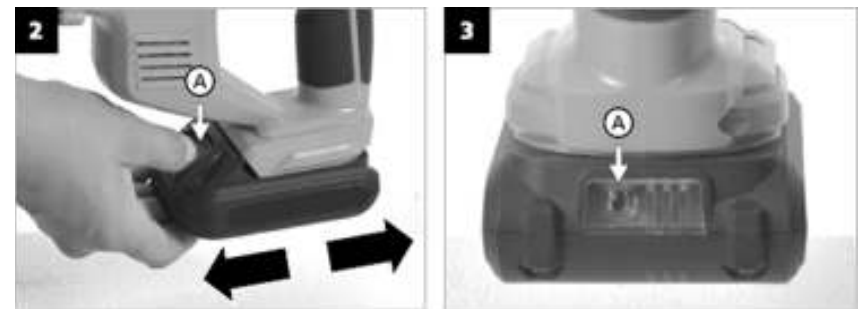
- Consumer is responsible for carefully reading and following all instructions in the owner's manual. Any product that is damaged due to misuse or abuse will not be covered by this warranty.
- Consumer is responsible for all transportation costs to an authorized Service Center. Unless otherwise requested, ground shipping will be applied for part shipment and

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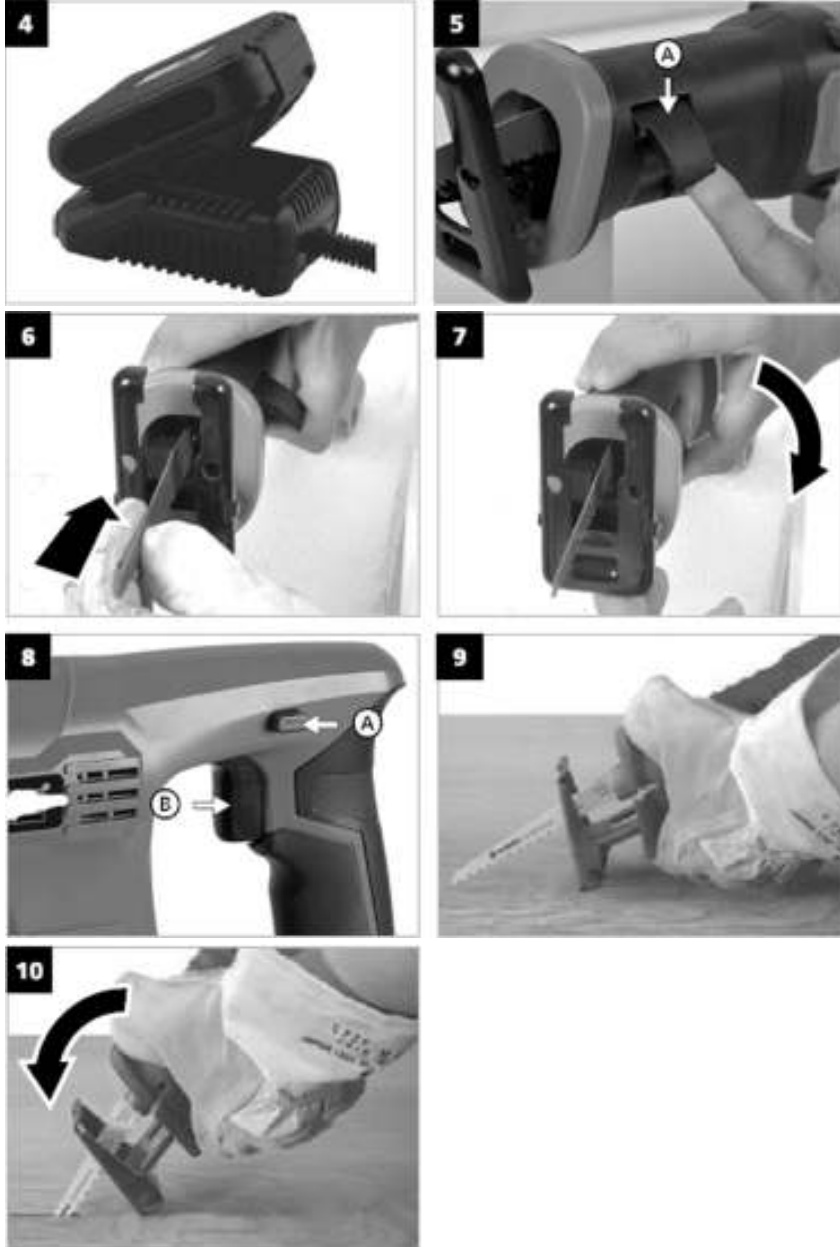
1. MACHINE DESCRIPTION



2. ILLUSTRATED GUIDE



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- Store the tool in a clean dry place.
- All repairs must be performed by a qualified electrician.
- Opening the tool voids the warranty.

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cutting. Always face the good side of the workpiece down.

Sawing metal materials

- Be aware that sawing metal takes much more time than sawing wood.
- Use a saw blade suitable for sawing metal. When cutting thin sheet metal, clamp a piece of scrap wood to the back surface of the workpiece and cut through this sand a film of oil along the intended line of cut.
- Always use a suitable coolant (cutting oil) when cutting metal. Failure to do so will cause significant blade wear. The underside of the workpiece can be greased instead of using a coolant.

Plunge cutting

- Only soft working materials, such as wood, may be used for plunge cutting.
- Place the machine with the front edge of the base plate on to the workpiece without the saw blade touching the workpiece (Fig. 9).
- Start your saw and slowly lower the blade into the workpiece until the blade cuts through the wood (Fig. 10).
- The corner of the guide serves as a pivot point around which the machine is slowly aligned where by the saw blade cuts into the workpiece.
- Firmly hold the machine against the workpiece.
- By tilting the machine, slowly plunge the saw blade into the workpiece.

9. MAINTENANCE

- Clean the tool with a rag dampened with clean water. Do not use chemicals or soap. Do not allow water to get inside the tool.
- Make sure the vent passages remain clear of dust and debris to avoid overheating the tool.

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3. SPECIFICATIONS

| Item | Value |
|--|--------------------|
| Main voltage | 110-120 V~60 Hz |
| Output voltage | 20 V |
| Battery voltage | 20 V |
| Battery capacity | 2.0 Ah Li-ion |
| Battery charge time | 1 hours |
| Stroke length | 22 mm |
| Cutting capacity (in wood / in soft metal) | 115 mm / 10 mm |
| No-load speed | 0-3000 SPM |
| Other features | Quick blade change |
| Operating conditions | 0 °C - +35 °C |

4. SAFETY SYMBOLS

The rating plate on your tool may show symbols. These represent important information about the product or instruction its use.



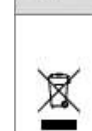
Battery voltage



Direct current



No-load speed












Do not discard electrical appliances with household waste.



Read instruction manual.

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| | |
|---|---|
|  | Use eyes and ears protection. |
|  | Charging |
|  | Battery full charging |
|  | Use dust mask. Dust which is injurious to health can be generated when working on wood and other materials. |
|  | Max. sawing depth |
|  | The battery contains toxic substances. Please dispose of batteries at your local battery disposal depot. |
|  | Do not store or use the battery in locations where the temperature may reach or exceed 50°C. |
|  | Do not throw the battery into fire. |
|  | Do not throw the battery into water. |

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Setting the stroke rate

By pressing the ON/OFF switch(Fig. 8B) you can set the stroke rate during idle operation. The optimal stroke rate depends on the work piece, the operation mode, and the inserted accessory. Select the stroke rate by applying a greater or lesser pressure to the ON/OFF switch.

Tip for working

- Always observe the safety instructions and applicable regulations.
- Secure the workpiece to a work bench or table with a vise or with clamps.
- Switch on the machine before it touches the workpiece.
- Position the base plate onto the surface of the work and saw through the material applying uniform contact pressure and feed.
- Always hold the tool with both hands.
- Always press the shoe firmly against the workpiece during operation. Do not force.
- After completing the working procedure, switch the machine off.

Sawing wood materials

- When cutting laminates, splintering may occur which can damage the presentation surface. The most common saw blades cut on the upward stroke, therefore if the shoe plate is sitting on the presentation surface either use a saw blade that cuts on the downward stroke or use a fine-tooth saw blade, saw from the back surface of the workpiece.
- To minimise splintering, clamp a piece of scrap wood or hardboard to both sides of the workpiece and saw through this sandwich.
- For long and straight cuts in thick wood (>40 mm), the cutting line can become inaccurate. In this case, using a circular saw is recommended to achieve accurate cuts.
- Splinter-free cutting- cover cutting-line with several layers of wide tape before

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Charging indication

| | FASTCHARGING | | BATTERY |
|-----------------------------------|--------------|-------------|---|
| | Red light | Green light | Three LEDs |
| Charger is connected to the mains | | ● | |
| Discharged battery is inserted | ● | | ☀ ☀ ☀ |
| About 30% capacity | | | ☀ ☀ ☀ |
| About 50% capacity | | | ● ☀ ☀ |
| About 75% capacity | | | ● ● ☀ |
| Battery fully charged | | ● | ● ● ● (Shining for about 10 minutes and then turn off) |

8. OPERATION

Switching ON/OFF

1. First insert a designated saw blade into the power tool.
2. Connect the power plug to a power source(accumulator).
3. To operate the machine, first press and hold the switch-on locking button (Fig. 8A). Press and hold the ON/OFF switch (Fig. 8B) to switch the machine on.
4. Apply the machine to the workpiece only when switched on.
5. Never cover the air vents since they must always be open for proper motor cooling.
6. To switch the machine off, release the ON/OFF switch. In the case that you let go of the switch-on locking button, the ON/OFF switch will be locked again.
7. When the cut is completed, switch off the machine and then pull the saw blade out of the cut only after it has come to a standstill.

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Do not throw the battery into household waste.



To be use inside only.



The charge is connected to the mains.



Identification article number.

Pay special attention to the instructions highlighted as follows:



WARNING! A signal word (word label) used to indicate a potentially dangerous situation that can result in death or serious injury, if it is not prevented.



CAUTION! A signal word (word label). In case of non-compliance with the instructions, we warn against a potential danger of minor or moderate injury and/or damage to the machine or property.



Important message.



Note: It provides helpful information.

5. CONDITIONS OF USE



WARNING! PLEASE READ THE OPERATING INSTRUCTIONS! Read all instructions before operation. Pay special attention to safety instructions.

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WARNING! FAILURE TO FOLLOW THE INSTRUCTIONS AND FAILURE TO RESPECT SECURITY MEASURES MAY RESULT IN DAMAGE OF THE PRODUCT OR SERIOUS INJURIES OR EVEN FATAL INJURY.

If you notice any damage during transport or unpacking, notify your supplier immediately. **DO NOT PUT INTO OPERATION.**

SPECIFIC TERMS AND CONDITIONS OF USE

This product is exclusively intended for the use:

- for cutting wood and steel.
- according to the corresponding descriptions and safety instructions in these operating instructions.

Any other use is not as intended.



If the product is used for any purpose other than the intended purpose or if unauthorized modification is made, the statutory warranty and statutory responsibility for defects as well as any liability on the part of the manufacturer will be void.

Do not overload! Use the product only for the powers it was designed for. The product designed for a given purpose performs it better and safer than one that has a similar function. Therefore, always use the correct one for a given purpose.

Please keep in mind that our products are not designed for commercial, trade or industrial use according to their intended purpose. We accept no liability if the product is used in these or comparable conditions.



Where it is required, follow the legal guidelines and regulations to prevent possible accidents during operation.



The user is liable for all damages caused to third parties or their property.



CAUTION! Never use the product if it is close to people, especially children or pets.

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- Let a hot battery cartridge cool down before charging it.
- Recharge the accumulators in time, before they are discharged fully, otherwise the accumulators can be damaged permanently (irreversibly). It is ideal to recharge the battery after each consumption.
- The lithium-ion battery can be charged in any state of charge, and the charging process can be interrupted at any time without harming the battery (no memory effect).
- Charging/discharging should be performed continuously. An unused battery loses capacity faster than a battery which is being used.
- After charging the battery, disconnect the charger and don't leave the battery in the charger.

Charging procedure

1. Connect charger to power supply. Make sure charger plug and input jack are properly connected.
2. Remove the battery pack from the machine and slide into the battery slot on the charger (Fig. 4). The battery will only fit into the charger in one way.
3. When battery properly connected, after a few seconds the charging process will start automatically.
4. The charging indicators will always keep you be informed about the status of the charging.
5. Once the battery is charged, remove it from the charger and unplug the charger from the mains.

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Service

- Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

7. DEVICE-SPECIFIC SAFETY ILLUSTRATIONS



WARNING! Dust from material such as paint containing lead, some wood species, minerals and metal may be harmful (such as oak and beech dust). Contact with or inhalation of the dust may cause allergic reactions and/or respiratory diseases to the operator or bystanders. Wear a dust mask and work with a dust extraction device when connectable. Contact with these dusts, especially inhaling them, can represent a hazard for operating personnel or persons in the vicinity. Exposure to even low levels of lead can cause serious brain and nervous system damage. Do not eat, drink or smoke in the work area. Dispose of dust particles and any other removal debris safely.

Battery charge-control indication

The battery is equipped with a charge-control indicator. The charge-control indicator consists of 3 LEDs lights. Press the button (Fig. 3A) to actuate the charge-control indicator.

| LED indicators | Battery capacity |
|----------------|------------------------|
| 3 LED lighting | more than 95% (+/-5 %) |
| 2 LED lighting | ca 60% (+/-5 %) |
| 1 LED lighting | ca 33% (+/-5 %) |

Recharging the Li-ion battery pack



Note: The supplied battery is only partially charged. Before initial use, fully charge battery. After the first charge, we recommend fully discharging the battery and the full charge/ discharge process to be repeated once or twice to "format" the battery pack. Perform this charge as soon as possible after the battery has been discharged and cooled.

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Keep these instruction manual and use them whenever you need more information. If you don't understand some of these instructions, contact your dealer. If the product is lent to another person, it is necessary to lent this instruction manual with it.

Training



All operating personnel must be adequately trained in the use, operation and setting and especially familiar with prohibited activities.

- Never allow use by children or people unfamiliar with these instructions. Local regulations may specify an age limit of the operator.
- This product is not intended for use by persons with reduced sensory or mental capacity or lack of experience and knowledge - unless they are under the supervision of the person responsible for their safety or if this person has instructed how use this product. The product is not intended for use by children and persons with reduced mobility or poor physical disposition. We strongly recommend to pregnant women to contact her doctor before use of this product.
- **Never use the product if it is close to people, especially children or pets.**
- Respect national/local regulations regarding working time (please, contact your local authority).

6. SAFETY INSTRUCTIONS

- **Know your tool. Read owner's manual carefully. Learn its applications and limitations as well as the specific potential hazards related to this tool. Familiarise yourself with the controls on the machine and how to use them.**
- Be careful at work, be concentrated on actual work, and use the common sense.
- An inattention during work may result in loss of control over the machine.



WARNING! Failure to follow the warnings and instructions may result in electric shock, fire and / or serious injury.

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The term “power tool” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

Work area safety

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

Power tool use and care

- Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- Do not use the power tool if the switch does not turn it on and off. Any power tool that can not be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

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- Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
- Avoid placing any objects on the product, especially flammable, electrically conductive objects or objects containing liquids.
- Do not throw any object into the product, especially metal and flammable objects. Prevent spontaneous fall of small objects into the product.
- Never use brute force.
- Hold the power tool only on the insulated handle surfaces, as the cutting tool may come into contact with concealed power cables. Contact between the cutting tool and a live cable may render metallic components live and result in an electric shock.

Use and care of the battery pack

- Verify that the switch is in the “OFF” position before inserting the battery pack. Inserting the battery pack into a power tool that has the switch in the “ON” position invites accidents.
- Recharging 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.
- Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- When the 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 create a connection between the terminals. Shorting the battery terminals together may cause burns or a fire.
- Handle batteries with care. In the case of improper care, chemical substances can leak from the battery. Avoid coming into contact with this substance and if you do come into contact with it, rinse the affected area under running water. If the chemical substance comes into contact with the eye, immediately seek out medical attention. The chemical substance from the battery can cause serious injury.