



**20V LITHIUM-ION
CORDLESS DRILL**
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

PT2520



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

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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.

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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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1. SAFETY GUIDELINES-DEFINITIONS

This manual contains important information that you need to know and understand in order to protect YOUR SAFETY and to PREVENT EQUIPMENT PROBLEMS. The following symbols help you recognize this information. Please read the manual and pay attention to these section.



WARNING! WARNINGS INDICATE A CERTAINTY OR STRONG POSSIBILITY OF PERSONAL INJURY OR DEATH IF INSTRUCTIONS ARE NOT FOLLOWED.



CAUTION: CAUTIONS INDICATE A POSSIBILITY OF EQUIPMENT DAMAGE IF INSTRUCTIONS ARE NOT FOLLOWED.



Note: Notes give helpful information.



WARNING! IMPROPER OPERATION OR MAINTENANCE OF THIS PRODUCT COULD RESULT IN SERIOUS INJURY AND PROPERTY DAMAGE. READ AND UNDERSTAND ALL WARNINGS AND OPERATING INSTRUCTIONS BEFORE USING THIS EQUIPMENT. WHEN USING POWER TOOLS, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED TO REDUCE THE RISK OF PERSONAL INJURY.

Save These Important Safety Instructions!

Read and understand all of these safety instructions. Be sure to retain them for future use.



2. GENERAL PRECAUTIONS



WARNING! FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SEVERE INJURY OR DEATH.



CAUTION: FAILURE TO FOLLOW THESE INSTRUCTIONS CAN ALSO RESULT IN DAMAGE TO THE TOOL AND/OR THE ITEM YOU ARE WORKING ON.

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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 products 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 madels 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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GENERAL PRECAUTIONS (cont'd)

- Verify that the power supply in your area is compatible with the voltage listed on the tool's label.
- Check the tool, cord, and plug for damage before each use.
- Make sure the tool is turned off before connecting the electrical cord.
- Always start the tool before setting it against the piece you are working on.
- Watch for and avoid potential electrocution hazards. Avoid bodily contact with grounded objects such as metal pipes, radiators, cooking ranges, refrigerators, and so forth when using the tool. Never work on any item that is connected to a live electrical circuit. Always disconnect electrical items before working on them.
- Large temperature variations cause condensation, which can increase the hazard of electrocution and/or internal corrosion. Allow the tool to adjust to the temperature of the work area for several minutes before each use.
- Do not use this tool, its charger, or any accessory for any purpose other than those for which they have been specifically designed.
- Secure all items you are working on. Use clamps, vices, or other securing devices as needed.
- Never wear jewelry or loose clothing that can become entangled in moving parts. Tie or otherwise secure long hair away from the tool and work area. Always wear fitted clothing and any protective items that may be necessary such as gloves, goggles, etc.
- Always wear protective goggles when using this tool.
- If working around dust, splinters, or shavings, wear a protective mask to avoid inhalation hazards.
- Always wear ear protection.
- Where there is a risk of heavy objects damaging feet or if there is a risk of slipping on wet or slippery floors, suitable non-slip safety footwear should be worn.

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GENERAL PRECAUTIONS (cont'd)

- Where there is a risk of falling objects or hitting your head on protruding or low level obstructions, a hard hat should be worn.
- Be sure you always have sure footing, especially when working on ladders and scaffolding.
- Keep electric tools away from humidity and rain. Do not immerse.
- When working outdoors, only use tools and extension cables designed and approved for outdoor use.
- Do not use the equipment in any areas any danger of fire or explosion exists. Keep batteries away from heat and allow to cool if warm.
- If the tool requires repair, be sure to have all work performed by a qualified technician.



WARNING! CONSUMING ALCOHOL, MEDICATION, OR DRUGS, OR HEALTH PROBLEMS SUCH AS ILLNESS, FEVER, OR FATIGUE, AFFECT YOUR ABILITY TO PLAN AND REACT. NEVER USE ANY ELECTRICAL EQUIPMENT WHILE UNDER THE INFLUENCE OF ALCOHOL, DRUGS, HEALTH PROBLEMS, OR FATIGUE.

- Keep all electric tools away from children.
- Store electric tools in the original box in a clean dry location out of the reach of children.
- Always unplug the power cable when the tool is not in use or when you are taking breaks or changing accessories.
- Never carry the tool by the cable. Never unplug the tool by pulling on the cable.
- When working, do not allow the motor to stall under the load.
- Keep your work place tidy. Untidiness can cause accidents!
- Avoid abnormal body postures while working.

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6. 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.
- 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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DRILL (cont'd)

Large-diameter screws require greater torque power to properly seat the screw. The chuck stops rotating when the selected torque is reached.

There are 19 torque settings:

- 1-4: For driving small screws.
- 5-8: For driving screws into soft materials or plastics
- 9-11: For driving screws into soft woods.
- 12-14: For driving screws into medium/hard woods.
- 15-17: For driving screws into hard woods.
- 18-19: For powerful screw driving or drilling metal or using spade (hole) bits.



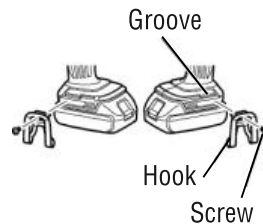
Note: Always start on the lowest setting. The drill symbol gives the highest torque setting and is used when drilling larger holes and/or for driving larger screws.

LED worklight

The tool has an LED light to illuminate the work area and improve vision when working in areas with insufficient light. The LED light will switch on automatically while the trigger switch is depressed.

Hook

The hook is convenient for temporarily hanging the tool. This can be installed on both sides of the tool. To install the hook, insert it into a groove in the tool's housing on either side and then secure it with a screw. To remove, loosen the screw and then take it out.



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GENERAL PRECAUTIONS (cont'd)

- Make sure not to start the tool unintentionally.
- Do not leave keys, spanners, adjusting tools, etc. inserted in the tool.
- Keep cutting tools sharp and clean.
- Follow all instructions for lubrication and changing accessories.
- Before using the power tool, check it carefully to ensure that it will operate properly and perform its intended function.
- Check that all moving parts are correctly aligned and free from binding.
- Check for broken or missing parts and have them replaced or repaired at an authorized service center.
- If the power tool requires mounting make sure it is securely attached to a suitable work bench.
- Check any other condition that may affect the operation of the power tool.
- Any damaged guard or any other damaged part of the power tool should be properly repaired or replaced by an authorized service center unless otherwise indicated in this instruction manual.
- Any switch that does not operate correctly must be replaced by an authorized service center. Do not use the power tool if the ON/OFF switch does not turn the power tool ON and OFF.
- Do not attempt to modify the power tool in any way. The use of any attachment or accessory other than those recommended in this instruction manual could result in damage to the power tool and injury to the operator.
- This electric power tool complies with national and international standards and safety requirements. Repairs should only be carried out by qualified persons using original spare parts. Failure to do so may result in considerable danger to the user.

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GENERAL PRECAUTIONS (cont'd)

If using the power tool inside your house, protect furnishings and floors with a suitable dust sheet.

- Always observe general fire safety precautions when using certain power tools inside your house or workshop. It is recommended that you have an appropriate fire extinguisher available at all times while working.

3. ADDITIONAL WARNINGS

Battery Charger



WARNING! THIS CHARGER AND BATTERY PACK ARE SPECIFICALLY DESIGNED TO WORK TOGETHER. DO NOT ATTEMPT TO CHARGE ANY OTHER BRAND OF CORDLESS TOOL OR BATTERY PACK WITH THIS CHARGER.

- This 120V~60Hz charger is double insulated and therefore does not require a grounding connection. It is a sealed unit fitted with an internal fuse which cannot be replaced.
- There are no user serviceable parts inside this charger. Never remove any part of the casing unless qualified to do so. If in doubt, consult a qualified electrician.



WARNING! THIS UNIT CONTAINS DANGEROUS VOLTAGES.

- For your protection, do not expose this charger to rain or use in damp locations. Do not place the charger on damp or wet surfaces; use a workbench if available. For added protection use a suitable Residual Current Device (RCD) at the wall outlet.
- This charger unit is intended for use with this specific tool only and must not be used for any other use. Do not use any other charger for charging these batteries.



WARNING! NEVER USE THE CHARGER IN YOUR HOME, ALWAYS CHARGE BATTERIES ON A BENCH IN YOUR WORKSHOP.

- Never exceed the charging time specified in the manual as this could damage both the battery and the charger.

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DRILL (cont'd)

ON/OFF switch

Depress to start and release to stop your drill. The on/off switch is fitted with a brake function which stops your chuck immediately when you quickly release the switch. It is also a variable speed switch that delivers higher speed and torque with increased trigger pressure. Speed is controlled by the amount of switch trigger depression.



WARNING! DO NOT OPERATE FOR LONG PERIODS AT LOW SPEED BECAUSE EXCESS HEAT WILL BE PRODUCED INTERNALLY.

Switch lock

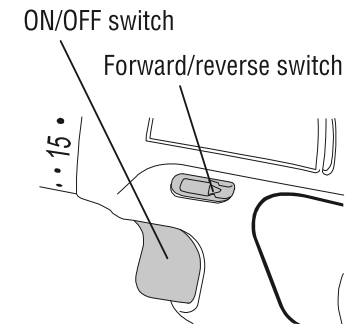
The on/off switch trigger can be locked in OFF position. This helps to reduce the possibility of accidental starting when not in use. To lock the switch, place the forward and reverse rotation selector in the center position by pushing it on either side of the drill.

Forward and reverse switch

Control the drill's direction using the slide switch located above the trigger.

- **Reverse:** To reverse the drill rotation, push the button all the way in on the left side.
- **Forward:** To return to forward rotation, push the button all the way in on the right side.

Place the directional control switch in the middle (neutral) position to prevent accidental starting while carrying the drill. Never carry the drill with your finger on the trigger.



Torque adjustments

This feature allows you to set the torque (tightening power) of your drill/driver depending on your specific application and amount of driving power required. Driving

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DRILL (cont'd)

Your new cordless drill has been engineered and manufactured to the highest possible standards by Pulsar Products, Inc. for dependability, ease of operation, and operator safety. Properly cared for, it will give you years of rugged, trouble-free performance. Every care has been taken to ensure that it reaches you in perfect condition. However, in the unlikely event that you should experience a problem, or if we can offer any assistance or advice, please do not hesitate to contact our customer care department at the address or telephone number listed at the back of this manual.

Specifications

Item	Value
Main voltage	110-120V~60Hz
Output voltage	20V
Battery voltage	20V
Battery capacity	2.0 Ah Li-ion
Battery charge time	1 hours
Max. Torque	30 Nm
Torque settings	19+1
Chuck auto-lock size	1/2 Inch
Variable speed	0-350/0-1250 RPM

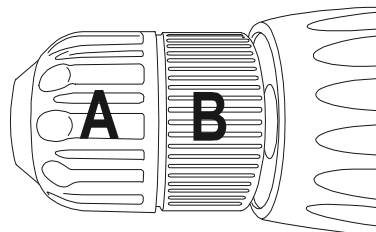
Keyless chuck operation

The keyless chuck on your drill/driver allows for easy installation, removal, and locking of bits and drills. The chuck has two rotating grips.

To open or close the chuck:

1. Hold grip B.
2. With your free hand, rotate grip A.

Do not use unnecessary force when tightening the chuck.



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ADDITIONAL WARNINGS (cont'd)

Battery Charger (cont'd)

- When the battery fails to charge or maintain its charge, its usable life is exhausted. The battery should be disposed of in an environmentally friendly manner. Do not dispose of the battery in the household disposal system. Take the battery to a recycling or specialized center for disposal.



WARNING! DO NOT DISPOSE OF THE BATTERY BY INCINERATION AS THE BATTERY WILL EXPLODE.

Drill

- Keep drills, drivers and other cutters sharp and in good condition to improve cutting and ensure tool and accessory life.
- Use only manufacturer-recommended bits, drivers, and cutters.
- Do not attempt to modify the tool or its accessories in any way.
- Do not force the tool. Let it do the work. This reduces wear and increases efficiency and operating life.
- Use approved safety glasses or goggles, face mask, and ear protection.
- When using the tool above your head height, wear an approved safety helmet, safety glasses or goggles, and an approved face mask.
- Beware of high torque when drilling, especially when drilling masonry.
- When drilling masonry, do not force the drill. Let the drill and hammer action do the work.
- Do not change any selector switches while the motor is running.
- Always remove the battery pack when the drill is not being used.
- Do not carry the drill with your finger on the trigger. Always turn the rotation lever to neutral to prevent accidental starting.

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4. BATTERY CHARGER & PLUG (cont'd)

Inserting the battery

Insert the battery pack into the tool handle.

Charging the battery

The battery supplied with this power tool contains a test charge only and must be fully charged before use. Be sure to read all safety instructions before charging the battery. The battery will become warm during charging. This is normal. (Fig A & Fig B)



1. Connect the the power cord of the charge with a wall socket. The charging indicator light truns green.
2. Slide the battery onto the charger. The there intelligent battery indicators will contiue flashing when start charging. Two indicators will flash inturn when the capacity reach 70%.
3. About one hour later, battery will full charge, and the charger indicator turn green again. At the moment three indicators (green, yellow, red) light up together.
4. Unplug the charger and disconnect it from the battery pack when charging is finished.
5. Allow the battery pack cool completely before use it.
6. During working, user can check the battery status pressing the button.

LED battery capacity indicator	Capacity
Green, Yellow and Red LED on	100%
Yellow and Red LEDs on	>60%
Red LED on	>30%



Note: Avoid charging your battery in freezing conditions as charging power will not be sufficient.

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BATTERY CHARGER & PLUG (cont'd)



CAUTION: WHEN CHARGING MORE THAN ONE BATTERY PACK IN SUCCESSION, ALLOW AT LEAST 30 MINUTES FOR THE CHARGER TO COOL DOWN BEFORE CHARGING THE ADDITIONAL BATTERY.



WARNING! ALWAYS REMOVE THE BATTERY PACK AND STORE IT SAFELY WHEN THE TOOL IS NOT IN USE.

Additional or replacement batteries

Additional or replacement batteries specifically designed to work with this tool and charger are available from your service center. (1-866-591-8921)

Discharging the battery

Use the tool until it loses all effective power before recharging the battery. Recharging partially used batteries may eventually cause a memory effect that will prevent batteries from accepting their full capacity. Making sure to charge batteries completely before use and discharge them completely before recharging will help them preserve their full capacity.

5. OPERATION

