



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 chemical are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **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.

SAFETY

WARNING

For Your Own Safety Read Instruction Manual Before Operating This Equipment

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words which are intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.



Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE

This symbol is used to alert the user to useful information about proper operation of the equipment.

WARNING

Safety Instructions For Power Tools

- KEEP ALL SAFETY DEVICES IN PLACE** and in working order.
- REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning on.
- KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
- DON'T USE IN DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or where any flammable or noxious fumes may exist. Keep work area well lighted.
- KEEP CHILDREN AND VISITORS AWAY.** All children and visitors should be kept a safe distance from work area.
- MAKE WORK SHOP CHILD PROOF** with padlocks, master switches, or by removing starter keys.
- DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.
- USE RIGHT TOOL.** Don't force tool or attachment to do a job for which it was not designed.

WARNING

Safety Instructions For Power Tools

- 9. USE PROPER EXTENSION CORD** for the charger. Make sure your extension cord is in good condition. Conductor size should be in accordance with the chart below. The amperage rating should be listed on the motor or tool nameplate. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Your extension cord must also contain a ground wire and plug pin. Always repair or replace extension cords if they become damaged.

Minimum Gauge for Extension Cords

AMP RATING	LENGTH		
	25ft	50ft	100ft
0-6	18	16	16
7-10	18	16	14
11-12	16	16	14
13-16	14	12	12
17-20	12	12	10
21-30	10	10	No

- 10. WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
- 11. ALWAYS USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- 12. SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and frees both hands to operate tool.
- 13. DON'T OVERREACH.** Keep proper footing and balance at all times.
- 14. MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 15. DISCONNECT TOOLS** before servicing and changing accessories, such as blades, bits, cutters, and the like.
- 16. REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure switch is in off position before plugging in.
- 17. USE RECOMMENDED ACCESSORIES.** Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury.
- 18. CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- 19. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.
- 20. NEVER OPERATE THIS TOOL WHEN TIRED, OR WHEN UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Full mental alertness is required at all times when operating this tool.

CHARGING SAFETY

WARNING

- 1. READ ALL INSTRUCTIONS** and warnings on the battery and charger before charging the battery.
- 2. CHARGE ONLY USING THE SUPPLIED CHARGER AND BATTERY.** Do not use with other batteries, chargers or drills.
- 3. DO NOT EXPOSE BATTERY OR CHARGER TO WET OR RAINY CONDITIONS.** Moisture greatly increases the risk of a shock hazard.
- 4. DO NOT TOUCH BATTERY POLES** with any conductive materials. Touching any two poles at the same time causes an electrical short condition and can cause sparks, electrical shock or fire.
- 5. DO NOT STORE BATTERY WITH CONDUCTIVE MATERIALS.** Storing the battery in a box of screws or nails can cause shorting across the battery poles.
- 6. DO NOT THROW BATTERY IN FIRE.** Combustion of some of the batteries' component materials can cause toxic fumes and possible explosion.
- 7. IF CHARGER LIGHT FAILS TO COME ON** check the incoming power supply. If power source is okay, then the fuse inside the charger needs replacement. Charger should be serviced by a qualified electrical technician only.
- 8. CHARGER HAS A POLARIZED PLUG** (one prong is wider than the other). Do not attempt to modify the plug. Modifying the plug will result in a safety hazard and will void the warranty.
- 9. CHARGER IS DESIGNED TO OPERATE AT 110-120 VOLTS.** Never try to plug into any circuit that is not 110-120 volts. Never modify or change the plug that is attached to the charger unit to attempt to plug into 220 volt. This can cause serious electrical damage to the unit, possible fire or explosion.



Ni-Cd

BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY. Consult your local Yellow Pages directory under the category "Recycling" to locate a battery recycler in your area.

BEFORE YOU START

First review the contents of your cordless tool kit and familiarize yourself with the key components:

- Heavy-Duty Case
- Cordless Drill
- Reciprocating Saw Head
- Power Carver Head
- Angle Grinder Head
- Detail Sander Head
- Battery Pack
- 1 Hour Charger
- Tool and Accessory Kit



Fig 1. Tool and accessory kit contents.

CAUTION

Never leave a battery unattended while charging. While charging will make the battery and charging unit warm, if it becomes hot to the touch, disconnect the charger immediately. There is a possibility of fire hazard. Have the battery and charging unit checked by a qualified electrical service technician.

The battery in your new cordless power tool will not be fully charged when you receive it. To maximize the storage capacity of the battery it should be completely discharged, then fully recharged 3-5 times.

For optimal life span, completely discharge the battery before recharging. Follow the instructions below to charge your battery.

Battery charging with the 1 hour "Smart" charger (1 piece charger):

1. Plug the charger into an appropriate 110/120V outlet.
2. Insert the battery into the charger. The battery fits into the oval recess in only one way. Do not force the battery. Insert until it locks into place.
3. The green light over the word "OFF" on the control panel should come on. If it doesn't, make certain the wall outlet you are plugged into is working. If the outlet power is okay, the fuse inside the charger may have blown. Fuses should be replaced by a qualified electrical technician.
4. To begin charging, press the "SET" button. A steady red light over the word "ON" should come on indicating the battery is being charged.
5. When the battery is fully charged, the red light will go off and the unit will stop charging. Remove the battery from the charger upon completion of the charge cycle.

CHANGING ATTACHMENTS

The accessory heads can be easily and quickly changed. On the left hand side of the motor housing there is a slider switch which locks the head in place. The head has three tabs which engage with slots in the motor body. One of the tabs is larger than the other two which ensure proper orientation of the head.

To change heads, move the slider switch to the unlocked position and pull the head straight out of the slots. Select the new head and orient the tabs and insert into the motor body. Push it in all the way until it seats, then move the slider switch to the locked position.

Test to make sure the new head is engaged properly by quickly cycling the motor. When testing the power carver be aware that it is spring loaded and will only oscillate when it is pushed against the workpiece.



Fig 2. Changing the heads.

CHANGING THE BATTERY

Insert the battery into the handle of the motor body so the long end is forward. The battery will only install in one orientation. Make sure the securing clasps on either side of the drill base engage with the clips on the battery compartment.

DRILL OPERATION

Inserting and Removing Bits and Drivers

1. Set the direction switch, located just above the trigger, so that it is in the center locked position.
2. Hold the chuck by the collar while turning the sleeve (the forward section). **See Figure 3.** This will cause the three chuck jaws located inside the recess to open or close depending upon the direction.
3. When the jaws are at the approximate diameter of the bit or driver, insert the shank end of the bit or driver into the jaw opening.
4. Turn the sleeve clockwise until it tightens around the bit or driver. Never “power tighten” which is holding the sleeve while running the drill. This can cause a loose grip on the bit or driver and potential damage to chuck jaws. Check for tightness periodically while using the tool.
5. To release the bit or driver, hold the chuck collar, and turn the sleeve counterclockwise.



Fig 3. Inserting bits into the chuck.

WARNING

Operating this equipment has the potential to propel debris into the air which can cause eye injury. Always wear safety glasses or goggles when operating equipment. Be certain the safety glasses you wear meet the appropriate standards of the American National Standards Institute (ANSI).

DRILL OPERATION, CONT'D

Operating the drill

1. **Set the Direction Switch** for the desired rotation of the bit or driver. The direction switch is the sliding switch located just above the trigger. When looking down on the drill, pushing the switch all the way to the right will give a counterclockwise rotation (normally for loosening fasteners and bits), all the way to the left will be clockwise (normally for tightening fasteners and drilling holes). When the switch is in the center position it locks the switch to avoid accidentally starting the drill.
2. **Set the Torque Setting Ring** located just behind the chuck. This ring has

numbers from 1 to 5 on it, and a pointer indicator embossed on the drill case. Set on 1 for very light applications such as driving screws into dry-wall. Use the higher settings up to 5 for denser woods and materials. Use the drill bit symbol when boring holes. Using the proper torque setting will ensure that the fastener is not driven too deeply, damaging the surface material, or in the worst case, stripped out of the hole due to over-torquing.

3. **Pull the trigger** to activate the drill. This drill is variable speed from 0 - 750 RPM, therefore, the more you pull on the trigger, the faster the motor and chuck will rotate.



Fig 4. Location of controls.

RECIPROCATING SAW OPERATION

Set the direction switch, located just above the trigger, so that it is in the center locked position. Install the reciprocating saw head onto the motor body. Install the reciprocating saw blade into the saw. The teeth of the blade can be positioned so they are pointed up or down, depending upon the type of cutting operation to be performed. Loosen the Allen® screw which is accessed through the slot on the right hand side of the head. **See Figure 5.** Insert the blade between the retaining plate and the flat, being sure to engage the hole in the blade on the pin. Hold the blade in position with your other hand while tightening the Allen® screw to retain the blade.

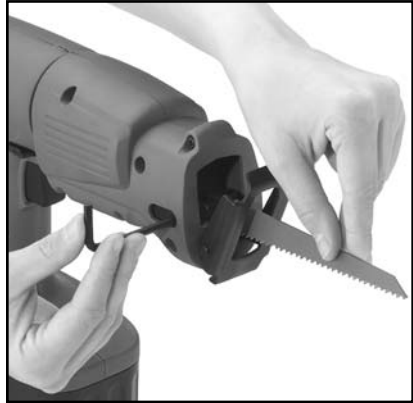


Fig 5. Blade installation.

Refer to the Grizzly catalog or website for other types of blades suitable for a wide variety of materials.

The reciprocating saw is the perfect tool for doing tough cutout work. If cutting through sheathing, a small pilot hole can be used to provide a place for the blade to start. In softer materials such as drywall, the pointed tip of the blade can be carefully punched into the drywall to give a starting point for the cut. A typical cutting operation is shown in **Figure 6.**

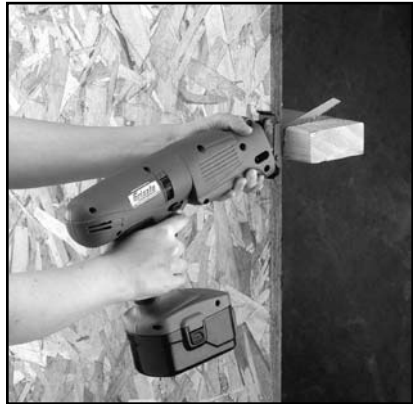


Fig 6. Reciprocating saw in use.

If cutting to a pattern, always cut to the outside of the pattern line. Push the saw evenly at a rate suitable for the material being cut. If the motor should begin to slow, ease up on the cutting pressure.

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DETAIL SANDER OPERATION

Set the direction switch, located just above the trigger, so that it is in the center locked position. Install the detail sanding head onto the motor body. Install the desired sandpaper grit onto the triangular sanding pad. Consult the Grizzly catalog or website for ordering information for sandpaper. The sandpaper attaches by means of a hook and loop material. Be certain the replacement sandpaper purchased is of this type.

The oscillating motion of the triangular sanding pad provides fast cutting action for detail and intricate sanding. The detail sander is excellent for hard-to-reach places like the corners of a picture frame.

Both wood and metal materials can be sanded with this device as long as the appropriate types of sandpaper are installed. Always be sure to check the sandpaper for loading and sharpness of grit. Change the sandpaper when the paper loses its surface, or when the edges become torn or loose.

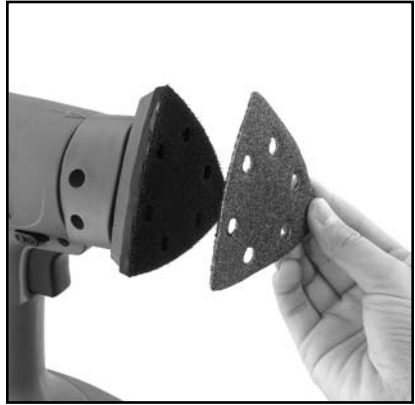


Fig 7. Attaching Sandpaper.

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POWER CARVER OPERATION

Set the direction switch, located just above the trigger, so that it is in the center locked position. Install the power carving head onto the motor body. Install one of the four supplied chisels depending upon the type of carving work you want to perform. Consult the Grizzly catalog or website for ordering replacement chisels. The chisel slides into the collet in only one direction.

See Figure 8. Seat the chisel firmly in the bottom of the collet, then tighten the collar of the collet.

The oscillating motion of the chisel is only activated when the chisel is against the workpiece. Test the chisel action on a scrap piece before beginning. Experiment with the amount of pressure necessary to take the desired cuts, and the orientation of the carving chisel and motor body during the chiseling process.

For best results make certain the chisels are sharpened periodically. Sharpening gouge style chisels does require some special sharpening expertise. Refer to one of the several reference books on chisel sharpening, or locate a local sharpening service.



Fig 8. Attaching chisel.



Fig 9. Using the power carver.

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ANGLE GRINDER OPERATION

Set the direction switch, located just above the trigger, so that it is in the center locked position. Install the angle grinder on the motor body. Install the grinding wheel on the grinder. Use the supplied wrench to tighten the mounting ring. There is a rotation lock on the side of the grinder head which will limit movement while you tighten the bolt. **See Figure 10.** Consult the Grizzly catalog or website for ordering information for replacement grinding discs.

The angle grinder can be used in a couple of different ways. The edge of the disc can be used as a cutoff tool as shown in **Figure 11.** Or the face of the disc can be used to grind a surface, such as removing a layer of rust from a metal surface.



Fig 10. Attaching wheel.

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Fig 11. Using the wheel as a cutoff tool.

OPERATING TIPS AND MAINTENANCE

Operating Guides and Tips

Avoid overloading the accessory heads. Do not apply excessive pressure to the tool while using. If the speed drops abnormally, decrease pressure immediately. When drilling, if the bit stops abruptly or becomes blocked, release the trigger at once. Reverse the direction to free the drill bit.

Ensure the safety of the workplace. Clear the work area of all parts and debris that may cause injury by flying objects. Securely fix the object to be worked on in a vise or otherwise clamp to avoid injury. Do not attempt to hold workpiece by hand.

Inspect the cordless tool before use. Run the tool before using to ensure all parts are running smoothly and there are no abnormal sounds or sparks. If any defect is found, have unit serviced.

Know your work site. Take care to make sure the material being worked on is not supporting another structure, or that there are no obstructions. Before drilling or sawing, check behind walls for wires, other electrical hazards, or plumbing.

Use accessories properly. Use the lowest possible torque setting when driving fasteners. This will increase the life span of the driving bit and prevent damage to the fastener.

Maintenance

Your cordless power tool will give you hundreds of hours of operation time before ever needing service. The electrical components of this cordless drill are not user serviceable. Repair should always be undertaken by a qualified electrical repair technician.

Keep the motor body and accessory heads free from dirt and grease. Always store them in a dry place, preferably in the case that is supplied.

The battery will require periodic recharging, and eventually replacement after it has exceeded its recharge life (approximately 800-1000 recharge cycles). You will notice extended charging times or shortened operation time as the battery experiences more cycles. **Battery must be recycled or disposed of properly.** Refer to the Grizzly catalog for replacement batteries.

WARNING

Disassembly and improper reassembly of this device can result in electrical shock danger. Always have this device serviced by an qualified electrical repair technician. Serious injury will result.

WARRANTY AND RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number", which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Grizzly Industrial, Inc.
2406 Reach Road
Williamsport, PA 17701
Phone: (570) 326-3806
Fax: (800) 438-5901

E-Mail:
techsupport@grizzlyindustrial.com

Web Site: <http://www.grizzly.com>

Thank you again for your business and continued support. We hope to serve you again soon.

WARRANTY CARD

Name _____

Street _____

City _____ State _____ Zip _____

Phone Number _____ E-Mail _____ FAX _____

MODEL # G9921 18V Cordless Set Order # _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. Of course, all information is strictly confidential.

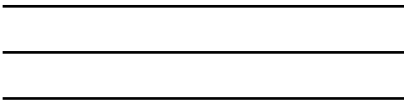
- How did you learn about us?
 Advertisement Friend
 Catalog Card Deck
 World Wide Web
 Other _____
- What is your annual household income?
 \$20,000-\$29,999 \$60,000-\$69,999
 \$30,000-\$39,999 \$70,000-\$79,999
 \$40,000-\$49,999 \$80,000-\$89,999
 \$50,000-\$59,999 \$90,000 +
- What is your age group?
 20-29 50-59
 30-39 60-69
 40-49 70 +
- How long have you been a woodworker?
 0 - 2 Years 8 - 20 Years
 2 - 8 Years 20+ Years
- How would you rank your woodworking skills?
 Simple Advanced
 Intermediate Master Craftsman
- What stationary woodworking tools do you own?
Check all that apply.
 Air Compressor Panel Saw
 Band Saw Planer
 Drill Press Power Feeder
 Drum Sander Radial Arm Saw
 Dust Collector Shaper
 Spindle Sander Jointer
 Table Saw Lathe
 Mortiser Wide Belt Sander
 Horiz.Boring Machine
 Vacuum Veneer Press
 Other _____
- How many of your woodworking machines are Grizzly? _____
- Which benchtop tools do you own? Check all that apply.
 1"x42" Belt Sander 6" - 8" Grinder
 5" - 8" Drill Press Mini Lathe
 8" Table Saw 8" - 10" Bandsaw
 Scroll Saw Disc/Belt Sander
 Spindle/Belt Sander Mini Jointer
 10"-12"Thickness Planer
 Other _____
- How many of the machines checked above are Grizzly? _____
- Which portable/hand held power tools do you own?
Check all that apply.
 Belt Sander Orbital Sander
 Biscuit Joiner Palm Sander
 Circular Saw Portable Planer
 Detail Sander Saber Saw
 Drill/Driver Reciprocating Saw
 Miter Saw Router
 Other _____
- What machines/supplies would you like Grizzly Industrial to carry?
 12" Table Saw Radial Arm Saw
 12" Jointer Panel Saw
 Brass Hardware Lumber
 Paint & Finishing Supplies
 Contractor's Supplies
 Combination Planer/Jointer
 Other _____
- What new accessories would you like Grizzly Industrial to carry?
 Builders Hardware Hand Tools
 Fasteners
 Wood Components
 Other _____
- What other companies do you purchase your tools and supplies from?

- Do you think your purchase represents good value?
 Yes No
- Would you recommend Grizzly to a friend?
 Yes No
- Would you allow us to use your name as a reference for Grizzly customers in your area? **Note: We never use names more than three times.**
 Yes No
- Comments: _____

Send a Grizzly Catalog to a friend:

Name_____
Street_____
City_____State_____Zip_____

FOLD ALONG DOTTED LINE



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P.O. BOX 2069
BELLINGHAM, WA 98227-2069

TAPE ALONG EDGES--PLEASE DO NOT STAPLE