

Grizzly

Industrial, Inc.®

MODEL G1061/G1061Z BUFFING SYSTEM

(For models manufactured since 09/02)



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**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE
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 **WARNING!**

This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.

Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.

The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

 **WARNING!**

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

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, 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.

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INTRODUCTION

Machine Description

We are proud to offer the Grizzly Model G1061/G1061Z Buffing System. The Model G1061 offers a 3450 RPM motor, and the Model G1061Z offers a 1725 RPM motor. Both models feature 1 HP motors and 1" diameter shafts that extend 8" on both sides.

When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

A number of buffing wheels for the Model G1061/G1061Z are available through the Grizzly catalog.

Contact Info

We stand behind our machines! If you have questions or need help, contact us with the information below. Before contacting, make sure you get the **serial number** and **manufacture date** from the machine ID label. This will help us help you faster.

Grizzly Technical Support
1815 W. Battlefield
Springfield, MO 65807
Phone: (570) 546-9663
Email: techsupport@grizzly.com

We want your feedback on this manual. What did you like about it? Where could it be improved? Please take a few minutes to give us feedback.

Grizzly Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com

Manual Accuracy

We are proud to provide a high-quality owner's manual with your new machine!

We made every effort to be exact with the instructions, specifications, drawings, and photographs in this manual. Sometimes we make mistakes, but our policy of continuous improvement also means that **sometimes the machine you receive is slightly different than shown in the manual.**

If you find this to be the case, and the difference between the manual and machine leaves you confused or unsure about something, check our website for an updated version. We post current manuals and manual updates for free on our website at www.grizzly.com.

Alternatively, you can call our Technical Support for help. Before calling, make sure you write down the **Manufacture Date** and **Serial Number** from the machine ID label (see below). This information is required for us to provide proper tech support, and it helps us determine if updated documentation is available for your machine.

Grizzly Industrial		MODEL GXXXX	
		MACHINE NAME	
SPECIFICATIONS		▲ WARNING!	
Motor:		To reduce risk of serious injury when using this machine:	
Specification:		1. Read manual before operation.	
Specification:		2. Wear safety glasses and respirator.	
Specification:		3. Make sure machine is properly adjusted/setup and	
Weight:		4. power is connected to grounded circuit before starting.	
		5. Make sure the motor has stopped and disconnect	
		power before adjustments, maintenance, or service.	
		6. DO NOT expose to rain or dampness.	
		7. DO NOT modify this machine in any way.	
		8. Keep machine clean and free of debris.	
		9. Do not use while under the influence of drugs or alcohol.	
		10. Maintain machine carefully to prevent accidents.	

Manufacture Date:

Serial Number:

Manufactured for Grizzly in Taiwan





MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

MODEL G1061/G1061Z BUFFING SYSTEM

Product Dimensions:

Weight 53 lbs.
 Length/Width/Height 31½" x 11¼" x 7½"
 Foot Print (Length/Width) 10" x 7"

Shipping Dimensions:

Weight 59 lbs.
 Length/Width/Height 32" x 15" x 16"

Electrical:

Power Requirement 115V, Single-Phase, 60 Hz
 Full-Load Current Rating 14A
 Minimum Circuit Size 15A
 Connection Type Cord & Plug
 Plug Included Yes
 Included Plug Type NEMA 5-15
 Switch Type Push/Pull

Motor:

Horsepower 1 HP
 Phase Single Phase
 Amps 14A
 G1061 Speed 3450 RPM
 G1061Z Speed 1725 RPM
 Type TEFC Induction
 Bearings Shielded & Permanently Sealed

Shaft:

Shaft Size without Threads 1" x 6"
 Thread Size for Buffing Wheel Mount 5/8" x 2"
 Total Length of Each Shaft 8"
 Clearance Below Shaft (When Surface Mounted) 7"
 Maximum Buffing Wheel Diameter 12"

WARNING

Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to decrease the risk of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

CAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.



SECTION 1: SAFETY

For Your Own Safety, Read Instruction Manual Before Operating This Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words 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. Always use common sense and good judgment.

⚠ 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. It may also be used to alert against unsafe practices.

NOTICE Alerts the user to useful information about proper operation of the machine to avoid machine damage.

Safety Instructions for Machinery

⚠ WARNING

OWNER'S MANUAL. Read and understand this owner's manual **BEFORE** using machine.

TRAINED OPERATORS ONLY. Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make your workshop kid proof!

DANGEROUS ENVIRONMENTS. Do not use machinery in areas that are wet, cluttered, or have poor lighting. Operating machinery in these areas greatly increases the risk of accidents and injury.

MENTAL ALERTNESS REQUIRED. Full mental alertness is required for safe operation of machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

ELECTRICAL EQUIPMENT INJURY RISKS. You can be shocked, burned, or killed by touching live electrical components or improperly grounded machinery. To reduce this risk, only allow qualified service personnel to do electrical installation or repair work, and always disconnect power before accessing or exposing electrical equipment.

DISCONNECT POWER FIRST. Always disconnect machine from power supply **BEFORE** making adjustments, changing tooling, or servicing machine. This prevents an injury risk from unintended startup or contact with live electrical components.

EYE PROTECTION. Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are **NOT** approved safety glasses.



WARNING

WEARING PROPER APPAREL. Do not wear clothing, apparel or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to reduce risk of slipping and losing control or accidentally contacting cutting tool or moving parts.

HAZARDOUS DUST. Dust created by machinery operations may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material. Always wear a NIOSH-approved respirator to reduce your risk.

HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

REMOVE ADJUSTING TOOLS. Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!

USE CORRECT TOOL FOR THE JOB. Only use this tool for its intended purpose—do not force it or an attachment to do a job for which it was not designed. Never make unapproved modifications—modifying tool or using it differently than intended may result in malfunction or mechanical failure that can lead to personal injury or death!

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

CHILDREN & BYSTANDERS. Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.

GUARDS & COVERS. Guards and covers reduce accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly **BEFORE** operating machine.

FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.

NEVER STAND ON MACHINE. Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.

STABLE MACHINE. Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.

USE RECOMMENDED ACCESSORIES. Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

UNATTENDED OPERATION. To reduce the risk of accidental injury, turn machine **OFF** and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

DAMAGED PARTS. Regularly inspect machine for damaged, loose, or mis-adjusted parts—or any condition that could affect safe operation. Immediately repair/replace **BEFORE** operating machine. For your own safety, **DO NOT** operate machine with damaged parts!

MAINTAIN POWER CORDS. When disconnecting cord-connected machines from power, grab and pull the plug—**NOT** the cord. Pulling the cord may damage the wires inside. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

EXPERIENCING DIFFICULTIES. If at any time you experience difficulties performing the intended operation, stop using the machine! Contact our Technical Support at (570) 546-9663.



Additional Safety for Buffers

WARNING

Serious injury or death can occur from impact injuries. Rotating buffing wheels can easily remove skin, or entanglement/amputation injuries can occur from being caught in moving parts or in-running pinch points. To minimize risk of getting hurt or killed, anyone operating machine MUST completely heed hazards and warnings below.

HAND/WHEEL CONTACT. Never purposely touch the moving buffing wheel or shaft. Take care to keep fingers away from buffing wheel during operations. If the workpiece is small or difficult to hold, use a workpiece holding fixture. Abrasive accessories can quickly remove large amounts of skin!

AVOID WORKPIECE GRAB. Firmly support the workpiece against the rotation direction of the buffing wheel. Otherwise, the buffing wheel could grab the workpiece and pull your hands into the moving wheel.

AVOID KICKBACK. Avoid kickback by buffing in accordance with directional arrows. Always buff on the downward side of the wheel—pay close attention to the direction of wheel rotation to avoid placing the workpiece against the upward side of the buffing wheel. Avoid buffing with excessive force.

WORKPIECE SELECTION. Always inspect the condition of your workpiece. **DO NOT** buff pieces with loose knots, large splinters, sharp edges, and **DO NOT** buff knives, cable, chain or other potentially dangerous objects that may be grabbed by the buffing wheel and thrown at the operator.

WORKPIECE FEED. Allow the wheel to reach full speed, then slowly ease the workpiece into the buffing wheel, holding it in front of and slightly below the wheel center. Do not place the workpiece on the top or sides of the buffing wheel and do not place an edge or corner of the workpiece against the buffing wheel, or jam it against the wheel. The workpiece may eject toward the operator or be torn from the operator's hands, causing serious personal injury.

WORKPIECE CONTROL. If you cannot hold small workpieces securely, do not buff them with this machine. Secure them with clamps or similar jigs or use a smaller buffer.

DISCONNECT POWER WHEN SERVICING. Disconnect the machine from power and allow the wheel to come to a complete stop before service, maintenance, or adjustments. Avoid pulling cord-connected machinery from the cord—instead, grasp the plug when disconnecting it from power.

AVOID ENTANGLEMENT. Tie back long hair and remove any loose-fitting clothing or jewelry that could be caught up in the buffing wheel or other moving machine parts. Avoid wearing gloves as they may get caught in the buffing wheel and cause entanglement injuries.

MOUNTING TO BENCH/STAND. An unsecured buffer may become dangerously out of control during operation. Make sure buffer is **FIRMLY** secured to a bench/stand before use.

CORRECT ACCESSORIES AND USE. Never install a grinding wheel on this buffer. It is only designed for buffing and polishing. Never exceed the maximum speed listed on each buffing/polishing wheel.

OPERATOR POSITION. Do not stand directly in front of the buffer wheel when turning the machine on, or when buffing. Do not buff material at the rear of the machine.

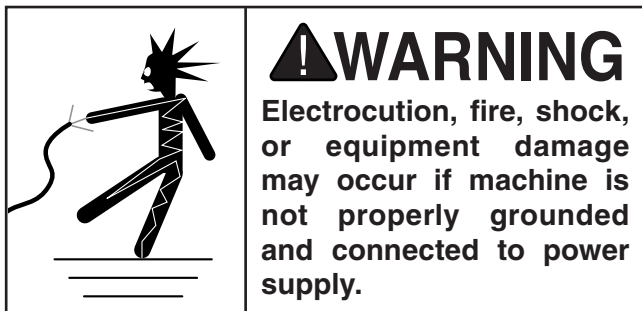
BE AWARE OF DUST ALLERGIES. Be aware that certain woods may cause an allergic reaction in people and animals, especially when fine dust is created by buffing. Make sure you know what type of wood dust you will be exposed to in case there is a possibility of an allergic reaction.



SECTION 2: POWER SUPPLY

Availability

Before installing the machine, consider the availability and proximity of the required power supply circuit. If an existing circuit does not meet the requirements for this machine, a new circuit must be installed. To minimize the risk of electrocution, fire, or equipment damage, installation work and electrical wiring must be done by an electrician or qualified service personnel in accordance with all applicable codes and standards.



Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

Full-Load Current Rating at 115V..... 14 Amps

The full-load current is not the maximum amount of amps that the machine will draw. If the machine is overloaded, it will draw additional amps beyond the full-load rating.

If the machine is overloaded for a sufficient length of time, damage, overheating, or fire may result—especially if connected to an undersized circuit. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets the specified circuit requirements.

! WARNING

Serious injury could occur if you connect machine to power before completing setup process. DO NOT connect to power until instructed later in this manual.

115V Circuit Requirements

This machine is prewired to operate on a power supply circuit that has a verified ground and meets the following requirements:

Nominal Voltage 110V–120V
Cycle 60 Hz
Phase Single-Phase
Power Supply Circuit 15 Amps

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

! CAUTION

For your own safety and protection of property, consult an electrician if you are unsure about wiring practices or electrical codes in your area.

Note: *Circuit requirements in this manual apply to a dedicated circuit—where only one machine will be running on the circuit at a time. If machine will be connected to a shared circuit where multiple machines may be running at the same time, consult an electrician or qualified service personnel to ensure circuit is properly sized for safe operation.*



Grounding & Plug Requirements

This machine **MUST** be grounded. In the event of certain malfunctions or breakdowns, grounding reduces the risk of electric shock by providing a path of least resistance for electric current.

This machine is equipped with a power cord that has an equipment-grounding wire and a grounding plug. Only insert plug into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances. **DO NOT** modify the provided plug!

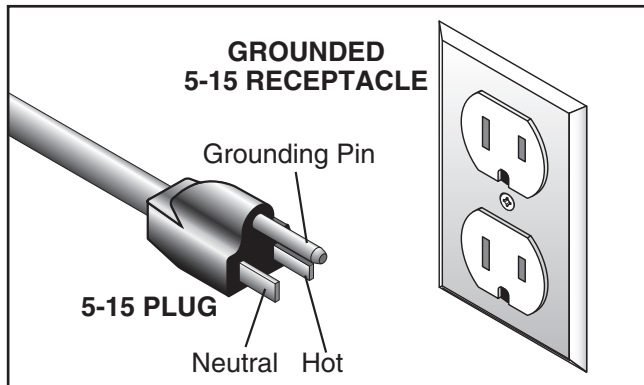


Figure 1. Typical 5-15 plug and receptacle.

⚠ CAUTION

SHOCK HAZARD!

Two-prong outlets do not meet the grounding requirements for this machine. Do not modify or use an adapter on the plug provided—if it will not fit the outlet, have a qualified electrician install the proper outlet with a verified ground.

Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

Extension Cords

We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

Extension cords cause voltage drop, which can damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must be in good condition and contain a ground wire and matching plug/receptacle. Additionally, it must meet the following size requirements:

Minimum Gauge Size 14 AWG
Maximum Length (Shorter is Better)..... 50 ft.



SECTION 3: SETUP

Unpacking

This machine was carefully packaged for safe transport. When unpacking, separate all enclosed items from packaging materials and inspect them for shipping damage. ***If items are damaged, please call us immediately at (570) 546-9663.***

IMPORTANT: Save all packaging materials until you are completely satisfied with the machine and have resolved any issues between Grizzly or the shipping agent. *You MUST have the original packaging to file a freight claim. It is also extremely helpful if you need to return your machine later.*

	<p>! WARNING SUFFOCATION HAZARD! Keep children and pets away from plastic bags or packing materials shipped with this machine.</p>
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Needed for Setup

The following are needed to complete the setup process, but are not included with your machine.

Description	Qty
• Safety Glasses	1
• Wrenches ¹⁵ / ₁₆ "	2

Inventory

The following is a list of items shipped with your machine. Before beginning setup, lay these items out and inventory them.

If any non-proprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.

NOTICE

If you cannot find an item on this list, carefully check around/inside the machine and packaging materials. Often, these items get lost in packaging materials while unpacking or they are pre-installed at the factory.

Inventory	Qty
A. Wheel Flanges	4
B. Hex Nuts ⁵ / ₈ "-11 (1 LH, 1 RH)	2
C. T-Bushings 1" x ³ / ₄ " x ³ / ₈ "	2
D. T-Bushings ³ / ₄ " x ⁵ / ₈ " x ⁵ / ₁₆ "	2
E. Buffer (Not Shown)	1

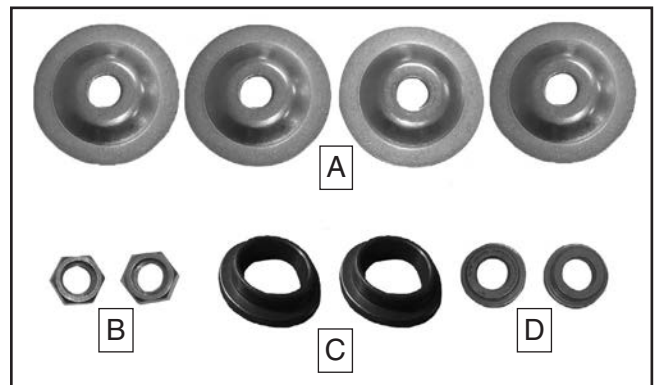


Figure 2. Buffing system inventory.



Cleanup

The shafts of your machine are coated with a heavy-duty rust preventative that prevents corrosion during shipment and storage. This rust preventative works extremely well, but it will take a little time to clean.

Be patient and do a thorough job cleaning your machine. The time you spend doing this now will give you a better appreciation for the proper care of your machine's unpainted surfaces.

There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

Before cleaning, gather the following:

- Disposable Rags
- Cleaner/degreaser (WD-40 works well)
- Safety glasses & disposable gloves
- Plastic paint scraper (optional)

Basic steps for removing rust preventative:

1. Put on safety glasses.
2. Coat the rust preventative with a liberal amount of cleaner/degreaser, then let it soak for 5–10 minutes.
3. Wipe off the surfaces. If your cleaner/degreaser is effective, the rust preventative will wipe off easily. If you have a plastic paint scraper, scrape off as much as you can first, then wipe off the rest with the rag.
4. Repeat **Steps 2–3** as necessary until clean, then coat all unpainted surfaces with a quality metal protectant to prevent rust.

NOTICE

Avoid chlorine-based solvents, such as acetone or brake parts cleaner, that may damage painted surfaces.

Site Considerations

Workbench Load

Refer to the **Machine Data Sheet** for the weight and footprint specifications of your machine. Some workbenches may require additional reinforcement to support both the machine and materials.

Placement Location

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your new machine. See **Figure 3** for the minimum working clearances.

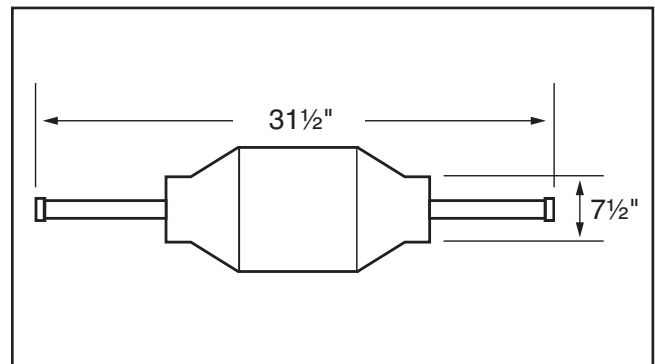
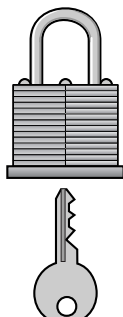


Figure 3. Minimum working clearances.

	<p>CAUTION</p> <p>Children and visitors may be seriously injured if unsupervised around this machine. Lock entrances to the shop or disable start switch or power connection to prevent unsupervised use.</p>
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Bench Mounting

The base of this machine has mounting holes that allow it to be fastened to a workbench or other mounting surface to prevent it from moving during operation and causing accidental injury or damage.

The strongest mounting option is a "Through Mount" (see example below) where holes are drilled all the way through the workbench—and hex bolts, washers, and hex nuts are used to secure the machine in place.

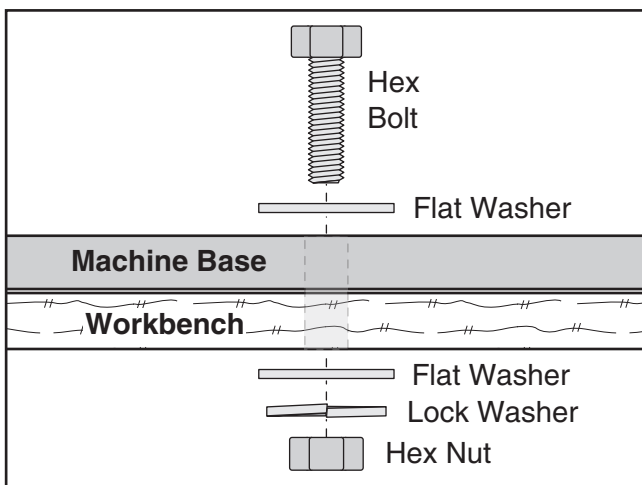


Figure 4. Example of a "Through Mount" setup.

Another option is a "direct mount" (see example below) where the machine is secured directly to the workbench with lag screws and washers.

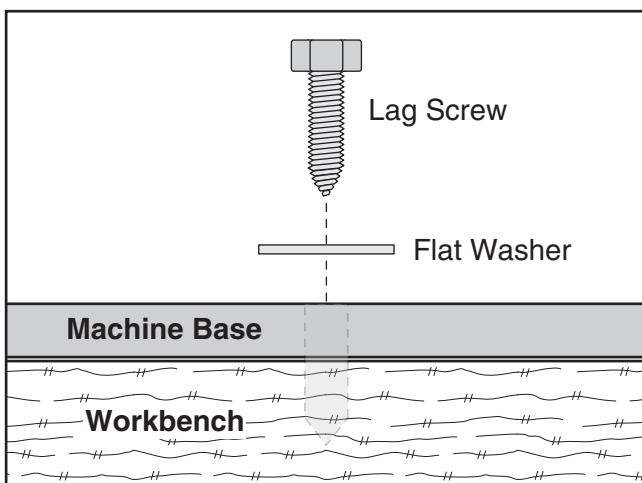


Figure 5. Example of a "Direct Mount" setup.

Test Run

Once assembly is complete, test run the machine to ensure it is properly connected to power and safety components are functioning correctly.

If you find an unusual problem during the test run, immediately stop the machine, disconnect it from power, and fix the problem **BEFORE** operating the machine again. The **Troubleshooting** table in the **SERVICE** section of this manual can help.

WARNING

Serious injury or death can result from using this machine **BEFORE** understanding its controls and related safety information. **DO NOT** operate, or allow others to operate, machine until the information is understood.

WARNING

DO NOT start machine until all preceding setup instructions have been performed. Operating an improperly set up machine may result in malfunction or unexpected results that can lead to serious injury, death, or machine/property damage.

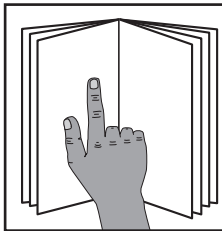
To test run machine:

1. Clear all setup tools away from machine.
2. Connect machine to power supply.
3. Turn machine **ON**. Verify motor operation, and then turn machine **OFF**.

The motor should run smoothly and without unusual problems or noises.



SECTION 4: OPERATIONS

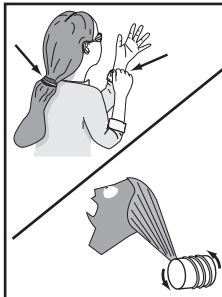
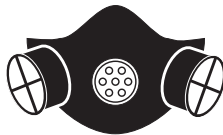


!WARNING

To reduce your risk of serious injury, read this entire manual **BEFORE** using machine.

!WARNING

To reduce risk of eye injury from flying chips or lung damage from breathing dust, always wear safety glasses and a respirator when operating this machine.



!WARNING

Keep hair, clothing, and jewelry away from moving parts at all times. Entanglement can result in death, amputation, or severe crushing injuries!

NOTICE

If you are not experienced with this type of machine, **WE STRONGLY RECOMMEND** that you seek additional training outside of this manual. Read books/magazines or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

Buffing and Polishing Setup

The Model G1061/G1061Z Buffing System is strictly designed for buffing and polishing operations. **IT IS NOT A GRINDER.** The absence of grinding wheel guards and eye shields prohibits the use of this machine as a grinder.

Note: Use caution when polishing plated metals; there is a chance that the thin plated material may be damaged. A light pressure is all that is needed for quality work.

To install wheel and buff or polish:

1. DISCONNECT MACHINE FROM POWER!
2. Using (2) $1\frac{5}{16}$ " wrenches, remove the hex nuts at the end of each shaft, then remove provided wheel flanges from each shaft.

Note: When facing the machine, the shaft on the left side has left-handed threads, meaning the nut loosens when turned clockwise. The shaft on the right side has right-handed threads, meaning the nut loosens when turned counterclockwise.



- Fit (1) $\frac{3}{4}$ " x $\frac{5}{8}$ " x $\frac{5}{16}$ " T-bushing inside (1) 1" x $\frac{3}{4}$ " x $\frac{3}{8}$ " T-bushing and slide onto first shaft. Insert a buffing wheel (not included) between each of the two wheel flanges, then slide flanges onto shaft and secure with hex nut removed in **Step 2**, as shown in **Figure 6**. Repeat on second shaft.

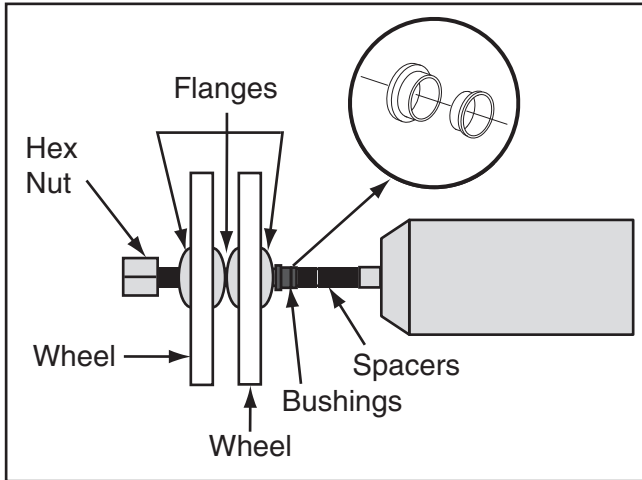


Figure 6. Buffing wheels installed.

- Select the appropriate stick of polishing compound for your application, and apply to the rotating face of the wheel.
- Put on safety glasses and a respirator, then connect machine to power.

CAUTION

Never buff with workpiece on top of the wheel. Workpiece may catch on wheel and be thrown at operator. Always buff workpiece near the bottom of the wheel!

- Stand to the side of the buffer and turn it *ON*.
- Allow the buffer to reach full speed.
- Firmly grasp the workpiece with both hands. Lightly and evenly move the workpiece back and forth on the buffing wheel.

Buffing Tips

Below are some quick tips for getting the most out of your buffer. Remember, there is no substitute for experience. Learning how to hold the workpiece, how much pressure to apply, how to move the workpiece against the wheel, and how much compound to use requires some amount of trial-and-error.

- Thoroughly clean all parts that you plan to buff. Dirt, oil, rust, paint or other film must be removed chemically or with water. Make sure to dry off parts with a rag after cleaning.
- Apply buffing compounds in small amounts at a time. Apply paste-type compounds with a wand or directly to the part. For wax-based polishing stick-type compounds, press the compound on the wheel for a couple of seconds while the machine is running. Avoid using too much compound.
- Put your workpiece under the wheel when you are loading the compound on the buffing wheel. This way, you will catch any compound that would normally be wasted on the floor.
- Only use the area indicated in **Figure 7** to do the actual buffing. Contacting the workpiece on areas outside the correct area may flip the workpiece out of your hands.

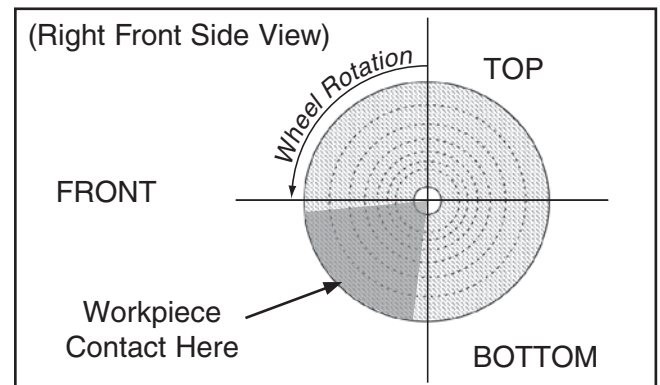


Figure 7. Location where workpiece should contact wheel.



- Hold the workpiece tightly at all times while buffing. Placing one hand near the contact point will give you better control.
- Keep buffing wheels raked out before each use and when buildup gets heavy during use. Raking means to clean the buffing wheels with a wheel rake to remove built-up compounds and metal particles. ALWAYS use light pressure when raking wheels!
- Do not mix two different compounds on the same wheel. For best results, use a separate wheel for each compound.
- Always use an upward stroke with heavy to moderate pressure for cutting. Use a downward stroke with light pressure for polishing. See **Figure 8**.

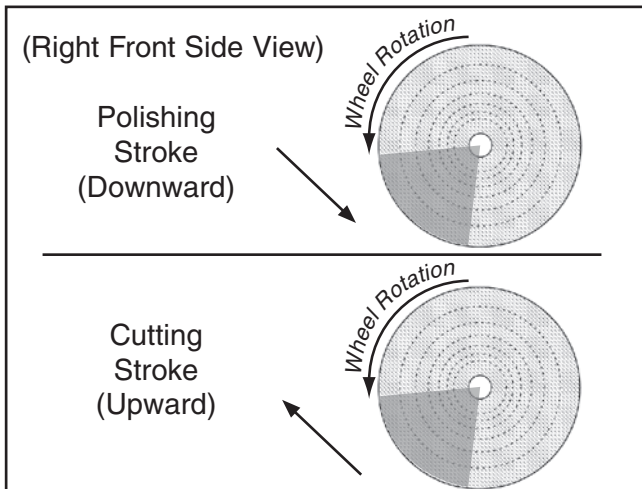


Figure 8. Cutting and polishing strokes.

- Wear safety equipment when buffing. If the buffer forces the workpiece out of your hand, be prepared for it to come flying at you! Wear safety glasses or a face shield and a heavy leather apron. Also, wear a dust mask to protect your lungs from microscopic particulate that will be flying off the wheel.

Buffing Compound Selection

Most colors of abrasives have similar applications, but always check with the manufacturer of your particular compound.

Grizzly offers the following buffing compounds:

Red Rouge — Made for fine polishing on brass and gold. Provides an excellent shine when used with the loose muslin buffing wheel.

Green (Extra Fine) — Great for extra-fine polishing on most metals to bring out that mirror finish. Works best with loose muslin and spiral-sewn buffing wheels.

Green (Fine) — Slightly more abrasive than the extra fine green, this green compound is great for a medium to fine polish with most softer metals.

White — Great for ivory, plastic and resins when used successively with the soft spiral-sewn and soft airway buffing wheels.

Black — Designed to be used with sisal and airway hard buffing wheels, this compound is perfect for the initial rough cut on stainless steel and iron.

Tripoli — A true middle-of-the-road abrasive, Tripoli provides an excellent medium cut for brass, aluminum and zinc alloy.

Buffing Compound Sequence Key

Compound Type	Plastics Soft Metals			Thin Plating Gold Silver			Chrome & Nickel Plate			Copper Brass Aluminum			Iron Steel Stainless Steel		
	R	F	P	R	F	P	R	F	P	R	F	P	R	F	P
Tripoli	X							X		X					
Dark Rouge						X			X		X	X			X
White Rouge		X	X												
Black Rouge													X	X	

Buffing Sequence: R = Rough F= Final Cut, Initial Polish P = Final Polish



Buffing Wheel Selection

Buffing wheels are available for most types of metals and for different stages in the buffing process. Below are pictures and descriptions of common wheel types:

Loose Muslin

Soft feather-edged muslin stitched together near the center leaves the outer edge to provide a wide angle, fine polishing surface. Perfect for polishing stainless steel, chrome, gold or silver.



Airway Hard

Made of 100% cotton sheets that are treated to stiffen the material. Pleats in the material help hold compound. These are great for rough cutting plastics and initial polishing a wide variety of metals.



Airway Soft

Made of 100% cotton sheets and held together with a steel retainer. Pleats in the material help hold compound. These wheels are great for polishing soft metals and plastics.



Laminated Sisal

Designed for rough cutting, sisal works well with various steels, copper, aluminum, and brass to remove scratches and prepare the piece for polishing.



Spiral Sewn

Consist of layers of 100% unbleached cotton sheeting that are spiral sewn 1/8" apart. Works well for initial polish on brass, stainless steel, aluminum, bronze and cast iron.



Buffing Wheel Sequence Key

Buff Style	Plastics Soft Metals			Thin Plating Gold Silver			Chrome & Nickel Plate			Copper Brass Aluminum			Iron Steel Stainless Steel		
	R	F	P	R	F	P	R	F	P	R	F	P	R	F	P
Loose Muslin-Soft			X			X			X			X			X
Loose Muslin-Hard										X			X	X	
Airway Hard	X									X			X		
Airway Soft			X			X			X			X			
Laminated Sisal										X			X		
Spiral Sewn		X						X			X			X	

Buffing Sequence: R = Rough F= Final Cut, Initial Polish P = Final Polish



Loading Compound on Wheels

Select a buffing compound and buffing wheel that is suitable for the workpiece and each sequence of the buffing or polishing operation. Refer to **Buffing Compound Selection** on **Page 14** and **Buffing Wheel Selection** on **Page 15** before loading compound on the buffing wheel.

Items Needed	Qty
¹⁵ / ₁₆ " Wrench	1

To load compound on wheels:

1. Select buffing wheel suitable for workpiece (refer to **Buffing Wheel Selection** and **Buffing Wheel Sequence Key** on **Page 15**). Follow directions on **Page 12** to install wheel.

2. Select buffing compound suitable to material (refer to **Buffing Compound Selection** and **Buffing Compound Sequence Key** on **Page 14**).

Note: Make sure buffing wheel is free of any compound used in prior buffing operation. Clean with a buffing wheel rake if necessary (See **Cleaning** on **Page 18**).

3. Put on safety glasses, face shield, and respirator, then connect machine to power.

4. Stand to side of buffer wheel and turn machine **ON**. Allow buffer wheel to reach full speed.

5. Apply buffing compound to rotating face of wheel, as shown in **Figures 9–10**. Only hold compound to wheel for 2–5 seconds. The buffer is now ready for buffing/polishing.

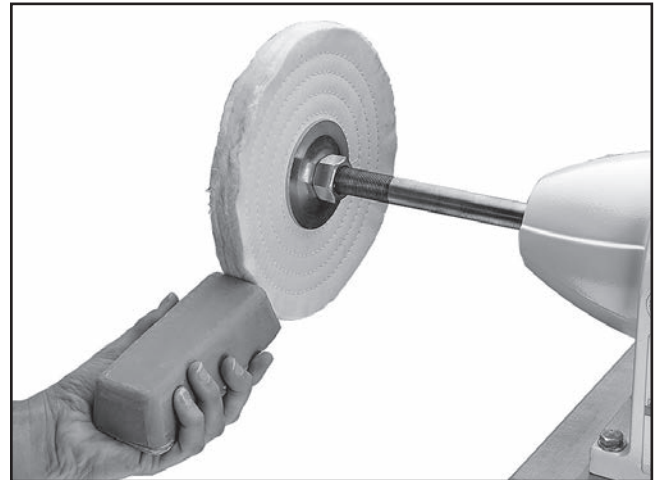


Figure 9. Applying buffing compound to wheel.

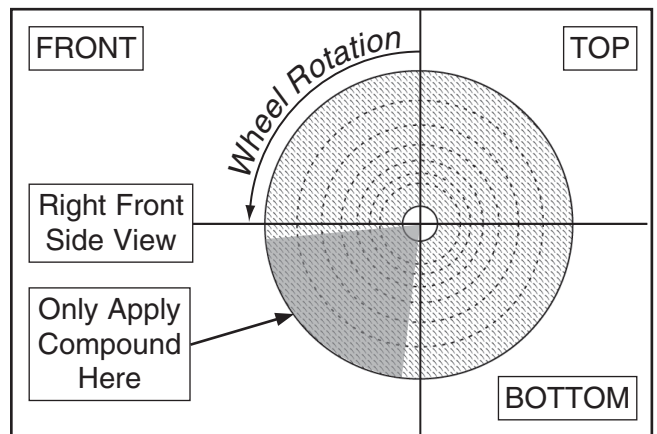


Figure 10. Location where buffing compound should contact wheel.

6. Turn machine **OFF** when completed.



SECTION 5: ACCESSORIES

! WARNING

Installing unapproved accessories may cause machine to malfunction, resulting in serious personal injury or machine damage. To reduce this risk, only install accessories recommended for this machine by Grizzly.

NOTICE

Refer to our website or latest catalog for additional recommended accessories.

G2582—Buffing Compound Set

Set includes one 5 oz. bar of each of the following compounds: Black Emery Cake, Tripoli Brown rouge, White Rouge & Red Rouge. Due to their nature, colors may vary.



Figure 11. Buffing compound set.

H4383—Buffing Wheel Rake with Handle

H4384—Replacement Rake

Great for removing dried compound from buffing wheels. Simply guide the rake across the spinning buff.



Figure 12. Buffing wheel rake with handle.

Buffing Wheels

MODEL	TYPE	SIZE	MAX RPM
D3186	Soft Muslin	3" x 40 Ply x 5/8"	5,000
D3188	Soft Muslin	5" x 40 Ply x 5/8"	5,000
D3191	Hard Muslin	6" x 50 Ply x 5/8"	4,000
D3194	Soft Airway	6" x 5/8" Hole	3,500
D3193	Hard Airway	6" x 5/8" Hole	3,500
D3177	Spiral Sewn	4" x 30 Ply x 5/8"	5,000
D3176	Spiral Sewn	4" x 40 Ply x 5/8"	5,000
D3181	Spiral Sewn	6" x 40 Ply x 5/8"	4,000

H7763—Pedestal Stand

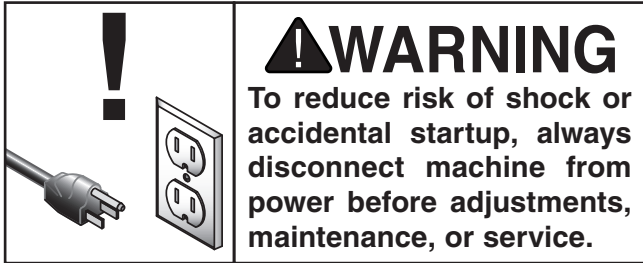
This is one of the most stable buffing system stands on the market. Overall height is 32".



Figure 13. H7763 Pedestal Stand.



SECTION 6: MAINTENANCE



Schedule

For optimum performance from this machine, this maintenance schedule must be strictly followed.

Ongoing

To maintain a low risk of injury and proper machine operation, if you ever observe any of the items below, shut down the machine immediately and fix the problem before continuing operations:

- Loose bolts on shafts or mounted base.
- Damaged shafts.
- Damaged buffing wheels.
- Worn or damaged wires.
- Any other unsafe condition.

Weekly Maintenance

- Worn or damaged shaft bearings.
- Worn or damaged cord.
- Worn ON/OFF switch.

Monthly Check

- Clean/vacuum dust buildup off motor.

Cleaning

Cleaning the Model G1061/G1061Z buffing system is relatively easy. Vacuum excess wood chips, sawdust, or metal shavings and wipe off the remaining dust with a dry cloth. Wipe down shafts with a non-staining lubricant after cleaning.

To clean buffing wheels, use a buffing wheel rake to remove dried compound. Guide the rake across the spinning buffing wheel using light pressure, as shown in **Figure 14**.



Figure 14. Removing compound from buffing wheel with buffing wheel rake.

Lubrication

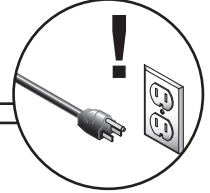
The bearings inside the Model G1061/1061Z are sealed and permanently lubricated. Simply leave them alone unless they need replacing.



SECTION 7: SERVICE

Review the troubleshooting and procedures in this section to fix or adjust your machine if a problem develops. If you need replacement parts or you are unsure of your repair skills, then feel free to call our Technical Support at (570) 546-9663.

Troubleshooting



Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> 1. Power supply circuit breaker tripped or fuse blown. 2. Start capacitor at fault. 3. Centrifugal switch at fault. 4. Wiring open/has high resistance. 5. ON/OFF switch is at fault. 6. Motor is at fault. 	<ol style="list-style-type: none"> 1. Ensure circuit is sized correctly and free of shorts. Reset circuit breaker or replace fuse. 2. Test/replace. 3. Adjust/replace centrifugal switch if available. 4. Check/fix broken, disconnected, or corroded wires. 5. Replace ON/OFF switch. 5. Test/repair/replace.
Machine stalls or is underpowered.	<ol style="list-style-type: none"> 1. Buffing wheel too large/wide, or exceeds recommended wheel rating. 2. Motor has overheated. 3. Motor connection is wired incorrectly. 4. Motor bearings are at fault. 5. Motor is at fault. 	<ol style="list-style-type: none"> 1. Replace with smaller wheel or reduce wheel width. 2. Let cool, clean off motor, and reduce workload. 3. Correct motor wiring connections. 4. Test/repair/replace. 5. Test/repair/replace.
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> 1. Buffing wheel has become loose, worn, or components (steel center hub) are dislodged. 2. Motor or component is loose. 3. Incorrectly mounted to workbench. 4. Motor bearings are at fault. 5. Motor shaft is bent. 	<ol style="list-style-type: none"> 1. Replace buffing wheel. 2. Inspect/replace damaged bolts/nuts, and retighten with thread-locking fluid. 3. Shim or tighten mounting hardware. 4. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. 5. Test with dial indicator and replace if bent.

Buffing Operations

Symptom	Possible Cause	Possible Solution
Poor results from buffing/polishing operation.	<ol style="list-style-type: none"> 1. Workpiece contains residue or contaminants. 2. Incorrect stroke for buffing compound/wheel/material. 3. Contaminated buffing compounds on wheel. 4. Wrong buffing compound for material. 5. Inappropriate buffing wheel. 	<ol style="list-style-type: none"> 1. Dirt, oil, rust, paint, or other film must be removed chemically or with water. Dry parts before buffing. 2. Use upward stroke with heave to moderate pressure for cutting; use downward stroke with light pressure for polishing. 3. DO NOT mix different compounds on same wheel. Use separate wheel for each compound. Remove compound with buffing wheel rake (Page 18). 4. Refer to Buffing Compound Selection and Buffing Sequence Key on Page 14. 5. Refer to Buffing Wheel Selection and Buffing Wheel Sequence Key on Page 15.



SECTION 8: WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Compare the manufacture date of your machine to the one stated in this manual, and study this section carefully.

If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine. An updated wiring diagram may be available. **Note:** *Please gather the serial number and manufacture date of your machine before calling. This information can be found on the main machine label.*

WARNING

Wiring Safety Instructions

SHOCK HAZARD. Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

MODIFICATIONS. Modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire. This includes the installation of unapproved after-market parts.

WIRE CONNECTIONS. All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.

CIRCUIT REQUIREMENTS. You MUST follow the requirements at the beginning of this manual when connecting your machine to a power source.

WIRE/COMPONENT DAMAGE. Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components.

MOTOR WIRING. The motor wiring shown in these diagrams is current at the time of printing but may not match your machine. If you find this to be the case, use the wiring diagram inside the motor junction box.
















CAPACITORS/INVERTERS. Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

EXPERIENCING DIFFICULTIES. If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

NOTICE

The photos and diagrams included in this section are best viewed in color. You can view these pages in color at www.grizzly.com.

COLOR KEY

BLACK 	BLUE 	YELLOW 	LIGHT BLUE 
WHITE 	BROWN 	YELLOW GREEN 	BLUE WHITE 
GREEN 	GRAY 	PURPLE 	TURQUOISE 
RED 	ORANGE 	PINK 	



Main Wiring

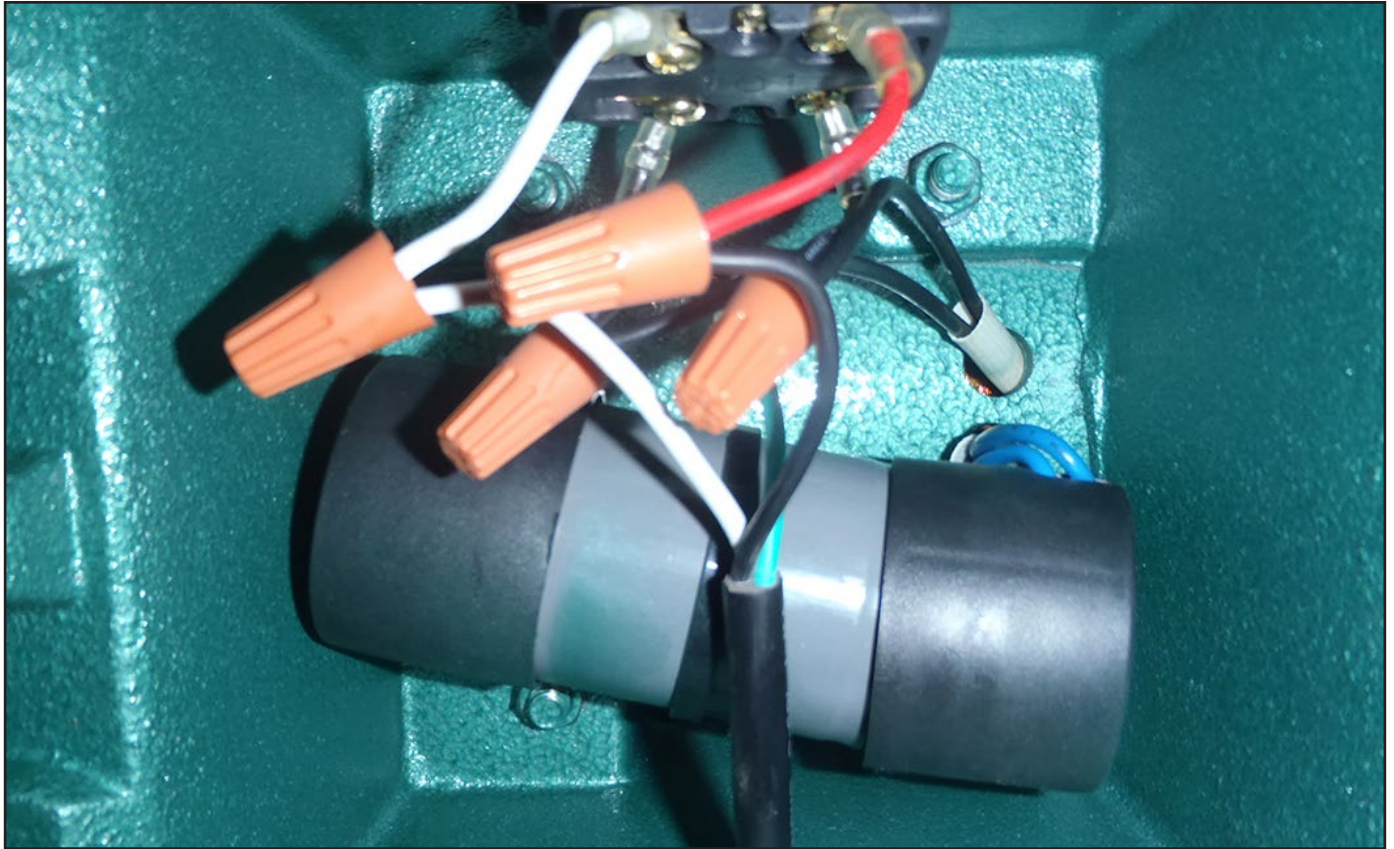
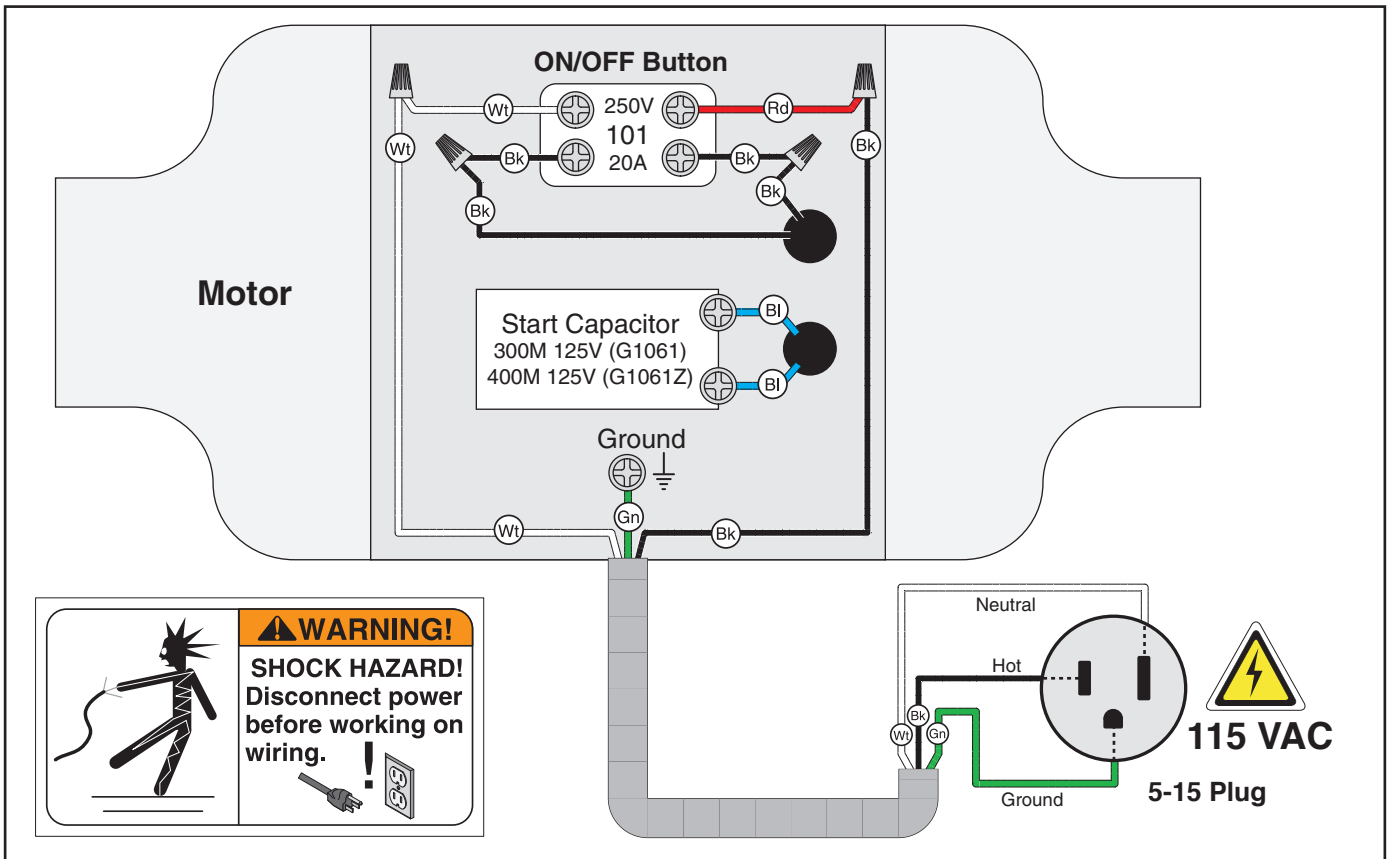
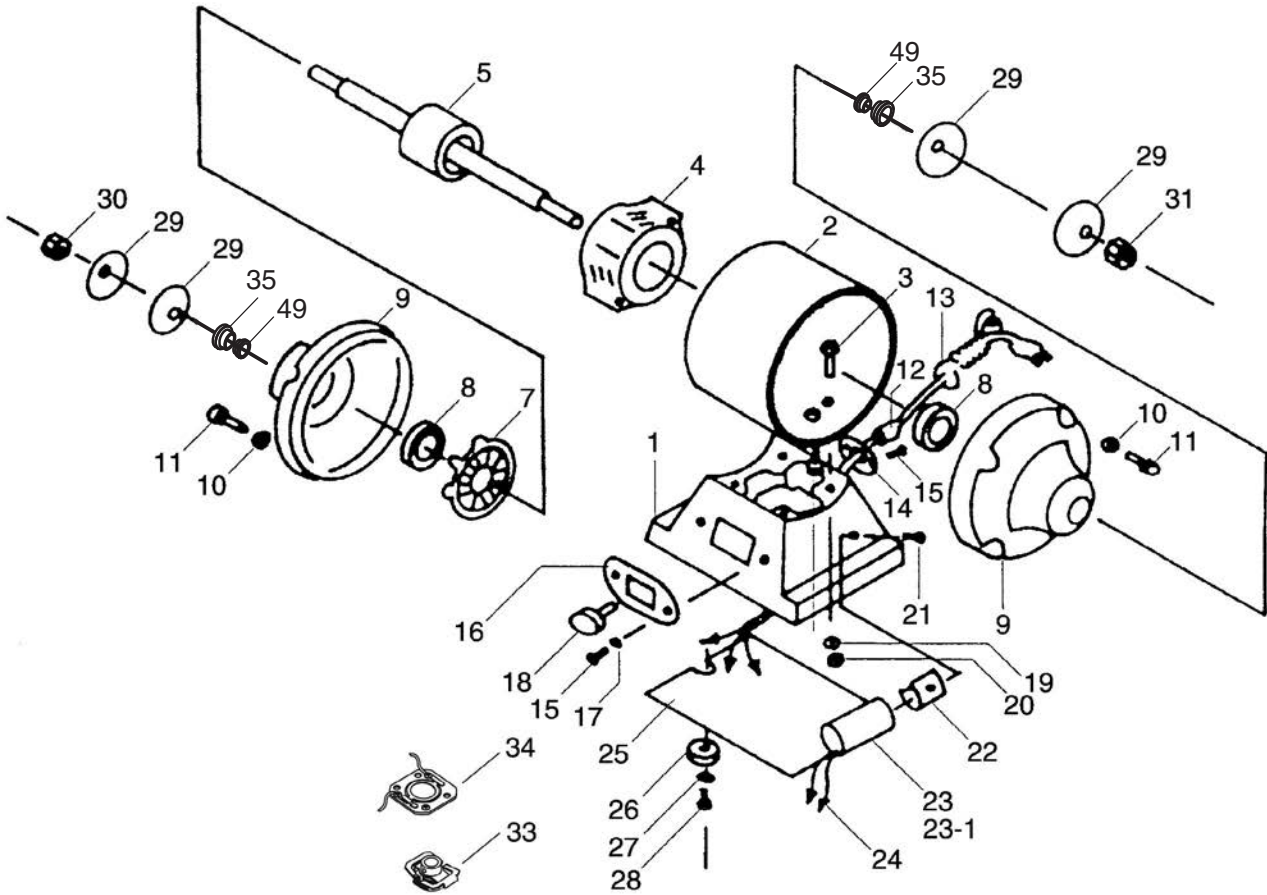


Figure 15. Buffering system wiring.



SECTION 9: PARTS

Main



REF PART #	DESCRIPTION
1	P1061001 MOTOR BASE
2	P1061002 MOTOR CASE
3	P1061003 FLAT HD SCR 5/16-18 X 1-1/4
4	P1061004 STATOR (G1061)
4	P1061Z004 STATOR (G1061Z)
5	P1061005 ROTOR (G1061)
5	P1061Z005 ROTOR (G1061Z)
7	P1061007 MOTOR FAN
8	P1061008 BALL BEARING 6206ZZ
9	P1061009 END BELL
10	P1061010 LOCK WASHER 1/4
11	P1061011 PHLP HD SCR 1/4-20 X 5/8
12	P1061012 CORD CLAMP
13	P1061013 POWER CORD 16G X 3W 73L
14	P1061014 STRAIN RELIEF
15	P1061015 PHLP HD SCR 10-24 X 1/2
16	P1061016 SWITCH PANEL
17	P1061017 LOCK WASHER #10
18	P1061018 ON/OFF SWITCH

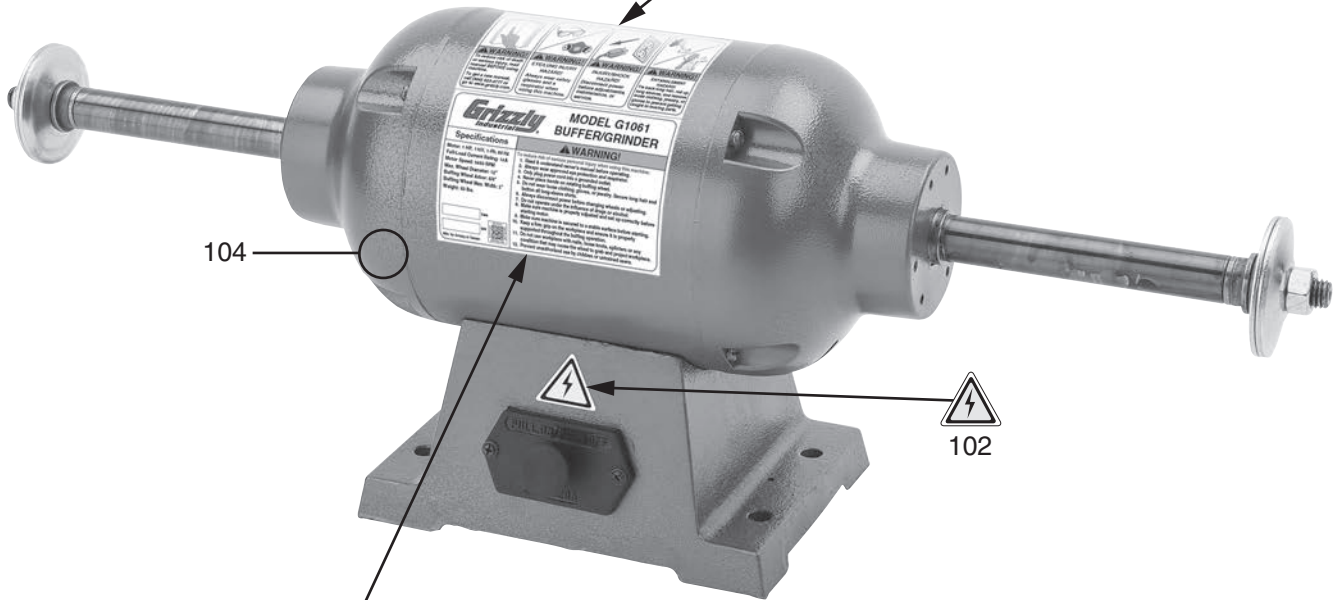
REF PART #	DESCRIPTION
19	P1061019 LOCK WASHER 5/16
20	P1061020 HEX NUT 5/16-18
21	P1061021 TAP SCREW #6 X 1/2
22	P1061022 CLAMP
23	P1061023 S CAPACITOR 400M 125V 1-3/4 X 3-3/8 (G1061Z)
23-1	P1061123-1 S CAPACITOR 300M/125V 1-3/4 X 3-3/8 (G1061)
24	P1061024 CLAMP CORD
25	P1061025 FLOOR PLATE
26	P1061026 FOOT WASHER
27	P1061027 FLAT WASHER #10
28	P1061028 PHLP HD SCR 10-24 X 1/2
29	P1061029 WHEEL FLANGE 5/8 BORE
30	P1061030 HEX NUT 5/8-11 LH
31	P1061031 HEX NUT 5/8-11 RH
33	P1061033 CENTRIFUGAL SWITCH 3450 RPM (G1061)
33	P1061033 CENTRIFUGAL SWITCH 3450 RPM (G1061)
34	P1061034 CONTACT SWITCH PLATE
35	P1061035 T-BUSHING 1 X 3/4 X 3/8
49	P1061049 T-BUSHING 3/4 X 5/8 X 5/16



Labels & Cosmetics

101

▲ WARNING! To reduce risk of death or serious injury, read manual BEFORE using machine. To get a new manual, call (800) 523-4777 or go to www.grizzly.com .	▲ WARNING! EYE/LUNG INJURY HAZARD! Always wear safety glasses and a respirator when using this machine.	▲ WARNING! INJURY/SOCK HAZARD! Disconnect power before adjustments, maintenance, or service.	▲ WARNING! ENTANGLEMENT HAZARD! Tie back long hair, roll up long sleeves, and remove loose clothing, jewelry, or gloves to prevent getting caught in moving parts.



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102

103

Grizzly Industrial		MODEL G1061 BUFFER/GRINDER	
Specifications	▲ WARNING!		
Motor: 1 HP, 115V, 1-Ph, 60 Hz Full-Load Current Rating: 14A Motor Speed: 3450 RPM Max. Wheel Diameter: 12" Buffing Wheel Arbor: 5/8" Buffing Wheel Max. Width: 2" Weight: 53 lbs.	To reduce risk of serious personal injury when using this machine: 1. Read & understand owner's manual before operating. 2. Always wear approved eye protection and respirator. 3. Only plug power cord into a grounded outlet. 4. Never place hands on rotating buffing wheel. 5. Do not wear loose clothing, gloves, or jewelry. Secure long hair and button all long-sleeve shirts. 6. Always disconnect power before changing wheels or adjusting. 7. Do not operate under the influence of drugs or alcohol. 8. Make sure machine is properly adjusted and set up correctly before starting motor. 9. Make sure machine is secured to a stable surface before starting. 10. Keep a firm grip on the workpiece and ensure it is properly supported throughout the buffing operation. 11. Do not use workpiece with nails, loose knots, splinters or any condition that may cause the wheel to grab and project workpiece. 12. Prevent unauthorized use by children or untrained users.		
_____ Date _____ S/N 	_____ Date _____ S/N 		
Mfd. for Grizzly in Taiwan	Mfd. for Grizzly in Taiwan		

103

Grizzly Industrial		MODEL G1061Z BUFFER/GRINDER	
Specifications	▲ WARNING!		
Motor: 1 HP, 115V, 1-Ph, 60 Hz Full-Load Current Rating: 14A Motor Speed: 1725 RPM Max. Wheel Diameter: 12" Buffing Wheel Arbor: 5/8" Buffing Wheel Max. Width: 2" Weight: 53 lbs.	To reduce risk of serious personal injury when using this machine: 1. Read & understand owner's manual before operating. 2. Always wear approved eye protection and respirator. 3. Only plug power cord into a grounded outlet. 4. Never place hands on rotating buffing wheel. 5. Do not wear loose clothing, gloves, or jewelry. Secure long hair and button all long-sleeve shirts. 6. Always disconnect power before changing wheels or adjusting. 7. Do not operate under the influence of drugs or alcohol. 8. Make sure machine is properly adjusted and set up correctly before starting motor. 9. Make sure machine is secured to a stable surface before starting. 10. Keep a firm grip on the workpiece and ensure it is properly supported throughout the buffing operation. 11. Do not use workpiece with nails, loose knots, splinters or any condition that may cause the wheel to grab and project workpiece. 12. Prevent unauthorized use by children or untrained users.		
_____ Date _____ S/N 	_____ Date _____ S/N 		
Mfd. for Grizzly in Taiwan	Mfd. for Grizzly in Taiwan		

REF	PART #	DESCRIPTION
101	P1061101	4-WAY WARNING LABEL
102	P1061102	ELECTRICITY WARNING LABEL
103	P1061103	MACHINE ID LABEL (G1061)

REF	PART #	DESCRIPTION
103	P1061Z103	MACHINE ID LABEL (G1061Z)
104	P1061104	TOUCH-UP PAINT, GRIZZLY GREEN

▲ WARNING

Safety labels help reduce the risk of serious injury caused by machine hazards. If any label comes off or becomes unreadable, the owner of this machine **MUST** replace it in the original location before resuming operations. For replacements, contact (800) 523-4777 or www.grizzly.com.





WARRANTY & 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.

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.

In the event you need to use 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.

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

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

To take advantage of this warranty, you must register it at <https://www.grizzly.com/secureforms/warranty-card>, or you can scan the QR code below to be automatically directed to our warranty registration page. Enter all applicable information for the product.



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