



## MODEL G0561

### 7" x 12" METAL CUTTING BANDSAW

#### OWNER'S MANUAL

*(For models manufactured since 01/08)*



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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

The Model G0561 Metal Cutting Bandsaw has a flexible continuous blade that is used to make straight cuts in metal stock.

The clamping vise adjusts for cuts between 0° and 45°. There are four blade speeds (90, 135, 195, and 255 FPM), with an adjustable feed rate for the correct blade pressure on the workpiece. The pump-controlled coolant system helps provide optimum working results and extended longevity of blades.

## 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.

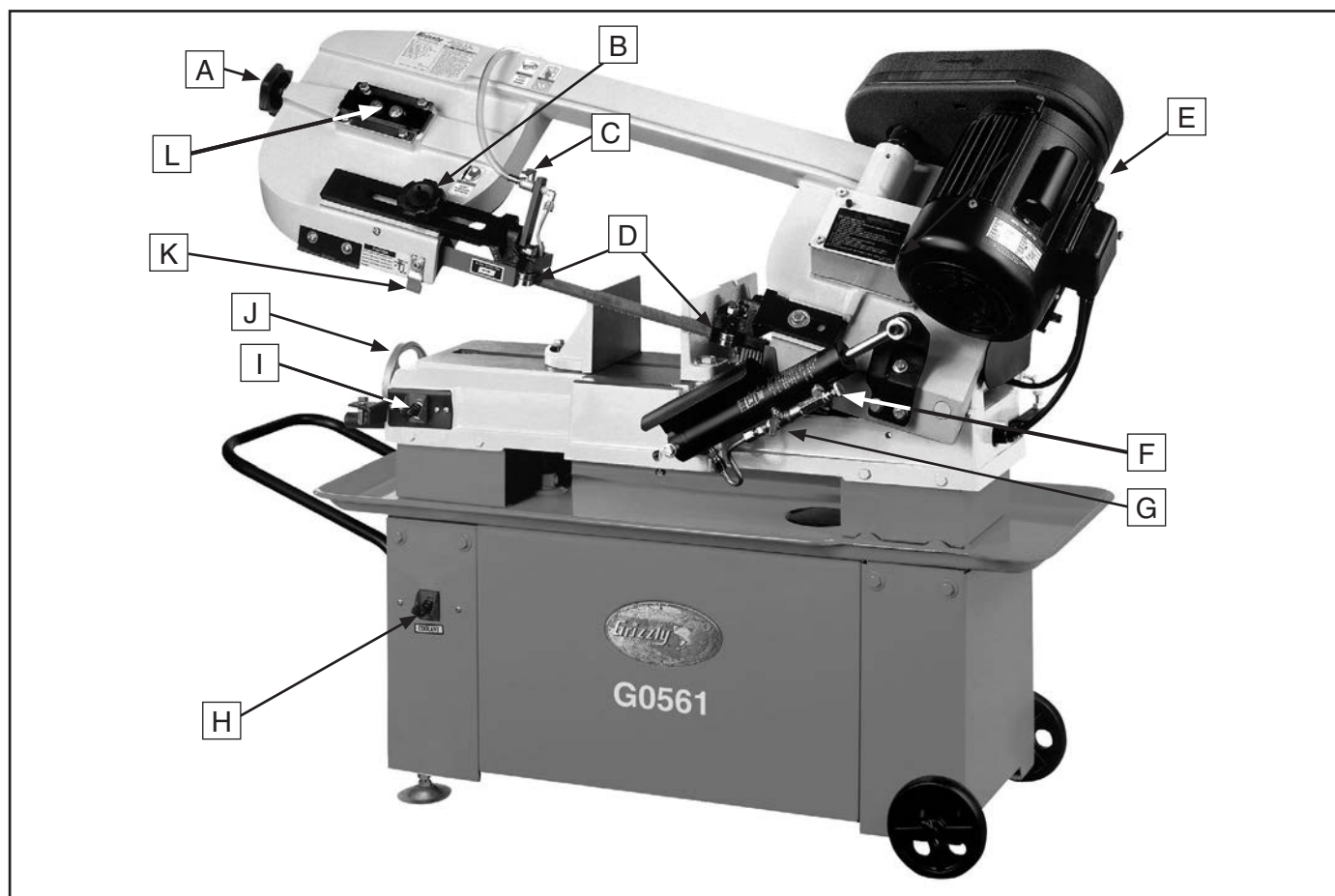
		MODEL GXXXX MACHINE NAME	
SPECIFICATIONS		▲ WARNING!	
Motor:	To reduce risk of serious injury when using this machine:		
Specification:	Read manual before operation.		
Specification:	Wear safety glasses and respirator.		
Specification:	Ensure machine is properly adjusted/setup and		
Specification:	power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

Manufactured for Grizzly in Taiwan



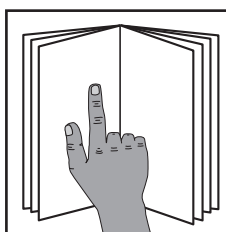
# Identification

Become familiar with the names and locations of the controls and features shown below to better understand the instructions in this manual.



**Figure 1.** Main view of machine features.

- |                                       |                                   |
|---------------------------------------|-----------------------------------|
| <b>A.</b> Blade Tension Handle        | <b>G.</b> Feed ON/OFF Valve Lever |
| <b>B.</b> Blade Guide Adjustment Knob | <b>H.</b> Pump ON/OFF Switch      |
| <b>C.</b> Coolant Control Valve       | <b>I.</b> Motor ON/OFF Switch     |
| <b>D.</b> Blade Guides                | <b>J.</b> Vise Handwheel          |
| <b>E.</b> 1 HP Motor                  | <b>K.</b> Automatic Shut-Off Tab  |
| <b>F.</b> Feed Rate Control Knob      | <b>L.</b> Blade Tracking Controls |



## **!WARNING**

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





# MACHINE DATA SHEET

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

## MODEL G0561 7" X 12" METAL CUTTING BANDSAW

### Product Dimensions:

Weight..... 330 lbs.  
Width (side-to-side) x Depth (front-to-back) x Height..... 48 x 16 x 40 in.  
Footprint (Length x Width)..... 38 x 13 in.

### Shipping Dimensions:

Type..... Wood Slat Crate  
Content..... Machine  
Weight..... 343 lbs.  
Length x Width x Height..... 19 x 51 x 41 in.  
Must Ship Upright..... Yes

### Electrical:

Power Requirement..... 110V or 220V, Single-Phase, 60 Hz  
Prewired Voltage..... 110V  
Full-Load Current Rating..... 12A at 110V, 6A at 220V  
Minimum Circuit Size..... 15A at 110V, 15A at 220V  
Connection Type..... Cord & Plug  
Power Cord Included..... Yes  
Power Cord Length..... 7 ft.  
Power Cord Gauge..... 14 AWG  
Plug Included..... Yes  
Included Plug Type..... 5-15 for 110V  
Recommended Plug Type..... 6-15 for 220V  
Switch Type..... Sealed Toggle Switch w/Automatic Shut-Off

### Motors:

#### Main

Horsepower..... 1 HP  
Phase..... Single-Phase  
Amps..... 12A/6A  
Speed..... 1720 RPM  
Type..... TEFC Capacitor-Start Induction  
Power Transfer ..... Belt Drive  
Bearings..... Shielded & Permanently Lubricated

### Main Specifications:

#### Operation Info

Blade Speeds..... 90, 135, 195, 255 FPM  
Std. Blade Length..... 93 in.  
Blade Size Range..... 3/4 in.



## Cutting Capacities

Angle Cuts.....	0 – 45 deg.
Vise Jaw Depth.....	9-3/4 in.
Vise Jaw Height.....	4 in.
Max. Capacity Rectangular Height at 90 Deg.....	7 in.
Max. Capacity Rectangular Width at 90 Deg.....	12 in.
Max. Capacity Round at 90 Deg.....	7 in.
Max. Capacity Rectangular Height at 30 Deg.....	7-3/4 in.
Max. Capacity Rectangular Width at 30 Deg.....	8 in.
Max. Capacity Round at 30 Deg.....	7 in.
Max. Capacity Rectangular Height at 45 Deg.....	4-3/4 in.
Max. Capacity Rectangular Width at 45 Deg.....	4-1/2 in.
Max. Capacity Round at 45 Deg.....	5 in.

## Construction

Table.....	Cast Iron
Upper Wheel.....	Cast Iron
Lower Wheel.....	Cast Iron
Body.....	Cast Iron
Base.....	Stamped Steel
Wheel Cover.....	Pre-formed Steel
Paint Type/Finish.....	Epoxy

## Other

Wheel Size.....	11-1/2 in.
Blade Guides Upper.....	Ball Bearing
Blade Guides Lower.....	Ball Bearing
Coolant Cap.....	2-1/2 GAL

## Table Info

Table Size Length.....	20-1/2 in.
Table Size Width.....	6-3/4 in.
Floor To Cutting Area Height.....	21 in.

## Other Specifications:

Country of Origin .....	China
Warranty .....	1 Year
Approximate Assembly & Setup Time .....	30 Minutes
Serial Number Location .....	ID Label on Body Frame
ISO 9001 Factory .....	Yes
Certified by a Nationally Recognized Testing Laboratory (NRTL) .....	No

## Features:

Hydraulic Feed Control  
Quick-Release Vise  
Automatic Shut off  
Coolant System  
Includes Blade





# 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.



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 machine.

## Safety Instructions for Machinery



**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 Metal Bandsaws

## WARNING

**BLADE CONDITION.** Do not operate with dull, cracked or badly worn blade that can break during operation or decrease the performance of the bandsaw. Inspect blades for cracks and missing teeth before each use.

**BLADE REPLACEMENT.** Wear gloves to protect hands and safety glasses to protect eyes when replacing the blade. Make sure teeth face workpiece, in direction of blade travel.

**WORKPIECE HANDLING.** Always support workpiece with table, vise, or some type of support fixture. Flag long pieces to avoid a tripping hazard. Never hold workpiece with hands during horizontal cutting operations. Keep hands a safe distance away from moving blade during vertical cutting operations.

**FIRE HAZARD.** Use EXTREME CAUTION if cutting magnesium. Using the wrong cutting fluid will lead to chip fire and possible explosion.

**HOT SURFACES.** Be aware that touching hot workpieces or chips can cause burns.

**CUTTING FLUID SAFETY.** Cutting fluids are poisonous. Always follow manufacturer's cutting-fluid safety instructions. Pay particular attention to contact, contamination, inhalation, storage and disposal warnings. Spilled cutting fluid invites slipping hazards.

**ENTANGLEMENT HAZARDS.** Always keep the blade guard in place when bandsaw is in operation. Loose clothing, jewelry, long hair and work gloves could be pulled into the blade or moving parts, resulting in lacerations or amputation.

**UNSTABLE WORKPIECES.** Workpieces that cannot be supported or stabilized without a vise or jig should not be cut in vertical position, because they can unexpectedly move while cutting and draw the operator's hands into the blade causing serious personal injury. Examples are chains, cables, round or oblong-shaped workpieces, and those with internal or built-in moving or rotations parts, etc.

**PROPERLY MAINTAIN MACHINE.** Keep machine in proper working condition to help ensure that it functions safely and all guards and other components work as intended. Perform routine inspections and all necessary maintenance. Never operate machine with damaged or worn parts that can break or result in unexpected movement during operation.

**DISCONNECT POWER FIRST.** To reduce risk of electrocution or injury from unexpected startup, make sure bandsaw is turned **OFF**, disconnected from power, and all moving parts have come to a complete stop before changing blade or starting any inspection, adjustment, or maintenance procedure.

**LEAVING WORK AREA.** Never leave machine running unattended. Allow bandsaw to come to a complete stop before you leave it unattended.

**AVOID SUDDEN STARTUP.** In the event of a local power outage during operation, immediately press Emergency Stop button to avoid a sudden startup once power is restored.

## WARNING

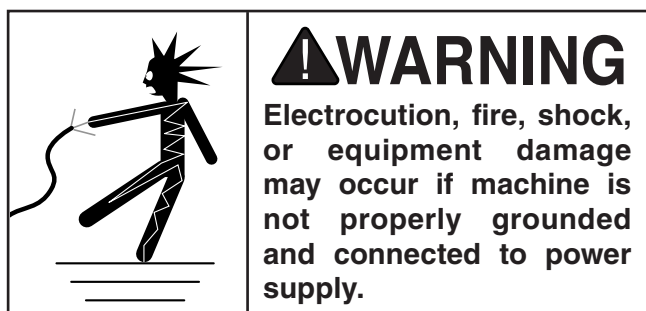
No list of safety guidelines can be complete. Every shop environment is different. Like all machines there is danger associated with the Model G0561. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.



# 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 110V..... 12 Amps**

**Full-Load Current Rating at 220V ..... 6 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.

## Circuit Information

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.*

## Circuit Requirements for 110V

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

**Nominal Voltage** ..... 110V, 115V, 120V  
**Cycle** ..... 60 Hz  
**Phase** ..... Single-Phase  
**Power Supply Circuit** ..... 15 Amps  
**Plug/Receptacle** ..... NEMA 5-15

## Circuit Requirements for 220V

This machine can be converted to operate on a power supply circuit that has a verified ground and meets the requirements listed below. (Refer to **Voltage Conversion** instructions for details.)

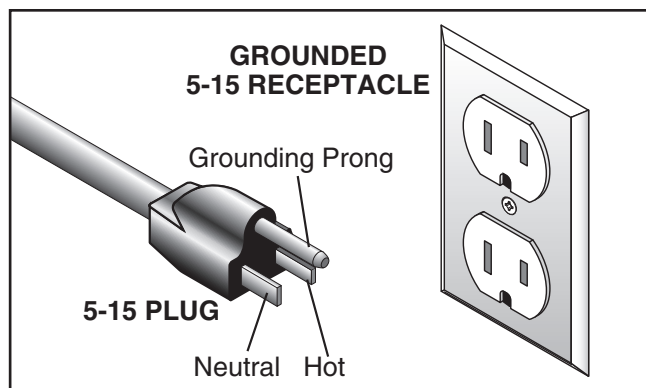
**Nominal Voltage** ..... 208V, 220V, 230V, 240V  
**Cycle** ..... 60 Hz  
**Phase** ..... Single-Phase  
**Power Supply Circuit** ..... 15 Amps  
**Plug/Receptacle** ..... NEMA 6-15



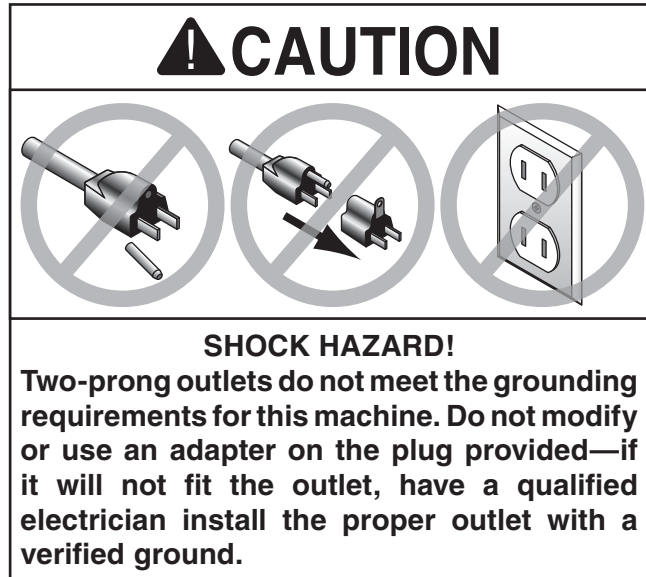
## Grounding Requirements

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.

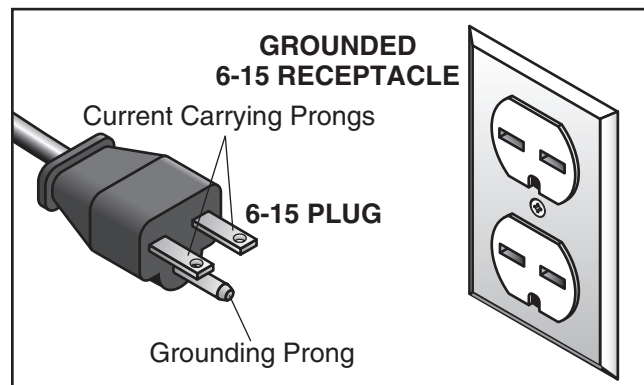
**For 110V operation:** This machine is equipped with a power cord that has an equipment-grounding wire and a grounding plug (see following figure). The plug must only be inserted into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances.



**Figure 2.** Typical 5-15 plug and receptacle.



**For 220V operation:** The plug specified under “Circuit Requirements for 220V” on the previous page has a grounding prong that must be attached to the equipment-grounding wire on the included power cord. The plug must only be inserted into a matching receptacle (see following figure) that is properly installed and grounded in accordance with all local codes and ordinances.



**Figure 3.** Typical 6-15 plug and receptacle.

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.**



## Voltage Conversion

The voltage conversion **MUST** be performed by an electrician or qualified service personnel.

The voltage conversion procedure consists of rewiring the main and coolant motors and installing the correct plug. A wiring diagram is provided on **Page 48** for your reference.

**IMPORTANT:** If the diagram included on either motors conflicts with the one on **Page 48**, the motor may have changed since the manual was printed. Use the diagram included on the applicable motor junction box cover instead.

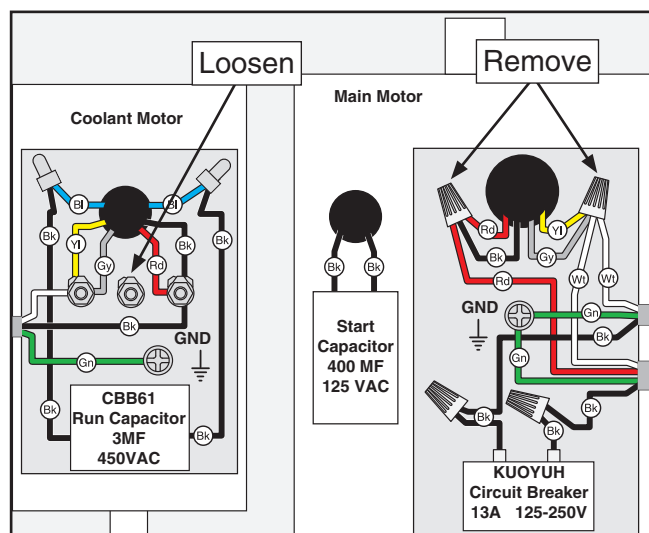
### Items Needed

### Qty

- Wrench 7mm ..... 1
- Electrical Tape ..... As Needed
- Wire Nut (14 AWG x 3) ..... 1
- Hex Nut #8-36 ..... As Needed
- Plug 6-15 ..... 1
- Wire Stripper ..... As Needed

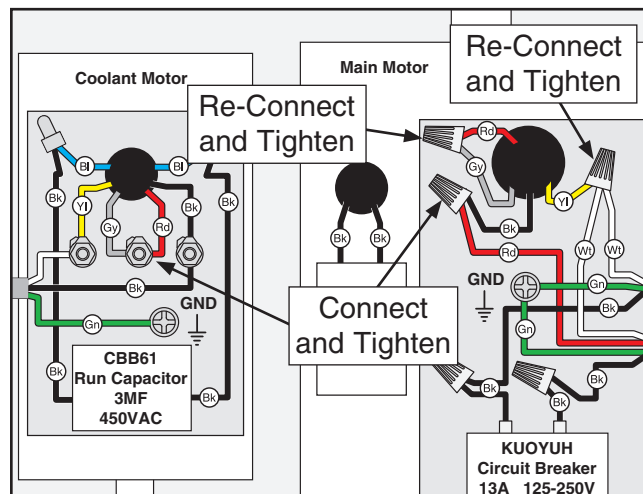
### To convert Model G0561 to 220V:

1. DISCONNECT MACHINE FROM POWER!
2. Cut off the included plug.
3. Open the main and coolant motor junction boxes, remove the wire nuts on the main motor, and loosen the terminal nut on the coolant motor, as indicated in **Figure 4**.



**Figure 4.** Location of components to be removed and loosened.

4. Connect the main motor wires, as shown in **Figure 5**, with wire nuts. Once snug, wrap electrical tape around each wire nut and the connected wires, to reduce the likelihood of the wire nut vibrating loose during motor operation.



**Figure 5.** Motor wires repositioned for 220V.

5. Connect the wires on the coolant motor as shown in **Figure 5** at the center terminal nut.
6. Close and secure the motor junction boxes.
7. Install a 6-15 plug on the end of the cord, according to the instructions and wiring diagrams provided by the plug manufacturer.

—If the plug manufacturer did not include instructions, the wiring of a generic NEMA 6-15 plug is illustrated in the **Wiring** section on **Page 48**.





# 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.*



**!WARNING**  
**SUFFOCATION HAZARD!**  
Keep children and pets away from plastic bags or packing materials shipped with this machine. Discard immediately.

## Needed for Setup

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

Description	Qty
• Wrench 3/4".....	1
• Wrench 14mm .....	1
• Safety Glasses (for each person).....	1
• Helpers .....	3
• Phillips Head Screwdriver #2 .....	1
• Level .....	1



# 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.

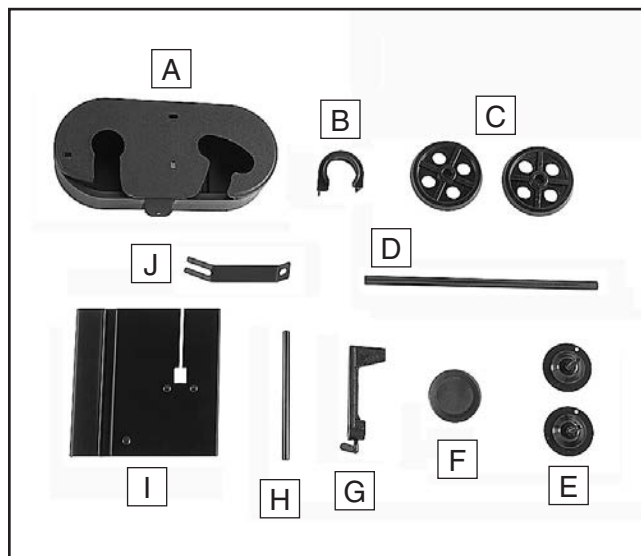


Figure 6. Loose parts inventory.

Box Contents (Figure 6)	Qty
A. Pulley Cover .....	1
B. Collar .....	1
C. Wheels .....	2
D. Axle .....	1
E. Leveling Feet with Hex Nuts .....	2
F. Chip Screen .....	1
G. Work Stop .....	1
H. Work Stop Rod .....	1
I. Vertical Work Table .....	1
J. Table Bracket .....	1
K. V-Belt 3V270 (Not Shown) .....	1

### Hardware Bag (Not Shown)

• Flat Washers $\frac{3}{8}$ " (Leveling Feet) .....	2
• Cotter Pins 3 x 30mm (Wheels) .....	2
• Flat Washers $\frac{5}{8}$ " (Wheels) .....	4
• Wire Nuts (for 220V Wiring) .....	2
• Flat Head Screw $\frac{1}{4}$ "-20 x $\frac{1}{2}$ " (Table) .....	1
• Hex Nut $\frac{1}{4}$ "-20 (Table) .....	1
• Knob $\frac{1}{4}$ "-20 x $\frac{5}{8}$ " (Pulley Cover) .....	1
• Hex Nuts $\frac{3}{8}$ "-16 .....	2
• Hose Clamp $\frac{5}{8}$ " (Coolant Hose) .....	1
• Hex Bolts $\frac{5}{16}$ "-18 x 1" (Motor) .....	4
• Hex Nuts $\frac{5}{16}$ "-18 (Motor) .....	2
• Flat Washers $\frac{5}{16}$ " (Motor) .....	2





# Cleanup

The unpainted surfaces 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.

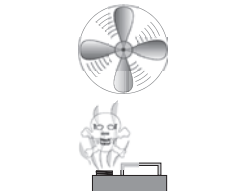
## Before cleaning, gather the following:

- 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.

	<b>⚠ WARNING</b> Gasoline and petroleum products have low flash points and can explode or cause fire if used to clean machinery. Avoid using these products to clean machinery.
--	--

	<b>⚠ CAUTION</b> Many cleaning solvents are toxic if inhaled. Only work in a well-ventilated area.
--	---

<b>NOTICE</b> Avoid chlorine-based solvents, such as acetone or brake parts cleaner, that may damage painted surfaces.
---

## T23692—Orange Power Degreaser

A great product for removing the waxy shipping grease from your machine during clean up.



**Figure 7.** T23692 Orange Power Degreaser.



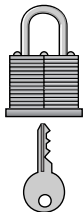
# Site Considerations

## Weight Load

Refer to the **Machine Data Sheet** for the weight of your machine. Make sure that the surface upon which the machine is placed will bear the weight of the machine, additional equipment that may be installed on the machine, and the heaviest workpiece that will be used. Additionally, consider the weight of the operator and any dynamic loading that may occur when operating the machine.

## Space Allocation

Consider the largest size of workpiece that will be processed through this machine and provide enough space around the machine for adequate operator material handling or the installation of auxiliary equipment. With permanent installations, leave enough space around the machine to open or remove doors/covers as required by the maintenance and service described in this manual. **See below for required space allocation.**

	<p><b>CAUTION</b></p> <p>Children or untrained people may be seriously injured by this machine. Only install in an access restricted location.</p>
---	--

## Physical Environment

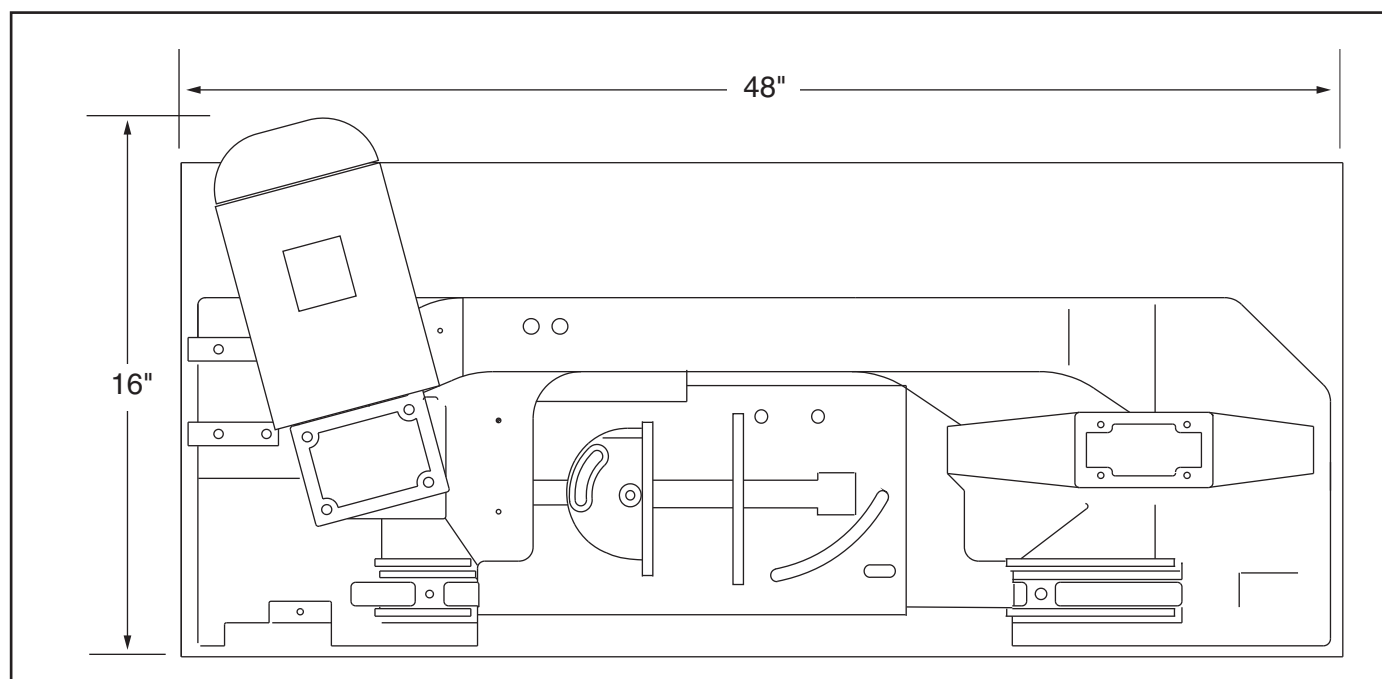
The physical environment where the machine is operated is important for safe operation and longevity of machine components. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions. Extreme conditions for this type of machinery are generally those where the ambient temperature range exceeds 41°–104°F; the relative humidity range exceeds 20%–95% (non-condensing); or the environment is subject to vibration, shocks, or bumps.

## Electrical Installation

Place this machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure to leave enough space around machine to disconnect power supply or apply a lockout/tagout device, if required.

## Lighting

Lighting around the machine must be adequate enough that operations can be performed safely. Shadows, glare, or strobe effects that may distract or impede the operator must be eliminated.



**Figure 8.** Minimum working clearances.

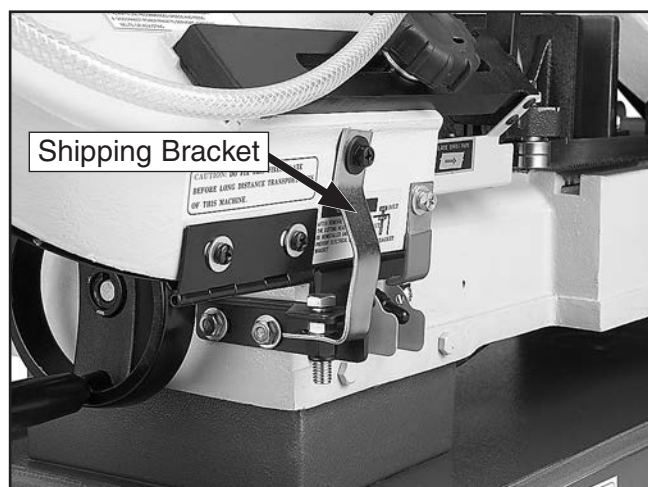


# Shipping Bracket

A shipping bracket has been installed on the bandsaw to protect the alignment of the bow during shipment. After removal, store the bracket in a safe place until you need to move or ship the bandsaw in the future.

## To remove shipping bracket:

1. Use a #2 Phillips head screwdriver to remove top screw and flat washer.
2. Use a 14mm wrench to loosen bottom hex nut and remove shipping bracket shown in **Figure 9**.



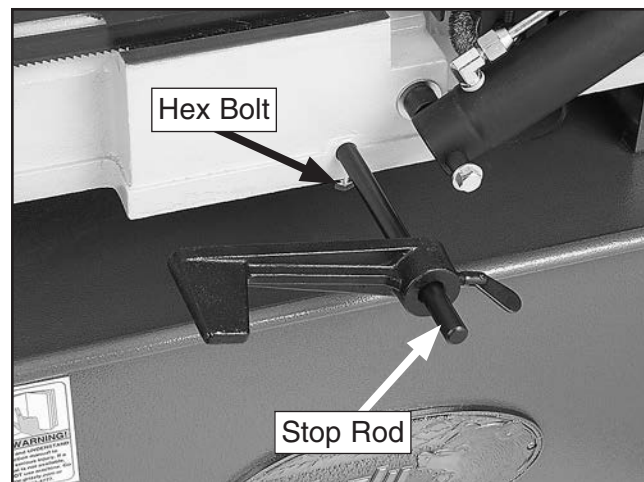
**Figure 9.** Location of shipping bracket.

# Work Stop

Components and Hardware Needed:	Qty
Work Stop.....	1
Work Stop Rod.....	1

## To install work stop:

1. Insert work stop rod through hole in base and lock in place with hex bolt (see **Figure 10**).



**Figure 10.** Work stop installed.

2. Slide work stop over rod.
3. Measuring from outside of blade, tighten thumbscrew to set work stop at desired length.



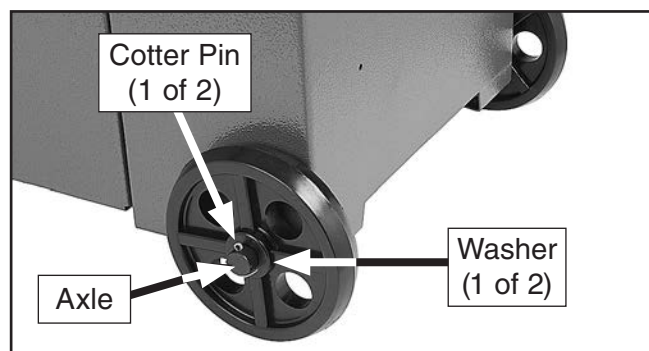
# Wheels & Leveling Feet

The wheels may be installed to make it easier to move the G0561 bandsaw.

Components and Hardware Needed:	Qty
Wheels.....	2
Axle .....	1
Cotter Pins 3 x 30mm.....	2
Flat Washers 5/8".....	4
Leveling Feet with Hex Nuts .....	2

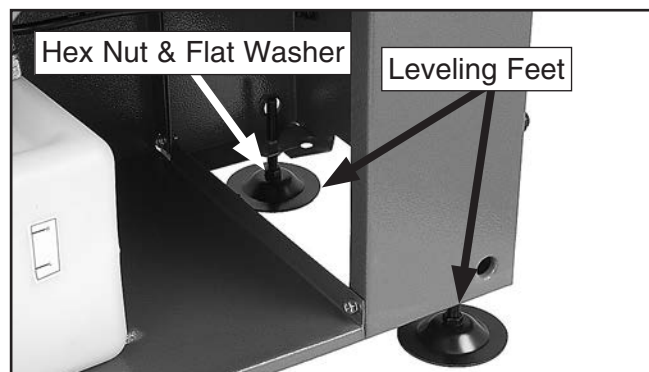
## To install wheels and leveling feet:

1. Slide axle through holes in bottom of cabinet.
2. Slide one flat washer onto the axle, followed by a wheel and another washer. Secure with cotter pins, as shown in **Figure 11**.



**Figure 11.** Wheels secured with cotter pin.

3. Attach threaded portion of leveling feet with flat washer and hex nut into the base of cabinet, as shown in **Figure 12**.



**Figure 12.** Leveling feet attached.

4. Adjust the feet to level bandsaw as needed.

Model G0561 (Mfd. Since 01/08)



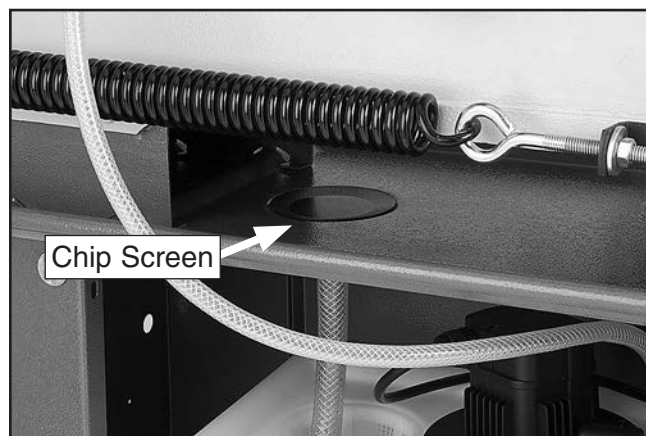
# Chip Screen

The chip screen is designed to prevent chips and cutoffs from entering the coolant tank.

Components and Hardware Needed:	Qty
Chip Screen.....	1

## To install chip screen:

1. Place chip screen into opening shown in **Figure 13**.



**Figure 13.** Chip screen installed.

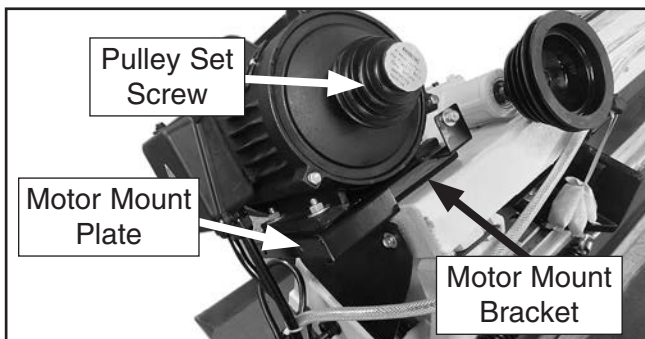
# Motor

The motor is placed inside the machine cabinet for shipping purposes and must be installed in order for the machine to operate.

Components and Hardware Needed:	Qty
Motor .....	2
V-Belt 3V270.....	1
Hex Bolts $\frac{5}{16}$ "-18 x 1" .....	4
Hex Nuts $\frac{5}{16}$ "-18 .....	2
Flat Washers $\frac{5}{16}$ " .....	2

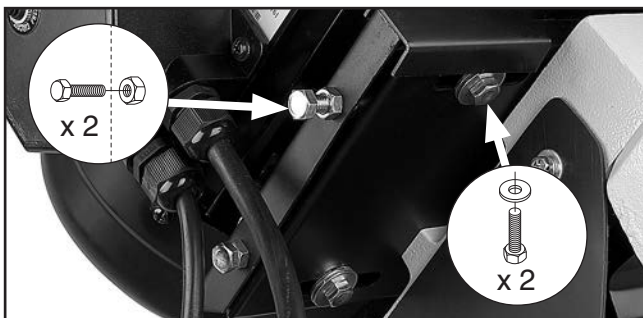
## To install motor:

1. Remove motor from cabinet.
2. Slide motor mount plate into motor mount bracket (see **Figure 14**).



**Figure 14.** Motor installed on motor mount bracket.

3. Thread (2)  $\frac{5}{16}$ "-18 x 1" hex bolts with  $\frac{5}{16}$ " hex nuts into side of motor mount plate, then thread (2)  $\frac{5}{16}$ "-18 x 1" hex bolts with  $\frac{5}{16}$ " flat washers into motor mount bracket (see **Figure 15**).



**Figure 15.** Motor mounting fasteners installed.

4. Install V-belt onto pulleys, then use a straight-edge to check pulley alignment. If pulleys are not aligned, loosen motor pulley set screw (see **Figure 14**), adjust pulley, then re-tighten set screw.

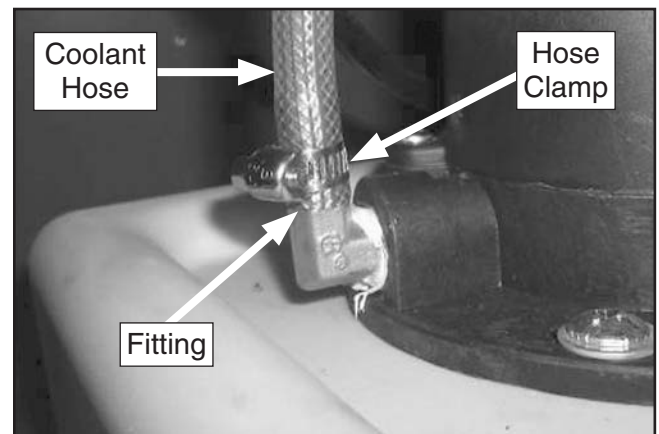
# Coolant Tank

The coolant tank hose is not installed onto the coolant tank for shipping purposes, so these must be connected prior to operating the machine.

Components and Hardware Needed:	Qty
Coolant Tank .....	1
Hose Clamp $\frac{5}{8}$ " .....	1

## To install coolant tank:

1. Move coolant tank into cabinet.
2. Push hose over coolant tank fitting and secure with hose clamp (see **Figure 16**).



**Figure 16.** Coolant hose installed.



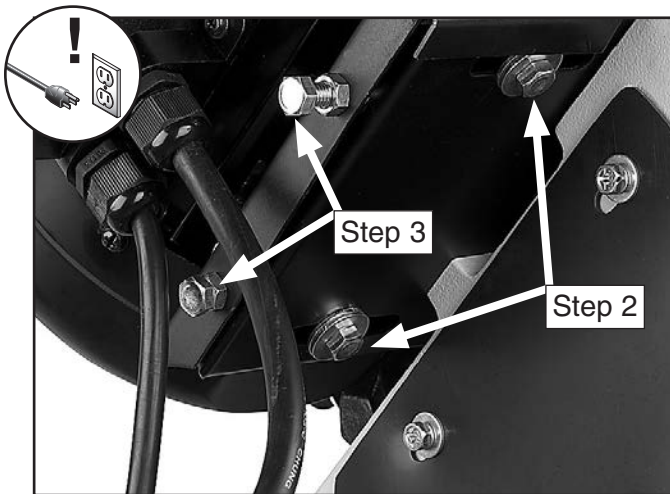


# V-Belt

The V-belt needs to be tensioned or repositioned for your desired RPM.

## To tension or reposition V-belt:

1. DISCONNECT MACHINE FROM POWER!
2. Loosen the two hex bolts on motor mount bracket (see **Figure 17**).



**Figure 17.** Location of V-belt tension hex bolts.

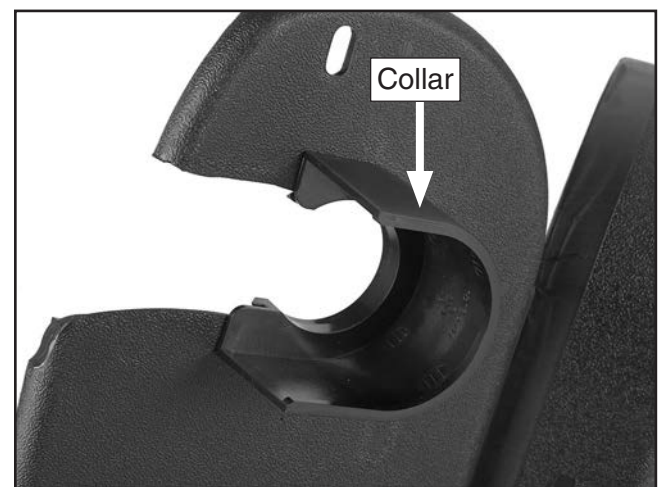
3. Adjust the two hex bolts on motor mount plate to loosen belt (see **Figure 17**).
4. Slip V-belt over combination of pulleys to get desired RPM. Make sure belt is on parallel sheaves. See chart on inside of pulley cover for RPM choices.
5. Retension belt. Apply enough tension so belt deflects about  $\frac{1}{4}$ " with moderate pressure when pinched together between center of pulleys.

# Pulley Cover

Components and Hardware Needed:	Qty
Pulley Cover .....	1
Collar .....	1
Hex Bolts $\frac{1}{4}$ "-20 x $\frac{1}{2}$ " .....	2
Flat Washers $\frac{1}{4}$ " .....	2
Knob $\frac{1}{4}$ "-20 x $\frac{5}{8}$ " .....	1

## To install the pulley cover:

1. Slide the collar onto the bottom side of the pulley cover and snap in place, as shown in **Figure 18**.

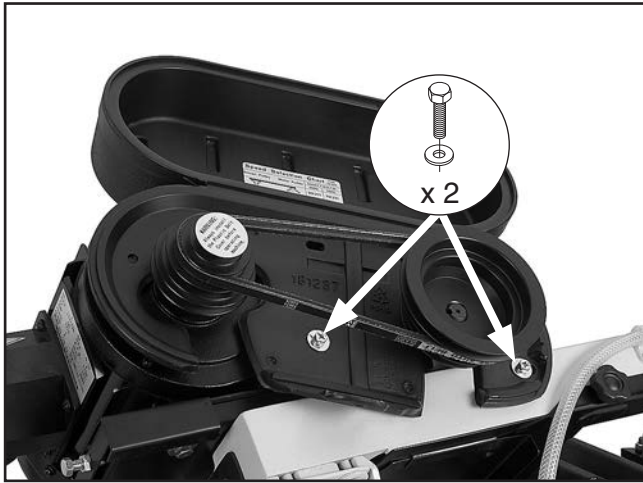


**Figure 18.** Collar installed.

	<p><b>⚠ WARNING</b>  <b>Entanglement Hazard!</b>  <b>You MUST install the pulley cover before operating or severe injury may occur.</b></p>
--	---



2. Remove (2) pre-installed 1/4"-20 x 1/2" hex bolts and (4) 1/4" flat washers.
3. Slide pulley cover over pulleys (see **Figure 19**).



**Figure 19.** Pulley cover installed.

4. Align holes and secure with fasteners you removed in **Step 2** (see **Figure 19**).

5. Close pulley cover lid and secure with knob (see **Figure 20**).



**Figure 20.** Secured pulley cover lid.





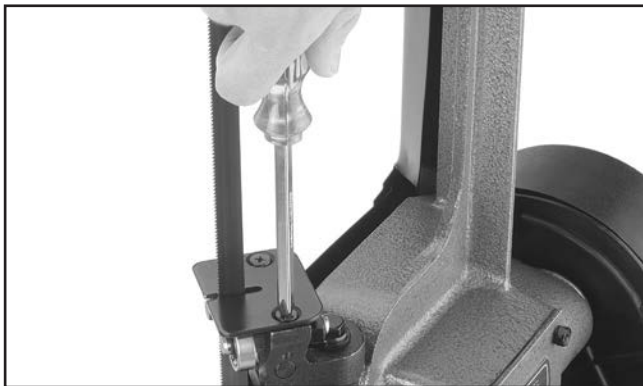
# Vertical Assembly

The Model G0561 can be set up for vertical cutting operations.

Components and Hardware Needed:	Qty
Vertical Work Table .....	1
Table Bracket .....	1
Flat Head Screw 1/4"-20 x 1/2" .....	1
Hex Nut 1/4"-20 .....	1

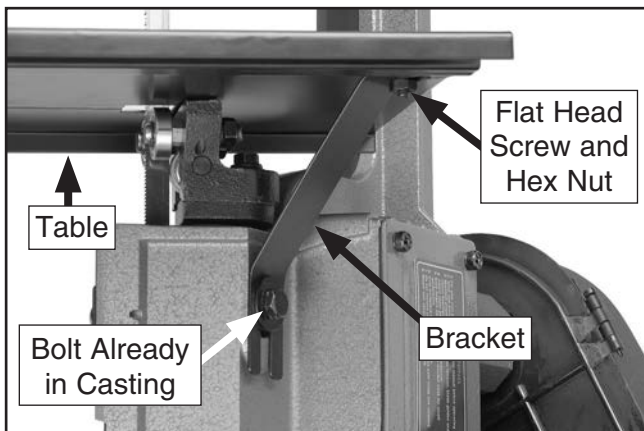
## To assemble bandsaw for vertical cutting:

1. Remove the two flat head screws and blade guide cover (see **Figure 21**).



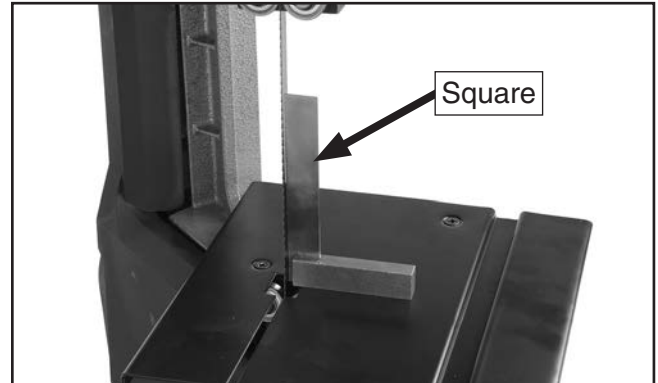
**Figure 21.** Location of flat head screws holding blade guide cover.

2. Install vertical work table and replace the two flat head screws removed in **Step 1**.
3. Install table bracket using pre-installed bolt already in casting (see **Figure 22**).



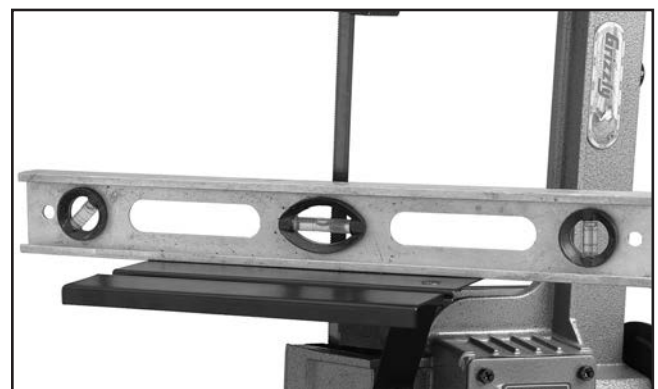
**Figure 22.** Table and bracket installed.

4. Set a square on table to side of blade, as shown in **Figure 23**, and adjust table bracket to square table to blade.

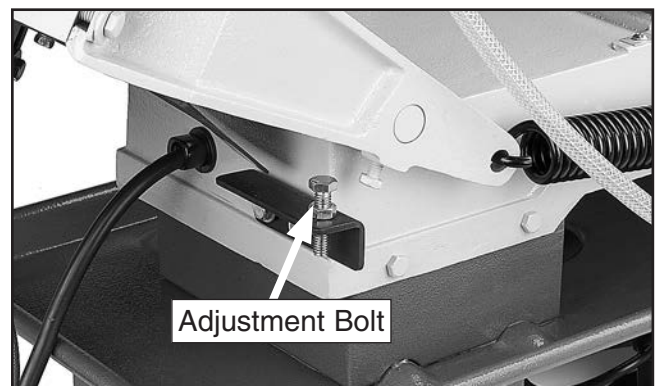


**Figure 23.** Squaring table to blade.

5. Place a level on the table, as shown in **Figure 24**, and turn the adjustment bolt shown in **Figure 25** until table is level.



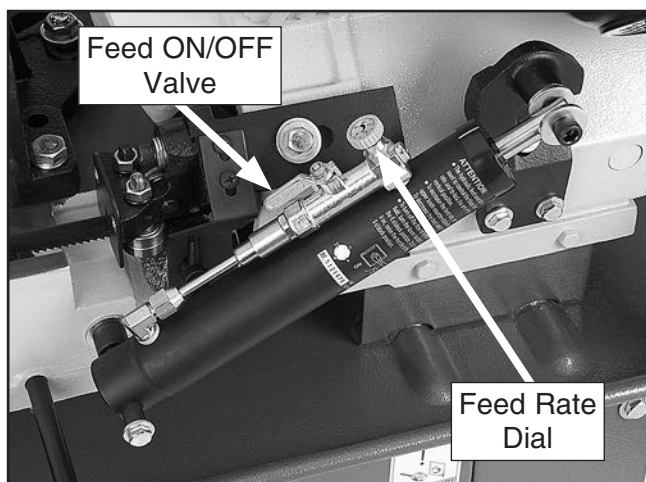
**Figure 24.** Adjusting table level.



**Figure 25.** Location of adjustment bolt.



6. Close feed ON/OFF valve to lock bow in position (see **Figure 26**).



**Figure 26** Location of feed ON/OFF valve and feed rate dial.

## Inspections & Adjustments

The following list of adjustments were performed at the factory before the machine was shipped:

- Blade Tension & Tracking .....**Page 43**
- Squaring the Blade.....**Page 44**
- Blade Guide Bearings .....**Page 45**

Be aware that these can change during the shipping process. Pay careful attention to these adjustments when first operating the machine. If you find that the adjustments are not set to your personal preferences, re-adjust them.

## 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.

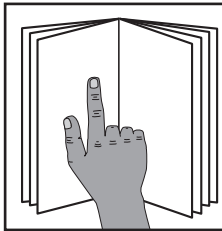


# SECTION 4: OPERATIONS

## Operation Overview

The purpose of this overview is to provide the novice machine operator with a basic understanding of how the machine is used during operation, so the machine controls/components discussed later in this manual are easier to understand.

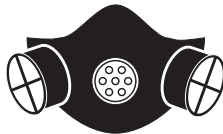
Due to the generic nature of this overview, it is **not** intended to be an instructional guide. To learn more about specific operations, read this entire manual, seek additional training from experienced machine operators, and do additional research outside of this manual by reading "how-to" books, trade magazines, or websites.



**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.



## 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.

To complete a typical operation, the operator does the following:

1. Examines workpiece to make sure it is suitable for cutting.
2. Adjusts blade tilt, if necessary, to correct angle of desired cut.
3. Adjusts fence to desired width of cut, then locks it in place.
4. Checks outfeed side of machine for proper support and to make sure workpiece can safely pass all the way through blade without interference.
5. Puts on personal protective equipment, and locates push sticks if needed.
6. Starts saw.
7. Feeds workpiece all the way through blade while maintaining firm pressure on workpiece against table and fence, and keeping hands and fingers out of blade path and away from blade.
8. Stops machine.

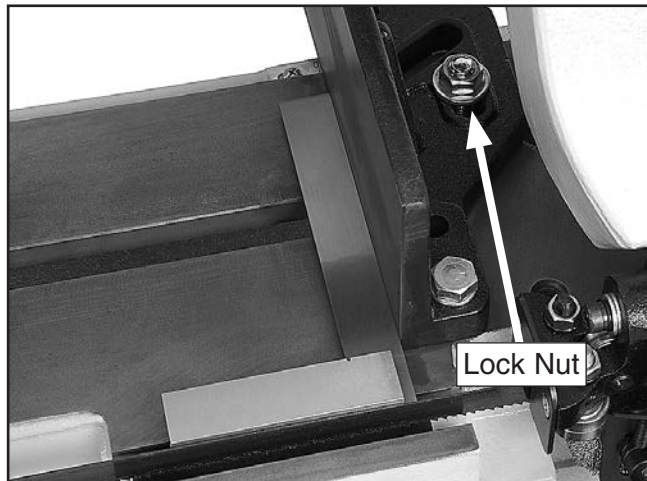


# Vise

The vise can hold material up to six inches wide and be set to cut angles from 0 to 45 degrees.

## To square blade to vise:

1. Loosen lock nut shown in **Figure 27** with  $\frac{3}{4}$ " wrench or socket.

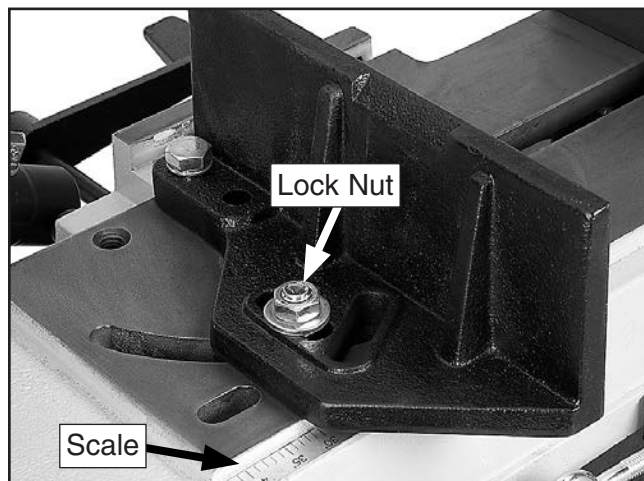


**Figure 27.** Location of lock nut.

2. Use scale as a guide to set your angle, or a machinist's square to square blade to vise.
3. Tighten lock nut.

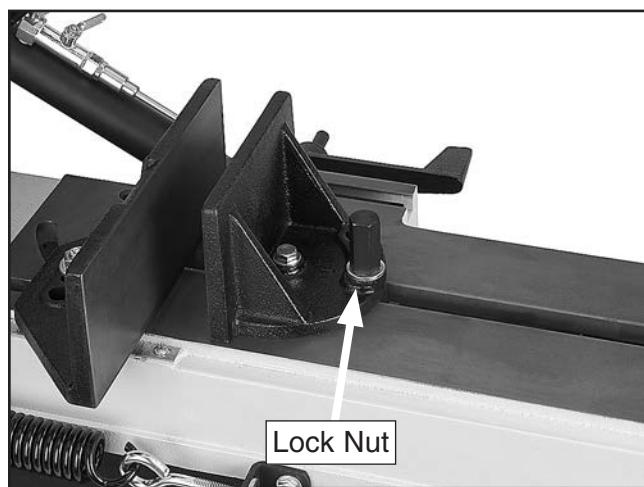
## To adjust angle on vise:

1. Loosen lock nut on rear jaw with a  $\frac{3}{4}$ " hex wrench, as shown in **Figure 28**.



**Figure 28.** Location of scale.

2. Use scale to set your angle.
3. Tighten lock nut.
4. Loosen lock nut in **Figure 29** on opposite jaw so jaw can float, and match angle of workpiece.



**Figure 29.** Vise jaw lock nut.

5. Tighten vise against workpiece.



# Blade Terminology

Selecting the right blade for the cut requires a knowledge of various blade characteristics.

## Blade Terminology

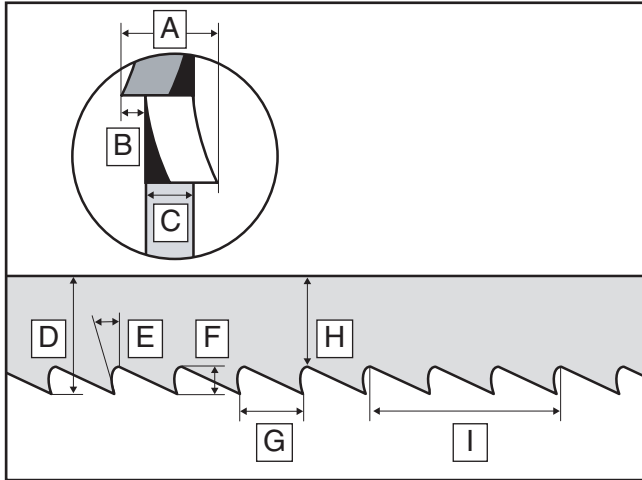


Figure 30. Bandsaw blade terminology.

- A. **Kerf:** Amount of material removed by blade during cutting.
- B. **Tooth Set:** Amount each tooth is bent left or right from blade.
- C. **Gauge:** Thickness of blade.
- D. **Blade Width:** Widest point of blade measured from tip of the tooth to back edge of the blade.
- E. **Tooth Rake:** Angle of tooth from a line perpendicular to length of blade.
- F. **Gullet Depth:** Distance from tooth tip to bottom of curved area (gullet).
- G. **Tooth Pitch:** Distance between tooth tips.
- H. **Blade Back:** Distance between bottom of gullet and back edge of blade.
- I. **TPI:** Number of teeth per inch measured from gullet to gullet.





# Blade Selection

## Blade Size

The Model G0561 uses 93" x  $\frac{3}{4}$ " bandsaw blades. Grizzly is proud to offer a variety of selections that can be found in the current catalog and in **SECTION 5: ACCESSORIES** on **Page 36**.

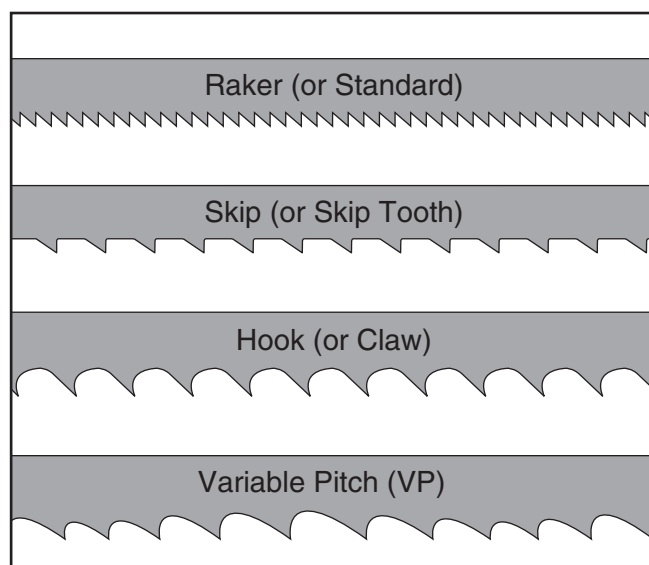
## Tooth Pitch

Usually measured as TPI (teeth per inch), tooth pitch determines the size/number of the teeth. More teeth per inch (fine pitch) will cut slower, but smoother; while fewer teeth per inch (coarse pitch) will cut rougher, but faster.

As a general rule, choose blades that will have at least three teeth in the material at all times. Use fine pitched blades on harder metals and coarse pitched blades on softer metals. When selecting blades, refer to **Figures 34–35** on **Pages 27–28** for recommended blade tooth (TPI) and speed (FPM) based on the workpiece material.

## Tooth Style

When selecting blades, another option to consider is the shape, gullet size, teeth set and teeth angle—otherwise known as “Tooth Style.” Many blade manufacturers offer variations of the four basic styles shown in **Figure 31**.



**Figure 31.** Bandsaw blade tooth types.

**Standard:** This style is considered to be the standard because the tooth size and shape are the same as the tooth gullet. The teeth on these blades usually are very numerous, have no angle, and produce cuts by scraping the material; these characteristics result in very smooth cuts, but do not cut fast and generate more heat than other types while cutting.

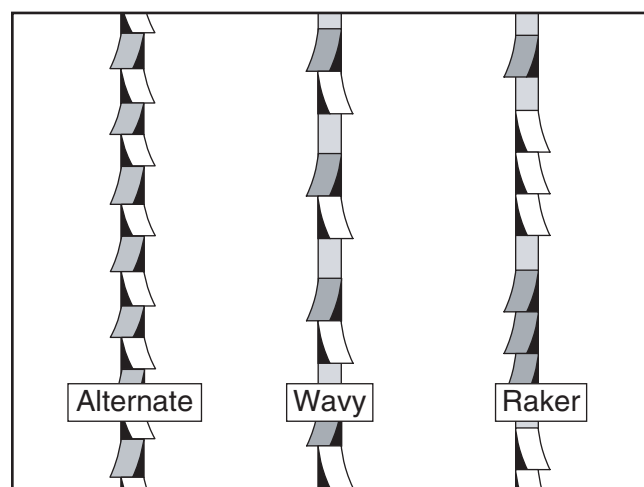
**Skip:** This style is similar to a raker blade that is missing every other tooth. Because of the design, skip toothed blades have a much larger gullet than raker blades, and therefore, cut faster and generate less heat. However, these blades also leave a rougher cut than raker blades.

**Hook:** The teeth on this style have a positive angle (downward) which makes them dig into the material, and the gullets are usually rounded for easier waste removal. These blades are excellent for the tough demands of resawing and ripping thick material.

**Variable Pitch:** These blades typically feature combinations of tooth styles that provide qualities of both.

## Tooth Set

Three of the most common tooth sets are alternate, wavy, and raker (see **Figure 32**).



**Figure 32.** Bandsaw tooth sets.

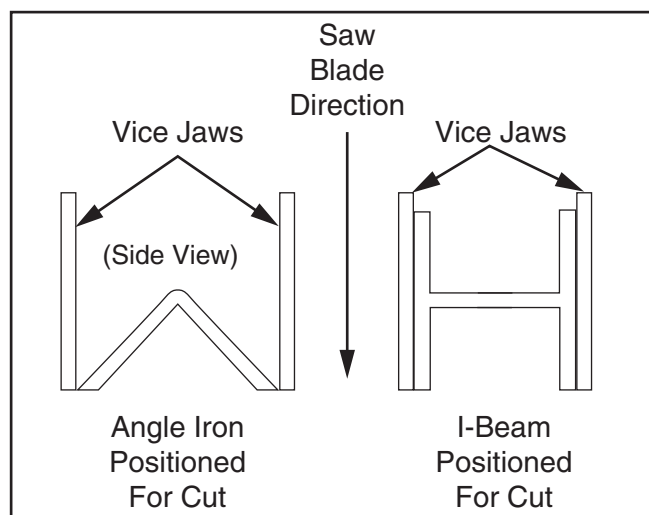


# Choosing Blade TPI

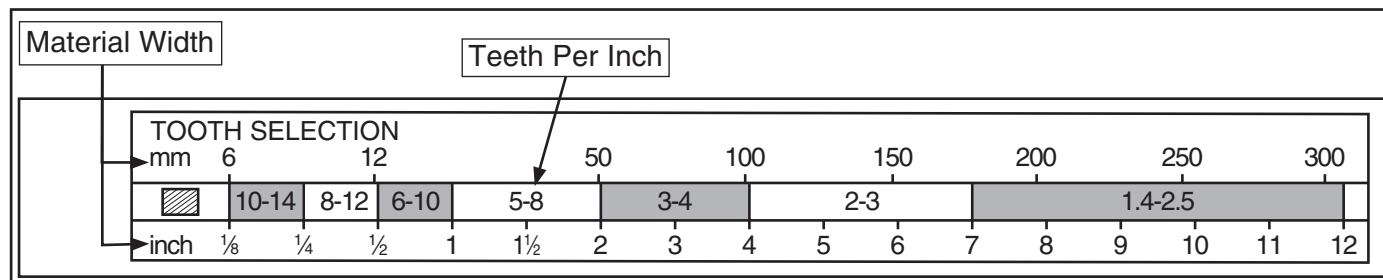
Selecting the right blade for the job depends on a variety of factors, such as type, hardness, and shape of the material being cut, machine capability, and operator technique.

The chart in **Figure 34** is a basic starting point for choosing blade type based on teeth per inch (TPI) for variable tooth pitch blades and for standard raker type bi-metal blades/HSS blades. As a general rule, there should be at least 3 teeth in contact with the workpiece at all times. However, for exact specifications of bandsaw blades, contact the blade manufacturer.

When cutting structural shapes such as angle iron or I-beams, workpieces should be positioned to maintain the same material width throughout the cut, as illustrated in **Figure 33**.



**Figure 33.** Structural workpieces positioned in vise for cut.



**Figure 34.** Material width and recommended teeth per inch.

## To select correct blade TPI:

1. Measure material thickness. This measurement is the length of cut taken from where the tooth enters the workpiece, sweeps through, and exits the workpiece.
2. Refer to "Material Width" row of blade selection chart in **Figure 34** and read across to find workpiece thickness you need to cut.
3. In the center row, find the TPI that corresponds to the workpiece thickness.





# Choosing Blade Cutting Speeds

Selecting the right blade speed for cutting depends on the type of material being cut. Selecting the correct blade speed prolongs the life of your blade and provides the best possible cutting results.

The "Cutting Speed Rate Recommendation Chart" in **Figure 35** offers guidelines for various metals, given in feet per minute (speed FPM) and meters per minute in parenthesis. Choose the speed closest to the number shown in the chart.

Follow the directions in the **Changing Blade Speed** section on **Page 29** to set the machine to the closest available speed.

CUTTING SPEED RATE RECOMMENDATION							
Material	Speed FPM (M/Min)	Material	Speed FPM (M/Min)	Material	Speed FPM (M/Min)	Material	Speed FPM (M/Min)
Carbon Steel	196~354 (60) (108)	Tool Steel	203 (62)	Alloy Steel	111~321 (34) (98)	Free Machining Stainless Steel	150~203 (46) (62)
Angle Steel	180~220 (54) (67)	High-Speed Tool Steel	75~118 (25) (36)	Mold Steel	246 (75)	Gray Cast Iron	108~225 (33) (75)
Thin Tube	180~220 (54) (67)	Cold-Work Tool Steel	95~213 (29) (65)	Water Hardened Tool Steel	242 (75)	Ductile Austenitic Cast Iron	65~85 (20) (26)
Aluminum Alloy	220~534 (67) (163)	Hot-Work Tool Steel	203 (62)	Stainless Steel	85 (26)	Malleable Cast Iron	321 (98)
Copper Alloy	229~482 (70) (147)	Oil-Hardened Tool Steel	203~213 (62) (65)	CR Stainless Steel	85-203 (26) (62)	Plastics	220 (67)

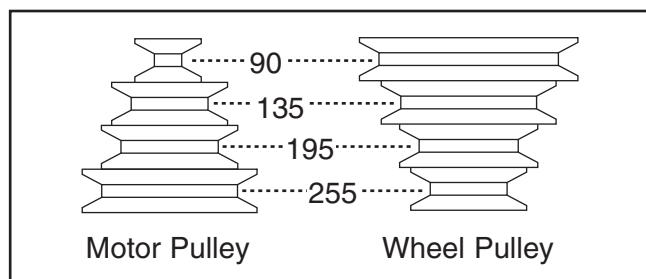
**Figure 35.** Recommended cutting speed chart.



# Changing Blade Speed

## To change blade speeds:

1. DISCONNECT MACHINE FROM POWER!
2. Determine blade speed for your cut. The table in **Figure 35** on **Page 28** is provided as a rough guideline. Material thickness and type of blade used will factor into FPM selection.
3. Slacken V-belt and position on pulley for desired FPM (see **Figure 36**).



**Figure 36.** Illustration of V-belt placement for FPM selection.

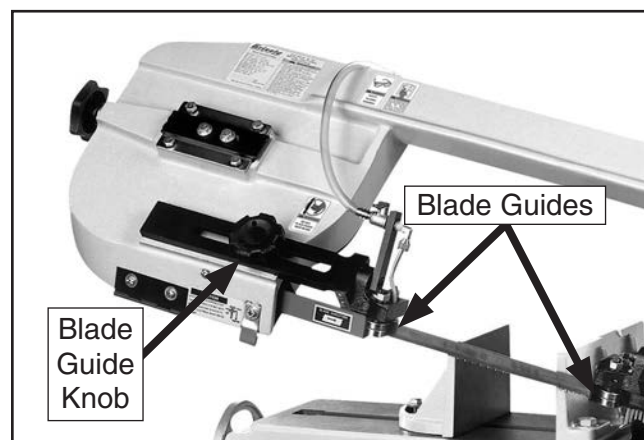
4. Tension V-belt as described in the **V-Belt** section on **Page 19**

# Blade Guides

The blade guides should be positioned approximately  $\frac{1}{4}$ " away from workpiece if possible. This will help ensure straight cuts by keeping the blade from twisting and drifting off the cut line.

## To adjust blade guides:

1. Loosen blade guide knob shown in **Figure 37**.



**Figure 37.** Location of blade guide knob.

2. Slide rear blade guide as close to workpiece as possible.
3. Tighten knob.



# Cutting Fluid System

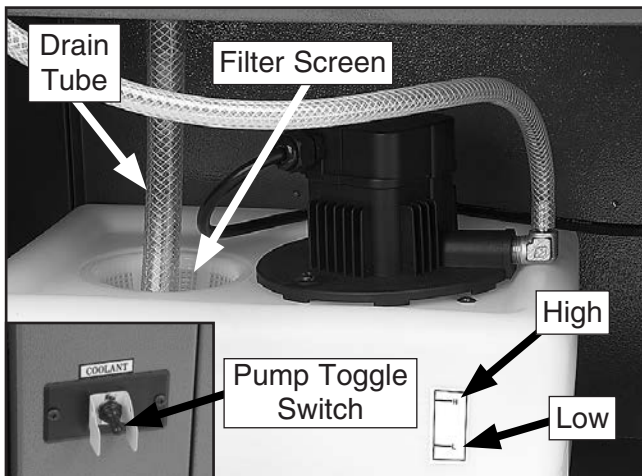


This bandsaw has a built-in cutting fluid system that extends the life of your bandsaw blades by lowering the cutting temperature and washing away chips.

See **Cutting Fluid** on **Page 31** for more information.

## To use cutting fluid system:

1. Thoroughly clean and remove any foreign material that may have fallen inside reservoir during shipping.
2. Place filter screen and drain tube in reservoir, as shown in **Figure 38**.

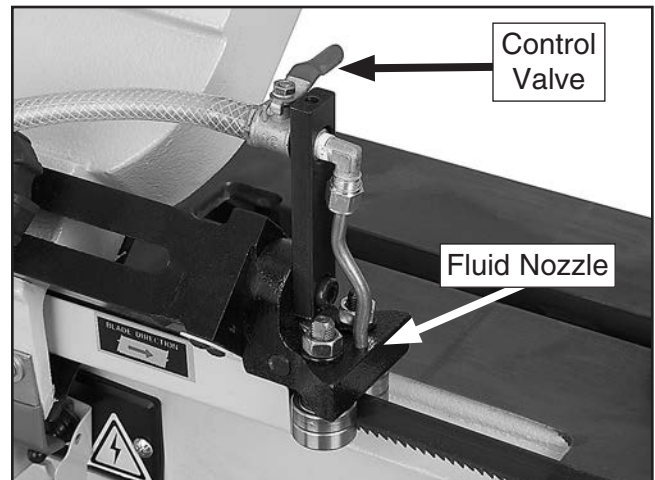


**Figure 38.** Identification of coolant components.

3. Fill reservoir to "High" mark with cutting fluid.



4. Adjust valve on coolant hose to control flow of coolant (see **Figure 39**). Make sure that pressure is not so high that coolant spills on floor and creates a slipping hazard.



**Figure 39.** Location of coolant control valve.

5. Turn pump toggle switch **ON** before making your cut.

## NOTICE

Keep tray chip screen clear so coolant can recycle to pump reservoir. **NEVER** operate pump with reservoir below low mark or you will over-heat pump and void warranty!



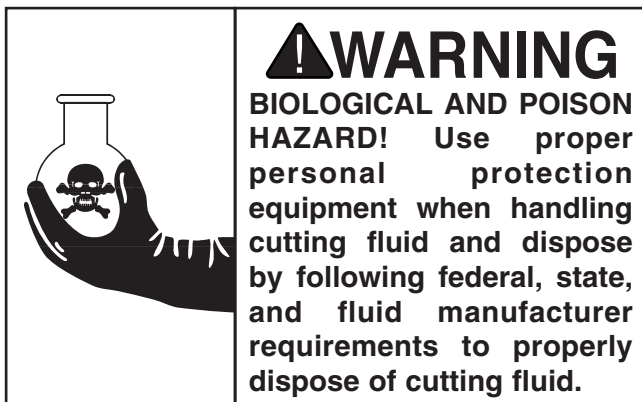
# Cutting Fluid

While simple in concept and function, many issues must be taken into account to find and use the correct cutting fluid. Always follow all product warnings and contact the fluid manufacturer for unanswered questions.

**Use selections below to choose appropriate cutting fluid:**

- For cutting low alloy, low carbon, and general-purpose category metals with a bi-metal blade—use water soluble cutting fluid.
- For cutting stainless steels, high carbon, and high alloy metals, brass, copper and mild steels—use "Neat Cutting Oil" (commonly undiluted mineral oils) that have extreme pressure additives (EP additives).
- For cutting cast iron, cutting fluid is not recommended.
- For cutting magnesium, use only cutting fluid that is designed for cutting magnesium.

**Remember:** Too much flow at the cutting fluid nozzle will make a mess and can make the work area unsafe; and not enough fluid at the cut will heat the blade, causing the blade teeth to load up and break.



# Feed Rate

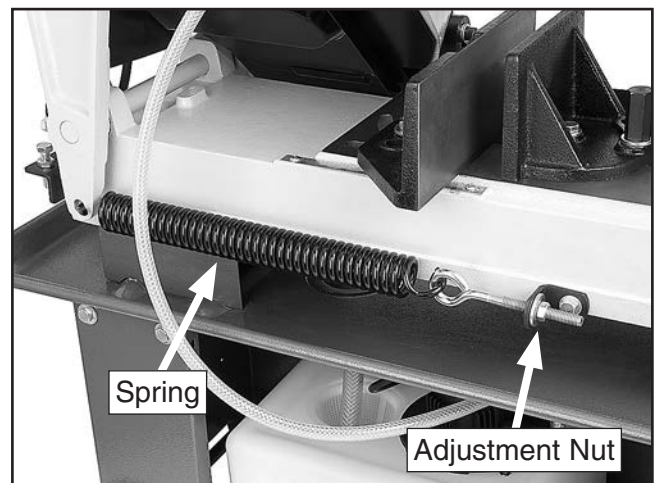
The speed at which the saw blade will cut through a workpiece is controlled by blade type, feed rate, and feed pressure.

**Note:** If a lubricant is used on the cut, the feed rate can be increased by approximately 15%.

**To set feed rate:**

1. Raise bow to maximum height to remove spring tension. Close ON/OFF valve to lock bow in place.
2. Using a  $\frac{9}{16}$ " wrench, adjust feed pressure tension spring by rotating adjustment nut (see **Figure 40**). Tighten enough to remove play but not enough to apply tension to spring.

**Note:** This spring adjustment is an initial setting. Depending on cutting circumstances, you will have to fine-tune the feed pressure with this adjustment. Increasing the spring tension will reduce the feed pressure.

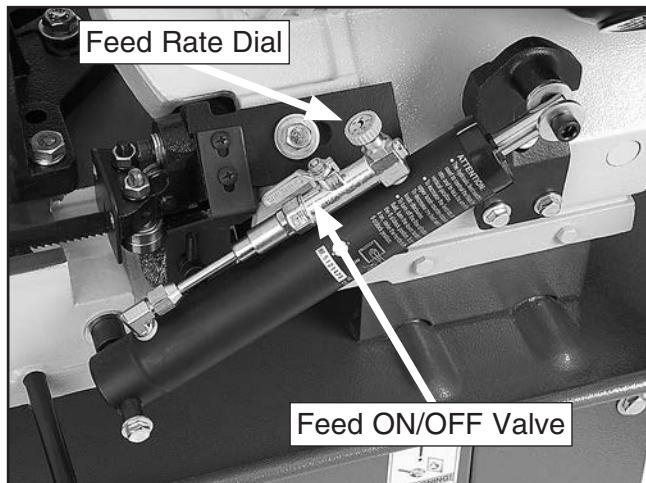


**Figure 40.** Location of adjustment nut.

3. Clamp workpiece in table vise.



4. Close feed ON/OFF valve shown in **Figure 41**, to lock bow and blade a few inches above workpiece.



**Figure 41.** Location of feed ON/OFF valve.

5. With correct saw blade and blade speed selected, turn saw and lubricant pump **ON**.
6. Open the ON/OFF valve, then slowly rotate the feed rate dial clockwise to a slow feed rate until saw begins to cut workpiece (see **Figure 41**).
7. Observe the chips that exit the cut, and increase or decrease the feed rate according to chip characteristics.
  - If the chips are tightly curled, warm shavings, brown to black in color, there is too much downward pressure.
  - If the chips are blue looking chips, the blade speed is too high.
  - If the chips are thin and powder-like, there is insufficient feed pressure. This will dull your blade rapidly.
  - The best cut and feed rate will give you evenly shaped spiraled curls with very little color change, if any at all.

## Blade Breakage

Many conditions may cause a bandsaw blade to break. Blade breakage is unavoidable, in some cases, since it is the natural result of the peculiar stresses that bandsaw blades must endure. Blade breakage is also due to avoidable circumstances. Avoidable blade breakage is most often the result of poor care or judgement on the part of the operator when mounting or adjusting the blade or support guides.

**The most common causes of blade breakage are:**

- Faulty alignment or adjustment of the blade guides.
- Feeding workpiece too fast.
- Dull or damaged teeth.
- Over-tensioned blade.
- Blade guide assembly set too far away from workpiece. Adjust the blade guide assembly approximately  $\frac{1}{4}$ " away from workpiece.
- Using a blade with a lumpy or improperly finished braze or weld.
- Continuously running bandsaw when not in use.
- Leaving blade tensioned when not in use.
- Using wrong pitch (TPI) for the workpiece. The general rule of thumb is to have at least three teeth in contact with the workpiece at all times during cutting.



# Blade Care & Break-In

---

## Blade Care

A bandsaw blade is a delicate piece of steel that is subjected to tremendous strain. You can obtain longer use from a bandsaw blade if you give it fair treatment and always use the appropriate feed rate for your operation.

Be sure to select blades with the proper width, set, type, and pitch for each application. The wrong choice of blades will often produce unnecessary heat and will shorten the life of your blade.

A clean blade will perform much better than a dirty blade. Dirty or gummed up blades pass through the cutting material with much more resistance than clean blades. This extra resistance also causes unnecessary heat.

## Blade Break-In

The sharp teeth tips and edges of a new blade are extremely sharp, and cutting at full feed rate may cause fracturing of the beveled edges of the teeth and premature blade wear.

### To properly break in a new blade:

1. Choose correct speed for blade and material of operation.

**Note:** *We strongly recommend using mild steel if cutting metal during break-in phase.*

2. Reduce feed pressure by  $\frac{1}{2}$  for first 50–100 square inches of material cut.
3. To avoid twisting blade when cutting, adjust feed pressure when total width of blade is in material.
4. Use **Chip Inspection Chart** on **Page 35** to check blade efficiency for metal cutting.



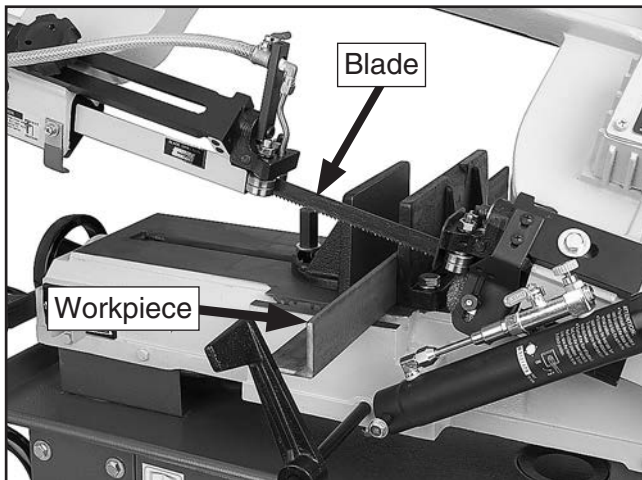


# Operation Tips

The following tips will help you safely and effectively operate your bandsaw, and help you get the maximum life out of your saw blades.

## Tips for horizontal cutting:

- Use work stop to quickly and accurately cut multiple pieces of stock to same length.
- Clamp material firmly in vise jaws to ensure a straight cut through the material.
- Let blade reach full speed before engaging workpiece (see **Figure 42**). Never start a cut with blade in contact with workpiece.



**Figure 42.** Correct blade starting position.

## **NOTICE**

**Loosen blade tension at end of each day to prolong blade life.**

- Wait until blade has completely stopped before removing workpiece from vise, and avoid touching cut end—it could be very hot!
- Support long workpieces so they won't fall when cut, and flag ends of workpieces to alert passers-by of potential danger.
- Position blade guides approximately 1/4" from workpieces to minimize side-to-side blade movement.
- Use coolant when possible to increase blade life.

## Tips for vertical cutting:



- Workpieces that cannot be properly supported or stabilized without a vise should not be cut in vertical position. Examples are chains, cables, round or oblong-shaped workpieces, workpieces with internal or built-in moving or rotating parts, etc.
- Make sure that vertical table assembly is securely fastened to bandsaw frame so it will adequately support workpiece.
- Always keep your fingers away from blade and always hold workpiece securely with appropriate clamping device.
- Adjust blade guides as close as possible to workpiece to minimize side-to-side blade movement.





# Chip Inspection Chart

The best method of evaluating the performance of your metal cutting operation is to inspect the chips that are formed from cutting. Refer to the chart below for chip inspection guidelines.

Chip Appearance	Chip Description	Chip Color	Blade Speed	Feed Pressure	Additional Actions
	Thin & Curled	Silver	<b>Good</b>	<b>Good</b>	
	Hard, Thick & Short	Brown or Blue	Decrease	Decrease	Lubricate with a small amount of oil
	Hard, Strong & Thick	Brown or Blue	Decrease	Decrease	Lubricate with a small amount of oil
	Hard, Strong & Thick	Silver or Light Brown	<b>Good</b>	Decrease Slightly	Check Blade Pitch
	Hard & Thin	Silver	Increase	Decrease	Check Blade Pitch
	Straight & Thin	Silver	<b>Good</b>	Increase	
	Powdery	Silver	Decrease	Increase	
	Curled Tight & Thin	Silver	<b>Good</b>	Decrease	Check Blade Pitch

**Figure 43.** Chip inspection chart.



# 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.

- G5124—93 x 3/4 x .032 10 TPI Raker
- G5125—93 x 3/4 x .032 14 TPI Raker
- G5126—93 x 3/4 x .032 18 TPI Raker
- G5127—93 x 3/4 x .035 4-6 Variable Pitch
- G5128—93 x 3/4 x .035 5-8 Variable Pitch
- G5129—93 x 3/4 x .035 6-10 Variable Pitch
- G5130—93 x 3/4 x .035 8-12 Variable Pitch
- G5131—93 x 3/4 x .035 10-14 Variable Pitch

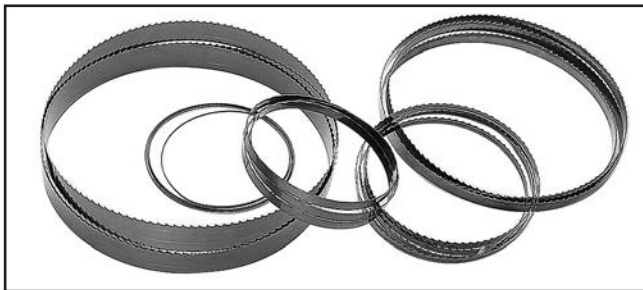


Figure 44. Metal-cutting blade assortment.

- G5618—Deburring Tool w/ 2 Blades
- G5619—Extra Aluminum Blades
- G5620—Extra Brass and Cast Iron Blade

The quickest tool for smoothing freshly machined metal edges. Comes with two blades—one for steel/aluminum and one for brass/cast iron.



Figure 45. G5618 Deburring Tool.

### **H5408—Lenox Blade Tensioning Gauge**

The Blade Tensioning Gauge ensures long blade life, reduced blade breakage, and straight cutting by indicating correct tension. A precision dial indicator provides you with a direct readout in PSI.



Figure 46. H5408 Blade Tensioning Gauge.

### **T20502—Face Shield Crown Protector 7"**

### **T20503—Face Shield Window**

### **T20451—"Kirova" Clear Safety Glasses**

### **T20452—"Kirova" Anti-Reflective S. Glasses**

### **T20456—DAKURA Safety Glasses, Black/Clear**



Figure 47. Eye protection assortment.

**order online at [www.grizzly.com](http://www.grizzly.com) or call 1-800-523-4777**



### **T10499—1.2 KVA Blade Welder**

Make your own bandsaw blades from inexpensive band stock, or repair what you already have with this blade welder. Features blade shear, grinder, and annealing. Operates on 115V, 15A power supply. For 1/8"–1/2" blade widths.



**Figure 48.** T10499 Blade Welder.

### **D2273—Single Roller Stand**

### **D2274—5 Roller Stand**

These roller stands are invaluable when working solo in any shop for outfeeding and support tasks. With 15 7/8" wide rollers, adjustable 26"–44 5/8" height, and all steel construction make them convenient and rugged.

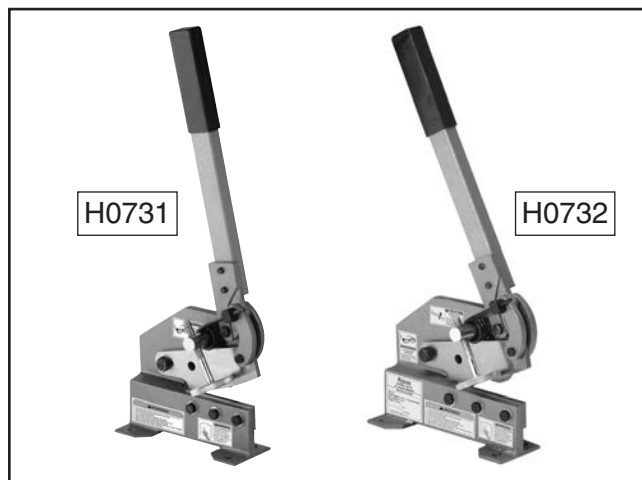


**Figure 49.** D2273 and D2274 Single and 5-Roller Stands.

### **H0731—Plate Shear - 5"**

### **H0732—Plate Shear - 6"**

These excellent quality shears will slice through sheet metal, cut rebar and round stock too. Features ground and hardened knives with an extended length handle for maximum leverage. Mounts directly to your workbench.



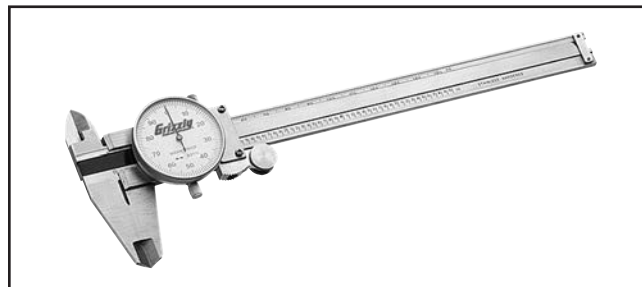
**Figure 50.** H0731 and H0732 5" and 6" Plate Shears.

### **G9256—6" Dial Caliper**

### **G9257—8" Dial Caliper**

### **G9258—12" Dial Caliper**

These traditional dial calipers are accurate to 0.001" and can measure outside surfaces, inside surfaces, and heights/depths. Features stainless steel, shock-resistant construction and a dust proof display.



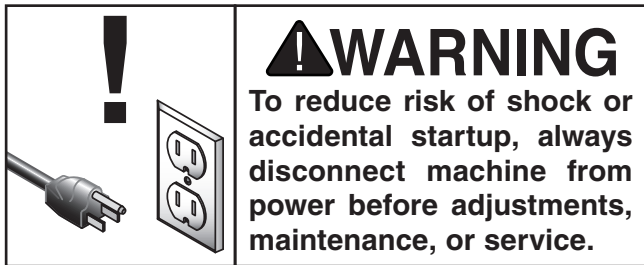
**Figure 51.** Grizzly dial calipers.

**order online at [www.grizzly.com](http://www.grizzly.com) or call 1-800-523-4777**



# SECTION 6: MAINTENANCE

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## Schedule

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For optimum performance from your machine, follow this maintenance schedule and refer to any specific instructions given in this section.

### Daily Check:

- Loose mounting bolts.
- Damaged saw blade.
- Worn or damaged wires.
- Any other unsafe condition.
- Clean after each use.
- Proper blade tension.

### Monthly Check:

- Lubricate vise screw.
- Check gear box lubrication.

## Cleaning

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Cleaning the Model G0561 is relatively easy. Use a brush and a shop vacuum to remove chips and other debris from the machine. Keep the non-painted surfaces rust-free with regular applications of a high-quality rust preventative like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9.

Periodically, remove the blade and thoroughly clean all metal chips or built-up grease from the wheel surfaces and blade housing.



# Lubrication

An essential part of lubrication is cleaning the components before lubricating them.

This step is critical because grime and chips build up on lubricated components over time, which makes them hard to move.

Clean all exterior components in this section with mineral spirits, shop rags, and brushes before lubricating.

**DISCONNECT MACHINE FROM POWER BEFORE PERFORMING LUBRICATION!**

## NOTICE

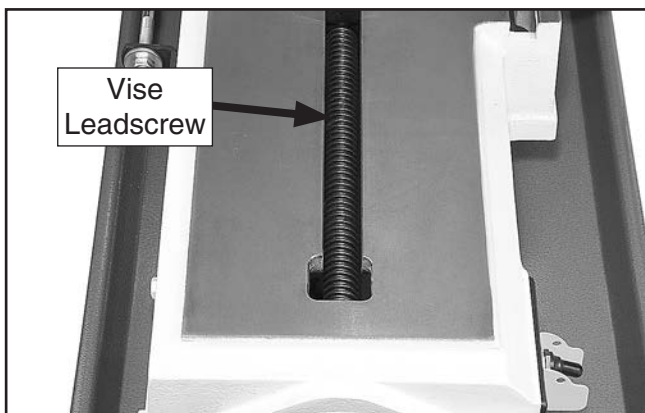
Follow reasonable lubrication practices as outlined in this manual. Failure to do so could lead to premature failure of machine and will void warranty.

### Vise Leadscrew

Lube Type.. Model SB1365 or ISO 68 Equivalent  
Lube Amount .....Thin Coat  
Lubrication Frequency ..... 40 hrs. of Operation

#### To lubricate vise leadscrew:

1. DISCONNECT MACHINE FROM POWER!
2. Using vise handwheel, move vise as far forward as possible.
3. Use mineral spirits and a brush to clean existing grease and debris off of vise leadscrew shown in **Figure 52**. Allow leadscrew to dry.



**Figure 52.** Location of vise leadscrew.

4. Apply thin coat of ISO 68 machine oil to exposed leadscrew threads, then move vise through its full range of motion several times to disperse oil along full length of leadscrew.

### Gears

Lube Type..Model T23964 or NLGI#2 Equivalent  
Lube Amount .....Thin Coat  
Lubrication Frequency ..... 90 hrs. of Operation

#### To lubricate gears:

1. Remove cover on gearbox (see **Figure 53**).



**Figure 53.** Location of gearbox cover.

2. Using small brush, apply thin coat of grease to headstock gears.
3. Operate saw to work grease through gears.
4. Re-install gearbox cover removed in **Step 1**.

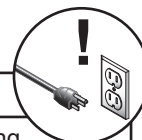


# SECTION 7: SERVICE

Review the troubleshooting and procedures in this section if a problem develops with your machine. If you need replacement parts or additional help with a procedure, call our Technical Support. **Note:** Please gather the serial number and manufacture date of your machine before calling.

## Troubleshooting

### Motor & Electrical

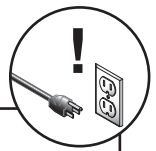


Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> <li>1. Plug/receptacle is at fault/ wired incorrectly.</li> <li>2. Power supply is at fault/switched OFF.</li> <li>3. Motor wired incorrectly.</li> <li>4. Start capacitor is at fault.</li> <li>5. Wall fuse/circuit breaker is blown/tripped.</li> <li>6. Motor ON/OFF switch is at fault.</li> <li>7. Wiring open/has high resistance.</li> <li>8. Motor is at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Test for good contacts; correct wiring.</li> <li>2. Ensure hot lines have correct voltage on all legs and main power supply is switched ON.</li> <li>3. Correct motor wiring.</li> <li>4. Test/replace.</li> <li>5. Ensure correct size for machine load; replace weak breaker.</li> <li>6. Replace faulty ON/OFF switch.</li> <li>7. Check/fix broken, disconnected, or corroded wires.</li> <li>8. Test/repair/replace.</li> </ol>
Machine stalls or is underpowered.	<ol style="list-style-type: none"> <li>1. Wrong blade for workpiece material.</li> <li>2. Wrong workpiece material.</li> <li>3. Feed rate/cutting speed too fast for task.</li> <li>4. Blade is slipping on wheels.</li> <li>5. Low power supply voltage.</li> <li>6. Motor bearings are at fault.</li> <li>7. Plug/receptacle is at fault.</li> <li>8. Motor connection is wired incorrectly.</li> <li>9. Motor has overheated.</li> <li>10. Motor is at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use blade with correct properties for your type of cutting.</li> <li>2. Use metal with correct properties for your type of cutting.</li> <li>3. Decrease feed rate/cutting speed.</li> <li>4. Adjust blade tracking and tension.</li> <li>5. Ensure hot lines have correct voltage on both legs.</li> <li>6. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.</li> <li>7. Test for good contacts; correct the wiring.</li> <li>8. Correct motor wiring connections.</li> <li>9. Clean off motor, let cool, and reduce workload.</li> <li>10. Test/repair/replace.</li> </ol>
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> <li>1. Motor fan is rubbing on fan cover.</li> <li>2. Blade is at fault.</li> <li>3. Gearbox is at fault.</li> <li>4. Wrong blade and/or speed too slow.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace dented fan cover; replace loose/damaged fan.</li> <li>2. Replace/resharpen blade.</li> <li>3. Rebuild gearbox for bad gear(s)/bearing(s).</li> <li>4. Change blade and/or speed.</li> </ol>





## Bandsaw Operations



Symptom	Possible Cause	Possible Solution
Machine is loud when cutting or bogs down in the cut.	<ol style="list-style-type: none"> <li>Excessive feed rate.</li> <li>Blade TPI is too great, or material is too coarse.</li> </ol>	<ol style="list-style-type: none"> <li>Refer to <b>Feed Rate</b> on <b>Page 31</b>, or <b>Changing Blade Speed</b> on <b>Page 29</b>, and adjust as required.</li> <li>Refer to <b>Blade Selection</b> on <b>Page 26</b> and adjust as required.</li> </ol>
Blades break often.	<ol style="list-style-type: none"> <li>Blade is not tensioned correctly.</li> <li>Workpiece is loose in vise.</li> <li>Excessive feed rate.</li> <li>Blade TPI is too great, or material is too coarse.</li> <li>Blade is rubbing on wheel flange.</li> <li>Bandsaw is being started with blade resting on workpiece.</li> <li>Guide bearings are misaligned.</li> <li>Blade is too thick, or blades are of low quality.</li> </ol>	<ol style="list-style-type: none"> <li>Check to see that blade is not excessively tight or too loose.</li> <li>Clamp workpiece more tightly, or use a jig to hold workpiece.</li> <li>Refer to <b>Feed Rate</b> on <b>Page 31</b>, or <b>Changing Blade Speed</b> on <b>Page 29</b>, and adjust as required.</li> <li>Refer to <b>Blade Selection</b> on <b>Page 26</b>, and adjust as required.</li> <li>Refer to <b>Blade Tension &amp; Tracking</b> on <b>Page 43</b>, and adjust as required.</li> <li>Start bandsaw and then slowly lower bow by setting feed rate.</li> <li>Refer to <b>Blade Guides</b> on <b>Page 29</b>, and adjust as required.</li> <li>Use a higher quality blade.</li> </ol>
Blade dulls prematurely.	<ol style="list-style-type: none"> <li>Cutting speed is too fast.</li> <li>Blade TPI is too great, or material is too coarse.</li> <li>Excessive feed rate.</li> <li>Workpiece has hard spots, welds, or scale is on material.</li> <li>Blade is twisted.</li> <li>Blade is slipping on wheels.</li> </ol>	<ol style="list-style-type: none"> <li>Refer to <b>Changing Blade Speed</b> on <b>Page 29</b>, and adjust as required.</li> <li>Refer to <b>Blade Selection</b> on <b>Page 26</b>, and adjust as required.</li> <li>Refer to <b>Feed Rate</b> on <b>Page 31</b>, or <b>Changing Blade Speed</b> on <b>Page 29</b>, and adjust as required.</li> <li>Increase feed pressure, and reduce cutting speed.</li> <li>Replace blade.</li> <li>Refer to <b>Blade Tension &amp; Tracking</b> on <b>Page 43</b>, and adjust as required.</li> </ol>
Teeth are ripping from the blade.	<ol style="list-style-type: none"> <li>Feed pressure is too heavy and blade speed is too slow; or blade TPI is too coarse for workpiece.</li> <li>Workpiece is vibrating in vise.</li> <li>Blade gullets are loading up with chips.</li> </ol>	<ol style="list-style-type: none"> <li>Refer to <b>Blade Selection</b> on <b>Page 26</b> and decrease feed pressure. Refer to <b>Feed Rate</b> on <b>Page 31</b>, and adjust as required.</li> <li>Reclamp workpiece in vise, and use a jig if required.</li> <li>Use a coarser-tooth blade.</li> </ol>
Cuts are crooked.	<ol style="list-style-type: none"> <li>Feed pressure is too high.</li> <li>Guide bearings are out of adjustment, or too far away from workpiece.</li> <li>Blade tension is low.</li> <li>Blade is dull.</li> <li>Blade speed is wrong.</li> </ol>	<ol style="list-style-type: none"> <li>Refer to <b>Feed Rate</b> on <b>Page 31</b>, and adjust as required.</li> <li>Refer to <b>Blade Guides</b> on <b>Page 29</b> and replace or adjust.</li> <li>Refer to <b>Blade Tension &amp; Tracking</b> on <b>Page 43</b>, and adjust as required.</li> <li>Refer to <b>Blade Change</b> on <b>Page 42</b> and replace blade.</li> <li>Refer to <b>Changing Blade Speed</b> on <b>Page 29</b>, and adjust as required.</li> </ol>

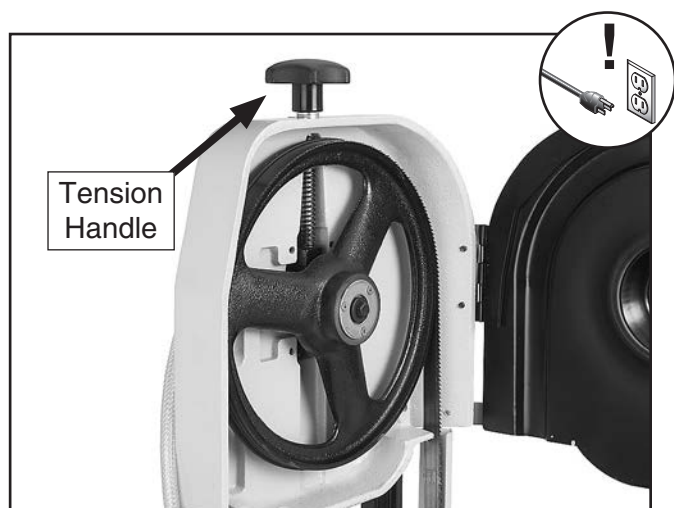


# Blade Change

Blades should be changed when they become dull, damaged, or when you are using materials that require a blade of a certain type or tooth count.

## To change blade on bandsaw:

1. DISCONNECT MACHINE FROM POWER!
2. Raise bow of bandsaw to vertical position, close feed ON/OFF valve, and remove wheel access cover.
3. Remove blade guards.
4. Loosen tension handle shown in **Figure 54** and slip blade off of wheels.



**Figure 54.** Location of tension handle.

## ⚠ CAUTION

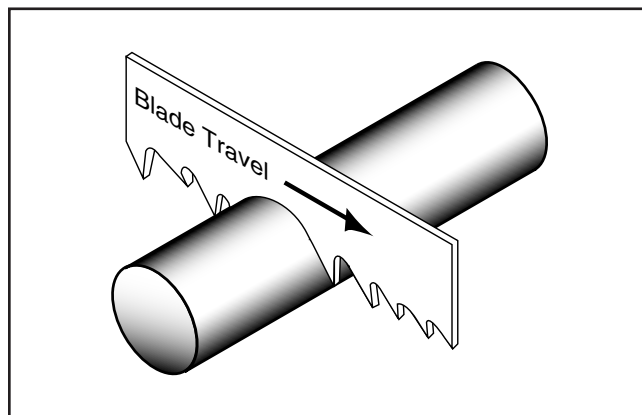
**CUTTING HAZARD!** Bandsaw blades are sharp and awkward to hold. Protect your hands with heavy gloves when handling blade.

5. Install new blade around bottom wheel and through both blade guide bearings.
6. With blade around bottom wheel, slip it around top wheel as shown in **Figure 55**, keeping blade between blade guide bearings.



**Figure 55.** Installing blade.

**Note:** It is possible to flip blade inside out, in which case the blade will be installed in the wrong direction. Check to make sure blade teeth are facing toward workpiece, as shown in **Figure 56**. Some blades have a directional arrow as a guide.



**Figure 56.** Blade teeth facing workpiece.

7. When blade is around both wheels, adjust so back of blade is against shoulder of wheels.
8. Complete blade change by following steps in **Blade Tension & Tracking**.



# Blade Tension & Tracking

Proper blade tension is essential to long blade life, straight cuts, and efficient cutting. The Model G0561 features a blade tension indicator to assist you with blade tensioning.

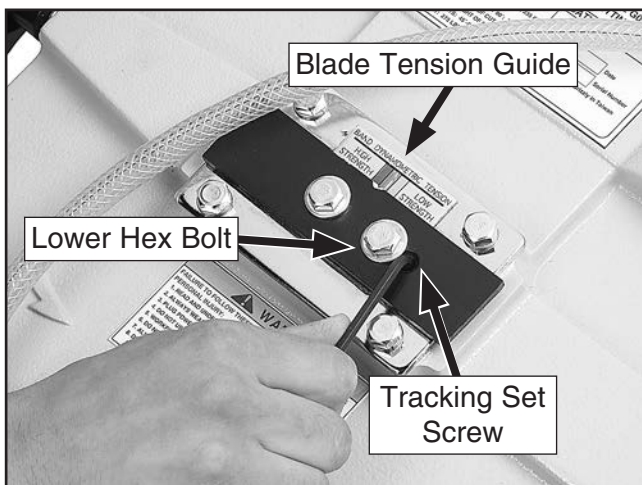
Two major signs that you do not have proper blade tension are: 1) the blade stalls in the cut and slips on the wheels, and 2) the blade frequently breaks from being too tight.

## NOTICE

Loosen blade tension at end of each day to prolong blade life.

### To tension blade on bandsaw:

1. Turn blade tension handle clockwise to tension blade.
2. Tension blade until blade tension guide indicator is in green zone (see **Figure 57**).



**Figure 57.** Blade tension controls.

3. To fine tune blade tension, use a blade tensioning gauge, like one found in **SECTION 5: ACCESSORIES** on **Page 36**. Follow instructions included with your gauge and blade manufacturer's recommendations on blade tension.

The blade tracking has been properly set at the factory. The tracking will rarely need to be adjusted if the bandsaw is used properly.

### To adjust blade tracking on bandsaw:

1. DISCONNECT MACHINE FROM POWER!
2. Position bandsaw in vertical position.
3. Open wheel access cover.
4. Loosen, but do not remove lower hex bolt in blade wheel tilting mechanism.
5. Relax blade tension.
6. Adjust set screw with a 4mm hex wrench (shown in **Figure 57**), then tighten hex bolt loosened in **Step 4**.
  - Tightening set screw will move blade closer to shoulder of wheel.
  - Loosening set screw will move blade away from shoulder.
7. Tension blade.
8. Reconnect machine to power and turn **ON** bandsaw.
  - If blade tracks along shoulder of wheel (without rubbing), blade is tracking properly and this adjustment is completed.
  - If blade walks away from shoulder of wheel or hits shoulder, repeat **Steps 4-7** until blade tracks properly.
9. Turn **OFF** bandsaw.
10. Replace blade guard and wheel access cover.

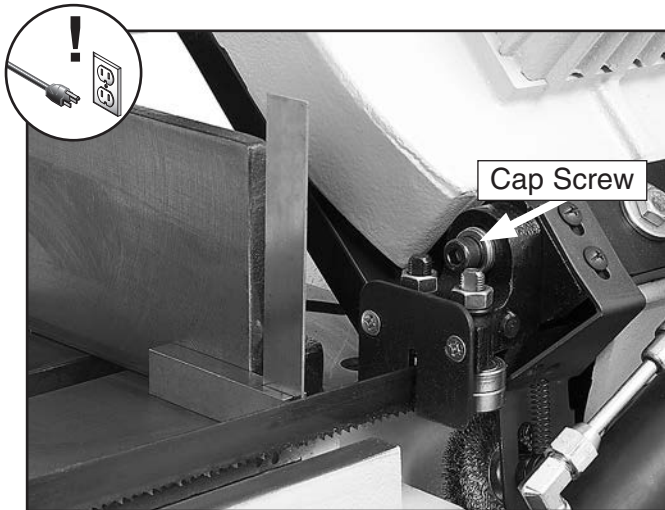


# Squaring Blade

It is always a good idea during the life of your saw to check and adjust this setting. This adjustment will improve your cutting results and extend the life of your blade.

## To square blade to bed of table:

1. DISCONNECT MACHINE FROM POWER!
2. Lower head of the bandsaw until it contacts horizontal stop.
3. Place a square on table bed and against edge of blade (see **Figure 58**), and check different points along length of table between blade guides.



**Figure 58.** Square placed on table bed against edge of blade.

4. Loosen cap screw shown in **Figure 58**, and rotate blade guide until blade is vertical to bed.

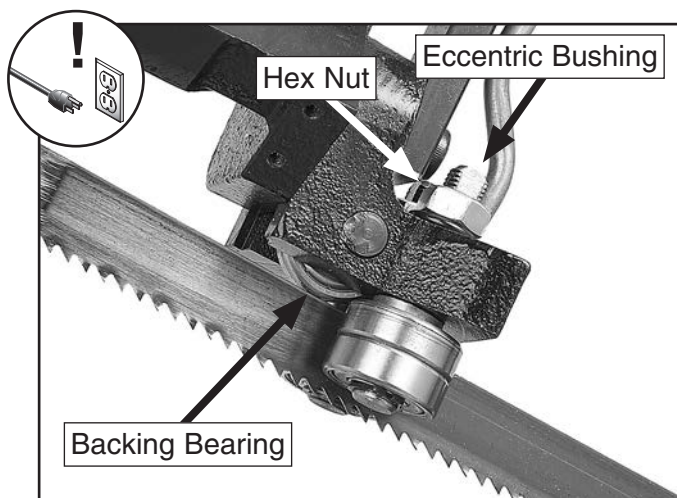
**Note:** *Both blade guides can be adjusted to achieve the results you want.*

5. Tighten cap screw.



# Blade Guide Bearings

The blade guide bearings come adjusted from the factory and the need for adjustment should rarely occur. Uneven blade wear and crooked cuts may be the result of improper adjustment. Each bearing assembly has an eccentric bushing (see **Figure 59**) that allows the distance between the blade and bearings to be adjusted. The bearings are secured in place by a hex nut and a lock washer.



**Figure 59.** Guide bearing components.

Before adjusting the blade guide bearings, make sure that you have squared the blade to the table as discussed in the previous section.

## To adjust blade guide bearings:

1. DISCONNECT MACHINE FROM POWER!
2. Position vise to 90°, then lock in place.
3. Put a machinist's square against face of vise and move it over to blade. The square should evenly touch both the face of vise and blade. If it does, skip ahead to **Step 6**.  
  
—If the square does not evenly touch blade, but it does evenly touch vise, continue with next step.
4. Loosen hex nuts that secure eccentric bushings attached to guide bearings.
5. Adjust bearings as necessary to force blade 90° to vise, then tighten hex nuts attached to bearings that are forcing the blade to 90°.
6. Check to see if any bearings are not touching blade evenly. If so, loosen hex nuts and adjust eccentric bushing so contact surface of bearing touches blade evenly.

**Note:** Since the bearings twist the blade into position, it is acceptable if there is 0.001"-0.002" gap between the blade and the front or back of the bearing. Just make sure not to squeeze the blade too tightly with the bearings. After the guide bearings are set, you should be able to rotate guide bearings (although they will be stiff) with your fingers.

The backing bearing is not adjustable and should make light contact with blade.





# 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.











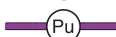

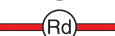

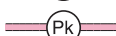
**CAPACITORS/INVERTERS.** Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

**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](http://www.grizzly.com).

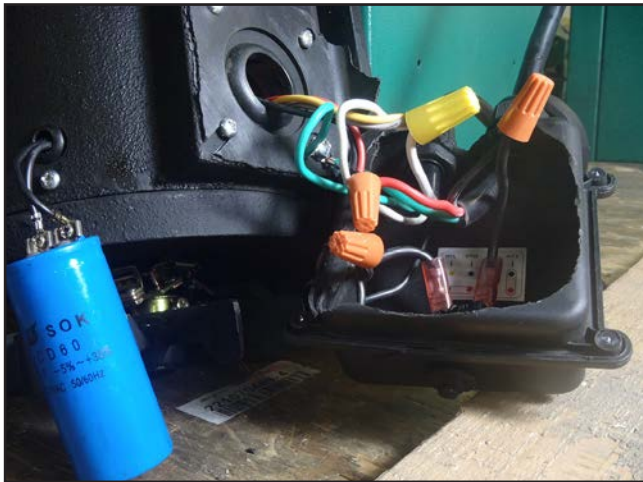
#### COLOR KEY

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





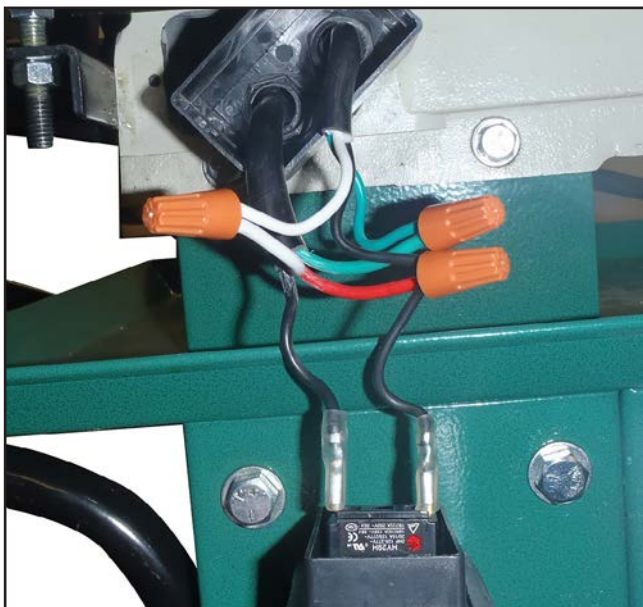
# Electrical Components



**Figure 60.** Main motor and capacitor (110V).



**Figure 62.** Pump motor (110V).

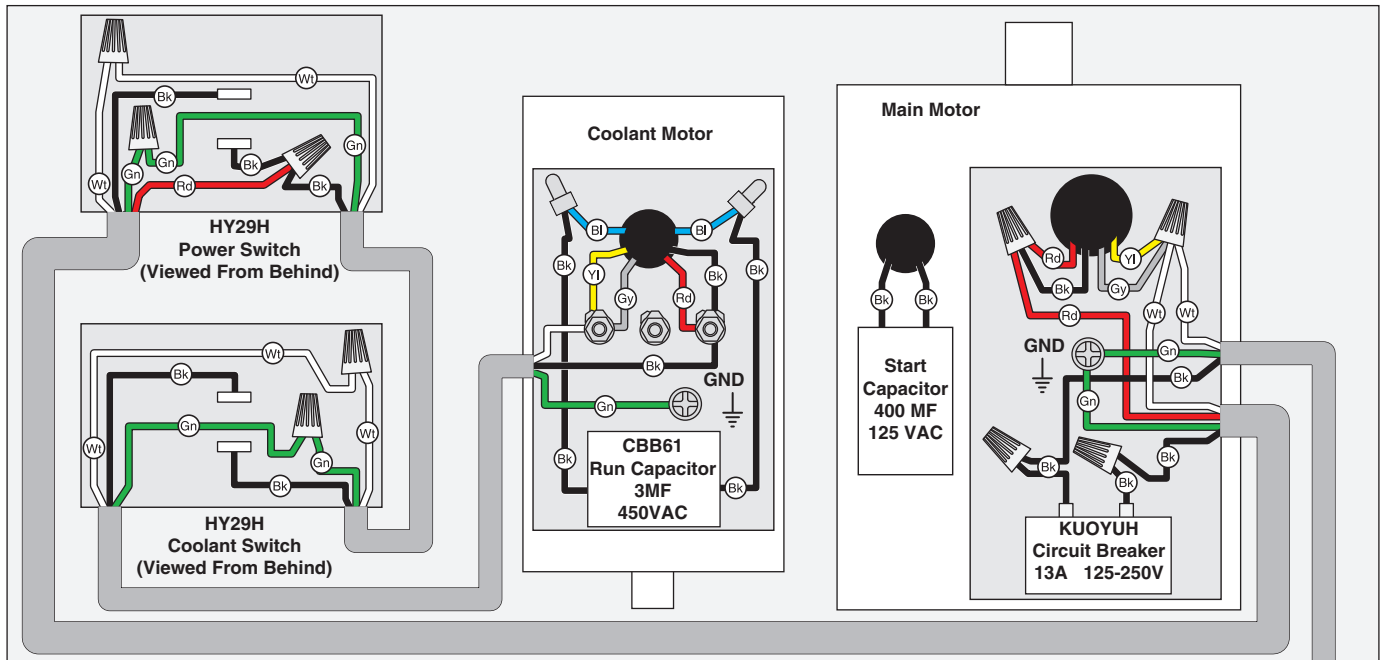


**Figure 61.** Power switch.



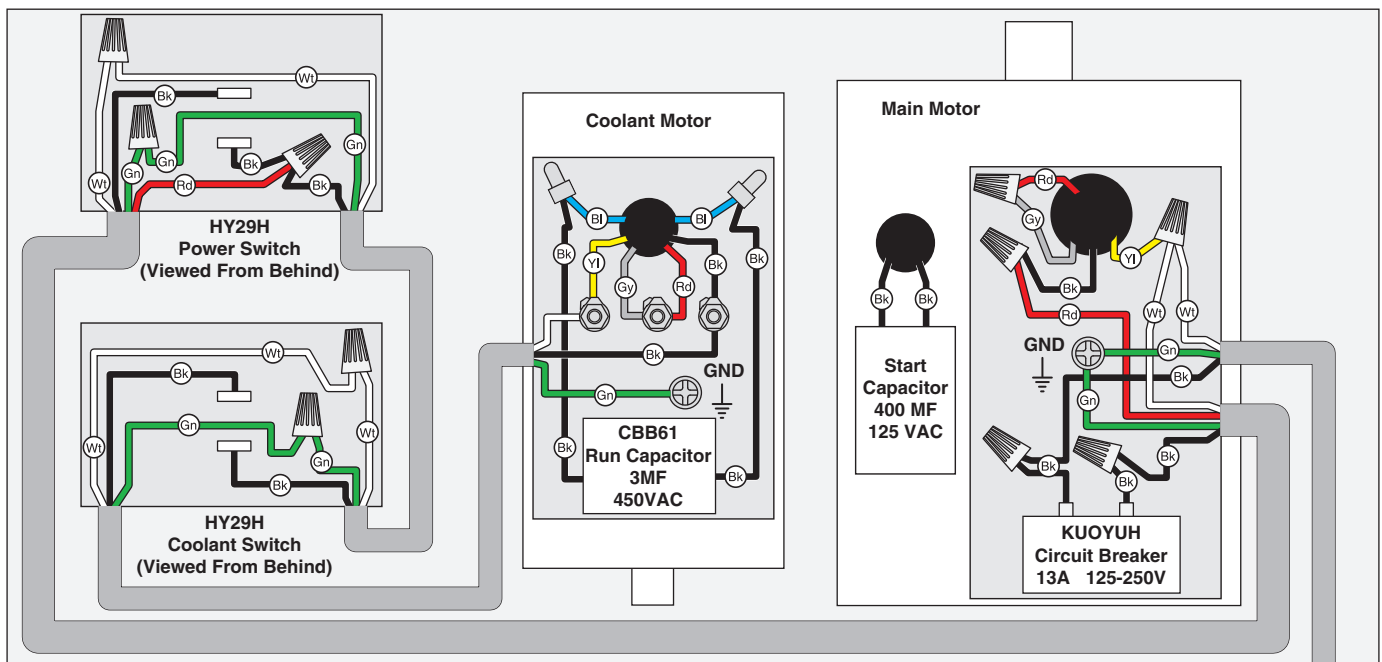
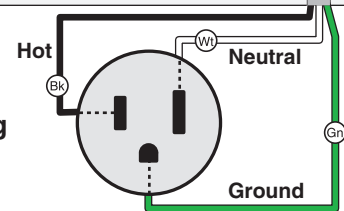
**Figure 63.** Coolant pump ON/OFF switch.

# G0561 110V & 220V Wiring Diagrams



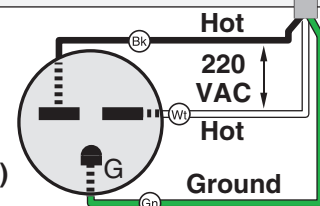
**110V Wiring Diagram**

  
**5-15 Plug**  
**110 VAC**



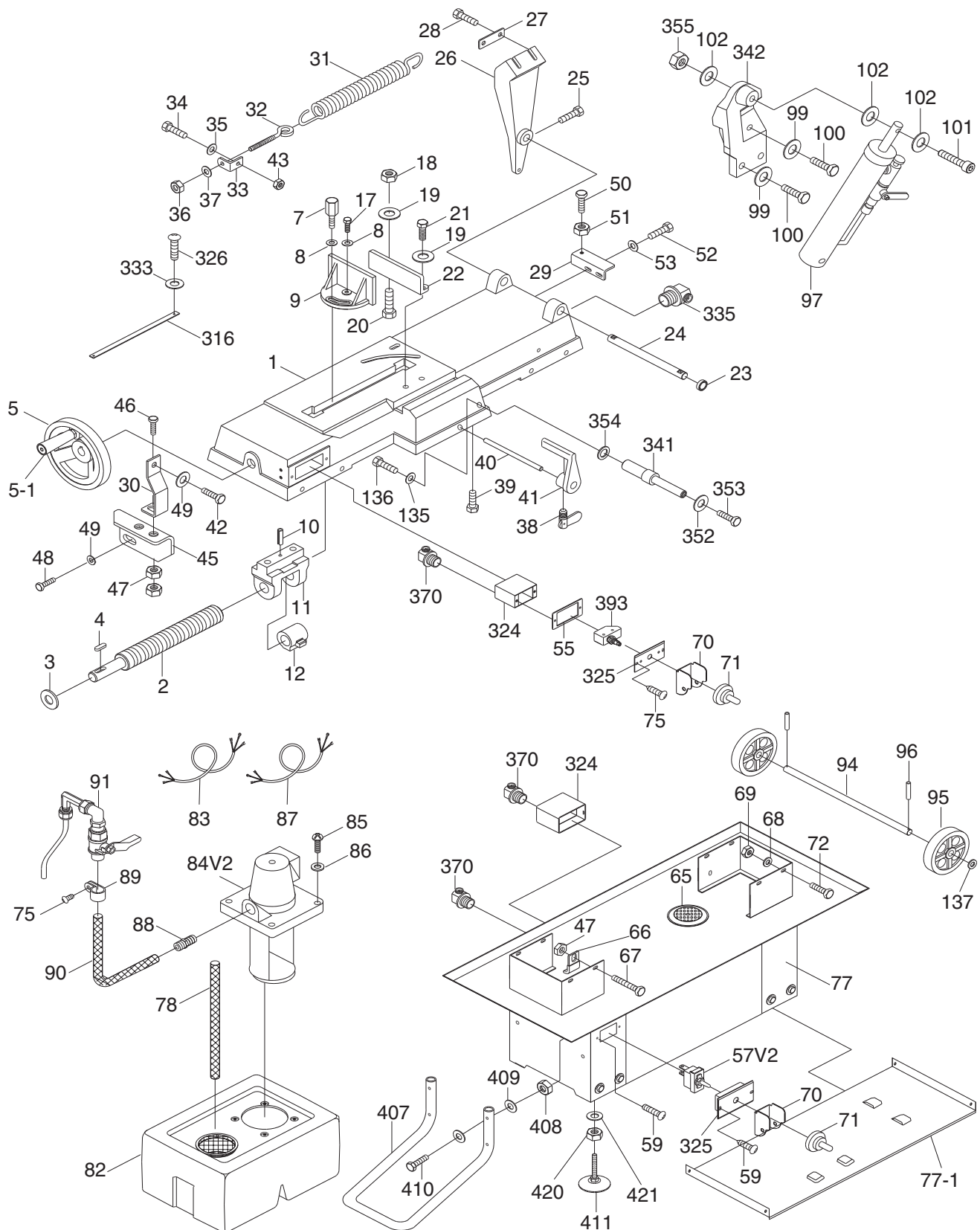
**220V Wiring Diagram**

  
**6-15 Plug**  
**(As Recommended)**



# SECTION 9: PARTS

## Cabinet & Base



# Cabinet & Base Parts List

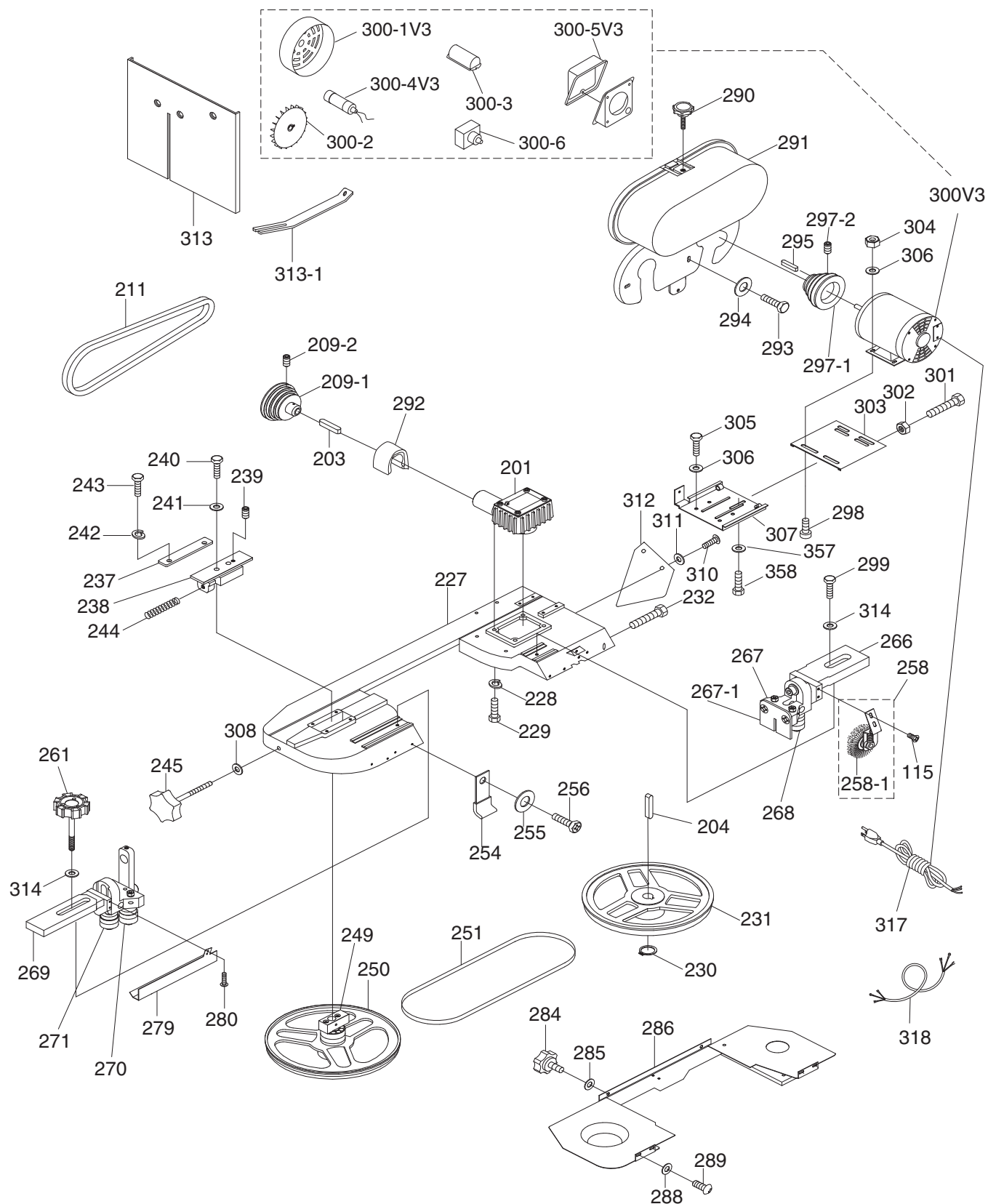
REF	PART #	DESCRIPTION
1	P0561001	BASE
2	P0561002	ACME SCREW 22 X 5 X 480
3	P0561003	FLAT WASHER 1/2
4	P0561004	KEY 5 X 5 X 15
5	P0561005	HANDWHEEL
5-1	P0561005-1	HANDWHEEL HANDLE
7	P0561007	KNOB BOLT 3/8-16
8	P0561008	FLAT WASHER 3/8
9	P0561009	WISE JAW, FRONT
10	P0561010	ROLL PIN 5 X 34
11	P0561011	BRACKET
12	P0561012	ACME NUT ASSY 22 X 5
17	P0561017	HEX BOLT 3/8-16 X 1-1/2
18	P0561018	HEX NUT 1/2-12
19	P0561019	FLAT WASHER 1/2
20	P0561020	CARRIAGE BOLT 1/2-12 X 2
21	P0561021	HEX BOLT 1/2-12 X 2
22	P0561022	WISE JAW, REAR
23	P0561023	BUSHING
24	P0561024	SUPPORT ROD
25	P0561025	HEX BOLT 5/16-18 X 3/4
26	P0561026	PIVOT BRACKET
27	P0561027	SPRING BRACKET 75 X 25.4
28	P0561028	HEX BOLT 3/8-16 X 1-1/2
29	P0561029	SUPPORT PLATE
30	P0561030	FIXED PLATE
31	P0561031	TENSION SPRING 32 X 282
32	P0561032	EYE BOLT 3/8-16 X 4-1/2
33	P0561033	SPRING HANDLE BRACKET
34	P0561034	HEX BOLT 5/16-18 X 3/4
35	P0561035	FLAT WASHER 5/16
36	P0561036	HEX NUT 3/8-16
37	P0561037	FLAT WASHER 3/8
38	P0561038	LEAF SCREW 5/16-18
39	P0561039	HEX BOLT 5/16-18 X 3/4
40	P0561040	WORK STOP ROD
41	P0561041	WORK STOP
42	P0561042	HEX BOLT 5/16-18 X 1-1/2
43	P0561043	HEX NUT 5/16-18
45	P0561045	SUPPORT PLATE
46	P0561046	HEX BOLT 3/8-16 X 1-3/4
47	P0561047	HEX NUT 3/8-16
48	P0561048	HEX BOLT 5/16-18 X 3/4
49	P0561049	FLAT WASHER 5/16
50	P0561050	HEX BOLT 3/8-16 X 1-3/4
51	P0561051	HEX NUT 3/8-16
52	P0561052	HEX BOLT 5/16-18 X 3/4
53	P0561053	LOCK WASHER 5/16
55	P0561055	ELECTRICAL BOX GASKET, RUBBER
57V2	P0561057V2	TOGGLE SWITCH KEDU HY29H V2.01.08
59	P0561059	PHLP HD SCR 10-24 X 3/8
65	P0561065	DRAIN SCREEN

REF	PART #	DESCRIPTION
66	P0561066	SWITCH SHUT-OFF TIP
67	P0561067	HEX BOLT 3/8-16 X 1-1/4
68	P0561068	FLAT WASHER 5/16
69	P0561069	HEX NUT 5/16-18
70	P0561070	SWITCH BRACKET
71	P0561071	TOGGLE SWITCH COVER
72	P0561072	HEX BOLT 5/16-18 X 1
75	P0561075	PHLP HD SCR 10-24 X 3/8
77	P0561077	STAND ASSEMBLY
77-1	P0561077-1	STAND SHELF
78	P0561078	HOSE 12 X 8 X 200MM
82	P0561082	COOLANT TANK
83	P0561083	COOLANT PUMP SWITCH CORD 16G 3W 26"
84V2	P0561084V2	COOLANT PUMP MOTOR V2.07.09
85	P0561085	PHLP HD SCR 1/4-20 X 5/8
86	P0561086	FLAT WASHER 1/4
87	P0561087	COOLANT PUMP CORD 18G 3W 23"
88	P0561088	HOSE COUPLER 3/8 NPT X 5/16
89	P0561089	HOSE CLIP 5/8"
90	P0561090	HOSE 12 X 8 X 2000MM
91	P0561091	VALVE ASSEMBLY
94	P0561094	STAND WHEEL AXLE
95	P0561095	STAND WHEEL
96	P0561096	COTTER PIN 3 X 25MM STANDARD
97	P0561097	CYLINDER ASSEMBLY RF-712N
99	P0561099	FLAT WASHER 5/16
100	P0561100	HEX BOLT 5/16-18 X 1
101	P0561101	CAP SCREW 3/8-16 X 2-1/4
102	P0561102	FLAT WASHER 3/8
135	P0561135	FLAT WASHER 5/16
136	P0561136	HEX BOLT 5/16-18 X 3/4
316	P0561316	SCALE
324	P0561324	ELECTRICAL BOX
325	P0561325	SWITCH COVER
326	P0561326	PHLP HD SCR 10-24 X 3/8
333	P0561333	FLAT WASHER #10
335	P0561335	STRAIN RELIEF 5/8 NPT NYLON
341	P0561341	CYLINDER SUPPORT, LOWER
342	P0561342	CYLINDER SUPPORT, UPPER
352	P0561352	FLAT WASHER 5/16
353	P0561353	HEX BOLT 5/16-18 X 1/2
354	P0561354	SPACER 8 X 16 X 2
355	P0561355	HEX NUT 3/8-16
370	P0561370	STRAIN RELIEF 1/2 NPT NYLON
393	P0561393	TOGGLE SWITCH KEDU HY29H
407	P0561407	CABINET HANDLE
408	P0561408	HEX NUT 5/16-18
409	P0561409	FLAT WASHER 5/16
410	P0561410	HEX BOLT 5/16-18 X 1-1/4
411	P0561411	LEVELING FOOT 3/8-16 x 3
420	P0561420	HEX NUT 3/8-16
421	P0561421	FLAT WASHER 3/8





# Bow & Motor



**Please Note:** We do our best to stock replacement parts whenever possible, but we cannot guarantee that all parts shown here are available for purchase. Call (800) 523-4777 or visit our online parts store at [www.grizzly.com](http://www.grizzly.com) to check for availability.



# Bow & Motor Parts List

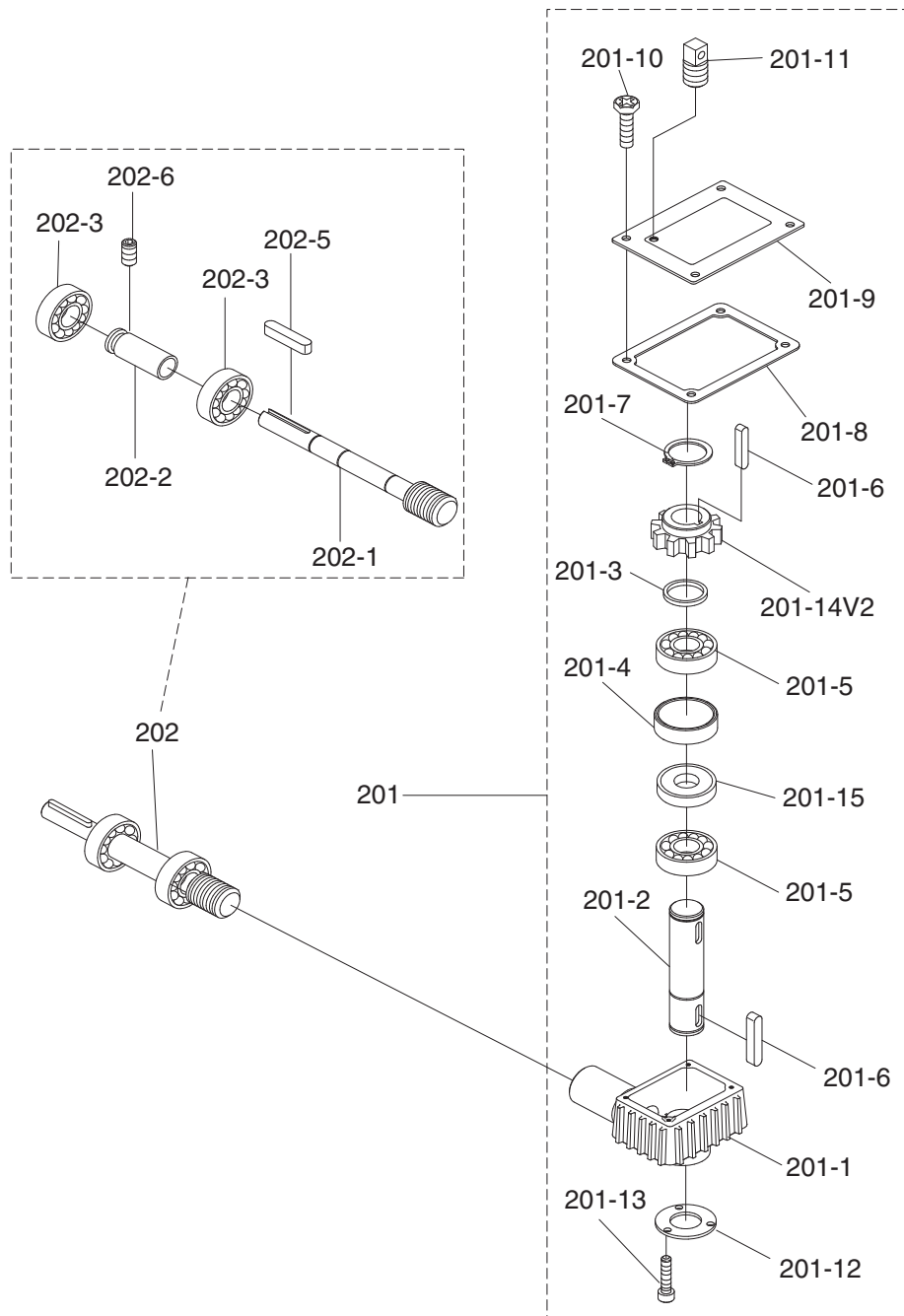
REF	PART #	DESCRIPTION
115	P0561115	PHLP HD SCR M5-.8 X 8
201	P0561201	GEARBOX ASSY
203	P0561203	KEY 5 X 5 X 30
204	P0561204	KEY 6 X 6 X 20
209-1	P0561209-1	SPINDLE PULLEY
209-2	P0561209-2	SET SCREW M6-1 X 10
211	P0561211	V-BELT M27 3L270
227	P0561227	BODY FRAME
228	P0561228	LOCK WASHER 3/8
229	P0561229	HEX BOLT 3/8-16 X 1-1/4
230	P0561230	EXT RETAINING RING 25MM
231	P0561231	DRIVE WHEEL
232	P0561232	HEX BOLT 5/16-18 X 3/4
237	P0561237	SLIDING PLATE
238	P0561238	BLADE TENSION SLIDING BLOCK
239	P0561239	SET SCREW 5/16-18 X 3/4
240	P0561240	HEX BOLT 5/16-18 X 1-1/2
241	P0561241	FLAT WASHER 5/16
242	P0561242	LOCK WASHER 5/16
243	P0561243	HEX BOLT 5/16-18 X 3/4
244	P0561244	COMPRESSION SPRING 115 X 4
245	P0561245	KNOB BOLT M10-1.5 X 50
249	P0561249	WHEEL SHAFT ASSEMBLY
250	P0561250	IDLER WHEEL
251	P0561251	BLADE 0.032 X 3/4 X 93 X 8T
254	P0561254	SWITCH SHUT-OFF LATCH
255	P0561255	FLAT WASHER 1/4
256	P0561256	PHLP HD SCR 1/4-20 X 1/2
258	P0561258	BRUSH ASSEMBLY
258-1	P0561258-1	BRUSH
261	P0561261	KNOB BOLT M10-1.5 X 35
266	P0561266	ADJUST BRACKET, REAR
267	P0561267	GUIDE PIVOT ASSEMBLY
267-1	P0561267-1	DEFLECTOR PLATE
268	P0561268	BEARING SHAFT ASSY, REAR
269	P0561269	ADJUST BRACKET, FRONT
270	P0561270	GUIDE PIVOT ASSEMBLY
271	P0561271	BEARING SHAFT ASSY, FRONT
279	P0561279	BLADE COVER, FRONT
280	P0561280	PHLP HD SCR 8-32 X 1/4

REF	PART #	DESCRIPTION
284	P0561284	KNOB BOLT 1/4" X 20 x 3/8
285	P0561285	FLAT WASHER 1/4
286	P0561286	BLADE BACK COVER
288	P0561288	FLAT WASHER 1/4
289	P0561289	PHLP HD SCR 1/4-20 X 1/2
290	P0561290	KNOB BOLT M6-1 X 12
291	P0561291	MOTOR PULLEY COVER
292	P0561292	SHAFT COVER
293	P0561293	HEX BOLT 1/4-20 X 1/2
294	P0561294	FLAT WASHER 1/4
295	P0561295	KEY 5 X 5 X 30
297-1	P0561297-1	MOTOR PULLEY
297-2	P0561297-2	SET SCREW 1/4-20 X 3/8
298	P0561298	CARRIAGE BOLT 5/16-18 X 1
299	P0561299	HEX BOLT 3/8-16 X 1-1/4
300V3	P0561300V3	MOTOR 1HP 115/230V 1-PH V3.01.08
300-1V3	P0561300-1V3	MOTOR FAN COVER, PLASTIC V3.01.08
300-2	P0561300-2	MOTOR FAN
300-3	P0561300-3	CAPACITOR COVER
300-4V3	P0561300-4V3	CAPACITOR 400MFD 125VAC V3.01.08
300-5V3	P0561300-5V3	JUNCTION BOX V3.01.08
300-6	P0561300-6	CIRCUIT BREAKER 13A
301	P0561301	HEX BOLT 5/16-18 X 1-1/2
302	P0561302	HEX NUT 5/16-18
303	P0561303	MOTOR MOUNT
304	P0561304	HEX NUT 5/16-18
305	P0561305	HEX BOLT 5/16-18 X 3/4
306	P0561306	FLAT WASHER 5/16
307	P0561307	MOTOR MOUNT BRACKET
308	P0561308	FLAT WASHER 3/8
310	P0561310	PHLP HD SCR 1/4-20 X 1/2
311	P0561311	FLAT WASHER 1/4
312	P0561312	SUPPORT PLATE
313	P0561313	VERTICAL SAW TABLE
313-1	P0561313-1	TABLE BRACKET
314	P0561314	FLAT WASHER 3/8
317	P0561317	POWER CORD 14G 3W 84" 5-15 V3.01.08
318	P0561318	POWER SWITCH CORD 14G 3W 54"
357	P0561357	FLAT WASHER 5/16
358	P0561358	HEX BOLT 5/16-18 X 1





# Gearbox

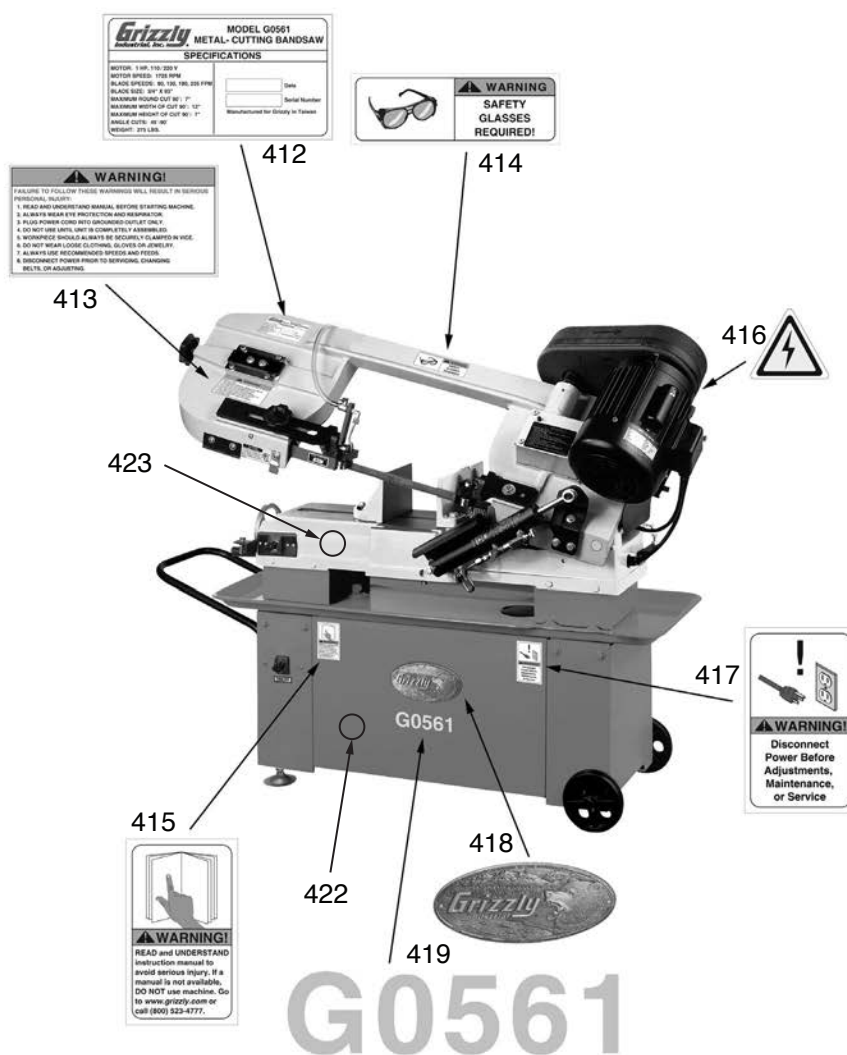


REF	PART #	DESCRIPTION
201	P0561201	GEARBOX ASSY
201-1	P0561201-1	GEARBOX HOUSING
201-2	P0561201-2	TRANSMISSION WHEEL SHAFT
201-3	P0561201-3	SPACER
201-4	P0561201-4	SPACER
201-5	P0561201-5	BALL BEARING 6205ZZ
201-6	P0561201-6	KEY 6 X 6 X 20
201-7	P0561201-7	EXT RETAINING RING 25MM
201-8	P0561201-8	GEARBOX GASKET
201-9	P0561201-9	GEARBOX COVER
201-10	P0561201-10	FLAT HD SCR 1/4-20 X 1/2

REF	PART #	DESCRIPTION
201-11	P0561201-11	VENT PLUG
201-12	P0561201-12	BEARING COVER
201-13	P0561201-13	PHLP HD SCR 10-24 X 3/8
201-14V2	P0561201-14V2	WORM GEAR STEEL V2.10.11
201-15	P0561201-15	OIL SEAL 25 X 52 X 10
202	P0561202	WORM GEAR SHAFT ASSEMBLY
202-1	P0561202-1	WORM SHAFT
202-2	P0561202-2	BEARING BUSHING
202-3	P0561202-3	BALL BEARING 6003ZZ
202-5	P0561202-5	KEY 5 X 5 X 30
202-6	P0561202-6	SET SCREW 5/16-18 X 1/2



# Labels



REF	PART #	DESCRIPTION
412	P0561412	MACHINE ID LABEL
413	P0561413	MACHINE WARNING LABEL
414	P0561414	SAFETY GLASSES LABEL
415	P0561415	READ MANUAL LABEL
416	P0561416	ELECTRICITY LABEL

REF	PART #	DESCRIPTION
417	P0561417	UNPLUG BANDSAW LABEL
418	P0561418	GRIZZLY NAMEPLATE, SMALL
419	P0561419	MODEL NUMBER LABEL
422	P0561422	GRIZZLY GREEN TOUCH-UP PAINT
423	P0561423	GRIZZLY PUTTY TOUCH-UP PAINT





# WARRANTY CARD

Name \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Phone # \_\_\_\_\_ Email \_\_\_\_\_  
Model # \_\_\_\_\_ Order # \_\_\_\_\_ Serial # \_\_\_\_\_

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.**

1. How did you learn about us?

\_\_\_\_\_ Advertisement \_\_\_\_\_ Friend \_\_\_\_\_ Catalog  
\_\_\_\_\_ Card Deck \_\_\_\_\_ Website \_\_\_\_\_ Other: \_\_\_\_\_

2. Which of the following magazines do you subscribe to?

_____ Cabinetmaker & FDM	_____ Popular Science	_____ Wooden Boat
_____ Family Handyman	_____ Popular Woodworking	_____ Woodshop News
_____ Hand Loader	_____ Precision Shooter	_____ Woodsmith
_____ Handy	_____ Projects in Metal	_____ Woodwork
_____ Home Shop Machinist	_____ RC Modeler	_____ Woodworker West
_____ Journal of Light Cont.	_____ Rifle	_____ Woodworker's Journal
_____ Live Steam	_____ Shop Notes	_____ Other: _____
_____ Model Airplane News	_____ Shotgun News	
_____ Old House Journal	_____ Today's Homeowner	
_____ Popular Mechanics	_____ Wood	

3. What is your annual household income?

\_\_\_\_\_ \$20,000-\$29,000 \_\_\_\_\_ \$30,000-\$39,000 \_\_\_\_\_ \$40,000-\$49,000  
\_\_\_\_\_ \$50,000-\$59,000 \_\_\_\_\_ \$60,000-\$69,000 \_\_\_\_\_ \$70,000+

4. What is your age group?

\_\_\_\_\_ 20-29 \_\_\_\_\_ 30-39 \_\_\_\_\_ 40-49  
\_\_\_\_\_ 50-59 \_\_\_\_\_ 60-69 \_\_\_\_\_ 70+

5. How long have you been a woodworker/metalworker?

\_\_\_\_\_ 0-2 Years \_\_\_\_\_ 2-8 Years \_\_\_\_\_ 8-20 Years \_\_\_\_\_ 20+ Years

6. How many of your machines or tools are Grizzly?

\_\_\_\_\_ 0-2 \_\_\_\_\_ 3-5 \_\_\_\_\_ 6-9 \_\_\_\_\_ 10+

7. Do you think your machine represents a good value?

\_\_\_\_\_ Yes \_\_\_\_\_ No

8. Would you recommend Grizzly Industrial to a friend?

\_\_\_\_\_ Yes \_\_\_\_\_ No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?

**Note:** We never use names more than 3 times.

\_\_\_\_\_ Yes \_\_\_\_\_ No

10. Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

FOLD ALONG DOTTED LINE

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



Place  
Stamp  
Here



GRIZZLY INDUSTRIAL, INC.  
P.O. BOX 2069  
BELLINGHAM, WA 98227-2069



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Send a Grizzly Catalog to a friend:

Name\_\_\_\_\_

Street\_\_\_\_\_

City\_\_\_\_\_State\_\_\_\_\_Zip\_\_\_\_\_

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

# WARRANTY & RETURNS

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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.

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



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