

# MODEL G0640X 17" VARIABLE-SPEED WOOD & METAL CUTTING BANDSAW

### **OWNER'S MANUAL**

(For models manufactured since 12/20)



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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.



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.

# **Table of Contents**

INTRODUCTION	
Contact Info2	
Manual Accuracy2	
Identification	
Machine Data Sheet	4
SECTION 1: SAFETY	6
Safety Instructions for Machinery	
Additional Safety for Wood/Metal Bandsaws.	
SECTION 2: POWER SUPPLY	
SECTION 3: SETUP1	
Needed for Setup	
Unpacking 1: Inventory	
Hardware Recognition Chart	
Cleanup14 Site Considerations14	
Lifting & Placing18	
Anchoring to Floor	
Assembly16	
Blade Tracking	
Test Run	
Blade Tensioning	
Adjusting Blade Guides	2
Adjusting Support Bearings	3
Adjusting Positive Stop	
Aligning Table	
Aligning Fence	
Miter Gauge27	
<b>o</b>	
SECTION 4: OPERATIONS28	
Guide Post	_
Quick-Release Blade Tension 29	
Table Tilt	
Blade Terminology 30	
Blade Selection	
Blade Breakage	
Blade Care & Break-In	
Blade Changes	
Blade Speed34	4
SECTION 5: WOOD CUTTING39	5
Workpiece Inspection	
Cutting Tips	
Ripping36	
Crosscutting36	
Resawing37	
Stacked Cuts38	
Cutting Curves	
Cutting Circles 39	

SECTION 6: METAL CUTTING	39
Workpiece Inspection	39
Cutting Tips	
Choosing Blades and Speeds	40
Metal Chip Inspection Chart	41
SECTION 7: ACCESSORIES	42
SECTION 8: MAINTENANCE	44
Schedule	
Wheel & Blade Brushes	
Cleaning	
Lubrication	
Redressing Rubber Tires	46
SECTION 9: SERVICE	47
Troubleshooting	
Replacing V-Belts	
Adjusting Wheel & Blade Brushes	
Wheel Alignment	
Shimming Table	
Blade Lead	
Adjusting Tension Lever	
SECTION 10: WIRING	54
Wiring Safety Instructions	
Wiring Diagram	
Electrical Component Photos	
SECTION 11: PARTS	
Main	
Fence & Blade Guides	
Labels & Cosmetics (Front)	
Labels & Cosmetics (Front)	
, ,	
WARRANTY & RETURNS	65

## INTRODUCTION

#### 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

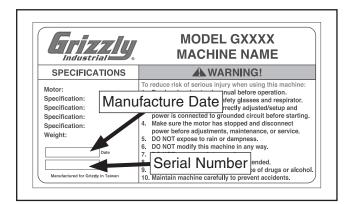
### **Manual Accuracy**

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.

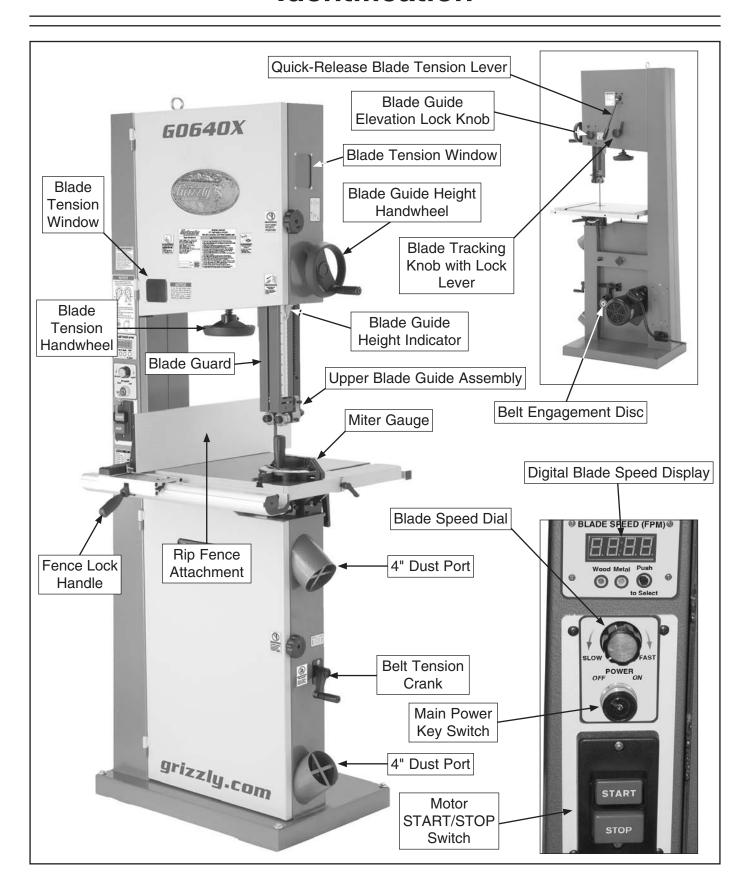
If you find this to be the case, and the difference between the manual and machine leaves you confused or unsure about something, check our website for an updated version. We post current manuals and manual updates for free on our website at www.grizzly.com.

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.





### Identification







# MACHINE DATA SHEET

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

# MODEL G0640X 17" VARIABLE-SPEED WOOD & METAL CUTTING BANDSAW

Product Dimensions:	
Weight	
Width (side-to-side) x Depth (front-to-back) x Height	
Footprint (Length x Width)	
Shipping Dimensions:	
Type	Wood Slat Crate
Content	
Weight	
Length x Width x Height	
Must Ship Upright	Yes
Electrical:	
Power Requirement	220V, Single-Phase, 60 Hz
Full-Load Current Rating	8 <i>A</i>
Minimum Circuit Size	15 <i>A</i>
Connection Type	Cord & Plug
Power Cord Included	Yes
Power Cord Length	6 ft
Power Cord Gauge	14 AWG
Plug Included	No
Recommended Plug Type	6-15
Switch Type	ON/OFF Push Button Switch w/Lockout Key
Inverter (VFD) Type	TECO L510
Inverter (VFD) Size	2 HF
Motors:	
Main	
Horsepower	2 HP
Phase	3-Phase
Amps	8A
	1720 RPN
	TEFC Induction
· ·	Belt Drive
Bearings	Shielded & Permanently Lubricated
Main Specifications:	
Main Specifications	
-	47 :
·	Variable 100 - 3600 FPN
Blade Information	
Standard Blade Length	131-1/2 in
	1/8 - 1 in



#### **Table Information**

Table Illiotiliation	
Table Length	
Table Width	17-1/4 in.
Table Thickness	1-1/2 in.
Table Tilt	Left 5, Right 45 deg.
Floor-to-Table Height	37-1/2 in.
Fence Locking Position	Front
Construction Materials	
Table	Precision-Ground Cast Iron
Fence	Precision-Ground Cast Iron
Base/Stand	Steel
Frame/Body	Steel
Wheels	Fully Balanced Cast Iron
Wheel Cover	Steel
Paint Type/Finish	Powder Coated
Other Related Information	
Number of Dust Ports	2
Dust Port Size	4 in.
Other Specifications:	
•	
Country of Origin	
Warranty	
Approximate Assembly & Setup Time	
Serial Number Location	ID Label on Center of Upper Wheel Cover
Sound Rating	
ISO 9001 Factory	Yes

### **AWARNING**

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



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



## **SECTION 1: SAFETY**

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

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



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

**AWARNING** 

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

**A**CAUTION

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

**NOTICE** 

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

## **Safety Instructions for Machinery**

### **AWARNING**

**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.



# **AWARNING**

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 Wood/Metal Bandsaws**

### **AWARNING**

Serious cuts, amputation, or death can occur from contact with the moving saw blade during operation, if blade breaks, or if fingers, hair, or clothing get entangled. Long-term respiratory damage can occur from breathing metal/wood dust created while cutting. To reduce this risk, anyone operating this machine MUST completely heed the hazards and warnings below.

HAND PLACEMENT. Placing hands or fingers in line with blade during operation may result in serious injury if hands slip or workpiece moves unexpectedly. Do not position fingers or hands in line with blade, and never reach under table while blade is moving.

WORKPIECE MATERIAL. This machine is intended for cutting natural woods, man-made wood products, laminate-covered wood, steel, aluminum, copper, cast iron, and plastics. DO NOT cut magnesium—using the wrong cutting fluid could lead to chip fire and possible explosion. This machine is NOT designed to cut glass, stone, tile, chains, cables, round or oblong-shaped workpieces, and workpieces with internal or built-in moving or rotating parts, etc.

**CUTTING TECHNIQUES.** To avoid blade getting pulled off wheels or accidentally breaking and striking operator, always turn bandsaw *OFF* and wait for blade to come to a complete stop before backing workpiece out of blade. DO NOT back workpiece away from blade while bandsaw is running. DO NOT force or twist blade while cutting, especially when sawing small curves. This could result in blade damage or breakage.

CLEARING JAMS AND CUTOFFS. Always allow blade to stop on its own. DO NOT try to stop or slow blade with your hand or the workpiece. Always stop bandsaw and disconnect power before clearing scrap pieces that get stuck between blade and table insert. Use brush or push stick, not hands, to clean chips/cutoff scraps from table.

**BLADE SPEED/FEED RATE.** Cutting workpiece before blade is at full speed could cause blade to grab workpiece and pull hands into blade. Allow blade to reach full speed before starting cut. DO NOT start machine with workpiece contacting blade. To avoid risk of operator injury, always feed stock evenly and smoothly.

**BLADE CONDITION.** Dull blades require more effort to perform cut, increasing risk of accidents. Do not operate with dirty, dull, cracked or badly worn blades. Inspect blades for cracks and missing teeth before each use. Always maintain proper blade tension and tracking while operating.

CHIP COLLECTION. DO NOT collect metal dust cuttings in a wood dust collector. Use a dedicated metal dust collector or shop vacuum to collect metal cuttings. DO NOT mix wood dust and metal cuttings, as it may cause a fire.

**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.

**SMALL/NARROW WORKPIECES.** If hands slip during a cut while holding small workpieces with fingers, serious personal injury could occur. Always support/feed small or narrow workpieces with push sticks, push blocks, jig, vise, or some type of clamping fixture.

**UPPER BLADE GUIDE SUPPORT.** To reduce exposure of operator to blade and provide maximum blade support while cutting, keep upper blade guides adjusted to just clear workpiece.

WORKPIECE SUPPORT. To maintain maximum control and reduce risk of blade contact/breakage, always ensure adequate support of long, large, or unstable workpieces. Always keep workpiece flat and firm against table/fence when cutting to avoid loss of control. If necessary, use a jig or vise.

**BLADE REPLACEMENT.** To avoid mishaps that could result in operator injury, make sure blade teeth face down toward table and blade is properly tensioned and tracked before operating.



# **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.



#### **AWARNING**

Electrocution, fire, shock, or equipment damage may occur if machine is not properly grounded and connected to power supply.

#### **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 220V ...... 8 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.)

# **A**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**

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

Nominal Voltage	208V, 220V, 230V, 240V
Cycle	60 Hz
Phase	Single-Phase
<b>Power Supply Circuit</b>	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.

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

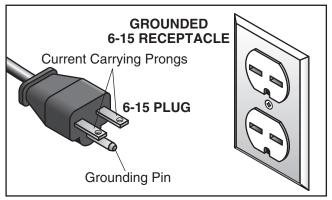


Figure 1. Typical 6-15 plug and receptacle.



No adapter should be used with plug. If plug does not fit available receptacle, or if machine must be reconnected for use on a different type of circuit, reconnection must be performed by an electrician or qualified service personnel, and it must comply with all local codes and ordinances.

### **A**WARNING

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

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

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

#### **Extension Cords**

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

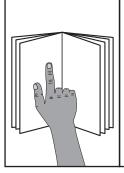
Extension cords cause voltage drop, which can damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

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

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



## **SECTION 3: SETUP**



### WARNING

This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!



## **AWARNING**

Wear safety glasses during the entire setup process!



### **AWARNING**

**HEAVY LIFT!** 

Straining or crushing injury may occur from improperly lifting machine or some of its parts. To reduce this risk, get help from other people and use a forklift (or other lifting equipment) rated for weight of this machine.

### **Needed for Setup**

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

Des	scription Qty
•	Safety Glasses (for each person)1 Pr.
•	Disposable Rags As Needed
•	Cleaner/Degreaser As Needed
•	Disposable Gloves As Needed
•	Forklift 1
•	Lifting Strap or Chain (500-lb. min. cap.) 1
•	Lifting Hook or Shackle1
•	Mounting Hardware As Needed
•	Another Person for Lifting Help1
•	Open-End Wrench 13mm1
•	Phillips Head Screwdriver #2 1
•	Straightedge 18" 1
•	Fine Ruler 12"1
•	Square 6" 1
•	Heavy Leather Gloves1 Pr.
•	Feeler Gauges 0.004", 0.016"1 Ea.
•	Wet/Dry Vacuum for Dust Collection 1
•	Vacuum Adaptor 4"1
•	Dust Hose Y-Fitting 4"1
•	Dust Hoses 4" (length as needed)2
•	Hose Clamps 4"4

# 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.



# **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.

Ma	in Components (Figures 2-3)	Qty
Α.	Bandsaw (not shown)	
B.	Table	
C.	Miter Gauge	
D.	Fence Assembly	
Ε.	Resaw Fence Attachment	
F.	Front Fence Rail	
G.	Rear Fence Rail	
H.	Guide Post Handwheel	1
Fas	steners	Qty
He	x Bolt M8-1.25 x 90 (Positive Stop)	1
	x Nut M8-1.25 (Positive Stop)	
	x Bolts M8-1.25 x 25 (Table)	
	ck Washers 8mm (Table)	
	t Washers 8mm (Table)	
	p Screws M6-1 x 16 (Rear Rail)	
	x Bolts M6-1 x 20 (Front Rail)	
Loc	ck Washers 6mm (Front Rail)	2
	t Washers 6mm (Front Rail)	
He	x Nut M8-1.25 (Fence Lock Lever)	1
Fla	t Washer 8mm (Attachment Lock Hand	le) 1
Tod	ols & Other Miscellaneous Items	Qty
He	x Wrench 5mm	1
	x Wrench 8mm	
Op	en End Wrench 10/13mm	1
	ole Pin	
	ole Insert	
	nce Lock Lever M8-1.25 x 22	
	nce Attachment Lock Handle M8-1.25 x	
Fer	nce Attachment T-Slot Nut	1
Me	talworking Blade 131½" x ½" (Shipped	
	Inside Lower Wheel Cover)	1

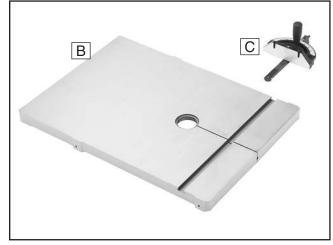


Figure 2. Table components.

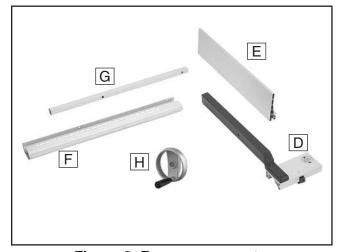


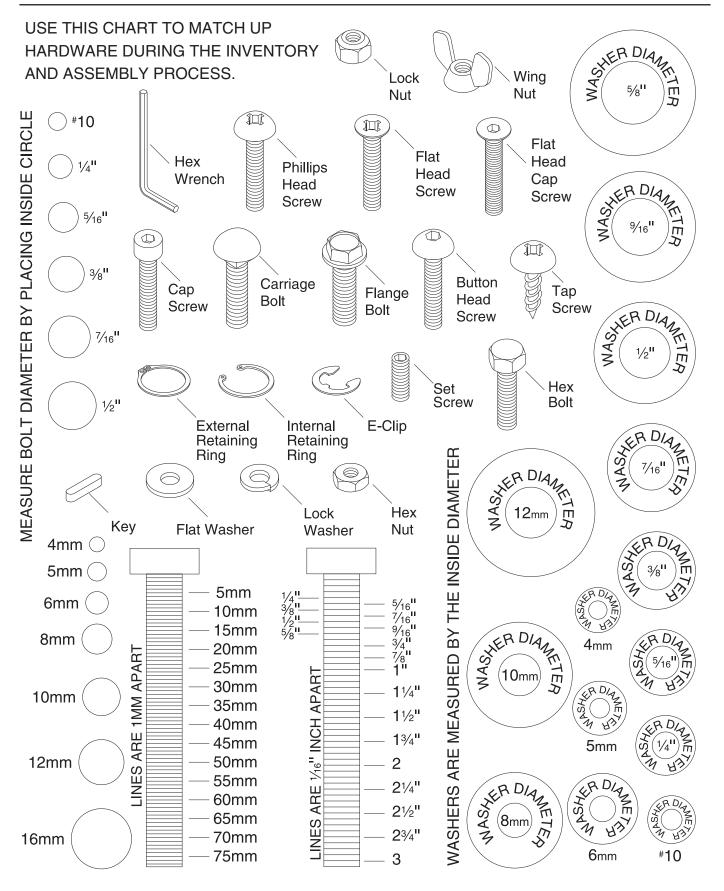
Figure 3. Fence components.

#### 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.



# **Hardware Recognition Chart**



### 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.
- Wipe off the surfaces. If your cleaner/degreaser is effective, the rust preventative will wipe off easily. If you have a plastic paint scraper, scrape off as much as you can first, then wipe off the rest with the rag.
- **4.** Repeat **Steps 2–3** as necessary until clean, then coat all unpainted surfaces with a quality metal protectant to prevent rust.

#### NOTICE

Avoid harsh solvents like acetone or brake parts cleaner that may damage painted surfaces. Always test on a small, inconspicuous location first.

#### **Site Considerations**

#### Floor Load

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

#### **Placement Location**

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your new machine. See **Figure 4** for the minimum working clearances.

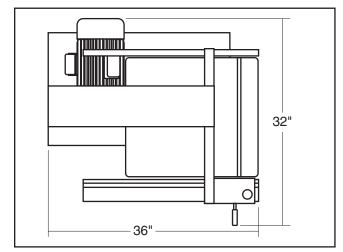
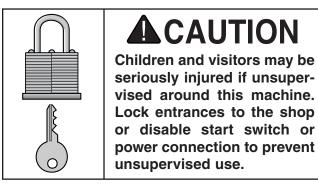


Figure 4. Minimum working clearances.





## Lifting & Placing



### **AWARNING**

**HEAVY LIFT!** 

Straining or crushing injury may occur from improperly lifting machine or some of its parts. To reduce this risk, get help from other people and use a forklift (or other lifting equipment) rated for weight of this machine.

Special care should be taken when moving this bandsaw. Only use the following methods to lift or move this bandsaw.

#### To move and place machine:

- 1. Use a forklift to move the bandsaw on the pallet near its final location.
- **2.** Unbolt the bandsaw from the pallet.
- Place the lifting hook through the eye bolt (see Figure 5) that is located on top of the machine.

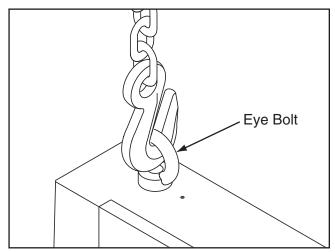


Figure 5. Lifting the bandsaw.

**4.** Carefully lift the machine and place where desired.

### **Anchoring to Floor**

Number of Mounting Holes	4
Diameter of Mounting Hardware7/1	6 <sup>''</sup>

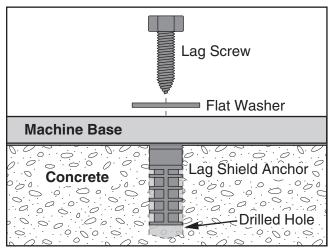
Anchoring machinery to the floor prevents tipping or shifting and reduces vibration that may occur during operation, resulting in a machine that runs slightly guieter and feels more solid.

If the machine will be installed in a commercial or workplace setting, or if it is permanently connected (hardwired) to the power supply, local codes may require that it be anchored to the floor.

If not required by any local codes, fastening the machine to the floor is an optional step. If you choose not to do this with your machine, we recommend placing it on machine mounts, as these provide an easy method for leveling and they have vibration-absorbing pads.

#### **Anchoring to Concrete Floors**

Lag shield anchors with lag screws (see below) are a popular way to anchor machinery to a concrete floor, because the anchors sit flush with the floor surface, making it easy to unbolt and move the machine later, if needed. However, anytime local codes apply, you MUST follow the anchoring methodology specified by the code.



**Figure 6**. Popular method for anchoring machinery to a concrete floor.

### **Assembly**

The machine must be fully assembled before it can be operated. Before beginning the assembly process, refer to **Needed for Setup** and gather all listed items. To ensure the assembly process goes smoothly, first clean any parts that are covered or coated in heavy-duty rust preventative (if applicable).

#### To assemble the bandsaw:

- 1. Thread (1) M8-1.25 hex nut half way up the length of the included M8-1.25 x 90 hex bolt (the longest one in the hardware bag).
- 2. Thread the M8-1.25 x 90 hex bolt (otherwise known as the "Positive Stop Bolt") into the casting near the trunnion base, as shown in Figure 7.

**Note:** The positive stop bolt acts as a table stop, which makes it easy to bring the table back to 90° after tilting it.

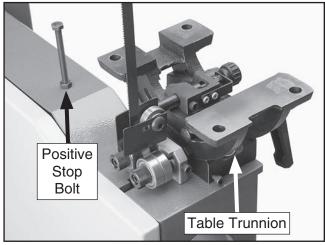


Figure 7. Positive stop bolt installed.

3. Slide guide post handwheel onto shaft and thread attached M6-1 x 20 cap screw through side of handwheel and against shaft to secure handwheel in place.

 Loosen blade tension by rotating the quickrelease tension lever clockwise as shown in Figure 8.

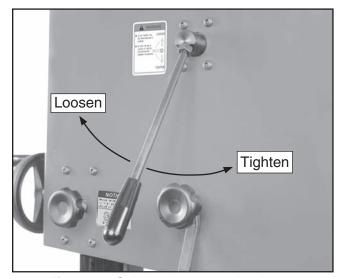


Figure 8. Quick-release tension lever.

 Adjust the upper and lower blade guides away from the blade. Refer to Adjusting Blade Guides on Page 22 for more details.



# **A**CAUTION

The saw blade is very sharp and can easily cut bare hands. Wear heavy leather gloves whenever handling blade.

**6.** Open the upper and lower wheel covers, and slide the blade off of both wheels.



### CAUTION

The table is heavy. To reduce the risk of injury when lifting, have another person help you during the next step.

7. Place the table onto the trunnion and position it so the mounting holes in the table are aligned with those on the trunnion.



- **8.** Attach the table to the trunnion with (4) M8-1.25 x 25 hex bolts, (4) 8mm lock washers, and (4) 8mm flat washers.
- **9.** With the blade teeth pointing downward, slide the blade through the table slot.
- 10. Slide the blade through the upper and lower blade guides, and mount it over the upper and lower wheels.
- **11.** Tighten the quick-release tension lever, then install the table insert and table pin.

**Note:** Keep the upper and lower blade guides adjusted away from the blade until the blade tracking and tension have been adjusted during later steps.

- **12.** Adjust the blade tension until the mark on the blade tension scale is between 4 and 6.
- **13.** Attach the rear rail to the table with (2) M6-1 x 16 cap screws (see **Figure 9**).
- **14.** Attach the front rail with (2) M6-1 x 20 hex bolts, (2) 6mm lock washers, and (2) 6mm flat washers, as shown in **Figure 9**.

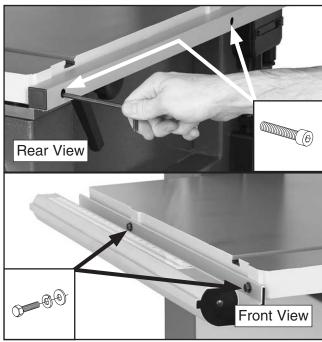


Figure 9. Rail installation.

15. Install (1) M8-1.25 hex nut on the fence lock lever, then thread the handle into the fence assembly (see Figure 10). Tighten the hex nut against the fence pivot block to secure the handle.

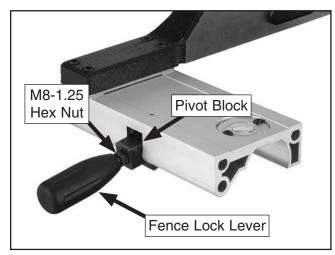


Figure 10. Handle installed on fence assembly.

- **16.** Place (1) 8mm flat washer on the fence attachment lock handle, slide it through the hole in the fence, then thread the T-slot nut onto the end of the lock handle threads.
- **17.** Slide the resaw fence over the T-slot nut, as shown in **Figure 11**, so the T-slot nut fits inside the channel of the resaw fence, then tighten the lock handle.

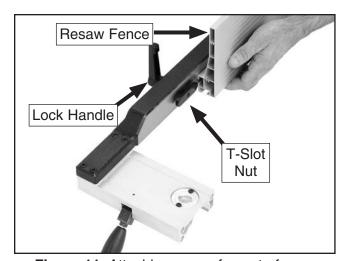


Figure 11. Attaching resaw fence to fence.

**18.** Pull the fence lock lever up and place the fence assembly on the front rail, as shown in **Figure 12**.



Figure 12. Correctly installed fence.

- 19. Adjust the rail pad against the rear rail until there is an even gap between the bottom of the fence and the table, then tighten the rail pad hex nut against the fence to secure the rail pad in place.
- 20. Slide the fence against the blade.
- **21.** Place a straightedge across the table and line it up over the fence scale indicator line.

# **A**CAUTION

This saw creates substantial amounts of fine dust while operating. Failure to use a vacuum system can result in respiratory illness. 22. Fit a 4" dust hose or 4" adapter over each dust port and secure in place with hose clamps, as shown in Figure 13.

**Note:** A tight fit is necessary for proper performance.

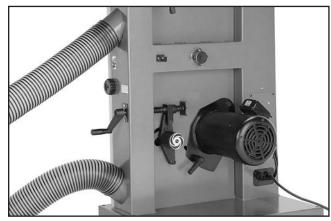


Figure 13. Dust hoses attached to dust ports.

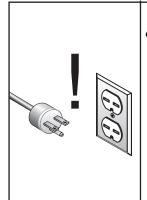
23. If cutting both wood and metal, connect this machine to a shop vacuum rather than a dust collector. Most dust collectors are not designed to capture metal shavings and doing so may lead to a fire from wood dust contacting hot metal cuttings or sparks from metal pieces hitting a dust collector impeller.

### **A**CAUTION

Mixing wood dust and metal cuttings may cause a fire. Do not collect metal shavings in a regular wood dust collector. Instead use a shop vacuum to collect metal cuttings.



### **Blade Tracking**



### WARNING

Serious personal injury can occur if the machine starts while your hand is touching the bandsaw wheel during tracking adjustments. Disconnect power from the bandsaw before performing blade tracking adjustments.

"Blade Tracking" refers to how the blade rides on the wheels. When tracking correctly, the blade rides in the center of the rim part of the wheels.

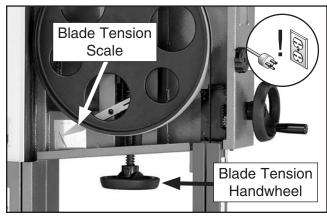
Blade tracking is primarily controlled by adjusting the upper wheel tilt. Tracking the blade in this manner is referred to as "Center Tracking," because you tilt the wheel until the blade rides in the center.

Another way to track the blade is known as "Coplanar Tracking." Coplanar tracking involves aligning the wheels so they are parallel and aligned (see **Wheel Alignment** on **Page 50**). When wheels are coplanar, vibration and heat are reduced during operation.

The wheels on the Model G0640X are factory aligned, so center tracking is the only adjustment that needs to be performed during setup.

#### To center track the blade:

- DISCONNECT MACHINE FROM POWER!
- 2. Make sure the upper and lower blade guides are adjusted away from the blade.
- Engage the quick tension lever and turn the blade tension handwheel until the tension scale (see Figure 14) reads between 4 and 6.



**Figure 14.** Blade tensioning controls.

### **A**CAUTION

Cast-iron spokes may have sharp edges and blade teeth may extend beyond edge of wheel, creating a laceration hazard. Be careful when turning wheel by hand.

- **4.** Spin the upper wheel by hand at least three times and watch how the blade rides on the crown of the wheel. Refer to **Figure 15** for an illustration of this concept.
  - If the blade rides in the center of the upper wheel and is centered on the peak of the wheel crown, then the blade is already tracked properly and no further adjustments are needed at this time.
  - If the blade does not ride in the center of the upper wheel and is not centered on the peak of the wheel crown, then continue with the following steps.

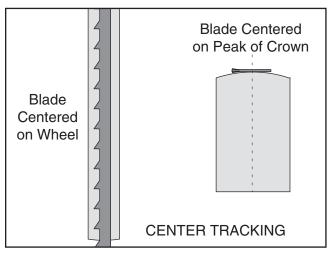


Figure 15. Center tracking profiles.



**5.** Loosen the lock lever shown in **Figure 16** so that the blade tracking knob can rotate.

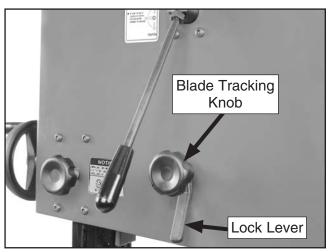


Figure 16. Blade tracking controls.

- 6. Spin the upper wheel with one hand and slowly rotate the tracking control knob with the other hand to make the blade ride in the center of the bandsaw wheel tire.
- 7. Close the upper wheel cover.
- 8. Fine tune the blade tracking (as instructed in the following **Test Run** procedure) while the bandsaw is running, then tighten the lock lever attached to the blade tracking knob.

#### **NOTICE**

Changes in the blade tension may change the blade tracking.

#### **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.

The Test Run consists of verifying the following: 1) The motor powers up and runs correctly, and 2) the power key switch disables the START button properly.

### **AWARNING**

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:

- Make sure you have read the safety instructions at the beginning of the manual and that you have followed all previous setup instructions in this section.
- Make sure all tools and objects used during setup are cleared away from the machine and that the wheel covers are closed and latched.



- **3.** Connect the machine to the power source.
- **4.** Lower the upper blade guide assembly to approximately 1" over the table.
- **5.** Turn the variable speed dial counterclockwise (toward the SLOW side) all the way.
- **6.** Turn the power key switch to the ON position.
- 7. Press START, allow the bandsaw to run for two seconds, then press STOP. This will give the blade enough time to start tracking off the wheel if the tracking is set incorrectly.
- Look through the blade tracking window (see Figure 17) and notice the position of the blade on the wheel.

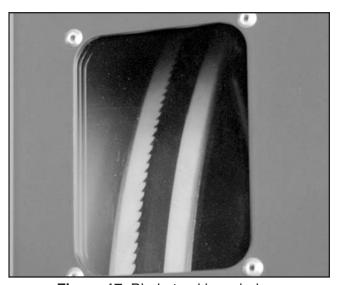


Figure 17. Blade tracking window.

- If the blade is positioned in the center of the wheel, continue to the next step.
- If the blade is positioned near the edge of one side of the wheel, then the tracking needs to be adjusted before continuing. Disconnect the saw from power and repeat the **Blade Tracking** instructions on **Page 19**.

- 9. Turn the bandsaw ON and watch the blade through the blade tracking window. SLOWLY adjust the tracking knob until the blade rides in the center of the wheel, then tighten the lock lever attached to the blade tracking knob.
- 10. Turn the variable speed to the FAST direction to make sure the blade speed increases, then return the variable speed dial all the way to the SLOW position.
- **11.** Turn the machine *OFF* by pressing the STOP button.

**Note:** The power key switch is provided to restrict unauthorized users from operating the bandsaw. It is not intended as a way for stopping the bandsaw during regular operation.

- **12.** Turn the power key switch to the OFF position.
- **13.** Test the power key switch by pressing the START button. The bandsaw should not operate while the power key switch is in the OFF position.

Note: Although the power key switch prevents the machine from starting, it will not completely cut all power to the machine. Do not rely on the power key switch to disconnect the bandsaw from power for service, adjustments, or maintenance. Instead, you must physically unplug the power cord to disconnect the machine from power.

If the previous tests were successful, the **Test Run** procedure is complete.

### **Blade Tensioning**

A properly tensioned blade is essential for making accurate cuts and is required before making many bandsaw adjustments. (Every time you replace the blade, perform this procedure because all blades tension differently.) The numbers on the tension scale are arbitrary, but help you keep track of different tensions for different blades.

#### To tension the bandsaw blade:

- 1. Complete the **Test Run** on **Page 20** and make sure the blade is tracking properly.
- 2. Raise the upper blade guide assembly as high as it will go, and adjust the upper and lower blade guides at least a 1/4" away from the blade.

**Note:** This procedure will NOT work if the blade guides are close to the blade.

- Engage the quick tension lever to the tightened position and turn the blade tension handwheel until the tension scale is at 5.
- 4. Turn the bandsaw *ON*.
- Slowly release the tension one quarter of a turn at a time. When you see the bandsaw blade start to flutter, stop decreasing the tension.
- **6.** Now, slowly increase the tension until the blade stops fluttering, then tighten the tension another quarter turn.
- Look at what the tension gauge reads and use that as a guide for tensioning that blade in the future.

**Note:** Always untension the blade after use to increase bearings and blade lifespan.

**8.** Re-adjust the blade tracking as instructed on **Page 19**.

#### NOTICE

To reduce blade stretching, remove tension from the blade when not in use.

# Adjusting Blade Guides

The blade guides provide side-to-side support to help keep the blade straight while cutting. The blade guides are designed to be adjusted in two ways—forward/backward and side-to-side.

Items Needed	Qty
Hex Wrench 5mm	1
Feeler Gauge 0.004"	1

#### To adjust the upper and lower blade guides:

- 1. Make sure the blade is tracking properly and that it is correctly tensioned.
- 2. DISCONNECT BANDSAW FROM POWER!
- **3.** Familiarize yourself with the upper blade guide controls shown in **Figure 18**.

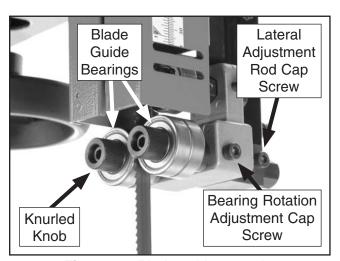


Figure 18. Blade guide controls.

**4.** Loosen the cap screw on the lateral adjustment rod and adjust the blade guides until the edges of the bearings are 1/16" behind the blade gullets, as illustrated in **Figure 19**.

**Note:** The <sup>1</sup>/<sub>16</sub>" spacing is ideal, although with larger blades it may not be possible. In such cases, adjust the guide bearings as far forward as possible to the blade gullets, and still maintain the proper support bearing spacing adjustment.



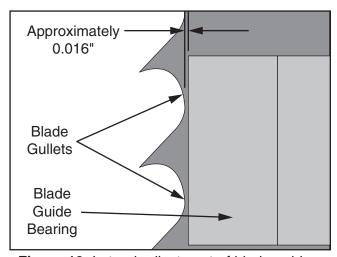


Figure 19. Lateral adjustment of blade guides.

#### **NOTICE**

Make sure that the blade teeth will not contact the guide bearings when the blade is against the rear support bearing during the cut or the blade teeth will be ruined.

- Tighten the cap screw on the lateral adjustment rod.
- **6.** Loosen the bearing rotation adjustment cap screws.
- 7. Use the knurled knob to rotate the bearings 0.004" away from the blade.
- **8.** Tighten the cap screw to lock the blade guide bearings in position.
- **9.** Repeat this procedure for the lower guides. (All though the lower guides are set up a little differently, the concept is the same.)

#### **NOTICE**

Whenever changing a blade or adjusting tension and tracking, the upper and lower blade support bearings and guide bearings must be properly adjusted before cutting operations.

# Adjusting Support Bearings

#### **NOTICE**

Whenever changing a blade or adjusting tension and tracking, the upper and lower blade support bearings and blade guide bearings must be properly adjusted before cutting operations.

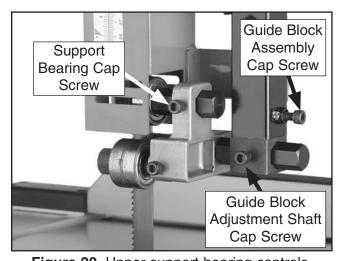
The support bearings are positioned behind the blade for support during cutting operations. Proper adjustment of the support bearings is an important part of making accurate cuts and also keeps the blade teeth from coming in contact with the guide bearings while cutting.

#### **Adjusting Upper Support Bearings**

Items Needed	Qty
Hex Wrench 5mm	1
Machinist's Square 6"	1
Feeler Gauge 0.016"	1

#### To adjust the upper support bearings:

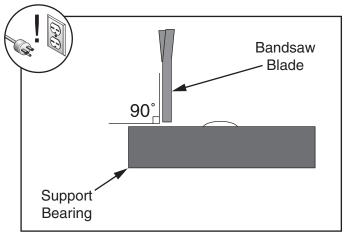
- 1. Make sure the blade is tracking properly and that it is correctly tensioned.
- 2. DISCONNECT BANDSAW FROM POWER!
- **3.** Familiarize yourself with the upper support bearing controls shown in **Figure 20**.



**Figure 20.** Upper support bearing controls.

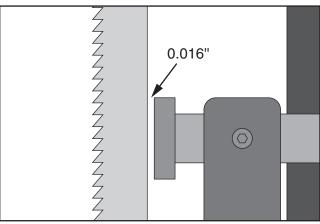


**4.** Check that the blade is approximately 90° to the face of the support bearing as illustrated in **Figure 21** (it is not critical that it be precisely 90°—just make sure it is close.)



**Figure 21.** Blade should be perpendicular (90°) to the face of the support bearing.

- If the support bearing is 90° to the blade, no adjustment to the guide block rotation is necessary.
- If the support bearing is not 90° to the blade, loosen the two guide block assembly cap screws, rotate the blade guide assembly side-to-side, until the blade is 90° the face of the support bearing as illustrated in **Figure 21**, then tighten the guide block assembly cap screws and readjust the blade guides.
- **5.** Loosen the support bearing cap screw.
- 6. Place a 0.016" feeler gauge between the support bearing and the blade, and position the bearing 0.016" away from the back of the blade, as illustrated in Figure 22.



**Figure 22.** Blade should be aligned approximately 0.016" away from the bearing edge.

7. Tighten the support bearing cap screw.

#### 

#### To adjust the lower support bearings:

- 1. Make sure the blade is tracking properly and that it is correctly tensioned.
- 2. DISCONNECT BANDSAW FROM POWER!
- **3.** Familiarize yourself with the lower support bearing controls shown in **Figure 23**.

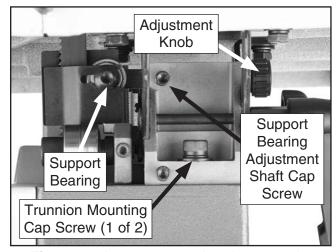
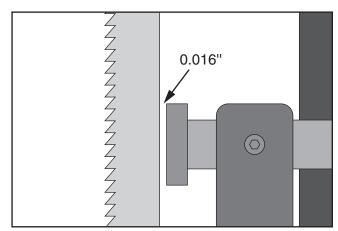


Figure 23. Lower support bearing controls.

- **4.** Check to make sure the support bearing is positioned directly behind the blade.
  - —If the support bearing is positioned directly behind the blade, continue on to the next step.
  - —If the support bearing is not positioned directly behind the blade, loosen the trunnion mounting cap screws and shift the trunnion assembly over until the support bearing is behind the blade.

**Note:** The table must be re-aligned with the blade if the trunnion assembly is moved. Refer to **Aligning Table** on **Page 26**.

- **5.** Loosen the cap screw on the support bearing adjustment shaft.
- 6. Place a 0.016" feeler gauge between the support bearing and the blade, and use the adjustment knob to position the bearing 0.016" away from the back of the blade (similar to **Figure 24**).



**Figure 24.** Blade should be aligned approximately 0.016" away from the bearing edge.

7. Tighten the cap screw to keep the support bearing locked in place.

# Adjusting Positive Stop

An adjustable positive stop allows the table to easily return to 90° after tilting. After adjusting the positive stop to 90°, the pointer on the table tilt scale should be adjusted to the 0° mark to ensure that the table tilt scale is accurate.

Items Needed	Qty
Open-End Wrenches 13mm	2
Machinist's Square 6"	1
Phillips Head Screwdriver #2	1

#### To set the positive stop 90° to the blade:

- Make sure the blade is correctly tensioned as described in the Blade Tensioning instructions on Page 22.
- 2. DISCONNECT MACHINE FROM POWER!
- Loosen the lock handle that secures the table trunnions.
- **4.** Loosen the hex nut that locks the positive stop bolt in place (see **Figure 25**).

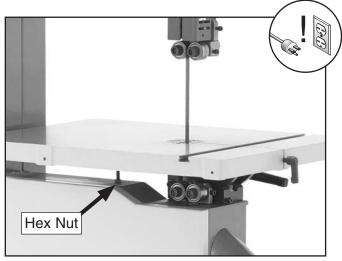


Figure 25. Location of positive stop bolt hex nut.

**5.** Raise the upper blade guide assembly and place a 6" machinist's square or try-square on the table next to the side of the blade, as illustrated in **Figure 26**. Adjust the positive stop bolt to raise or lower the table until the table is 90° to the blade.

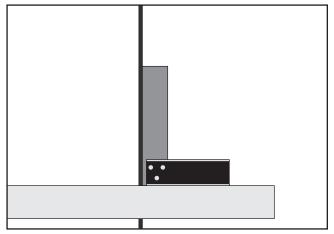


Figure 26. Squaring table to blade.

- 6. Tighten the lock handle, and lock the positive stop bolt by tightening the hex nut against the casting. Ensure that the bolt does not turn by holding it with another wrench while tightening the hex nut.
- 7. Loosen the pointer screw at the table tilt scale.
- **8.** Align the tip of the pointer with the 0° mark on the table tilt scale.
- **9.** Tighten the pointer screw.

### **Aligning Table**

To ensure cutting accuracy when the table is first installed, the table should be aligned so that the miter slot is parallel to the bandsaw blade. This procedure works best with a 3/4" blade installed.

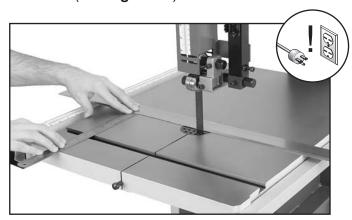
Items Needed	Qty
Wrench or Socket 13mm	1
Straightedge 18"	1
Fine Ruler 12"	1

## To align the table so the miter slot is parallel to the bandsaw blade:

- 1. Make sure that the blade is tracking properly and that it is correctly tensioned.
- 2. DISCONNECT MACHINE FROM POWER!
- 3. Loosen the table mounting bolts that secure the trunnions to the table.
- **4.** Place a straightedge on the table, so it lightly touches both the front and back of the blade.

**Note:** Make sure the straightedge fits between the teeth so the tooth set does not skew it.

5. Use a fine ruler to gauge the distance between the straightedge and the miter slot. The distance you measure should be the same at both the front and the back of the table (see Figure 27).



**Figure 27.** Measuring for miter slot to be parallel with blade.

- **6.** Adjust the table for proper alignment.
- **7.** Tighten the table mounting bolts.



## **Aligning Fence**

The fence must be parallel to the miter slot in order to yield accurate results.

Tool Needed	Qty
Hex Wrench 5mm	1

## To check/align the fence parallel with the miter slot:

- 1. Mount the fence next to the miter slot and examine the edges of each.
  - —If the fence is parallel with the miter slot, then no adjustments are necessary.
  - —If the fence is NOT parallel with the miter slot, continue to **Step 2**.
- **2.** Loosen the four cap screws located on the top face of the fence (**Figure 28**).



Figure 28. Four fence cap screws.

- Adjust the fence face parallel with the edge of the miter slot.
- **4.** Tighten the four cap screws, being careful not to move the fence.

### **NOTICE**

Adjusting the fence parallel to the miter slot does not guarantee straight cuts. The miter slot may need to be adjusted parallel to the side of the blade, which is covered in the Aligning Table instructions on Page 26.

### Miter Gauge

The miter gauge needs to be calibrated to the blade when it is first mounted in the miter slot.

Items Needed	Qty
Machinist's Square 6"	1
Open-End Wrench 7mm	1
Phillips Head Screwdriver #2	1

#### To calibrate the miter gauge:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Place a square on the table so one edge is touching the blade face and the other edge is touching the miter gauge (see **Figure 29**).

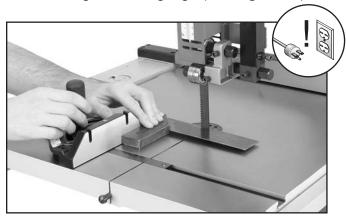


Figure 29. Squaring miter gauge to blade.

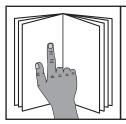
- Loosen the lock knob on the miter gauge and adjust it until flush with the edge of the square.
- **4.** Tighten the lock knob, and verify the setting.

**Note:** Sometimes the tightening procedure can affect the adjustment.

- 5. Adjust the stop screw and related lock nut on the underside of the miter gauge. This allows the miter gauge to return to the measurement repeatedly without using the square.
- 6. Loosen the screw that secures the angle pointer and adjust the pointer to the 0° mark on the scale, then tighten the screw.
- 7. Repeat **Steps 2–5** with the two 45° stops, using a 45° square as a gauge.



## **SECTION 4: OPERATIONS**



#### **AWARNING**

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

### **AWARNING**

Eye injuries, respiratory problems, or hearing loss can occur while operating this tool. Wear personal protective equipment to reduce your risk from these hazards.







#### **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.

### WARNING

Children or untrained people can be seriously injured by this machine. This risk increases with unsupervised operation. To help prevent unsupervised operation, always disable switch before leaving machine unattended. Make sure to place key in a well-hidden or secure location!

#### **Guide Post**

The guide post, shown in **Figure 30**, connects the upper blade guide assembly to the bandsaw. The guidepost allows the blade guide assembly to move up or down via a rack and pinion. In order to cut accurately, the blade guide assembly must be no more than ½" from the top of the workpiece at all times—this positioning provides the best support for the blade.

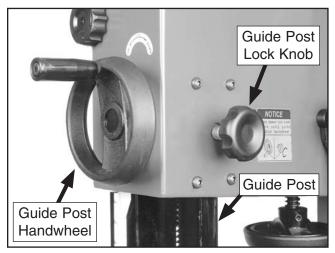


Figure 30. Guide post controls.

#### To adjust guide post:

- 1. Make sure that the blade tension, blade tracking, support bearing, and blade guides are adjusted correctly.
- 2. Loosen the guide post lock knob shown in Figure 30.
- Turn the guide post handwheel to raise or lower the guide post until the upper blade guide assembly is within 1/4" from the top of the workpiece.
- Lock the guide post in place with the lock knob.



### Quick-Release Blade Tension

Bandsaw blades stretch when tensioned and during operation. Eventually, an over-stretched blade will break. To minimize over-stretching, blade tension should always be removed after using the bandsaw.

The Model G0640X is equipped with a quick-release blade tension device, which is controlled by the lever shown in **Figure 31**.

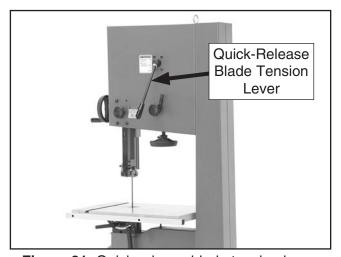
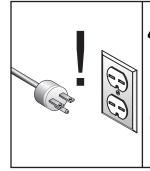


Figure 31. Quick-release blade tension lever.

When the lever is pointed down, the blade is tensioned. When the lever is pointed up, the blade is not tensioned.

Once blade tension has been properly set for a certain blade (refer to **Blade Tensioning** on **Page 22**), typically the lever can be used to tension/ untension that blade without further adjustment with the blade tensioning knob.

#### **Table Tilt**



#### WARNING

Personal injury or death can occur if the bandsaw starts during table adjustment. Disconnect power from the bandsaw before performing table adjustments.

The bandsaw table will tilt 5° left and 45° right to provide a wide range of cutting options. Remove the positive stop bolt to tilt the table to the left.

#### To tilt the table:

- DISCONNECT BANDSAW FROM POWER!
- 2. Loosen the lock handle on the table trunnion shown in **Figure 32**.

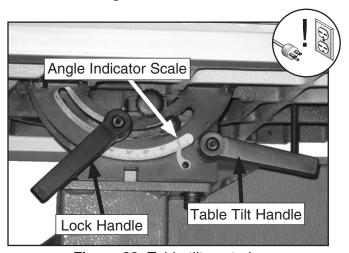


Figure 32. Table tilt controls.

- Turn the table tilt handle to position the table to the desired angle of tilt. Refer to the angle gauge on the table trunnion scale for the tilting angle.
- **4.** Retighten the lock handle to secure the table.

### **Blade Terminology**

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

#### **Blade Terminology**

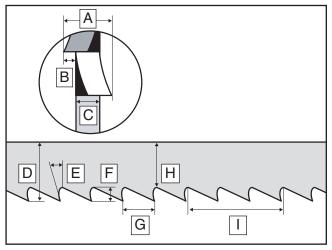


Figure 33. Bandsaw blade terminology.

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

#### **Blade Selection**

Selecting the right blade for the cut requires a knowledge of various blade characteristics. If you will be cutting metal, refer to **Page 40** for additional considerations.

#### **Blade Length**

Measured by the circumference of the band, blade length varies by saw.

Model	Blade Length
G0640X	131½"

#### **Blade Width**

Measured from the back of the blade to the tip of the blade tooth (the widest point), blade width is often the first consideration given to blade selection. Blade width dictates the largest and smallest curve that can be cut, as well as how accurately it can cut a straight line—generally the wider the blade, the straighter it will cut.

Model	Blade Width Range
G0640X	<sup>1</sup> / <sub>8</sub> " <b>–1</b> "

Curve Cutting: Determine the smallest radius curve that will be cut on your workpiece and use the list below to select the correct blade width.

Blade Width	Radius
1/8"	1/8"
3/16"	<sup>3</sup> /8"
1/4''	<sup>5</sup> /8''
3/8''	1½''
1/2''	<b>2</b> ½''
5/8''	3 <sup>3</sup> / <sub>4</sub> ''
3/4"	5 <sup>1</sup> / <sub>2</sub> ''

 Straight Cutting: Use the largest width blade that you own. Narrow blades can cut tight curves (a small radius) but are not very good at cutting straight lines because they naturally wander (blade lead). Wide blades excel at cutting straight lines and are less prone to wander.



#### **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 34**.

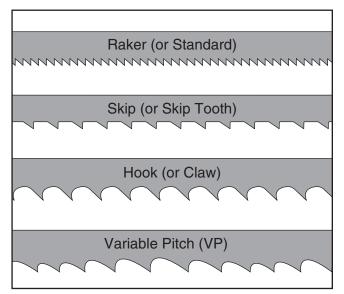


Figure 34. Bandsaw blade tooth types.

**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 35**).

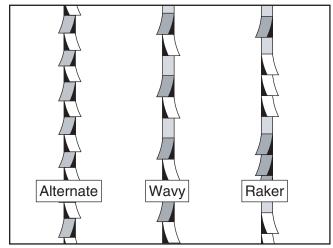


Figure 35. Bandsaw tooth sets.

**Alternate:** An all-purpose arrangement of bending the teeth evenly left and right of the blade. Generally used when exceptionally smooth, precise cuts are needed for cutting wood or mild steel.

**Wavy:** Generally three or more teeth in a group that are bent one way with a non-set tooth before the next group bent the other way. Typically used for straight cuts in thin metals or thin-wall tubing. Generally not used in woodworking.

**Raker:** There are three teeth in a recurring group—one bent left, next one bent right, and then a non-set tooth. The raker set is ideal for clearing chips on thick stock. It is often also used with contour, profile, and long cuts. This type of set leaves rough cut marks.

#### **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 woods and metals and coarse pitched blades on softer woods and metals.



### **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.
- Forcing or twisting a wide blade around a short radius.
- Feeding the workpiece too fast.
- Dull or damaged teeth.
- Over-tensioned blade.
- Top blade guide assembly set too high above the workpiece. Adjust the top blade guide assembly so that there is approximately ½" between the bottom of the assembly and the workpiece.
- Using a blade with a lumpy or improperly finished braze or weld.
- Continuously running the bandsaw when not in use.
- Leaving the blade tensioned when not in use.
- Using the wrong pitch (TPI) for the workpiece thickness. The general rule of thumb is to have at least two 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 the correct speed for the blade and material of the operation.

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

- **2.** Reduce the feed pressure by  $\frac{1}{2}$  for the first 50–100 in<sup>2</sup> of material cut.
- To avoid twisting the blade when cutting, adjust the feed pressure when the total width of the blade is in the cut.
- (For Metal Cutting Only) Use the Metal Chip Inspection Chart on Page 41 to check the blade efficiency for metal cutting.



### **Blade Changes**



### **AWARNING**

Always disconnect power to the machine when changing blades. Failure to do this may result in serious personal injury.



## **A**CAUTION

All saw blades are dangerous and may cause personal injury. To reduce the risk of being injured, wear leather gloves when handling saw blades.

#### Removing a Blade

- 1. DISCONNECT MACHINE FROM POWER!
- **2.** Release the blade tension by pointing the blade tension quick-release lever up.
- 3. Remove the table insert and the table pin. Adjust the upper and lower guide bearings as far away as possible from the blade.
- **4.** Open the upper and lower wheel covers, and with gloved hands, slide the blade off of both wheels.
- **5.** Rotate the blade 90° and slide it through the slot in the table.

#### Installing a Blade

- DISCONNECT MACHINE FROM POWER!
- **2.** Open the upper and lower wheel covers.
- 3. With gloved hands, slide the blade through the table slot, ensuring that the teeth are pointing down toward the table.

**Note:** If the teeth will not point downward in any orientation, the blade is inside-out. Remove the blade, and twist it right side-out.

**4.** Slip the blade through the guides, and mount it on the upper and lower wheels (see **Figure 36**).

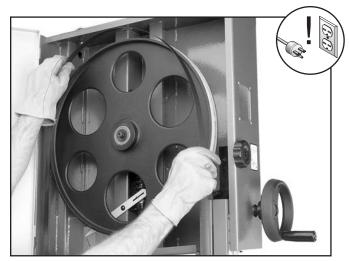


Figure 36. Placing blade on the wheels.

- Tighten the blade tension lever by pointing it down.
- 6. Apply tension to the blade by turning the tension control knob. Rotate the upper wheel slowly by hand as tension is applied to allow the blade to center itself on the wheel. Adjust tracking if needed.
- 7. Adjust tension as described on Page 22.
- Adjust the upper/lower guide bearings and the support bearings, as described on Pages 22–23.
- **9.** Close the wheel covers.
- **10.** Replace the table insert and table pin, being sure not to use excessive force when inserting the table pin.



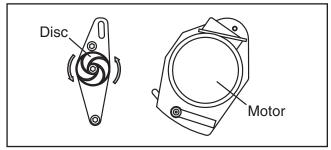
### **Blade Speed**

This bandsaw features a variable blade speed between 100–3600 FPM. There are two blade speed ranges. A fast range for wood cutting and a slow range for metal cutting.

The variable speed dial controls the blade speed within each range. The position of the V-belts behind the lower wheel cover control which speed range is activated. A disc with a spiral shape is located near the motor as a reminder to the operator which blade speed range is engaged. The disc spins when the metal cutting speed range is engaged.

The V-belt tension is controlled in two ways, depending on which position it is in. When in the "wood" position, the V-belt tension is controlled by the position of the motor, which pivots to tension/loosen the belt.

At "metal" position, the V-belt tension is controlled by the hand crank located between the dust ports.



**Figure 37.** Spiral disc near motor (spins when belts are positioned for metal cutting).

#### To change the V-belt positions:

- DISCONNECT MACHINE FROM POWER!
- 2. Open the lower wheel cover.
- 3. Loosen the V-belt tension.
- **4.** Refer to **Figure 38** to locate the correct V-belt position for the desired speed range.

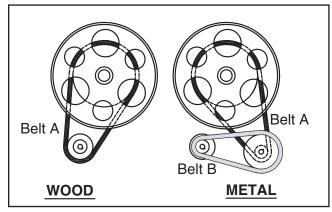


Figure 38. V-belt positions for speed ranges.

- **5.** Move the V-belt(s) to the desired position.
- 6. Tension the V-belt(s) to deflect approximately ½" (see **Figure 39**).

Note: If one belt is used more than the other belt, it will stretch slightly under normal conditions. This means that one belt may be looser than then other when both belts are installed. This is normal. Overtightening one belt in attempt to tighten the other will decrease the lifespan of the bearings in the pulleys.

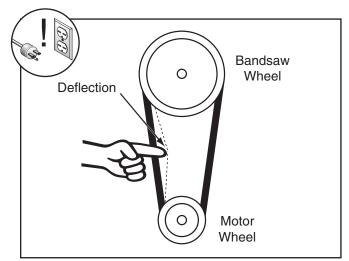


Figure 39. V-belt deflection.

- Close all wheel covers.
- **8.** Press the button below the "Blade Speed" digital display to light up either the "Wood" or "Metal" light so it matches your V-belt setting.



## **SECTION 5: WOOD CUTTING**

## Workpiece Inspection

Some wood workpieces are not safe to cut or may require modification before they are safe to cut.

Before cutting wood, get in the habit of inspecting all workpieces for the following:

- Foreign Objects: Nails, staples, dirt, rocks and other foreign objects are often embedded in wood. While cutting, these objects can become dislodged and hit the operator or break the blade, which might then fly apart. Always visually inspect your workpiece for these items. If they cannot be removed, do NOT cut the workpiece.
- Large/Loose Knots: Loose knots can become dislodged during the cutting operation. Large knots can cause blade damage. Choose workpieces that do not have large/ loose knots or plan ahead to avoid cutting through them.
- Wet or "Green" Stock: Cutting wood with a moisture content over 20% causes unnecessary wear on the blade and yields poor results.
- Excessive Warping: Workpieces with excessive cupping, bowing, or twisting are dangerous to cut because they are unstable and can move unpredictably when being cut. DO NOT use workpieces with these characteristics!
- Minor Warping: Workpieces with slight cupping can be safely supported if the cupped side faces the table or fence. On the contrary, a workpiece supported on the bowed side will rock during a cut, leading to loss of control.

## **Cutting Tips**

- Keep the upper blade guide assembly adjusted to within 1/4" of the workpiece.
- Replace, sharpen, and clean blades as necessary. Make adjustments periodically to keep the saw running in top condition.
- Use light and even pressure while cutting.
   Light contact with the blade makes it easier to follow lines and prevents extra friction.
- Avoid twisting the blade when cutting around tight corners. Allow the blade to saw around the corners.
- Misusing the saw or using incorrect techniques is unsafe and results in poor cuts.
   Remember—the blade does the cutting with the operator's guidance.
- Never start a cut with the blade in contact with the workpiece, and do not start a cut on a sharp edge.
- Use the right blade for the cutting task.
- Avoid cutting round objects, such as dowels, that cannot be properly supported or locked in place against the miter gauge. Unsupported round pieces can entangle your hands in the moving blade, causing serious injury.



## Ripping

Ripping is the process of cutting with the grain of the wood stock. For plywood and other processed wood, ripping simply means cutting down the length of the workpiece.

#### To make a rip cut:

- 1. Adjust the fence to match the width of the cut on your workpiece and lock the fence in place.
- Adjust the blade guide assembly to the correct height.
- 3. After all safety precautions have been met, turn the bandsaw ON. Slowly feed the workpiece into the blade and continue with the cut until the blade is completely through the workpiece. Figure 40 shows a typical ripping operation.

**Note:** If you are cutting narrow pieces, use a push stick to protect your fingers.



Figure 40. Ripping with a push stick.

## Crosscutting

Crosscutting is the process of cutting across the grain of wood. For plywood and other processed wood, crosscutting simply means cutting across the width of the material.

#### To make a 90° crosscut:

- **1.** Mark the workpiece on the edge where you want to begin the cut.
- 2. Adjust the blade guide assembly to the correct height and make sure the miter gauge is set to 90°.
- **3.** Move the fence out of the way. Place the workpiece evenly against the miter gauge.
- **4.** Hold the workpiece against the miter gauge and line up the mark with the blade.
- 5. After all safety precautions have been met, turn the bandsaw ON. Slowly feed the workpiece into the blade and continue the cut until the blade is all the way through the workpiece. Figure 41 shows a typical crosscutting operation.



**Figure 41.** Crosscutting with miter gauge.

## Resawing

Resawing (see **Figure 42**) is the process of cutting a board into two or more thinner boards. The maximum board width that can be resawn is limited by the maximum cutting height of the bandsaw.

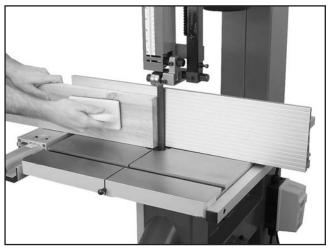


Figure 42. Resawing lumber.

One of the most important considerations when resawing is blade selection. Generally, wide blades are best for resawing. In most applications, a hook or a skip tooth style will be desirable. Choose blades with fewer teeth-per-inch (from 3 to 6), because they have larger gullets for clearing sawdust, reducing heat buildup, and reducing strain on the motor.

## **AWARNING**

When resawing thin pieces, a wandering blade (blade lead) can tear through the surface of the workpiece, exposing your hands to the blade teeth. Always use push blocks when resawing and keep your hands clear of the blade.

#### To resaw a workpiece:

- 1. Verify that the bandsaw is setup properly and that the table is perpendicular to the blade.
- 2. Use the widest blade your bandsaw will accept.

Note: The blade must also be sharp and clean.

**3.** Install the resaw fence and set it to the desired width of cut and lock it in place.

## NOTICE

The scale on the front rail will NOT be accurate when using the resaw fence.

- **4.** Support the ends of the board if necessary.
- 5. Turn the bandsaw ON.
- 6. Using push paddles and a push stick, keep pressure against the fence and table, and slowly feed the workpiece into the moving blade until the blade is completely through the workpiece (see **Figure 42**).



## **Stacked Cuts**

One of the benefits of a bandsaw is its ability to cut multiple copies of a particular shape by stacking a number of workpieces together. Before making stacked cuts, ensure that both the table and the blade are properly adjusted to 90°. Otherwise, any error will be compounded.

#### To complete a stacked cut:

- 1. Align your pieces from top to bottom to ensure that each piece has adequate scrap to provide a clean, unhampered cut.
- 2. Secure all the pieces together in a manner that will not interfere with the cutting. Hot glue on the edges works well, as do brad nails through the waste portion. (Be careful not to cut into the brads or you may break the blade!)
- **3.** On the face of the top piece, lay out the shape you intend to cut.
- 4. Make relief cuts perpendicular to the outline of your intended shape in areas where changes in blade direction could strain the woodgrain or cause the blade to bind.
- Cut the stack of pieces as though you were cutting a single piece. Follow your layout line with the blade kerf on the waste side of your line, as shown in Figure 43.

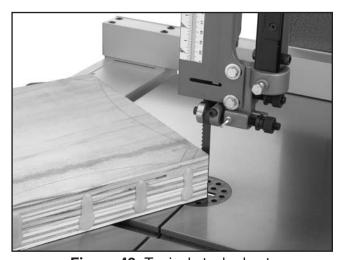


Figure 43. Typical stacked cut.

## **Cutting Curves**

When cutting curves, simultaneously feed and turn the stock carefully so that the blade follows the layout line without twisting. If a curve is so abrupt that you must repeatedly back up and cut a new kerf, use a narrower blade, a blade with more TPI (teeth per inch), or make more relief cuts.

Always make short cuts first, then proceed to the longer cuts. Relief cuts will also reduce the chance that the blade will be pinched or twisted. Relief cuts are cuts made through the waste portion of the workpiece and are stopped at the layout line. As you cut along the layout line, waste wood is released from the workpiece, alleviating any pressure on the back of the blade.

## **Cutting Circles**

Bandsaws can cut circles with the use of a shopbuilt or aftermarket jig. Typically, these jigs work on the same principal as a drafting compass.

Figure 44 below shows a generic shop built jig that can be easily made of wood, dowels, and wood screws. To set it up, advance the jig forward until the stop dowel hits the table, then pencil a square "radius" line across the jig. A nail can be placed anywhere on the radius line, depending on the size of the desired circle. Draw an X across the bottom of the workpiece and drill a small pivot hole in the center of the X to place on the nail. Place the workpiece on the nail, advance the jig to the stop dowel, place rear dowel, then cut circle.

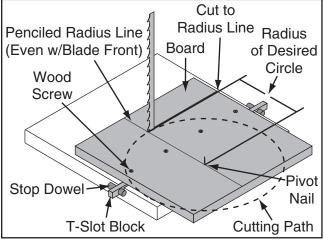


Figure 44. Example shop-built circle cutting jig.

Model G0640X (Mfd. Since 12/20)

## **SECTION 6: METAL CUTTING**

## Workpiece Inspection

Some metal workpieces are not safe to cut with a vertical metal cutting bandsaw; instead, a different tool or machine should be used.

Before cutting, inspect the material for any of the following conditions and take the necessary precautions:

- Small or Thin Workpieces: Small or thin workpieces are dangerous to cut if held by hand—avoid cutting these workpieces if possible. If you must cut a small or thin workpiece, attach it to or clamp it between larger scrap pieces that will both support the workpiece through the cut and keep your fingers away from the blade. Some thin sheet metals will not withstand the forces from this bandsaw during cutting; instead, use a shear, nibblers, or sheet metal nippers to cut these pieces.
- Round/Unstable Workpieces: Workpieces
  that cannot be properly supported or stabilized without a vise should not be cut on a
  vertical metal-cutting bandsaw. Examples
  are chains, cables, round or oblong-shaped
  workpieces, workpieces with internal or builtin moving or rotating parts, etc.
- Material Hardness: Always factor in the hardness of the metal before cutting it. Hardened metals will take longer to cut, may require lubrication, and may require a different type of blade in order to efficiently cut them.
- Tanks, Cylinders, Containers, Valves, Etc: Cutting into containers that are pressurized or contain gasses or liquids can cause explosions, fires, caustic burns, or machine damage. Avoid cutting any of these types of containers unless you have verified that the container is empty and it can be properly supported during a cut.

Magnesium: Pure magnesium burns easily. Cutting magnesium with a dull blade can create enough friction to ignite the small magnesium chips into a fire. Avoid cutting magnesium if possible.

## **Cutting Tips**

- Keep the upper blade guide assembly adjusted to within ½" of the workpiece.
- Avoid overheating your blade. Keep an oil can nearby and squirt the blade near the cutting area when it gets hot or you see a small amount of smoke. Different metals require different types and amounts of lubrication.
- Replace, sharpen, and clean blades as necessary. Make adjustments periodically to keep the saw running in top condition.
- Use light and even pressure while cutting.
   Light contact with the blade makes it easier to follow lines and prevents extra friction.
- Avoid twisting the blade when cutting around tight corners. Allow the blade to saw around the corners.
- Misusing the saw or using incorrect techniques is unsafe and results in poor cuts.
   Remember—the blade does the cutting with the operator's guidance.
- Never start a cut with the blade in contact with the workpiece, and do not start a cut on a sharp edge.
- Pay attention to the characteristics of the chips when cutting—they are good indicators of proper blade speed and feed rate. Page 41 shows the basic chip characteristics and what they mean.
- Use the right blade for the cutting task.



# Choosing Blades and Speeds

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

The chart below 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. However, for exact specifications of bandsaw blades, contact the blade manufacturer.

#### To select the correct blade TPI:

 Measure the material thickness. This measurement is the length of cut taken from where the tooth enters the workpiece, sweeps through, and exits the workpiece.

- Refer to the "Material Width/Diameter" row of the blade selection chart in Figure 45 and read across to find the workpiece thickness you need to cut.
- **3.** Refer to the "Material Shapes" row and find the shape and material to be cut.
- 4. In the applicable row, read across to the right and find the box where the row and column intersect. Listed in the box is the minimum TPI recommended for the variable tooth pitch blades.
- 5. The "Cutting Speed Rate Recommendation" section of the chart 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.

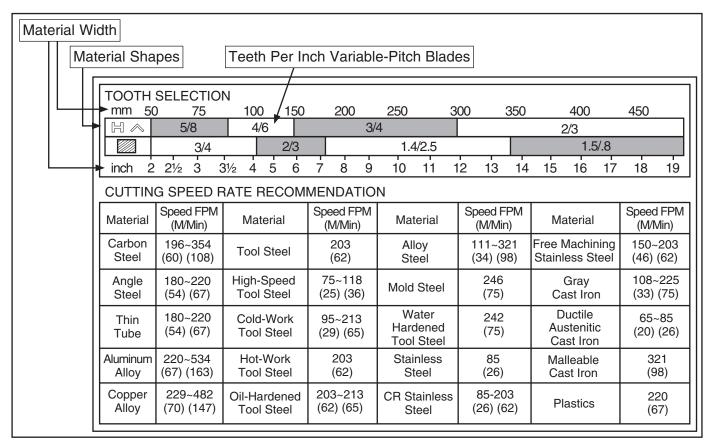


Figure 45. Blade selection and speed chart for metal cutting.



# **Metal 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
0	Thin & Curled	Silver	Good	Good	
~/~	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
0	Hard, Strong & Thick	Silver or Light Brown	Good	Decrease Slightly	Check Blade Pitch
(e)	Hard & Thin	Silver	Increase	Decrease	Check Blade Pitch
	Straight & Thin	Silver	Good	Increase	
	Powdery	Silver	Decrease	Increase	
	Curled Tight & Thin	Silver	Good	Decrease	Check Blade Pitch

Figure 46. Chip inspection chart.

## **SECTION 7: 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.

#### T31767—10-Gal. 4 Peak HP Contractor Wet/ **Dry Shop Vac**

Features a 4.0 Peak HP motor, onboard tool and cord storage, and a high efficiency filtration system. Equipped with 18-foot power cord, tank drain, and easy roll casters. Rear blower port converts vacuum to a blower. Includes (1) 12' x 1.5" diameter Lock-On® hose.



Figure 47. Contractor Shop•Vac® Wet/Dry Vacuum.

#### **Replacement Blades**

These replacement blades are milled for exact tooth set and are made with high quality tool steel.

#### 1311/2" Carbon Steel Replacement Blades

MODEL	WIDTH	TPI & TYPE
H4803	1/8"	14 RAKER
H4804	1/4"	6 HOOK
H4805	1/4"	18 RAKER
H4806	3/8"	10 RAKER
H4807	1/2"	6 HOOK
H4808	1/2"	10 RAKER
H4809	3/4"	3 HOOK
H4810	1"	6 HOOK
H4811	1"	2 HOOK

#### 1311/2" Timber Wolf® Bandsaw Blades

MODEL	WIDTH	TPI & TYPE
H8591	1/8"	14 HIGH PERFORMANCE
H8592	1/4"	4 POSITIVE CLAW
H8593	1/4"	10 RAKER
H8594	3/8"	4 POSITIVE CLAW
H8595	3/8"	10 RAKER
H8596	1/2"	3 POSITIVE CLAW
H8597	1/2"	10 RAKER
H8598	3/4"	3 ALT. SPECIAL RESAW
H8599	1"	3 POSITIVE CLAW

#### 131½" Metal Cutting Bandsaw Blades

MODEL	WIDTH	TPI & TYPE
T20349	1"	3-4 VARIABLE PITCH
T20224	1"	4-6 VARIABLE PITCH
T20225	1"	5-8 VARIABLE PITCH
T20226	1"	6-10 VARIABLE PITCH
T20227	1"	8-12 VARIABLE PITCH

#### D2057A—Heavy-Duty SHOP FOX® Mobile Base

These mobile bases are designed to give you a stable and mobile platform upon which to mount machinery and equipment having a variety of base sizes and weights. Adjusts from 20" x 20½" to 29½" x 29½". 700 lb. capacity. Weighs 47 lbs.



Figure 48. D2057A SHOP FOX® Mobile Base.

#### **Basic Eye Protection**

T20501—Face Shield Crown Protector 4"

T20502—Face Shield Crown Protector 7"

T20503—Face Shield Window

T20451—"Kirova" Clear Safety Glasses

T20456—DAKURA Safety Glasses, Black/Clear



Figure 49. Assortment of basic eye protection.

H2499—Small Half-Mask Respirator H3631—Medium Half-Mask Respirator H3632—Large Half-Mask Respirator H3635—Cartridge Filter Pair P100

Wood dust has been linked to nasal cancer and severe respiratory illnesses. If you work around dust everyday, a half-mask respirator can be a lifesaver. Also compatible with safety glasses!



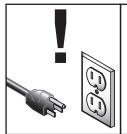
**Figure 50.** Half-mask respirator with disposable cartridge filters.

G5562—SLIPIT® 1 Qt. Gel G5563—SLIPIT® 12 Oz. Spray G2871—Boeshield® T-9 12 Oz. Spray G2870—Boeshield® T-9 4 Oz. Spray H3788—G96® Gun Treatment 12 Oz. Spray H3789—G96® Gun Treatment 4.5 Oz. Spray



**Figure 51.** Recommended products for protecting unpainted cast iron/steel part on machinery.

## **SECTION 8: MAINTENANCE**



## **AWARNING**

To reduce risk of shock or accidental startup, always disconnect machine from power before adjustments, maintenance, or service.

## **Schedule**

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

#### **Ongoing**

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

- Loose mounting bolts.
- Damaged saw blade.
- Worn or damaged wires.
- Any other unsafe condition.

#### **Daily**

Untension blade after done using machine.

#### Monthly

- Check for V-belt damage.
- Lubricate guide post gears.

#### Quarterly

Lubricate blade tension leadscrew, belt tension crank leadscrew, and table trunnions.

# Wheel & Blade Brushes

The bandsaw is equipped with two brushes. The brushes should be checked daily and cleaned when they become dirty. There is an adjustment bracket that allows each brush to be adjusted for bristle wear (see **Page 49**).

## **Cleaning**

Vacuum cutting chips and dust from in and on the bandsaw, and wipe off the remaining dust with a dry cloth. If wood resin or lubricating oil has built up, use a resin dissolving or oil soluble cleaner to remove it. Once a month, remove the blade and thoroughly clean all built-up particles from the rubber tires on the wheels.

After cleaning, wipe the unpainted cast-iron surfaces on the table, fence, and miter gauge with regular applications of metal protectant lubricants such as G96® Gun Treatment, SLIPIT®, or Boeshield® T-9 (see **Page 43** for more details).

## Lubrication

Lubricate the guide post gears, blade and belt tension leadscrews, and table trunnions as described in the following sections.

#### T26419—NLGI#2 Syn-O-Gen Synthetic Grease

Formulated with 100% pure synthesized hydrocarbon basestocks that are compounded with special thickeners and additives to make Syn-O-Gen non-melt, tacky, and water resistant. Extremely low pour point, extremely high temperature oxidation, and thermal stability produce a grease that is unmatched in performance.



**Figure 52.** T26419 Syn-O-Gen Synthetic Grease.



#### **Guide Post Gears**

Items Needed	Qty
Hex Wrench 6mm	1
Disposable Rags	As Needed
Stiff Brushes	2
Mineral Spirits/Degreaser	As Needed
T26419 or NLGI #2 Equivalent	As Needed

#### To lubricate the guide post gears:

- DISCONNECT MACHINE FROM POWER!
- 2. Lower the guide post down so the upper guide bearings almost touch the table, then open the upper wheel cover to access the gears, shown in **Figure 53**.

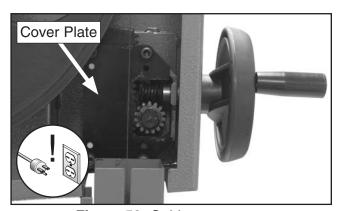


Figure 53. Guide post gears.

- 3. Remove the (4) cap screws that hold the cover plate in place. (The gears can be greased without removing the plate, but removing the plate makes cleaning easier.)
- 4. Wipe as much of the old grease off the gears as possible, and also wipe off the rack (the long plate with teeth that contact the pinion gear). The old grease will be contaminated with wood or metal dust, so you want to remove as much of it as possible.
- 5. Use mineral spirits/degreaser to clean any remaining grease from the gears and rack. Make sure to thoroughly wipe off the degreaser/mineral spirits after use so they will not contaminate the new grease.
- **6.** Use a clean brush to apply NLGI #2 grease to the pinion gear. After applying, rotate the handle two or three times to distribute the grease.

- **7.** Coat the inside cover plate with a light layer of grease and replace it.
- **8.** Close the upper wheel cover, and re-adjust the guide post height as necessary.

Blade & Belt Tension Leadscrews		
Items Needed	Qty	
Disposable Rags	As Needed	
Stiff Brushes	2	
Mineral Spirits/Degreaser	As Needed	
T26419 or NLGI #2 Equivalent	As Needed	

## To lubricate the blade and belt tension leadscrews:

- DISCONNECT MACHINE FROM POWER!
- 2. Wipe as much of the old grease off the leadscrews (Figures 54–55) as possible. The old grease will be contaminated with wood or metal dust, so you want to remove as much of it as possible.

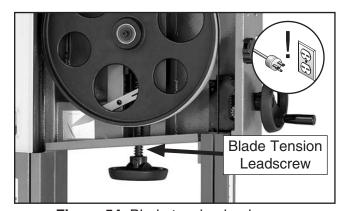


Figure 54. Blade tension leadscrew.

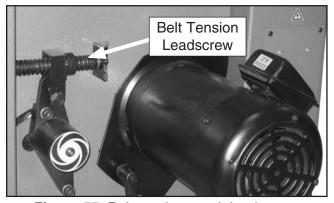


Figure 55. Belt tension crank leadscrew.



- 3. Use mineral spirits/degreaser to clean any remaining grease from the leadscrews. Make sure to thoroughly wipe off the degreaser/ mineral spirits after use so they will not contaminate the new grease.
- **4.** Use a clean brush to apply NLGI #2 grease to the leadscrews. After applying, rotate the handles through their full range of motion to distribute the grease.
- **5.** Close the upper wheel cover, and re-adjust the blade and belt tension as necessary.

#### **Table Trunnions**

Items Needed	Qty
Disposable Rags	As Needed
Stiff Brush	1
Mineral Spirits/Degreaser	As Needed
T26419 or NLGI #2 Equivalent	As Needed

#### To lubricate the table trunnions:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Wipe the old grease off the bearing surfaces of the table trunnions. Start with the outward side of the table trunnions (see **Figure 56**) when the table is at 0°, then tilt the table to 45° and wipe off the inward side. The old grease will be contaminated with wood or metal dust, so you want to remove as much of it as you can.

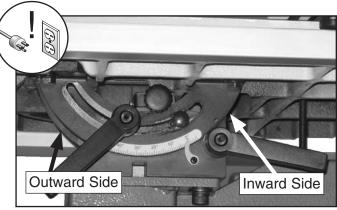


Figure 56. Sides of table trunnions to grease.

- 3. Use mineral spirits/degreaser to clean any remaining grease from the trunnions. Make sure to thoroughly wipe off the degreaser/ mineral spirits after use so they won't contaminate the new grease.
- **4.** Use a clean brush to apply NLGI #2 grease to the trunnion bearing surfaces. After applying, tilt the table back and forth from 0° to 45° to distribute the grease.

## Redressing Rubber Tires

As the bandsaw ages, the rubber tires on the wheels may need to be redressed if they harden or glaze over. Redressing the rubber tires improves blade tracking and reduces vibration/blade lead.

If the rubber tires become too worn, then blade tracking will become extremely difficult. At that point, redressing will no longer be effective and the rubber tires must be replaced.

Items Needed	Qty
Heavy Leather Gloves	1 Pr.
Sandpaper 100-Grit	As Needed

#### To redress the rubber tires:

- DISCONNECT MACHINE FROM POWER!
- Put on heavy leather gloves.
- **3.** Remove the blade.
- Clean any built-up sawdust from the rubber tires.
- Hold 100 grit sandpaper against the rubber tire and rotate the wheel by hand. Only redress the rubber enough to expose a fresh rubber surface.



# **SECTION 9: SERVICE**

Review the troubleshooting 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	Key switch is turned off.	1. Turn key switch on.
start or a breaker	2. Plug/receptacle is at fault or wired incorrectly.	2. Test for good contacts; correct the wiring.
trips.	3. Motor connection wired incorrectly.	3. Correct motor wiring connections.
	4. Wall fuse/circuit breaker is blown/tripped.	4. Ensure circuit size is suitable for this machine;
		replace weak breaker.
	5. Power supply switched OFF or is at fault.	5. Ensure power supply is switched on; ensure power supply has the correct voltage.
	6. Wiring is open/has high resistance.	Check for broken wires or disconnected/corroded connections, and repair/replace as necessary.
	7. Motor START/STOP button or ON/OFF switch	7. Replace faulty START/STOP button or ON/OFF
	is at fault.	switch.
	8. Inverter/Controller box is at fault.	8. Inspect inverter/controller box; replace if faulty.
	9. Motor is at fault.	9. Test/repair/replace.
Machine stalls or	Feed rate/cutting speed too fast for task.	Decrease feed rate/cutting speed.
bogs down while	2. Machine is undersized for the task.	2. Use sharp blade with lower TPI (Page 30); reduce
cutting.		the feed rate/depth of cut.
	3. Blade is slipping on wheels.	3. Adjust blade tracking (Page 19) and tension (Page
		22) to factory specifications; redress tires as stated
		on <b>Page 46</b> .
	4. Motor connection is wired incorrectly.	4. Correct motor wiring connections.
	5. Plug/receptacle is at fault.	5. Test for good contacts; correct the wiring.
	6. Pulley/sprocket slipping on shaft.	6. Replace loose pulley/shaft.
	7. Motor is at fault.	7. Test/repair/replace.
Machine has vibration or noisy	1. Motor or component is loose.	Inspect/replace stripped or damaged bolts/nuts, and     A single or with three of leaking fluid
operation.	Blade weld is at fault or teeth are broken.	re-tighten with thread locking fluid.
.,		2. Replace blade (Page 33).
	3. Blade is at fault.	3. Replace warped, bent, or twisted blade ( <b>Page 33</b> ); resharpen dull blade.
	4. V-belt worn or loose.	4. Inspect/replace belt (Page 49).
	5. Pulley is loose.	5. Realign/replace shaft, pulley, setscrew, and key as required.
	6. Motor mount loose/broken.	6. Tighten/replace.
	7. Machine is incorrectly mounted or sits	Tighten/replace anchor studs in floor; relocate/shim machine.
	unevenly.  8. Motor fan is rubbing on fan cover.	Replace dented fan cover; replace loose/damaged fan.
	9. Motor bearings are at fault.	Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.



## **Cutting Operations**

Symptom	Possible Cause	Possible Solution
Machine slows when operating.	Feeding workpiece too fast.     Blade is dull.	<ol> <li>Reduce feed rate.</li> <li>Replace blade (Page 33).</li> </ol>
Ticking sound when the saw is running.	<ol> <li>Blade weld contacting guide/support bearings (a light tick is normal).</li> <li>Blade weld may be failing.</li> </ol>	<ol> <li>Use file or stone to smooth and round the back of the blade; slightly loosen the blade guides.</li> <li>Inspect and replace blade if necessary (Page 33).</li> </ol>
Blade contacting table insert.	Insert installed upside down or backwards.     Table improperly mounted or aligned.	<ol> <li>Re-install insert a different way.</li> <li>Align table (Page 26).</li> </ol>
Vibration when cutting.	<ol> <li>Loose or damaged blade.</li> <li>Sawdust buildup on wheels.</li> </ol>	<ol> <li>Tighten or replace blade (Page 33).</li> <li>Clean all sawdust from rubber tires on wheels.</li> </ol>
Burn marks on the edge of the cut.	<ol> <li>Too much side pressure when feeding workpiece; blade is binding.</li> <li>Blade too wide for size of radius being cut.</li> </ol>	<ol> <li>Feed workpiece straight into the blade. See Cutting Tips on Page 35.</li> <li>Install a smaller width blade (Page 30)/increase blade tension (Page 33).</li> </ol>
Rough or poor quality cuts.	Feeding workpiece too fast.     Blade guides adjusted incorrectly.	<ol> <li>Reduce feed rate.</li> <li>Re-adjust all blade guides (Page 22) and support bearings (Page 23).</li> </ol>
Sawdust buildup inside cabinet.	<ol> <li>Clogged dust port or dust hose.</li> <li>Low CFM (airflow) from the shop vacuum.</li> </ol>	<ol> <li>Check for leaks or clogs.</li> <li>Connect saw to a more powerful shop vacuum.</li> </ol>
Blade wanders or doesn't cut straight.	Blade lead.     Sawdust buildup on wheels.	<ol> <li>Refer to Blade Lead on Page 52.</li> <li>Clean all sawdust from rubber tires on wheels.</li> </ol>
Cuts are not square (vertically).	<ol> <li>Table tilt is not adjusted to 0° or positive stop has moved out of adjustment.</li> <li>Table tilt scale pointer is not calibrated.</li> </ol>	<ol> <li>Adjust table tilt to 0°; re-adjust positive stop if necessary (Page 25).</li> <li>Calibrate table tilt scale pointer to 0° as described in the Adjusting Positive Stop instructions on Page 25.</li> </ol>
	3. Table is not square to the blade.	3. Shim table (Page 52).

## Miscellaneous

Symptom	Possible Cause	Possible Solution
Blade tension scale is grossly inaccurate.	The spring in the blade tension mechanism has lost its "spring." This is caused by not releasing the blade tension when not in use or frequently over-tensioning the bandsaw.	Replace spring in the blade tension mechanism, then take better care of the bandsaw by releasing tension when not in use and not over-tensioning the blade.
Wheel is noisy.	<ol> <li>Wheel bearing is worn out.</li> <li>Belt is too tight (lower wheel).</li> </ol>	<ol> <li>Replace the wheel bearing.</li> <li>Check/loosen the belt tension as described in the Blade Speed instructions on Page 34.</li> </ol>
Blade does not track consistently, correctly, or at all.	<ol> <li>Wheels are not coplanar or aligned with each other.</li> <li>Rubber tires on wheels are worn out.</li> </ol>	<ol> <li>Adjust wheels to be coplanar/aligned with each other (Page 50).</li> <li>Redress the rubber tires on the wheels (Page 46); replace the rubber tires on the wheels.</li> </ol>



## Replacing V-Belts

To ensure optimum power transfer from the motor to the blade, the V-belts must be in good condition and operate under proper tension. Check belt tension at least every 3 months—more often if the bandsaw is used daily. V-belts stretch with use and must be periodically re-tensioned.

Replace the V-belts if they are cracked, frayed, or excessively worn.

Items Needed	Qty
Hex Wrench 6mm	1
Replacement Belt (P0640X093)	1
Replacement Belt (P0640X118V2).	

#### To replace the V-belts:

- 1. DISCONNECT BANDSAW FROM POWER!
- 2. Open both wheel covers and remove the blade.
- Unthread the wheel mount cap screw shown in Figure 57 and slide the lower wheel off of the bearing shaft.

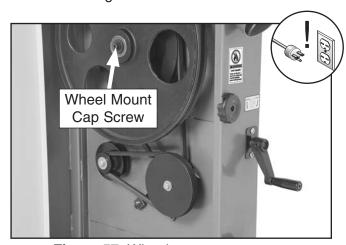


Figure 57. Wheel mount cap screw.

- **4.** Loosen the V-belts with the belt tension crank and roll them off of the pulleys.
- Replace the V-belts and tension them as described in the Blade Speed section on Page 34.
- Reinstall the lower wheel and blade, and close the wheel covers.

# Adjusting Wheel & Blade Brushes

The lower wheel compartment contains two brushes (see **Figure 58**). These brushes are designed to sweep sawdust off the wheel tire and blade as the bandsaw is operating. In order to work properly, the wheel brush must make contact with the wheel and the blade brush must make contact with the blade.

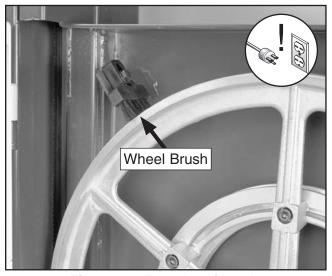


Figure 58. Example of brush.

Tools Needed	QTY
Wrenches or Sockets 10mm	2

#### To adjust the wheel and blade brushes:

- DISCONNECT BANDSAW FROM POWER!
- 2. Open the lower wheel cover.
- 3. Loosen the bolt/nut that secures the brush in place.
- **4.** Adjust the brush so it makes good contact with the wheel or blade.
- 5. Tighten the bolt/nut to secure the brush in place.



## **Wheel Alignment**

#### **Items Needed**

56" Long 2x4	
Open-End Wrench 13mm	
Tape Measure	1
Shims	As Needed
Hex Wrench 4mm	1

Wheel alignment is one of the most critical factors for optimal performance from your bandsaw.

Heat, vibration, wandering, blade wear, tire wear and overall bandsaw wear are considerably decreased when the wheels are properly aligned or "coplanar."

Coplanar wheels automatically track the blade by balancing it on the crown of the wheel. This is known as coplanar tracking.

#### To check if your wheels are coplanar:

- 1. Make the "Coplanarity Gauge" shown in Figure 59. Note: For best results, straighten the 2x4 with a jointer before cutting.
- 2. DISCONNECT MACHINE FROM POWER!
- **3.** Remove the fence and table, then open both wheel covers.
- 4. Make sure the guide blocks and rear support bearings are away from the blade, then tighten your blade to the tension that will be used during operation.
- **5.** Place your coplanarity gauge up against both wheels in the positions shown in **Figure 60**.

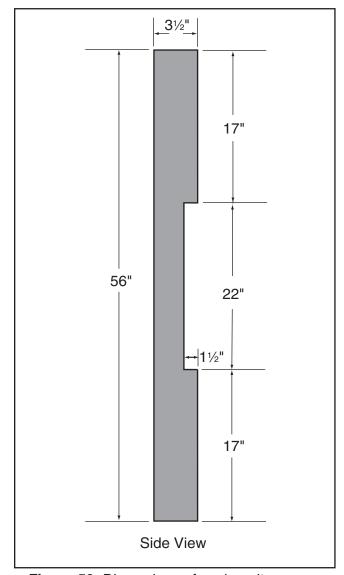


Figure 59. Dimensions of coplanarity gauge.

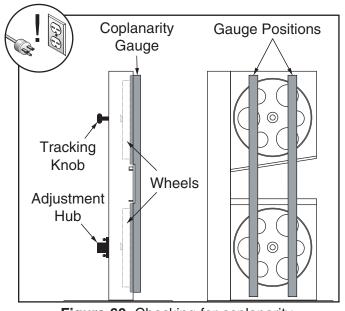


Figure 60. Checking for coplanarity.



- 6. Adjust the tracking knob to get both wheels parallel. If the wheels won't go parallel to each other, then move the lower wheel at the adjustment hub (see Figure 61) so they line up.
- 7. If the wheels will go parallel but not coplanar, shim the required wheel out as necessary (not to exceed 3/4"), using thin 3/4" washers on the shaft behind the wheel.
- 8. Figure 62 shows the positions of the wheels when coplanar. When your wheels are coplanar, re-adjust the guide blocks and rear support bearings, and replace the wheel covers.

**Note:** The blade may track slightly off-center when the wheels are coplanar. This is natural because the blade will be balanced on the crown of the tire, rather than just in the center of the tire. This will be more noticeable with larger blades.

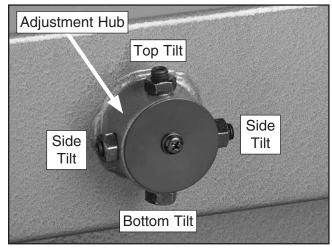


Figure 61. Lower wheel adjustment control.

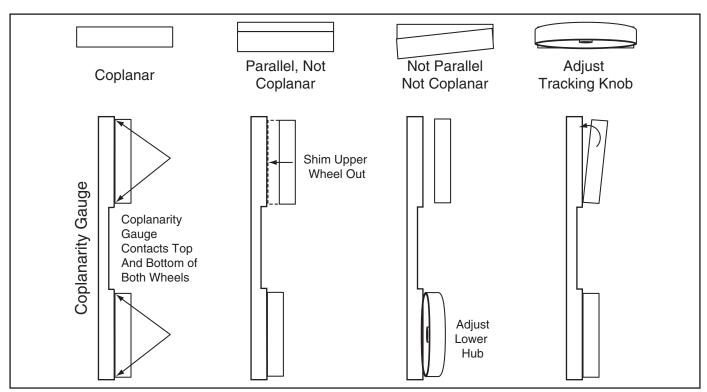


Figure 62. Coplanarity diagram.

## **Shimming Table**

To ensure accuracy when cutting stacked workpieces, the table should be 90° to the back of the blade as shown in **Figure 63**. If the table is not perpendicular to the back of the blade, the table needs to be shimmed.

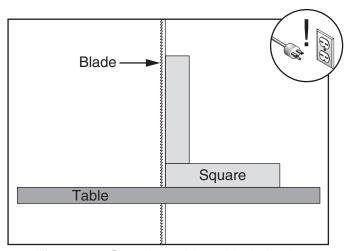


Figure 63. Squaring table to blade back.

Shims can be made of any durable object that can be sandwiched between the table and the trunnions. We recommend using shim washers or shim stock because of the wide range of available thicknesses. These items can be purchased at your local hardware store.

Items Needed	Qty
Wrench or Socket 13mm	1
Shims	As Needed

#### To shim the table:

- 1. Make sure that the blade is tracking properly and that it is correctly tensioned.
- 2. DISCONNECT BANDSAW FROM POWER!
- **3.** Loosen the table mounting bolts that secure the table to the trunnion.
- Place shims between the table and the trunnion to position the table in the desired direction.
- 5. Follow the **Aligning Table** instructions on **Page 26** to complete this procedure.

## **Blade Lead**

Bandsaw blades sometimes wander off the cut line when sawing, as shown in **Figure 64**. This is called blade lead. Blade lead is commonly caused by too fast of a feed rate, a dull or abused blade, or improper tension. If your blade is sharp/undamaged and you still have blade lead, perform the following instructions.

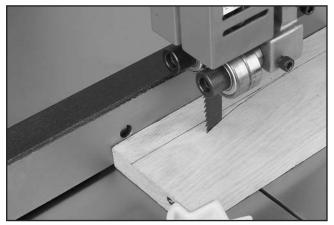


Figure 64. Blade leading away from line of cut.

### **Correcting Blade Lead**

- Use less pressure when feeding the workpiece through the cut.
- 2. Check that the miter slot or fence is parallel to the blade line, and correct if necessary.
- 3. Check for proper blade tension. If the blade tension is correct and it is not convenient to replace the blade, compensate for lead by skewing the fence or adjusting the table.

### **Skewing Fence**

Items Needed	Qty
Scrap Wood (3" x 17" x 3/4")	1
Pencil	1
Clamp	1
Hex Wrench 5mm	1

#### To skew your fence:

1. Cut a piece of scrap wood approximately <sup>3</sup>/<sub>4</sub>" thick x 3" wide x 17" long. On a wide face of the board, draw a straight line parallel to the long edge.



- Cut halfway through the board on the line by pushing it into the blade. Turn the bandsaw OFF and wait for the blade to stop.
- 3. Clamp the board to the table without moving it. Now slide the fence over to the board so it barely touches one end of the board.
- **4.** Loosen the (4) cap screws on top of the fence.
- 5. Skew the fence so it is parallel to the edge of the scrap piece. You may need to re-adjust the fence locking mechanisms to gain maximum adjustment.
- **6.** While maintaining the skew, tighten the cap screws.

#### **Shifting Table**

Items Needed	Qty
Scrap Wood	1
Pencil	1
Machinist's Square	1
Wrench or Socket 13mm	1

#### To shift the table:

- 1. On a scrap piece of wood, mark a line that is perpendicular to the front edge.
- **2.** Cut halfway through the board on the line by pushing it into the blade.
- **3.** Turn the bandsaw *OFF* and wait for the blade to stop.
- 4. Loosen the table mounting bolts, shift the table to compensate for the blade lead, then retighten the bolts.
- **5.** Repeat **Steps 1–4** until the blade cuts straight.

### **NOTICE**

If the table is shifted, the fence will need to be re-aligned, and the blade guides and blade support will need to be re-adjusted.

## **NOTICE**

Lead adjustments will change when new blades are mounted on the saw.

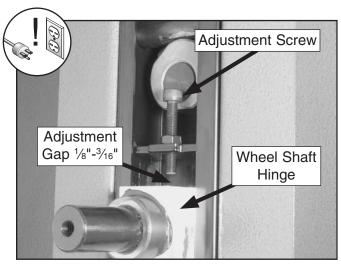
## Adjusting Tension Lever

The tension lever has an adjustment screw that allows you to adjust how much tension is released when the lever is used.

<b>Tools Needed</b>		QT'	Y
Hex Wrenches 5,	6mm	1 Ea	ì.

#### To adjust the tension lever:

- 1. DISCONNECT BANDSAW FROM POWER!
- **2.** Loosen the tension lever and remove the blade.
- **3.** Remove the upper wheel by taking out the cap screw at the center of the wheel.
- **4.** Move the tension lever to the tightened position.
- Turn the adjustment screw shown in Figure
   until the gap between the screw and the wheel shaft hinge is ½16"- ¾16".



**Figure 65.** Tension lever adjustment components.

**6.** Reassemble the removed components and tension and track the blade as normal.



## **SECTION 10: 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 aftermarket 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.

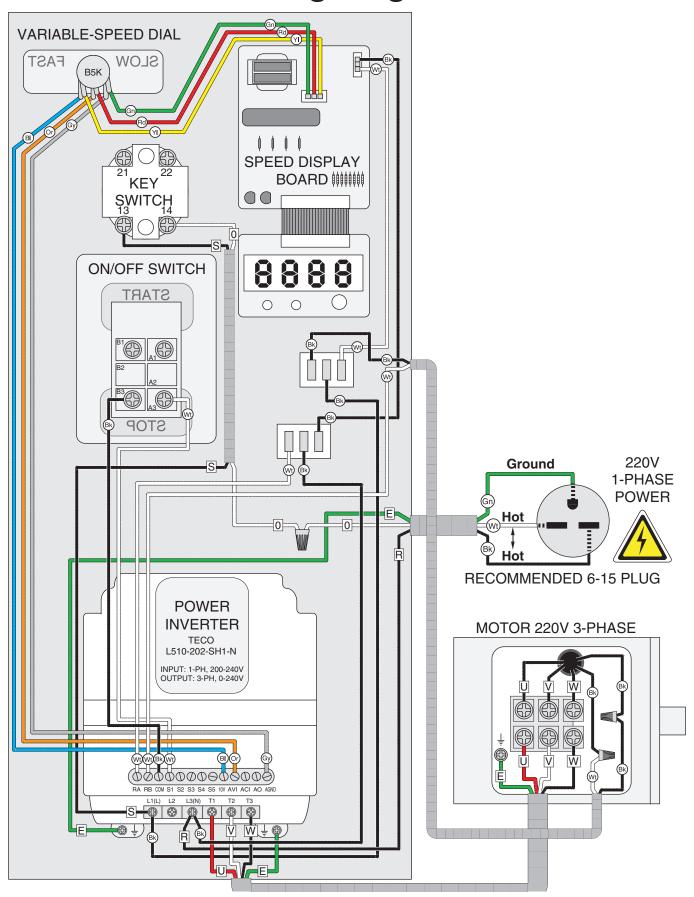
**CAPACITORS/INVERTERS.** Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

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

#### **NOTICE COLOR KEY** BLACK I **BLUE** YELLOW LIGHT The photos and diagrams included in this section are **YELLOW** WHITE = **BROWN** BLUE **GREEN** best viewed in color. You GREEN GRAY **PURPLE** can view these pages in TUR-QUOISE color at www.grizzly.com. RED ORANGE **PINK**



# **Wiring Diagram**



# **Electrical Component Photos**



Figure 66. Motor wiring.



Figure 68. ON/OFF and key switch.



Figure 67. Power inverter.

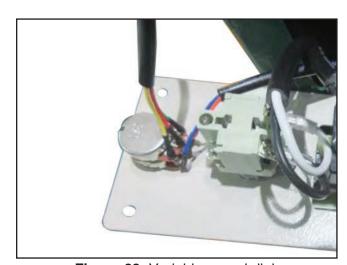


Figure 69. Variable-speed dial.

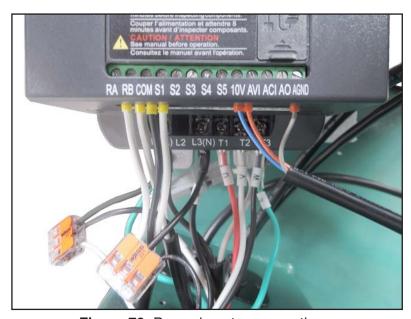


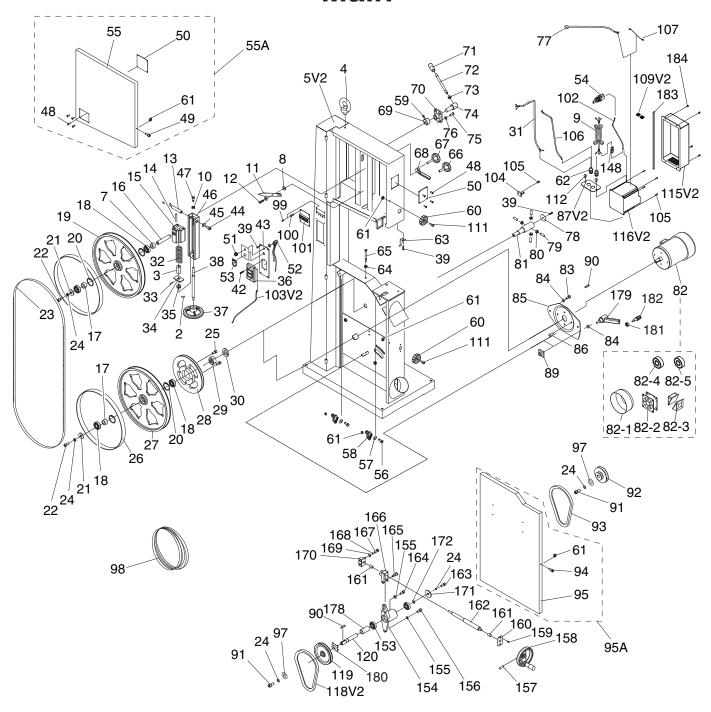
Figure 70. Power inverter connections.



# **SECTION 11: PARTS**

We do our best to stock replacement parts when possible, but we cannot guarantee that all parts shown are available for purchase. Call **(800) 523-4777** or visit **www.grizzly.com/parts** to check for availability.

## Main



## **Main Parts List**

REF	PART#	DESCRIPTION	
2	P0640X002	SET SCREW M6-1 X 10	
3	P0640X003	SPRING BUSHING	
4	P0640X004	LIFTING EYE BOLT M10-1.5	
5V2	P0640X005V2	MACHINE BODY V2.12.20	
7	P0640X007	WHEEL SHAFT BUSHING	
8	P0640X008	FLAT WASHER 4MM	
9	P0640X009	POWER CORD 14G 3W	
10	P0640X010	HEX NUT M6-1	
11	P0640X011	TENSION POINTER	
12	P0640X012	STEP SCREW M47 X 6	
13	P0640X013	HINGE SHAFT	
14	P0640X014	ROLL PIN 5 X 35	
15	P0640X015	UPPER WHEEL SHAFT HINGE	
16	P0640X016	UPPER WHEEL SHAFT	
17	P0640X017	WHEEL BUSHING	
18	P0640X018	BALL BEARING 6204-2RS	
19	P0640X019	UPPER WHEEL 17"	
20	P0640X020	INT RETAINING RING 47MM	
21	P0640X021	FLAT WASHER 8MM	
22	P0640X022	CAP SCREW M8-1.25 X 16	
23	P0640X023	WOOD SAW BLADE 131-1/2" X 1/2"	
24	P0640X024	LOCK WASHER 8MM	
25	P0640X025	CAP SCREW M8-1.25 X 20	
26	P0640X026	URETHANE TIRE 17" 1-PAIR	
27	P0640X027	LOWER WHEEL 17"	
28	P0640X028		
29	P0640X029	WHEEL PULLEY HEX NUT 1-14	
30	P0640X030	LOCK WASHER 1"	
31	P0640X031	MOTOR CORD 16G 4W	
32	P0640X032	COMPRESSION SPRING 8 X 7-1/2 X 36	
33	P0640X033	ROLL PIN 3 X 16	
34	P0640X034	SPRING BASE PLATE	
35	P0640X035	THRUST BEARING 51201	
36	P0640X036	START/STOP SWITCH CHENG SHANG 220V	
37	P0640X037	TENSION HANDWHEEL	
38	P0640X038	TENSION ADJUSTING BOLT	
	P0640X039	FLANGE SCREW M58 X 10	
40	P0640X040	EXT TOOTH WASHER 5MM	
42	P0640X042	FLANGE SCREW M58 X 16	
43	P0640X043	CONTROL PANEL PLATE	
44	P0640X043	CAP SCREW M8-1.25 X 16	
45	P0640X045	FLAT WASHER 8MM	
46		UPPER WHEEL SLIDING BRACKET	
-	P0640X046		
47	P0640X047	CAP SCREW M6-1 X 25 STEEL BLIND RIVET 3 X 10MM	
48	P0640X048		
49	P0640X049	CAP SCREW M6-1 X 10	
50	P0640X050	PLASTIC WINDOW	
51	P0640X051	VS DIAL	
52	P0640X052	POTENTIOMETER JIA XIN CF-X2-M-SA6M46E	
53	P0640X053	ON/OFF KEY SWITCH PLATE	
54	P0640X054	KEY SWITCH JUN YANG 22	

REF	PART #	DESCRIPTION
55A	P0640X055A	UPPER WHEEL COVER ASSEMBLY
56	P0640X056	HEX BOLT M6-1 X 25
57	P0640X057	FLAT WASHER 6MM
58	P0640X058	WHEEL BRUSH
59	P0640X059	CAP SCREW M6-1 X 25
60	P0640X060	DOOR KNOB
61	P0640X061	LOCK NUT M6-1
62	P0640X062	STRAIN RELIEF 16MM
63	P0640X063	HEIGHT POINTER
64	P0640X064	HEX NUT M8-1.25
65	P0640X065	HEX BOLT M8-1.25 X 90
66	P0640X066	KNOB BOLT M10-1.5 X 20
67	P0640X067	KNOB BOLT M10-1.5 X 55
68	P0640X068	LOCK HANDLE M10-1.5
69	P0640X069	CAM
70	P0640X070	SHAFT BRACKET
71	P0640X071	LEVER KNOB
72	P0640X072	LEVER ROD
73	P0640X073	HEX NUT M12-1.75
74	P0640X074	QUICK-TENSION SHAFT
75	P0640X075	BUTTON HD CAP SCR M8-1.25 X 20
76	P0640X076	LOCK WASHER 8MM
77	P0640X077	PC BOARD POWER CORD
78	P0640X078	SHAFT COVER
79	P0640X079	SET SCREW M8-1.25 X 20
80	P0640X080	HEX NUT M8-1.25
81	P0640X081	LOWER WHEEL SHAFT
82	P0640X082	MOTOR 2HP 220V 3-PH
82-1	P0640X082-1	MOTOR FAN COVER
82-2	P0640X082-2	MOTOR FAN
82-3	P0640X082-3	MOTOR JUNCTIONBOX
82-4	P0640X082-4	BALL BEARING 6203ZZ
82-5	P0640X082-5	BALL BEARING 6205ZZ
83	P0640X083	HEX BOLT M10-1.5 X 25
84	P0640X084	LOCK WASHER 10MM
85	P0640X085	MOTOR MOUNT
86	P0640X086	BUTTON HD CAP SCR M8-1.25 X 20
87V2	P0640X087V2	STRAIN RELIEF PLATE V2.12.20
89	P0640X089	LOCK HANDLE BRACKET
90	P0640X090	KEY 5 X 5 X 35
91	P0640X091	HEX BOLT M8-1.25 X 20 LH
92	P0640X092	MOTOR PULLEY
93	P0640X093	V-BELT A44
94	P0640X094	CAP SCREW M6-1 X 10
95	P0640X095	LOWER WHEEL COVER
95A	P0640X095A	LOWER WHEEL COVER ASSEMBLY
97	P0640X097	FLAT WASHER 8MM
98	P0640X098	METAL SAW BLADE 131-1/2" X 1/2"
99	P0640X099	PHLP HD SCR M35 X 6
100	P0640X100	HEX NUT M35
101	P0640X101	DIGITAL DISPLAY
102	P0640X102	KEY SWITCH CONNECTOR CORD 14G
	- +-	



P0640X055

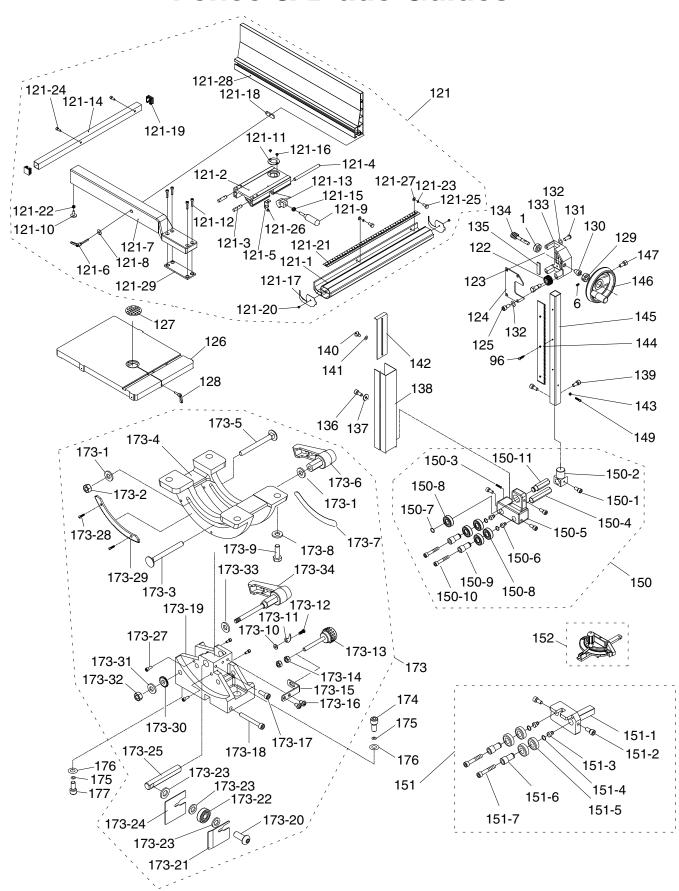
UPPER WHEEL COVER

## **Main Parts List**

REF	PART#	DESCRIPTION
103V2	P0640X103V2	SWITCH CONNECTOR CORD 20G 47" V2.12.20
104	P0640X104	BLADE HOOK
105	P0640X105	PHLP HD SCR M47 X 10
106	P0640X106	MOTOR FAN CONNECTOR CORD 18G
107	P0640X107	CONNECTOR WIRE 14G
109V2	P0640X109V2	TERMINAL BLOCK 221-413 3P V2.12.20
111	P0640X111	CAP SCREW M6-1 X 20
112	P0640X112	TAP SCREW M4 X 8
115V2	P0640X115V2	INVERTER COVER V2.12.20
116V2	P0640X116V2	INVERTER TECO L510-202-SH1-N V2.12.20
118V2	P0640X118V2	V-BELT A28
119	P0640X119	IDLER PULLEY
120	P0640X120	PULLEY SHAFT
148	P0640X148	CORD CONNECTOR 224-201
153	P0640X153	BALL BEARING 6204-2RS
154	P0640X154	BEARING STAND
155	P0640X155	LOCK WASHER 10MM
156	P0640X156	HEX BOLT M10-1.5 X 25
157	P0640X157	SET SCREW M6-1 X 6
158	P0640X158	BELT TENSION HANDWHEEL
159	P0640X159	FLANGE SCREW M6-1 X 10

REF	PART #	DESCRIPTION
160	P0640X160	ADJUSTING BOLT BRACKET
161	P0640X161	SELF-LUBRICATING BUSHING
162	P0640X162	ADJUSTING BOLT M10-1.5 X 227
163	P0640X163	BUTTON HD CAP SCR M8-1.25 X 20
164	P0640X164	CAP SCREW M10-1.5 X 35
165	P0640X165	SHAFT BOLT 18 X 14 X 37MM
166	P0640X166	ADJUSTING STAND
167	P0640X167	CAP SCREW M6-1 X 16
168	P0640X168	LOCK WASHER 6MM
169	P0640X169	FLAT WASHER 6MM
170	P0640X170	ADJUSTING BOLT END BRACKET
171	P0640X171	SPACER 60 X 5 X 8.5MM
172	P0640X172	FLAT WASHER 8MM
178	P0640X178	PULLEY SHAFT BUSHING
179	P0640X179	LOCK HANDLE
180	P0640X180	PULLEY SHAFT BRACKET
181	P0640X181	HEX NUT M8-1.25
182	P0640X182	HANDLE
183	P0640X183	FOAM TAPE 2 X 7 X 100MM
184	P0640X184	BUTTON HD CAP SCR M58 X 8

## Fence & Blade Guides



# **Fence & Blade Guides Parts List**

REF	PART #	DESCRIPTION
1	P0640X001	BUSHING
6	P0640X006	SET SCREW M58 X 6
96	P0640X096	FLAT HD SCR M47 X 8
121	P0640X121	FENCE ASSEMBLY 590MM
121-1	P0640X121-1	FRONT RAIL 640MM
121-2	P0640X121-2	FENCE BASE
121-3	P0640X121-3	FIXED SHAFT
121-4	P0640X121-4	LOCK SHAFT
121-5	P0640X121-5	SPRING PIECE 5 X 34 X 15 X 19MM
121-6	P0640X121-6	LOCK HANDLE M8-1.25 X 44
121-7	P0640X121-7	FENCE 590MM
121-8	P0640X121-8	FLAT WASHER 8MM
121-9	P0640X121-9	FENCE HANDLE M8-1.25 X 22
121-10	P0640X121-10	RAIL PAD
121-11	P0640X121-11	CONVEX WINDOW
121-12	P0640X121-12	CAP SCREW M6-1 X 25
121-13	P0640X121-13	LOCK BLOCK
121-14	P0640X121-14	REAR RAIL 640MM
121-15	P0640X121-15	HEX NUT M8-1.25
121-16	P0640X121-16	FLANGE SCREW M47 X 6
121-17	P0640X121-17	FRONT RAIL END PLATE
121-18	P0640X121-18	T-SLOT NUT R10 SLOT M8 X 1.25
121-19	P0640X121-19	REAR RAIL END PLUG
121-20	P0640X121-20	TAP SCREW M3.5 X 8
121-21	P0640X121-21	FENCE SCALE
121-22	P0640X121-22	HEX NUT M6-1
121-23	P0640X121-23	LOCK WASHER 6MM
121-24	P0640X121-24	CAP SCREW M6-1 X 16
121-25	P0640X121-25	HEX BOLT M6-1 X 20
121-26	P0640X121-26	FLANGE BOLT M47 X 8
121-27	P0640X121-27	FLAT WASHER 6MM
121-28	P0640X121-28	RESAW FENCE 590MM
121-29	P0640X121-29	SPACER PLATE
122	P0640X122	GEAR 12T/20T
123	P0640X123	GEAR BOLT
124	P0640X124	GUIDE BRACKET COVER
125	P0640X125	CAP SCREW M8-1.25 X 16
126	P0640X126	TABLE 17" X 24"
127	P0640X127	TABLE INSERT
128	P0640X128	TABLE PIN 8 X 29 X R4.5
129	P0640X129	HANDWHEEL BUSHING

REF	PART #	DESCRIPTION
130	P0640X130	BUSHING
131	P0640X131	BUTTON HD CAP SCR M8-1.25 X 20
132	P0640X132	LOCK WASHER 8MM
133	P0640X133	GUIDE BRACKET
134	P0640X134	WORM SHAFT
135	P0640X135	FIXED PLATE
136	P0640X136	CAP SCREW M58 X 10
137	P0640X137	FLAT WASHER 5MM
138	P0640X138	PROTECT COVER
139	P0640X139	CAP SCREW M6-1 X 16
140	P0640X140	STEP SCREW M47 X 5
141	P0640X141	FIBER WASHER 6 X 13MM
142	P0640X142	SLIDING PLATE
143	P0640X143	HEX NUT M47
144	P0640X144	GUIDE POST RACK
145	P0640X145	GUIDE POST
146	P0640X146	GUIDE POST HANDWHEEL
147	P0640X147	CAP SCREW M6-1 X 20
149	P0640X149	PHLP HD SCR M47 X 10
150	P0640X150	UPPER BLADE GUIDE ASSEMBLY
150-1	P0640X150-1	CAP SCREW M6-1 X 16
150-2	P0640X150-2	UPPER GUIDE SUPPORT BLOCK
150-3	P0640X150-3	SET SCREW M6-1 X 10
150-4	P0640X150-4	BLADE GUIDE ADJUSTMENT SHAFT
150-5	P0640X150-5	UPPER BLADE GUIDE SUPPORT
150-6	P0640X150-6	ECCENTRIC SHAFT
150-7	P0640X150-7	EXT RETAINING RING 15MM
150-8	P0640X150-8	BALL BEARING 6202ZZ
150-9	P0640X150-9	KNURLED KNOB BUSHING
150-10	P0640X150-10	CAP SCREW M6-1 X 35
150-11	P0640X150-11	SUPPORT BEARING SHAFT
151	P0640X151	LOWER BLADE GUIDE ASSEMBLY
151-1	P0640X151-1	LOWER BLADE GUIDE SUPPORT
151-2	P0640X151-2	CAP SCREW M6-1 X 16
151-3	P0640X151-3	ECCENTRIC SHAFT
151-4	P0640X151-4	EXT RETAINING RING 15MM
151-5	P0640X151-5	BALL BEARING 6202ZZ
151-6	P0640X151-6	KNURLED KNOB BUSHING
151-7	P0640X151-7	CAP SCREW M6-1 X 35
152	P0640X152	MITER GAUGE ASSEMBLY

## **Fence & Blade Guides Parts List**

REF	PART#	DESCRIPTION
173	P0640X173	CAST-IRON TRUNNION ASSEMBLY
173-1	P0640X173-1	FLAT WASHER 8MM
173-2	P0640X173-2	LOCK NUT M8-1.25
173-3	P0640X173-3	CARRIAGE BOLT M8-1.25 X 85
173-4	P0640X173-4	UPPER TRUNNION
173-5	P0640X173-5	CARRIAGE BOLT M8-1.25 X 80
173-6	P0640X173-6	LOCK HANDLE M8-1.25
173-7	P0640X173-7	ANGLE LABEL
173-8	P0640X173-8	FLAT WASHER 8MM
173-9	P0640X173-9	HEX BOLT M8-1.25 X 25
173-10	P0640X173-10	FLAT WASHER 4MM
173-11	P0640X173-11	TABLE TILT POINTER
173-12	P0640X173-12	PHLP HD SCR M47 X 6
173-13	P0640X173-13	ADJUSTMENT KNOB BOLT M6-1
173-14	P0640X173-14	HEX NUT M6-1
173-15	P0640X173-15	L-BRACKET
173-16	P0640X173-16	FLAT HD SCR M58 X 15
173-17	P0640X173-17	CAP SCREW M6-1 X 16
173-18	P0640X173-18	CAP SCREW M6-1 X 50

REF	PART #	DESCRIPTION
173-19	P0640X173-19	TRUNNION SUPPORT BRACKET
173-20	P0640X173-20	BUTTON HD CAP SCR M10-1.5 X 30
173-21	P0640X173-21	RIGHT BLADE GUARD
173-22	P0640X173-22	BALL BEARING 6000ZZ
173-23	P0640X173-23	FLAT WASHER 10MM
173-24	P0640X173-24	LEFT BLADE GUARD
173-25	P0640X173-25	SUPPORT BEARING SHAFT
173-27	P0640X173-27	CAP SCREW M58 X 6
173-28	P0640X173-28	PHLP HD SCR M47 X 6
173-29	P0640X173-29	TRUNNION RACK
173-30	P0640X173-30	TRUNNION PINION
173-31	P0640X173-31	FLAT WASHER 8MM
173-32	P0640X173-32	LOCK NUT M8-1.25
173-33	P0640X173-33	FLAT WASHER 12MM
173-34	P0640X173-34	TABLE TILT HANDLE
174	P0640X174	CAP SCREW M10-1.5 X 30
175	P0640X175	LOCK WASHER 10MM
176	P0640X176	FLAT WASHER 10MM
177	P0640X177	CAP SCREW M10-1.5 X 35



# **Labels & Cosmetics (Front)**

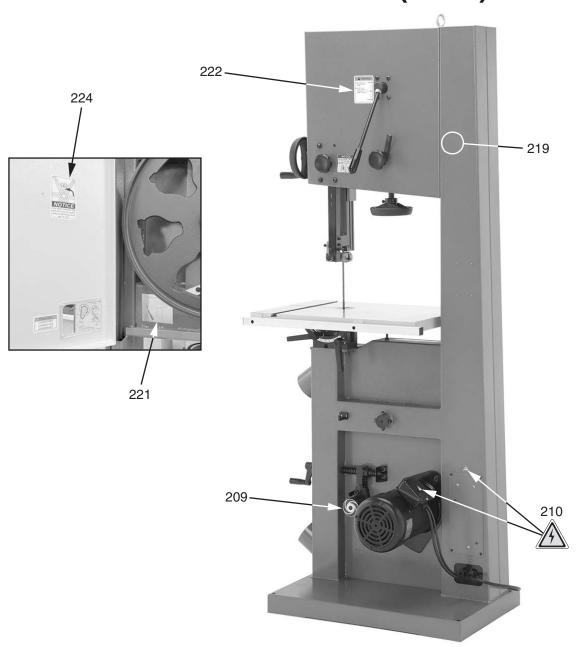


DEE	PART #	DESCRIPTION

201V3	P0640X201V3	MACHINE ID LABEL V3.02.22
202	P0640X202	GRIZZLY NAMEPLATE
203V3	P0640X203V3	MODEL NUMBER LABEL V3.02.22
204	P0640X204	GLASSES RESPIRATOR LABEL
205	P0640X205	GUIDE POST ADJUSTMENT LABEL
206	P0640X206	DOOR CLOSED LABEL
207	P0640X207	DISCONNECT POWER LABEL
208	P0640X208	HANDLE CRANK DIRECTION LABEL
211	P0640X211	FIRE HAZARD WARNING LABEL
212	P0640X212	CUTTING SPEED LABEL

213V2	P0640X213V2	CONTROLS LABEL V2.02.22
214V2	P0640X214V2	SPEED DISPLAY LABEL V2.02.22
215	P0640X215	BELT CHANGE LABEL
216	P0640X216	BLADE TENSION LABEL
217	P0640X217	UNSTABLE WORKPIECE LABEL
218	P0640X218	READ MANUAL LABEL
220	P0640X220	TOUCH-UP PAINT, GRIZZLY PUTTY
223	P0640X223	GUIDE POST SCALE
225	P0640X225	EXTREME SERIES NAMEPLATE
226V2	P0640X226V2	GRIZZLY.COM LABEL V2.02.22

## Labels & Cosmetics (Rear)



RFF	PART #	DESCRIPTION
ΠLΓ	FARI#	DESCRIPTION

209	P0640X209	SPIRAL INDICATOR LABEL
210	P0640X210	ELECTRICITY LABEL
219	P0640X219	TOUCH-UP PAINT, GRIZZLY GREEN

KEF	PARI#	DESCRIPTION
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221	P0640X221	BLADE TENSION SCALE LABEL
222	P0640X222	BLADE TENSIONING LEVER LABEL
224	P0640X224	TENSION ADJUSTMENT LABEL

## **AWARNING**

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



## **WARRANTY & RETURNS**

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

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

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

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

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

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

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





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