

READ THIS FIRST



Model G0948

*****IMPORTANT UPDATE*****

For Machines Mfd. Since 08/21
and Owner's Manual Printed 09/21

For questions or help with this product contact Tech Support at (570) 546-9663 or techsupport@grizzly.com

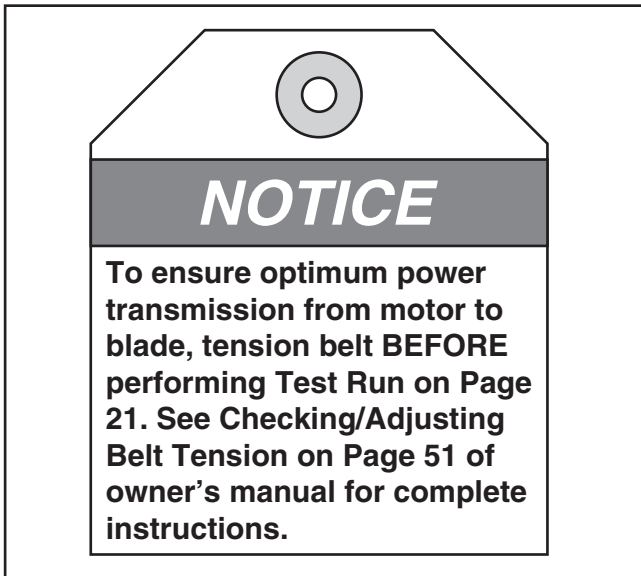
The following change was recently made since the owner's manual was printed:

- New notice tag added advising users to properly tension belt before using machine for the first time.

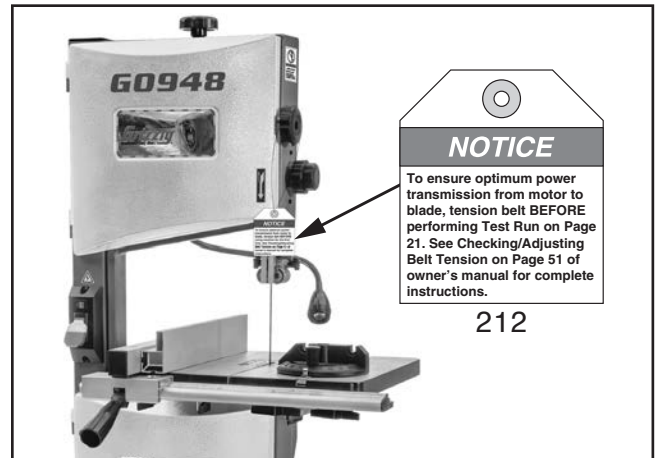
Aside from this information, all other content in the owner's manual applies and **MUST** be read and understood for your own safety. **IMPORTANT: Keep this update with the owner's manual for future reference.**

For questions or help, contact our Tech Support at (570) 546-9663 or techsupport@grizzly.com.

New Notice Tag



Revised Parts



REF	PART #	DESCRIPTION
212	P0948212	BELT TENSION NOTICE TAG

Grizzly **Industrial, Inc.**®

MODEL G0948 **10" 1/2 HP BANDSAW** **OWNER'S MANUAL**

(For models manufactured since 08/21)



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**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE
OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.**

#MN22059 PRINTED IN CHINA

V1.09.21

 **WARNING!**

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

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

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

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

 **WARNING!**

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

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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INTRODUCTION

Contact Info

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

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

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

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


Manual Accuracy

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

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

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

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

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

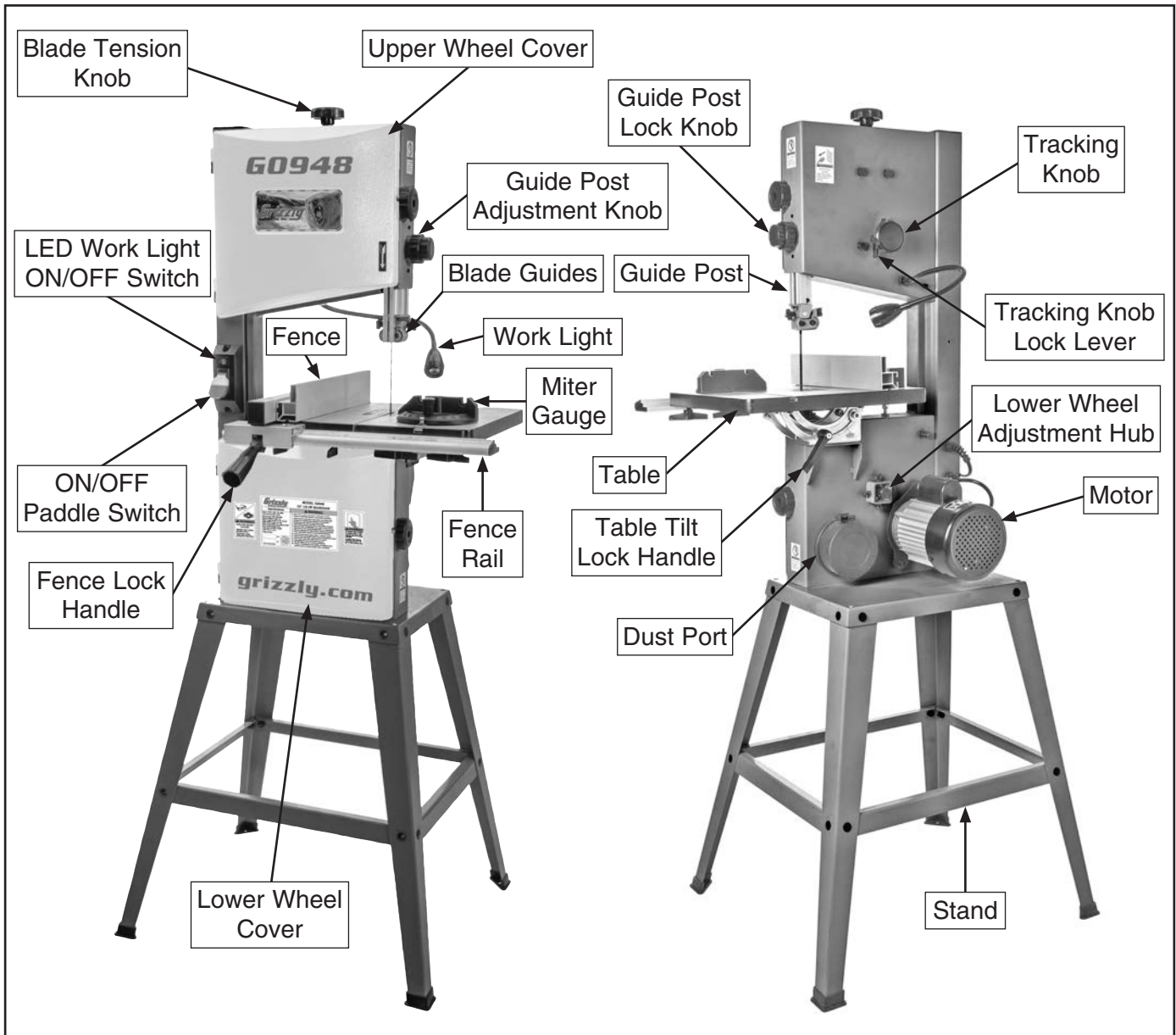
Manufacture Date

Serial Number



Identification

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



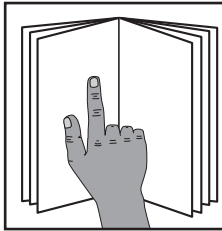
CAUTION

For Your Own Safety, Read Instruction Manual Before Operating Saw.

- a) **Wear eye protection.**
- b) **Do not remove jammed cutoff pieces until blade has stopped.**
- c) **Maintain proper adjustment of blade tension, blade guides, and thrust bearings.**
- d) **Adjust upper blade guide to just clear workpiece.**
- e) **Hold workpiece firmly against table.**



Controls & Components



!WARNING

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

Refer to **Figures 1–6** and the following descriptions to become familiar with the basic controls and components of this machine. Understanding these items and how they work will help you understand the rest of the manual and stay safe when operating this machine.

Power Controls

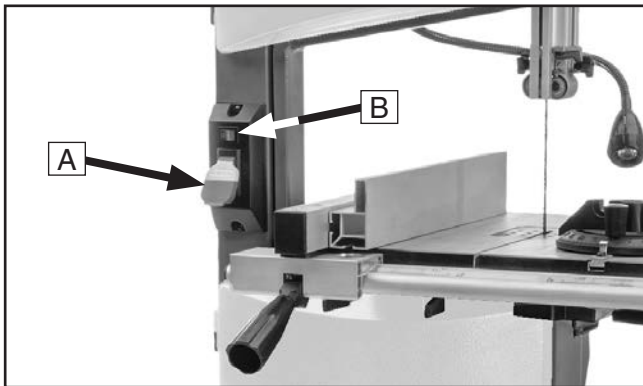


Figure 1. Power controls.

- A. ON/OFF Paddle Switch w/Removable Key:** Turns machine **ON** and **OFF**. Remove key to disable machine.
- B. LED Work Light ON/OFF Switch:** Turns light **ON** and **OFF**. Illuminates cutting area for better visibility.

Fence & Miter Gauge

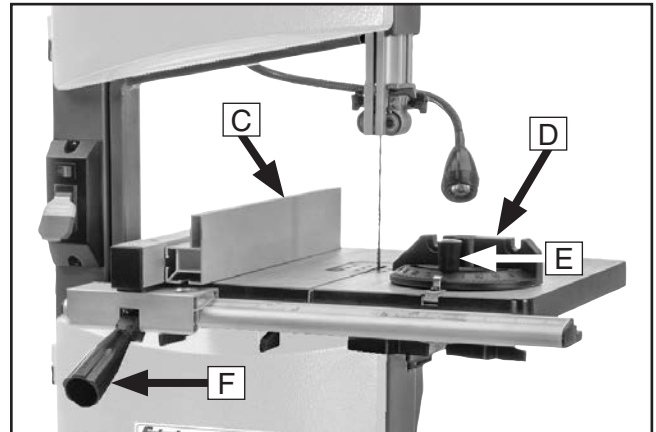


Figure 2. Fence and miter gauge controls.



Figure 3. Fence mounted in horizontal position.

- C. Fence:** Used for ripping or resawing. Distance from blade determines width of cut. Can be used in vertical position (as shown in **Figure 2**) for normal workpieces, or in horizontal position (as shown in **Figure 3**) for thin workpieces.
- D. Miter Gauge:** Typically used for cross cuts. Can be adjusted from 0°–60° left or right.
- E. Miter Gauge Lock Knob:** Secures angle position of miter gauge.
- F. Fence Lock Handle:** Secures fence position.



Guide Post

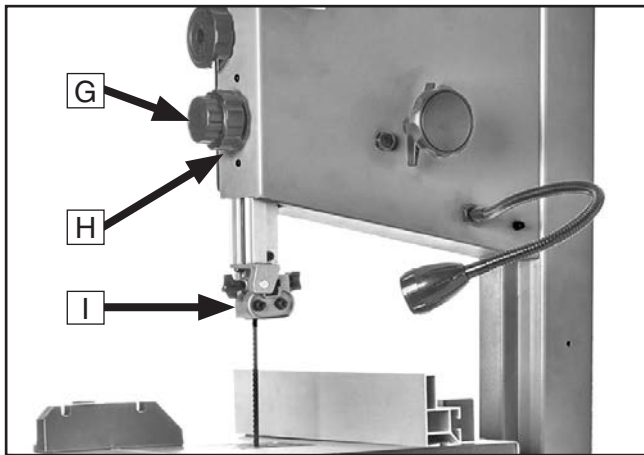


Figure 4. Guide post controls.

- G. Guide Post Lock Knob:** Secures height of blade guides.
- H. Guide Post Adjustment Knob:** Rotate to adjust height of blade guides above workpiece.
- I. Upper Blade Guide:** Supports blade above workpiece during operations.

Table Tilt

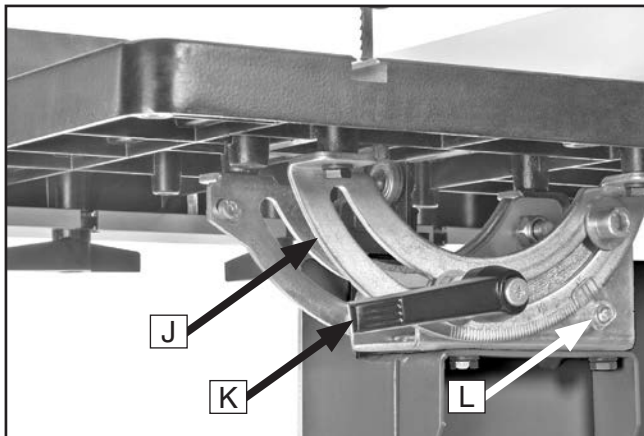


Figure 5. Table tilt controls.

- J. Trunnion w/Table Tilt Scale:** Functions as a tilting base for table. Graduated in degrees from 0°–45° for setting bevel angle.
- K. Table Tilt Lock Lever:** Secures table tilt angle setting.
- L. Table Tilt Indicator:** Shows angle of table tilt.

Blade Tension & Tracking

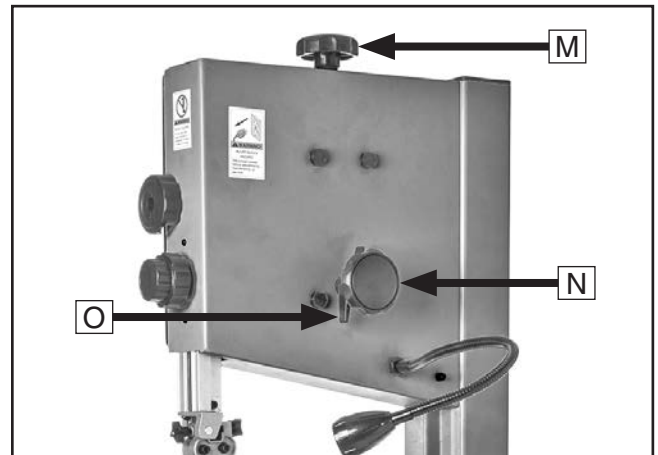


Figure 6. Blade tension and tracking controls.

- M. Blade Tension Adjustment Knob:** Rotate to adjust blade tension (refer to **Page 22** for more information).
- N. Blade Tracking Knob:** Rotate to adjust blade tracking (refer to **Page 20** for more information).
- O. Blade Tracking Knob Lock Lever:** Secures position of tracking knob.





MACHINE DATA SHEET

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

MODEL G0948 10" 1/2 HP BANDSAW

Product Dimensions:

Weight..... 69 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 28 x 21-1/2 x 58-1/2 in.
Footprint (Length x Width)..... 24-1/2 x 20-1/2 in.

Shipping Dimensions:

Type..... Cardboard
Content..... Machine
Weight..... 75 lbs.
Length x Width x Height..... 38 x 19 x 16 in.
Must Ship Upright..... No

Electrical:

Power Requirement..... 120V, Single-Phase, 60 Hz
Full-Load Current Rating..... 3.5A
Minimum Circuit Size..... 15A
Connection Type..... Cord & Plug
Power Cord Included..... Yes
Power Cord Length..... 72 in.
Power Cord Gauge..... 18 AWG
Plug Included..... Yes
Included Plug Type..... 5-15
Switch Type..... Paddle Safety Switch w/Removable Key

Motors:

Main

Horsepower..... 1/2 HP
Phase..... Single-Phase
Amps..... 3.5A
Speed..... 1720 RPM
Type..... TEFC Capacitor-Start Induction
Power Transfer Belt
Bearings..... Shielded & Permanently Lubricated

Main Specifications:

Main Specifications

Bandsaw Size..... 10 in.
Max Cutting Width (Left of Blade)..... 9-3/4 in.
Max Cutting Width (Left of Blade) w/Fence..... 6-1/8 in.
Max Cutting Height (Resaw Height)..... 6-1/8 in.
Blade Speeds..... 1520, 2620 FPM

Blade Information

Standard Blade Length..... 72 in.
Blade Length Range..... 71-1/2 - 72-1/2 in.
Blade Width Range..... 1/8 - 1/2 in.
Type of Blade Guides..... Ball Bearing
Guide Post Adjustment Type..... Rack & Pinion
Has Quick-Release..... No



Table Information

Table Length.....	14-3/16 in.
Table Width.....	12-5/8 in.
Table Thickness.....	1 in.
Table Tilt.....	0 - 45 deg.
Table Tilt Adjustment Type.....	Manual
Floor-to-Table Height.....	38-5/8 in.
Fence Locking Position.....	Front
Fence is Adjustable for Blade Lead.....	Yes
Resaw Fence Attachment Included.....	Yes
Miter Gauge Included.....	Yes

Construction Materials

Table.....	Cast Aluminum
Trunnion.....	Steel
Fence.....	Aluminum
Base/Stand.....	Steel
Frame/Body.....	Steel
Wheels.....	Cast Aluminum
Tire.....	Rubber
Wheel Cover.....	Steel
Paint Type/Finish.....	Urethane

Other Related Information

Wheel Diameter.....	10 in.
Wheel Width.....	1/2 in.
Number of Dust Ports.....	1
Dust Port Size.....	2, 3, 4 in.

Other Specifications:

Country of Origin	China
Warranty	1 Year
Approximate Assembly & Setup Time	30 Minutes
Serial Number Location	Machine ID Label
ISO 9001 Factory	Yes

Features:

- Steel Stand w/Vibration-Resistant Rubber Feet
- Ball-Bearing Blade Guides
- LED Work Light
- Extruded Aluminum Rip Fence
- Combination 2", 3" & 4" Dust Port
- 45-Degree Table Tilt
- 6-1/8" Cutting Height (Resaw Capacity)
- Blade Speeds: 1520, 2620 FPM

Accessories Included:


- Push Stick
- Miter Gauge
- Open-Ends Wrench 10/13mm
- Hex Wrenches 3, 4, 5, 6mm




SECTION 1: SAFETY

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

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

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

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

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

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

Safety Instructions for Machinery

WARNING

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

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

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

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

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

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

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



WARNING

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



Additional Safety for Bandsaws

WARNING

Serious cuts, amputation, or death can occur from contact with the moving saw blade during operation or if blade breakage occurs. Serious injury or death can also occur from getting fingers, hair, or clothing entangled in moving parts if the machine is operated while the doors are open. 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.

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, clamping fixture.

BLADE SPEED. 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.

FEED RATE. To avoid risk of workpiece slipping and causing 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.

CLEARING JAMS AND CUTOFFS. 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 CONTROL. To avoid risk of injury due to blade contact, always allow blade to stop on its own. **DO NOT** try to stop or slow blade with your hand or the workpiece.

GUARDS/COVERS. Blade guards and covers protect operator from moving bandsaw blade. The wheel covers protect operator from getting entangled with rotating wheels or other moving parts. **ONLY** operate bandsaw with blade guard in proper position and wheel covers completely closed.

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.

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.

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.

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

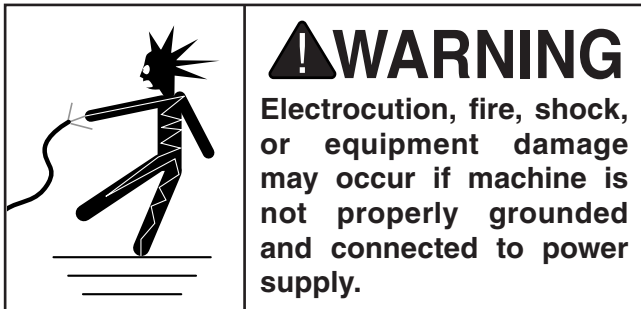
WORKPIECE MATERIAL. This machine is intended for cutting natural and man-made wood products, and laminate covered wood products. This machine is **NOT** designed to cut metal, glass, stone, tile, etc.



SECTION 2: POWER SUPPLY

Availability

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



Full-Load Current Rating

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

Full-Load Current Rating at 120V ... 3.5 Amps

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

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

! WARNING

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

120V Circuit Requirements

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

Nominal Voltage 110V, 115V, 120V
Cycle 60 Hz
Phase Single-Phase
Power Supply Circuit 15 Amps

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

! CAUTION

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

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



Grounding & Plug Requirements

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

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

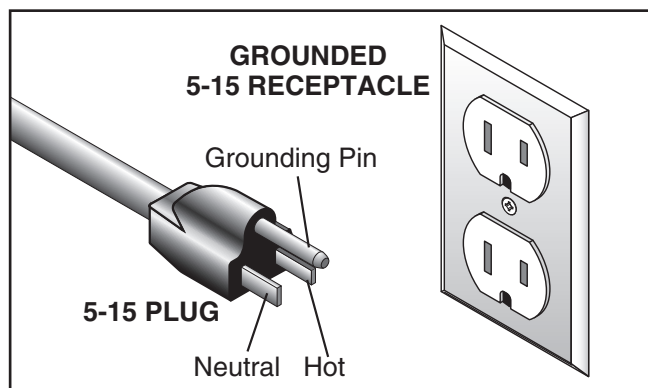
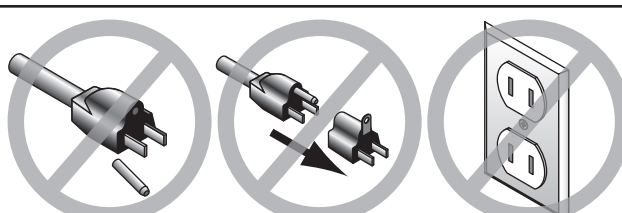


Figure 7. Typical 5-15 plug and receptacle.

⚠ CAUTION



SHOCK HAZARD!

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

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

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

Extension Cords

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

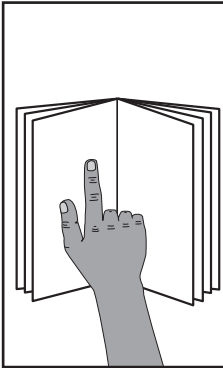
Extension cords cause voltage drop, which can damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

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

- Minimum Gauge Size 16 AWG**
- Maximum Length (Shorter is Better).....50 ft.**

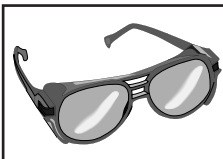


SECTION 3: SETUP



!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!



!WARNING

Wear safety glasses during the entire setup process!

!WARNING

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

!CAUTION

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

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.*

Needed for Setup

The following items are needed, but not included, for the setup/assembly of this machine.

Description	Qty
• Additional Person	1
• Safety Glasses (for each person).....	1
• Heavy Leather Gloves.....	1 Pr.
• Phillip's Head Screwdriver #2.....	1
• Feeler Gauge 0.016"	1
• Straightedge	1
• Ruler.....	1
• Shims	As Needed
• Machinist's Square	1
• Level 18".....	1
• Dust-Collection System.....	1
• Dust Hose 2", 3", or 4".....	1
• Hose Clamps 2", 3", or 4"	2



Inventory

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

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

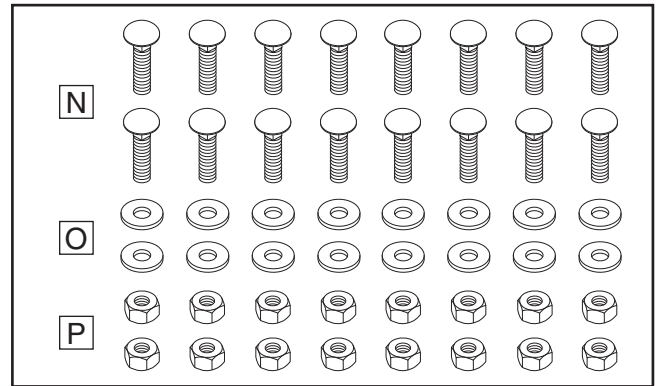


Figure 9. Hardware.

Hardware (Figure 9)		Qty
N.	Carriage Bolts M8-1.25 x 16.....	16
O.	Flat Washers 8mm	16
P.	Hex Nuts M8-1.25.....	16

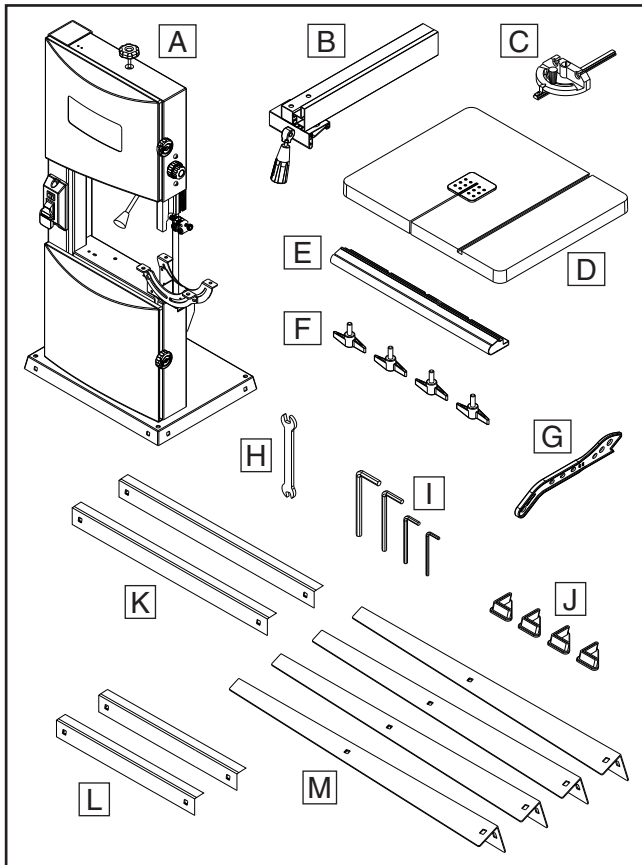


Figure 8. Inventory.

Inventory (Figure 8)		Qty
A.	Bandsaw.....	1
B.	Rip Fence Assembly	1
C.	Miter Gauge.....	1
D.	Table w/Insert.....	1
E.	Fence Rail	1
F.	Wing Bolts M8-1.25 x 18	4
G.	Push Stick	1
H.	Open-End Wrench 10 x 13mm.....	1
I.	Hex Wrenches 3, 4, 5, 6mm.....	1 Ea.
J.	Rubber Feet	4
K.	Stand Braces (Long)	2
L.	Stand Braces (Short).....	2
M.	Stand Legs	4

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

USE THIS CHART TO MATCH UP
HARDWARE DURING THE INVENTORY
AND ASSEMBLY PROCESS.

MEASURE BOLT DIAMETER BY PLACING INSIDE CIRCLE

○ #10

○ 1/4"

○ 5/16"

○ 3/8"

○ 7/16"

○ 1/2"

○ 4mm

○ 5mm

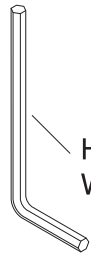
○ 6mm

○ 8mm

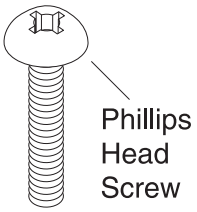
○ 10mm

○ 12mm

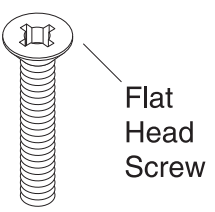
○ 16mm



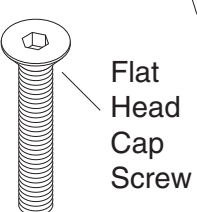
Hex Wrench



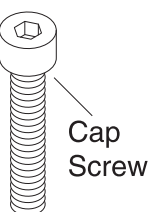
Phillips Head Screw



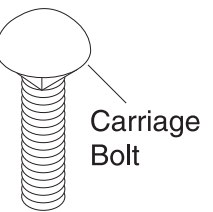
Flat Head Screw



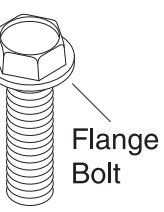
Flat Head Cap Screw



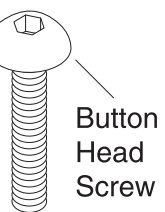
Cap Screw



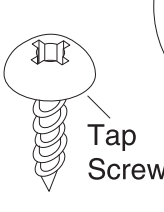
Carriage Bolt



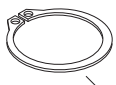
Flange Bolt



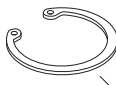
Button Head Screw



Tap Screw



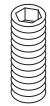
External Retaining Ring



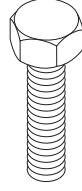
Internal Retaining Ring



E-Clip



Set Screw



Hex Bolt



Key



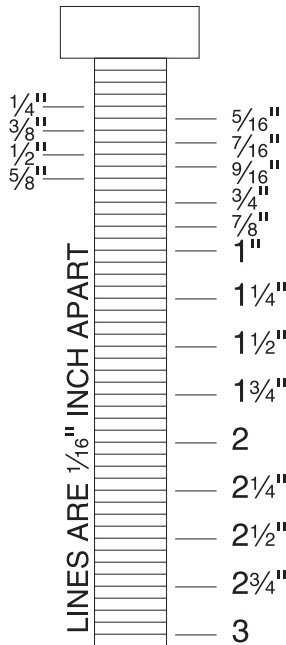
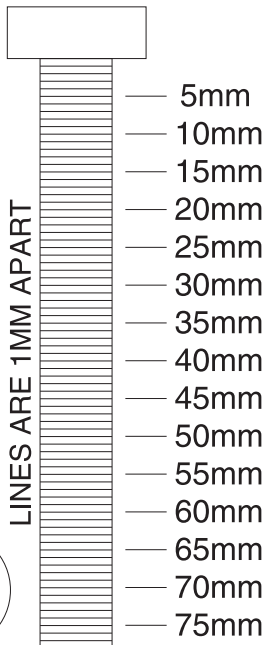
Flat Washer



Lock Washer



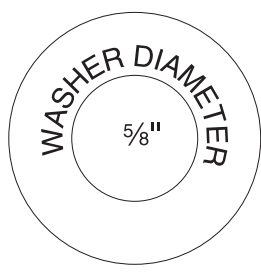
Hex Nut



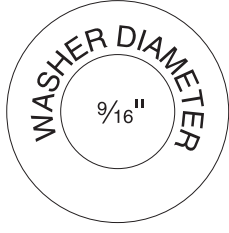
Lock Nut



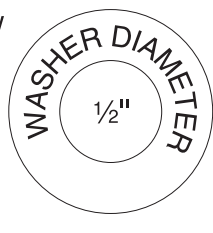
Wing Nut



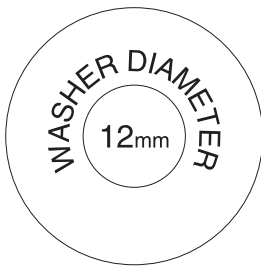
WASHER DIAMETER
5/8"



WASHER DIAMETER
9/16"



WASHER DIAMETER
1/2"



WASHER DIAMETER
12mm



WASHER DIAMETER
7/16"



WASHER DIAMETER
3/8"



WASHER DIAMETER
10mm



WASHER DIAMETER
4mm



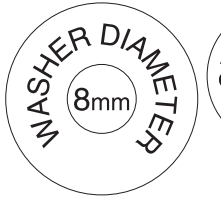
WASHER DIAMETER
5/16"



WASHER DIAMETER
5mm



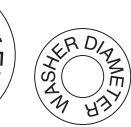
WASHER DIAMETER
1/4"



WASHER DIAMETER
8mm



WASHER DIAMETER
6mm



WASHER DIAMETER
#10

WASHERS ARE MEASURED BY THE INSIDE DIAMETER



Site Considerations

Workbench Load

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

Placement Location

Consider anticipated workpiece sizes and additional space needed for auxiliary stands, work tables, or other machinery when establishing a location for this machine in the shop. Below is the minimum amount of space needed for the machine.

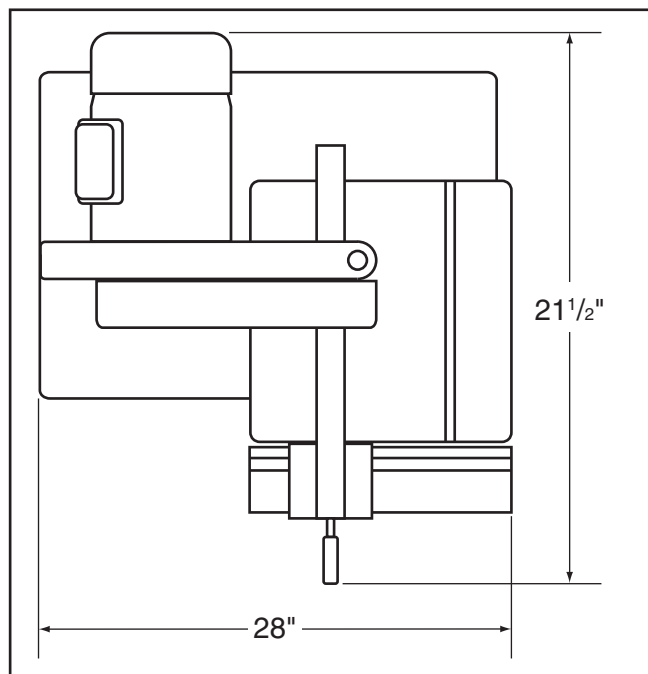
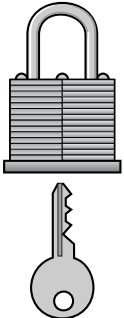



Figure 10. Minimum working clearances.

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

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).

	<p>CAUTION</p> <p>LACERATION HAZARD! Bandsaw blades and some sheet metal parts are sharp. Wear heavy leather gloves while handling to reduce risk of being cut.</p>
--	--

To assemble machine:

1. Locate (4) stand legs (see **Figure 11**) and attach (1) rubber foot to bottom of each leg.

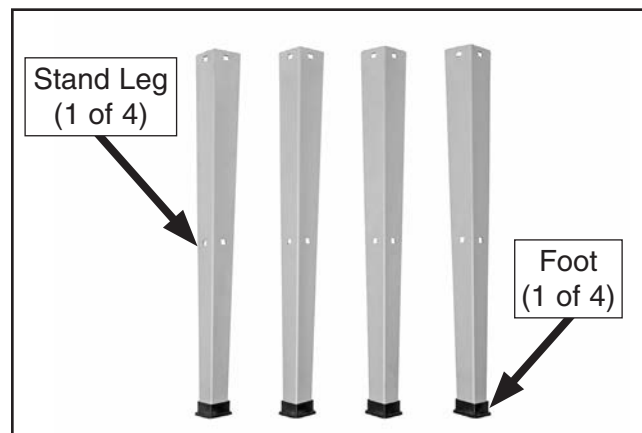


Figure 11. Rubber feet attached to stand legs.



- Attach (1) short brace to (2) stand legs with (2) M8-1.25 x 16 carriage bolts, 8mm flat washers, and M8-1.25 hex nuts, as shown in **Figure 12**. Only finger tighten for now.

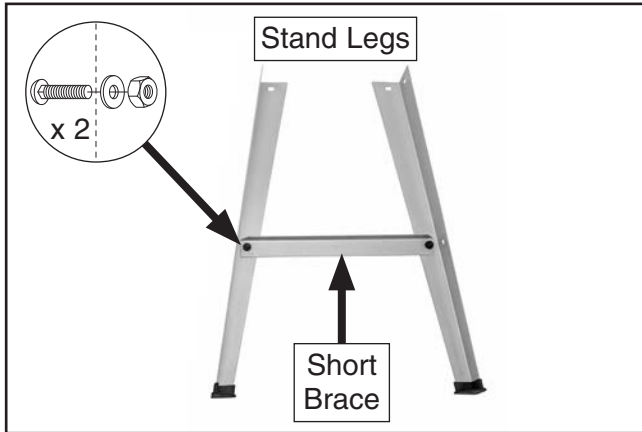


Figure 12. Stand legs attached to short braces.

- Repeat **Step 2** with remaining (1) short brace and (2) stand legs.
- Attach (2) leg assemblies together with (2) long braces using (4) M8-1.25 x 16 carriage bolts, 8mm flat washers, and M8-1.25 hex nuts, as shown in **Figure 13**. Only finger tighten for now.

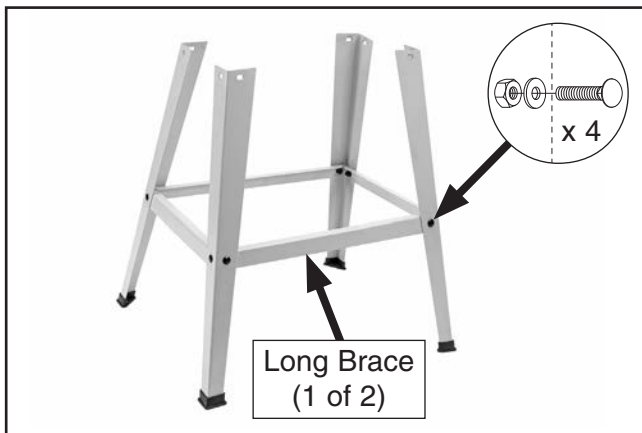


Figure 13. Leg assemblies attached with long braces.

- Have an assistant position machine base over top of stand (see **Figure 14**), and secure with (8) M8-1.25 x 16 carriage bolts, 8mm flat washers, and M8-1.25 hex nuts.



Figure 14. Machine attached to stand.

- Ensure machine is level, side to side and front to back, then tighten all fasteners installed in **Steps 2–5**.
- Remove (4) pre-installed M6-1 x 10 hex bolts and 6mm flat washers from base of table, and loosen (2) shoulder screws (see **Figure 15**) securing trunnions to trunnion bracket.

Note: For operations requiring a high degree of accuracy, tighten shoulder screws securing trunnions to trunnion bracket to increase table rigidity.

- Slide table past saw blade through table slot, and secure table to trunnions with fasteners removed in **Step 7** (see **Figure 15**).

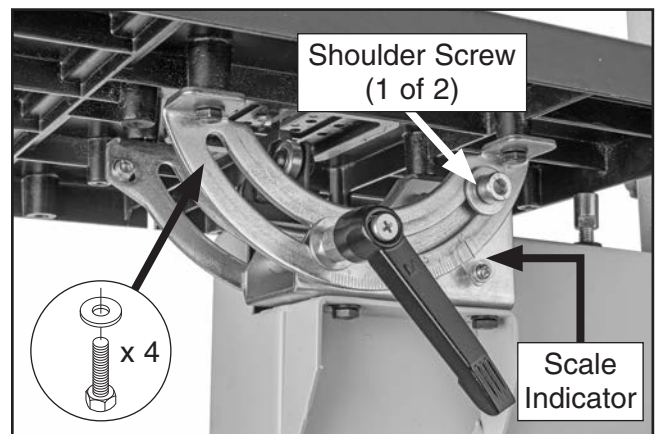


Figure 15. Table attached to trunnions.



9. Completely raise upper blade guide assembly, then place machinist's square flat on table, against side of blade (see **Figure 16**).
10. Loosen table lock lever, and tilt table until square is flat against side of blade, as illustrated in **Figure 16**. When complete, tighten lock lever.

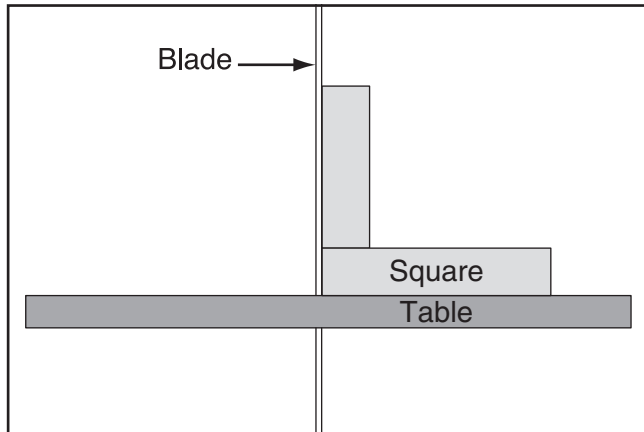


Figure 16. Using a square to adjust table perpendicular to the side of blade.

11. Loosen screw on scale indicator (see **Figure 15** on **Page 17**), set indicator to "0", and tighten screw.
12. Attach fence rail to front of table with (4) M8-1.25 x 18 wing bolts (see **Figure 17**).

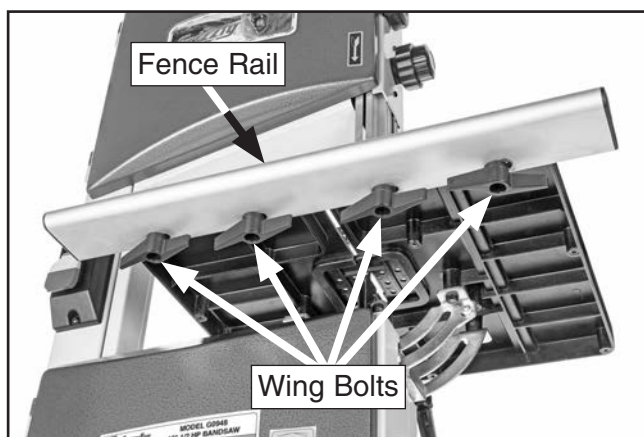


Figure 17. Fence rail attached to front of table.

13. Install fence on fence rail, as shown in **Figure 18**.

Note: Fence lock lever (see **Figure 18**) needs to be in up position when fitting fence onto fence rail. Once fence snaps onto fence rail, push lock lever down to secure fence in position.

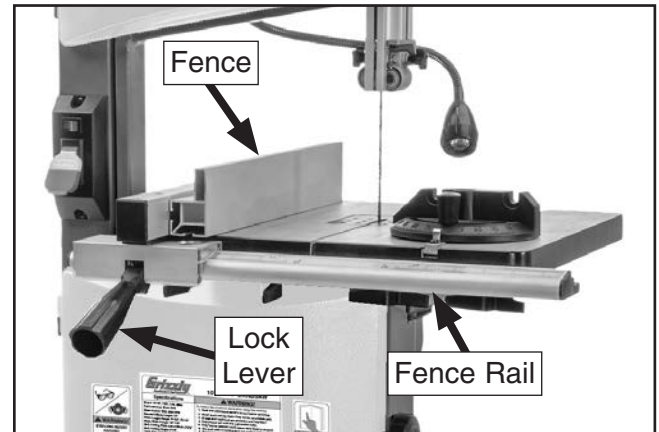


Figure 18. Fence installed on fence rail.



Dust Collection

⚠ CAUTION

This machine creates a lot of wood chips/dust during operation. Breathing airborne dust on a regular basis can result in permanent respiratory illness. Reduce your risk by wearing a respirator and capturing the dust with a dust-collection system.

2" Dust Port.....100 CFM
3" Dust Port.....250 CFM
4" Dust Port.....400 CFM

Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must consider these variables: (1) CFM rating of the dust collector, (2) hose type and length between the dust collector and the machine, (3) number of branches or wyes, and (4) amount of other open lines throughout the system. Explaining how to calculate these variables is beyond the scope of this manual. Consult an expert or purchase a good dust collection "how-to" book.

To connect a dust collection hose:

1. Fit 2", 3" or 4" dust hose over dust port, as shown in **Figure 19**, and secure it in place with a hose clamp.

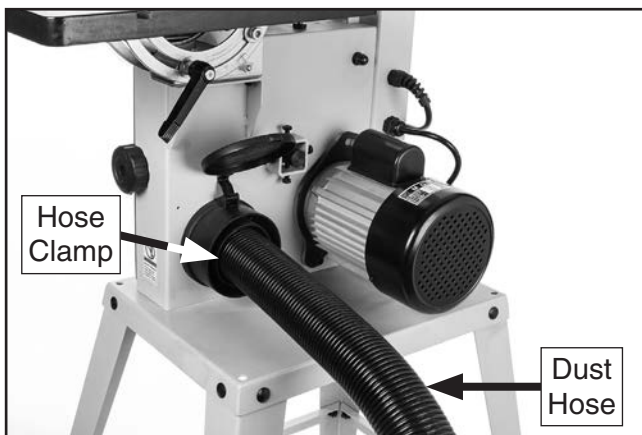


Figure 19. Example of 2" dust hose attached to dust port.

2. Gently pull hose to make sure it does not come off. A tight fit is necessary for proper performance.

Adjustment Overview

The bandsaw is one of the most versatile wood-working machines. However, it has multiple components that must be properly adjusted for the best cutting results.

For practical and safety reasons, some adjustments and test operations must be performed before performing other necessary adjustments. Below is an overview of all the adjustments and the order in which they should be performed:

1. Initial Blade Tracking
2. Test Run
3. Tensioning Blade
4. Adjusting Blade Support Bearings
5. Adjusting Blade Guide Bearings
6. Aligning Table
7. Aligning Fence



Initial Blade Tracking

"Tracking" refers to how the blade rides on the bandsaw wheels. Proper tracking is important for maintaining bandsaw adjustments, achieving correct blade tension, and cutting accurately. Improper tracking reduces cutting accuracy, causes excess vibrations, and places stress on the blade and other bandsaw components. The shape of the wheels and the orientation of the wheels in relation to each other determine how the blade tracks.

Bandsaw wheels are either flat or crowned and both shapes track differently. The G0948 has crowned wheels. As the wheels spin, a properly tracking blade naturally tracks at the center of the wheel (see **Figure 20**).

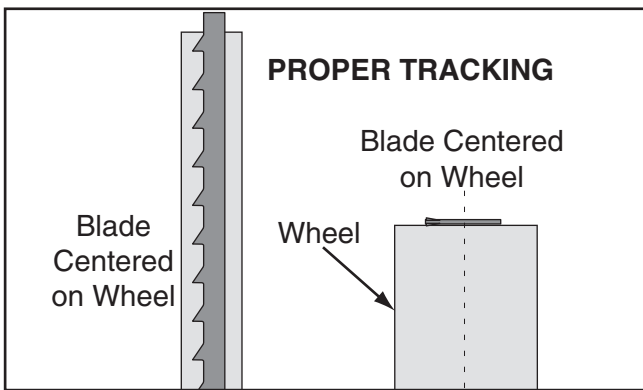


Figure 20. Blade centered on crown of wheel.

The bandsaw wheels must be aligned for optimal machine performance. Properly aligned wheels are parallel and coplanar (see **Figure 21**).

Improper blade tension and cutting practices can negatively affect blade tracking. Familiarizing yourself with the ideas and conditions described in **Figure 21** will help you recognize when your wheel alignment may need to be adjusted (refer to **Aligning Wheels** on **Page 53** for detailed instructions on adjusting the tracking).

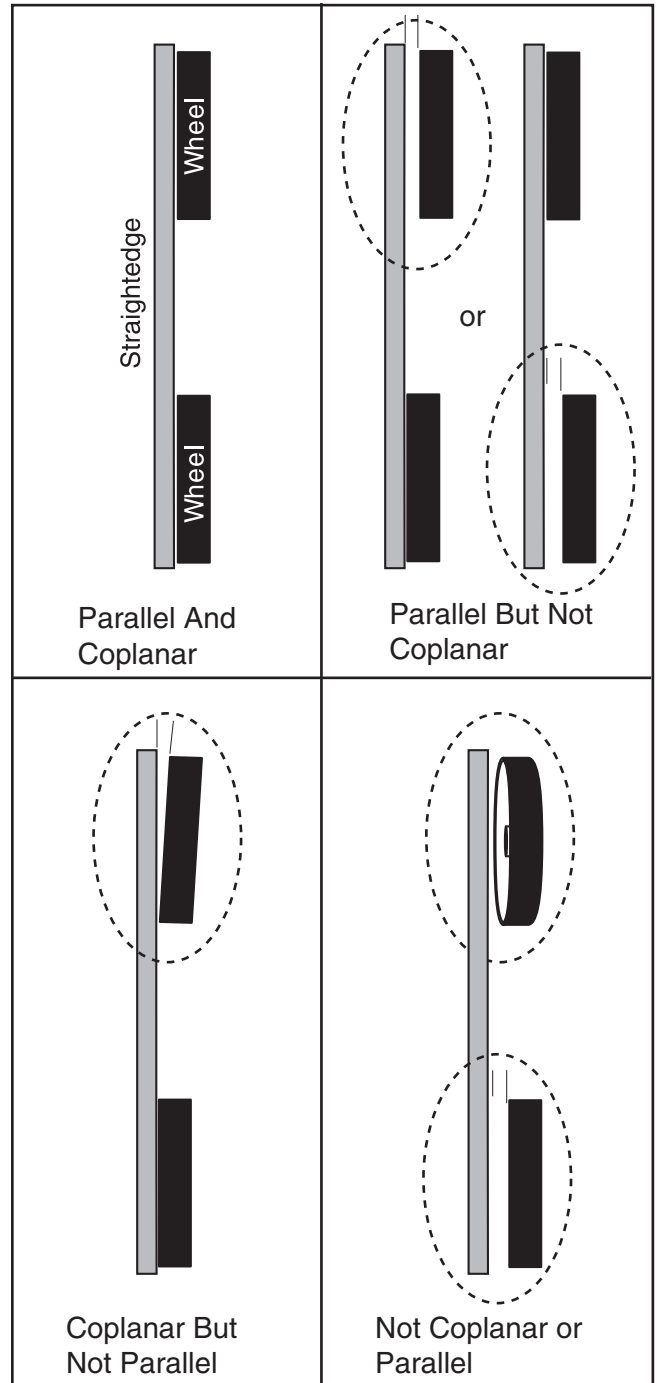


Figure 21. Wheel alignment and misalignment examples.

The wheels on the G0948 were aligned at the factory, so center tracking is the only adjustment that needs to be performed when the saw is new. This adjustment is necessary before turning the saw on or performing other adjustments.



Tool(s) Needed	Qty
Protective Gloves.....	1 Pr.
Hex Wrenches 4, 5mm.....	1 Ea.

To adjust blade tracking:

1. DISCONNECT MACHINE FROM POWER!
2. Adjust upper and lower blade guides away from blade, and raise upper guides all the way up (refer to **Adjusting Blade Guide Bearings** on **Page 25** for detailed instructions).

Note: *When adjusting the blade tracking for the test run in this procedure, the blade must have approximately the same amount of tension as when under operating conditions. After the test run is successfully completed, you will be instructed on how to more accurately tension the blade for optimum results.*

3. Rotate tension adjustment knob clockwise to apply tension to blade (see **Figure 22**).

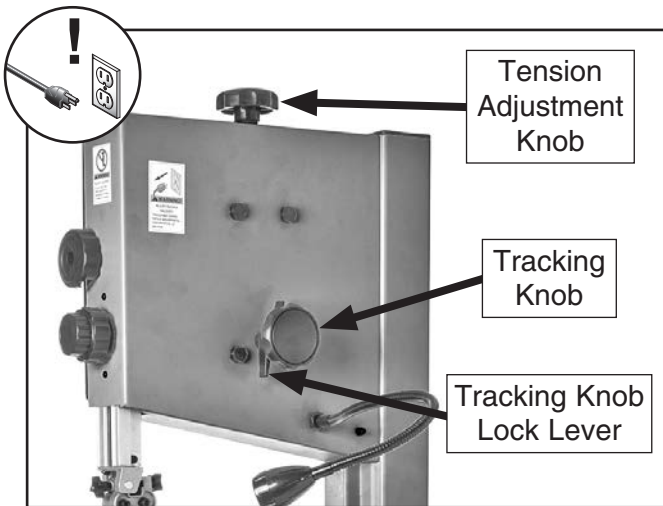


Figure 22. Blade tension and tracking controls.

4. Open upper wheel cover.
5. Push blade toward fence with moderate pressure to check if there is approximately 1/4" deflection. If not, rotate tension adjustment knob as needed until blade is properly tensioned.

6. Rotate upper wheel by hand several times and watch how blade rides on wheel (see **Figure 20** on **Page 20** for an illustration of this concept).

— If the blade rides in the center of the upper wheel, it is properly tracking and you are done with this procedure.

— If the blade does *not* ride in the center of the upper wheel, it is not properly tracking; continue with the next step to adjust it.

7. Spin upper wheel with one hand and slowly adjust tracking knob (see **Figure 22**) with other hand until blade consistently tracks in center of wheel.
8. Turn tracking knob lock lever clockwise to secure setting.
9. Close and secure upper wheel cover before operating bandsaw.

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 removable key on the switch works correctly.

⚠️ WARNING

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



!WARNING

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

To test run machine:

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

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

4. Remove key, as shown in **Figure 23**.

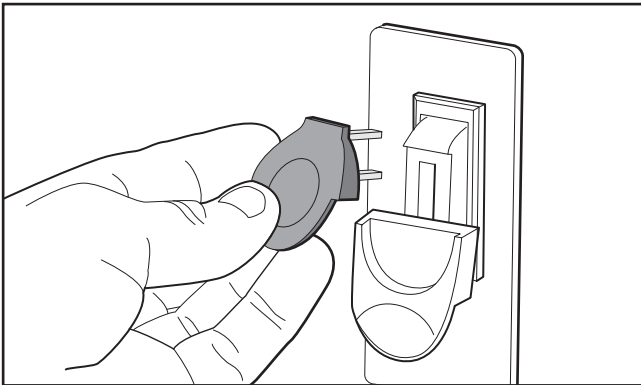


Figure 23. Removing key from ON/OFF paddle switch.

5. Try to start machine with ON/OFF paddle switch. The machine should not start.

— If the machine *does not* start, the switch is working as designed.

— If the machine *does start*, immediately stop the machine. The switch is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

Tensioning Blade

A properly tensioned blade is essential for making accurate cuts, maximizing the blade life, and making other bandsaw adjustments. However, a properly tensioned blade will not compensate for cutting problems caused by excessive feed rate, hardness variations between workpieces, and improper blade selection.

Optimal cutting results for any type of workpiece are achieved through a combination of correct blade selection, proper blade tension, properly adjusted blade guides and other bandsaw components, and using an appropriate feed rate.

Improper blade tension is unsafe, produces inaccurate and inconsistent results, and introduces unnecessary wear on bandsaw components. Over-tensioning the blade increases the chance of the blade breaking or wheel misalignment. Under-tensioned blades wander excessively while cutting and will not track properly during operation.

The method used to tension the blade is often a matter of preference. This manual describes two methods: the flutter method and the deflection method. Either method will help you properly tension the blade. Experience and personal preference will help you decide which method you prefer.

Note: *Tensioning the blade before the **Test Run** was an approximate tension. The following procedures fine-tune the blade tension.*



The Flutter Method

Using the flutter method, you intentionally loosen the blade until it just passes the point of being too loose (when it begins to flutter). Then you gradually tighten the blade until proper tension is reached.

To tension bandsaw blade using flutter method.

1. DISCONNECT MACHINE FROM POWER!
2. Make sure blade is properly tracking as instructed in **Initial Blade Tracking** on **Page 20**.
3. Raise guide post all the way, and move upper and lower guide bearings away from blade.
4. Rotate blade tension adjustment knob clockwise to apply tension to blade.
5. Connect bandsaw to power, then turn it **ON**.
6. Using blade tension adjustment knob, slowly decrease blade tension until you see the blade start to flutter.
7. Slowly increase tension until blade stops fluttering, then tighten blade tension adjustment knob an additional $\frac{1}{8}$ to $\frac{1}{4}$ of a turn.
8. DISCONNECT MACHINE FROM POWER!
9. Adjust blade guides as described in **Adjusting Blade Support Bearings** and **Adjusting Blade Guide Bearings** on **Pages 24–25**.

The Deflection Method

The deflection method is much more subjective than the flutter method. Each blade will deflect differently and every user will determine what "moderate pressure" means. The following are general guidelines for tensioning the blade with this method.

To tension bandsaw blade using deflection method:

1. DISCONNECT MACHINE FROM POWER!
2. Make sure blade is properly tracking as instructed in **Initial Blade Tracking** on **Page 20**.
3. Raise guide post all the way and move upper and lower guide bearings away from blade.
4. Rotate blade tension adjustment knob clockwise to apply tension to blade.
5. Using moderate pressure, push center of the blade sideways with one finger.
 - If the blade deflects approximately $\frac{1}{4}$ ", it is properly tensioned. Proceed to **Step 6**.
 - If the blade deflects less than $\frac{1}{4}$ ", it is over-tensioned. Turn the blade tension adjustment knob counterclockwise two full turns and repeat **Step 5**.
 - If the blade deflects $\frac{1}{4}$ " or more, the blade is not properly tensioned. Apply tension to the blade incrementally and repeat **Step 5** until properly tensioned.
6. Adjust blade guides as described in **Adjusting Blade Support Bearings** and **Adjusting Blade Guide Bearings** on **Pages 24–25**.



Adjusting Blade Support Bearings

The support bearings are positioned behind the blade near the blade guides and prevent the blade from pushing backward during cutting operations. Proper adjustment of the support bearings helps you make accurate cuts and prevents the blade teeth from coming in contact with the blade guides while cutting. If this happens the blade "tooth set" can be ruined, which will greatly reduce the blade's ability to make good cuts.

IMPORTANT: To ensure best results while cutting, make sure blade is tracking (see **Initial Blade Tracking** on **Page 20**) and tensioned (see **Blade Tensioning** on **Page 22**) correctly before performing this procedure.

Adjusting Upper Support Bearing

Tool(s) Needed	Qty
Feeler Gauge 0.016".....	1

To adjust upper support bearing:

1. DISCONNECT MACHINE FROM POWER!
2. Loosen support bearing adjustment knob (see **Figure 24**).

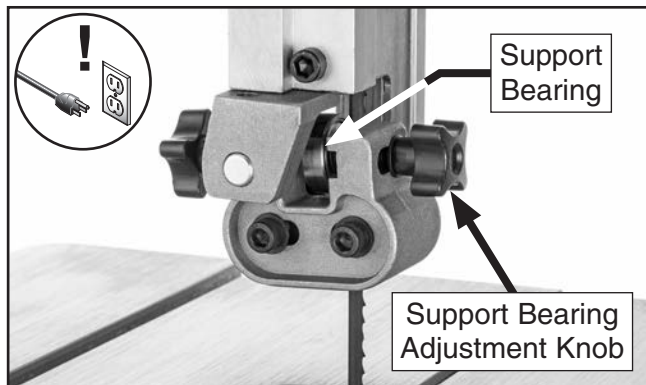


Figure 24. Upper support bearing components.

3. Position support bearing approximately 0.016" away from back of blade (see **Figure 25**).

Note: The main purpose of this adjustment is to prevent the blade from being pushed backward far enough that the blade guides will contact (and ruin) the "tooth set" of the blade during cutting operations.

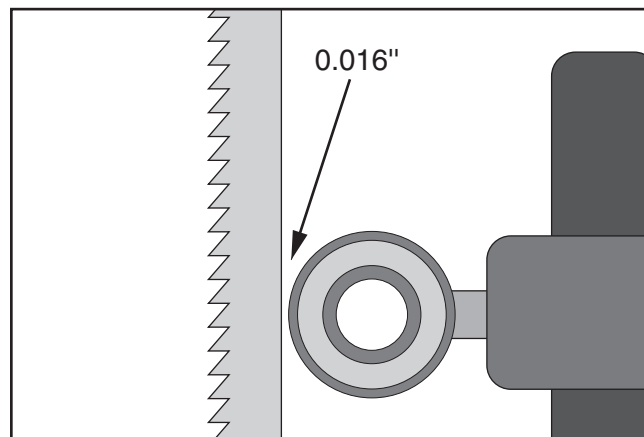


Figure 25. Bearing positioned 0.016" away from back of blade.

4. Tighten adjustment knob to lock support bearing in place.

Adjusting Lower Support Bearing

Tool(s) Needed	Qty
Wrench or Socket 10mm.....	1
Hex Wrench 4mm.....	1
Feeler Gauge 0.016".....	1

To adjust lower support bearing:

1. DISCONNECT MACHINE FROM POWER!
2. Loosen button head cap screw (see **Figure 26**).

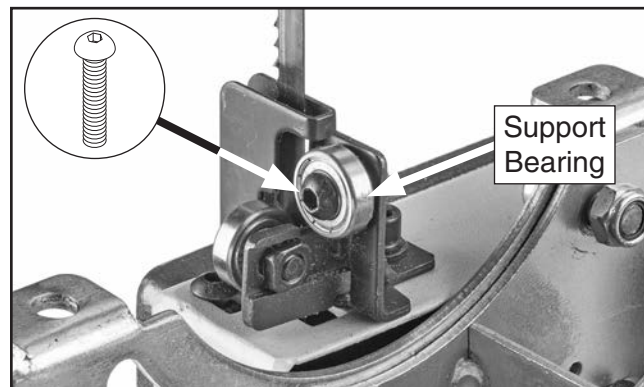


Figure 26. Location of lower support bearing (table removed for clarity).

3. Position support bearing approximately 0.016" away from the back of the blade, as illustrated in **Figure 25**. This can be measured with a feeler gauge.
4. Tighten button head cap screw loosened in **Step 2**.



Adjusting Blade Guide Bearings

The blade guide bearings can be adjusted left-to-right, as well as front-to-back, relative to the blade. Properly adjusted blade guide bearings provide side-to-side support, from just behind the gullets to the back of the blade, to help keep the blade straight while cutting.

IMPORTANT: Make sure the blade is tracking (refer to **Initial Blade Tracking** on **Page 20**) and tensioned (see **Tensioning Blade** on **Page 22**) correctly before performing this procedure.

Adjusting Upper Blade Guide Bearings

Tool(s) Needed	Qty
Hex Wrench 4mm.....	1
Feeler Gauge 0.016".....	1

To adjust upper blade guide bearings:

1. DISCONNECT MACHINE FROM POWER!
2. Loosen guide block adjustment knob shown in **Figure 27**, then laterally position guide bearings just behind blade gullets, as illustrated in **Figure 28**, then tighten knob to secure setting.

Note: The guide bearings should be positioned behind the gullets a distance equal to that of the support bearing behind the blade (see **Page 24** for reference).

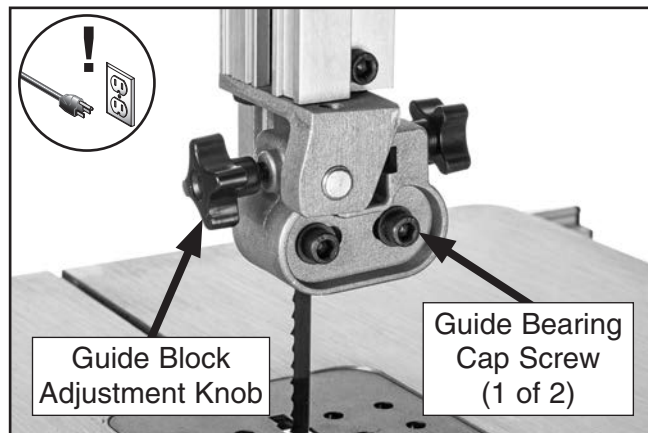


Figure 27. Upper guide bearing components.

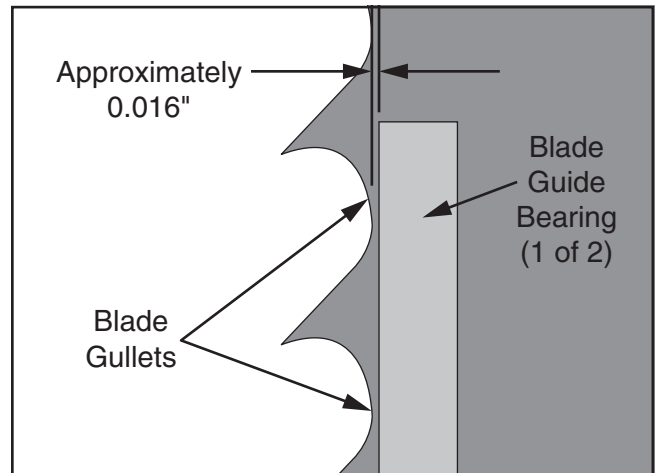


Figure 28. Blade guide bearing positioned just behind blade gullets.

Note: With wider blades, it may not be possible to bring the guide bearings just behind the blade gullets. Position them as far forward as possible without allowing the guide bearing housing to touch the back of the blade.

NOTICE

Blade teeth are angled out slightly, protruding wider than the blade thickness; this is known as blade "tooth set" (see **Figure 29**). If teeth contact guide bearings during operation, damage may occur. Therefore, the support bearing must be set to prevent teeth from contacting guide bearings during operation (refer to **Page 24** for details).

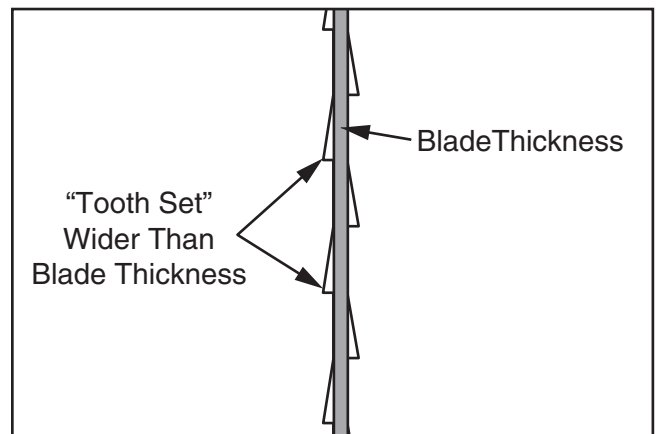


Figure 29. Illustration of blade "tooth set".



- Loosen both guide bearing cap screws (see **Figure 27** on **Page 25**), then position guide bearings so they evenly and lightly touch sides of blade (see illustration in **Figure 30**) without deflecting it one way or the other.

Note: When the blade guide bearings are properly adjusted against the blade, they should lightly rotate as the blade moves.

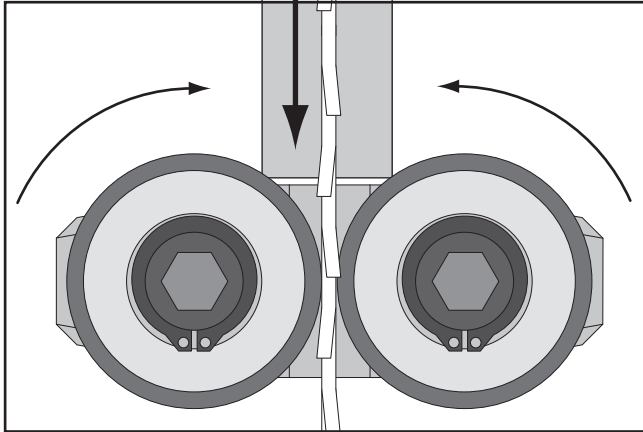


Figure 30. Blade guide bearings evenly and lightly touching the sides of the blade.

- Tighten cap screws to secure settings. Re-check setting after tightening.

NOTICE

Whenever changing blade or adjusting blade tension or tracking, the support and guide bearings must be re-adjusted before resuming operation to ensure proper blade support.

Adjusting Lower Blade Guide Bearings

Tool(s) Needed	Qty
Hex Wrenches 4, 5mm.....	1 Ea.
Feeler Gauge 0.016".....	1

To adjust lower blade guide bearings:

- DISCONNECT MACHINE FROM POWER!
- Loosen guide block cap screw (see **Figure 31**), then laterally position guide bearings just behind blade gullets, as illustrated in **Figure 28** on **Page 25**, then tighten cap screw to secure setting.

Note: The guide bearings should be positioned behind the gullets a distance equal to that of the support bearing behind the blade (see **Page 24** for reference).

- Loosen both guide bearing screws (see **Figure 31**), then position guide bearings so they evenly and lightly touch sides of blade (see illustration in **Figure 30**) without deflecting it one way or the other.

Note: When the blade guide bearings are properly adjusted against the blade, they should lightly rotate as the blade moves.

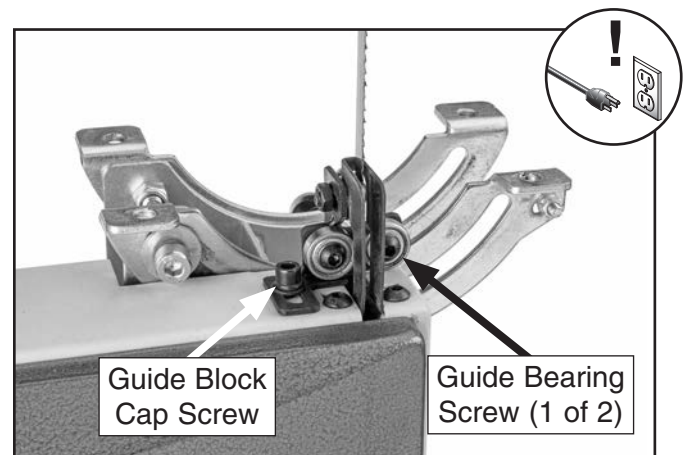


Figure 31. Lower blade guide components (table removed for clarity).

- Tighten screws to secure settings. Re-check setting after tightening.



Aligning Table

To ensure cutting accuracy, the table should be aligned so that the miter slot is parallel to the bandsaw blade.

Item(s) Needed	Qty
Precision Straightedge	1
Precision Ruler	1
Square	1
Hex Wrench 6mm.....	1
Wrench or Socket 10mm.....	1
Shims.....	As Needed

Adjusting Miter Slot Parallelism

1. Make sure blade is tracking properly and correctly tensioned (refer to **Pages 20 and 22**).
2. **DISCONNECT MACHINE FROM POWER!**
3. Place straightedge along blade so it barely touches both front and back of blade without going across a tooth (see **Figure 32**).
4. Measure distance between straightedge and miter slot (see **Figure 32**). Distance should be same at front and back of table.
 - If distance *is* same at front and back of table, no adjustment is necessary.
 - If distance *is not* same at front and back of table, it must be adjusted; proceed to **Step 5**.

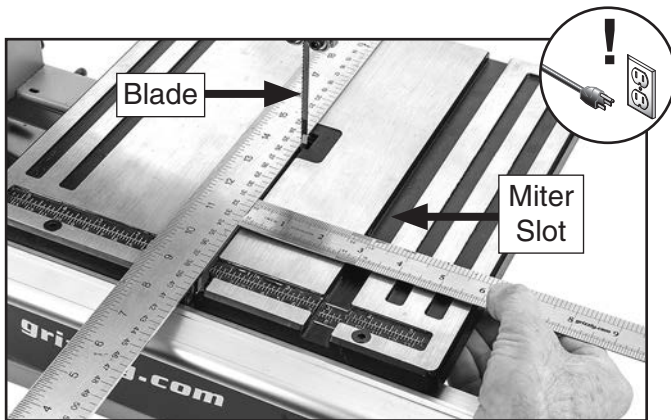


Figure 32. Example of placing a straightedge along blade and measuring to miter slot.

5. Loosen trunnion hex bolts that secure table (see **Figure 33**).

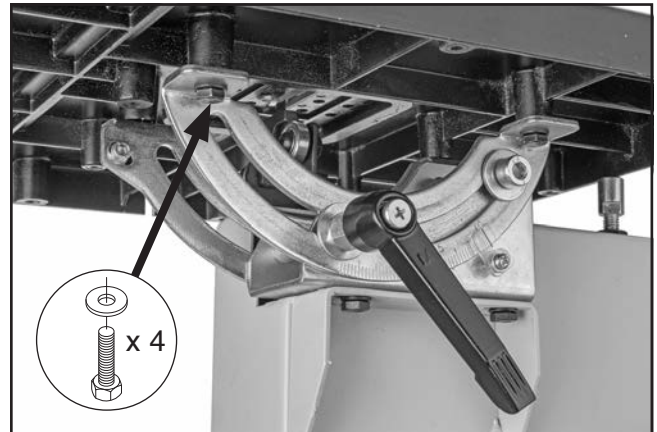


Figure 33. Location of trunnion hex bolts.

6. Adjust table until distance between straightedge and miter slot is same at front and back of table.
7. Taking care not to move table, tighten trunnion hex bolts, then repeat **Step 4** to verify adjustment.

Adjusting Table Perpendicular to Blade

1. **DISCONNECT MACHINE FROM POWER!**
2. Place a square on table and against back of blade, as illustrated in **Figure 34**. Table should be perpendicular to back of blade.
 - If the table *is* perpendicular to the back of the blade, no adjustment is necessary; proceed to **Aligning Fence on Page 28**.
 - If the table *is not* perpendicular to the back of the blade, you must shim the table; proceed to **Step 3**.

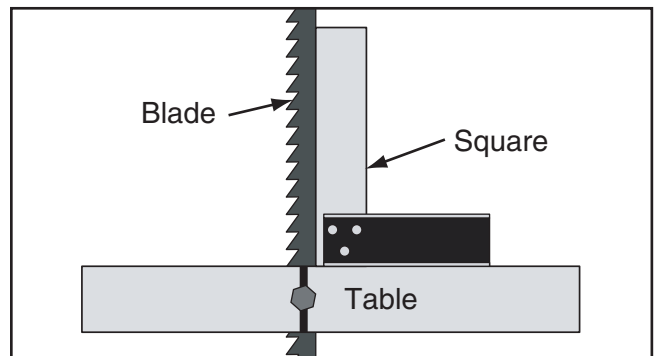


Figure 34. Squaring back of blade and table.



3. Determine which trunnion is on low side of table, then remove two hex bolts (see **Figure 33** on **Page 26**) from low trunnion.
4. Insert a shim, such as a thin washer, between table and low trunnion at each mounting location.
5. Re-install and tighten trunnion hex bolts, then repeat **Step 2** to verify adjustment.

3. Install fence on right side of blade, aligned with edge of miter slot, then lock it in place.
 - If fence *is* parallel with miter slot, no adjustment is necessary.
 - If fence *is not* parallel with miter slot, proceed to **Step 4**.
4. Loosen (2) fence adjustment cap screws (see **Figure 35**), adjust fence parallel with miter slot, then tighten cap screws to secure setting.

Aligning Fence

To ensure cutting accuracy, the fence should be aligned parallel with the blade. This is achieved by aligning the fence with the miter slot.

Note: Occasionally, even after aligning the fence, a symptom known as "blade lead" will develop, requiring the fence to be skewed slightly to compensate for the blade lead problem. Refer to **Blade Lead**, beginning on **Page 56** for more information on blade lead and skewing the fence.

Item(s) Needed	Qty
Hex Wrench 4mm.....	1

To align fence:

1. DISCONNECT MACHINE FROM POWER!
2. Make sure table is aligned with blade (see **Adjusting Miter Slot Parallelism** on **Page 27** for instructions).

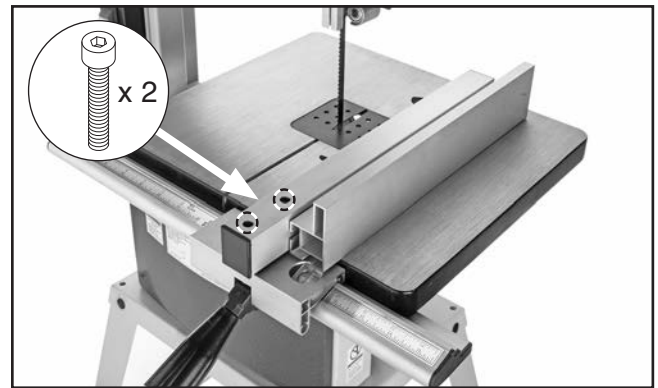


Figure 35. Location of fence adjustment cap screws.



Calibrating Miter Gauge

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

Tool(s) Needed	Qty
Phillips Screwdriver #2	1
Square	1

To calibrate miter gauge:

1. DISCONNECT MACHINE FROM POWER!
2. Place one edge of square against face of miter gauge and other edge of square against side of blade, as shown in **Figure 36**.

Note: *Make sure square does not go across a blade tooth when performing this step.*

- If square rests flush and evenly against *both* miter gauge face *and* side of blade, then no adjustments are necessary.
- If square *does not* rest flush and evenly against *both* miter gauge face *and* side of blade, the miter gauge must be calibrated. Proceed to **Step 3**.

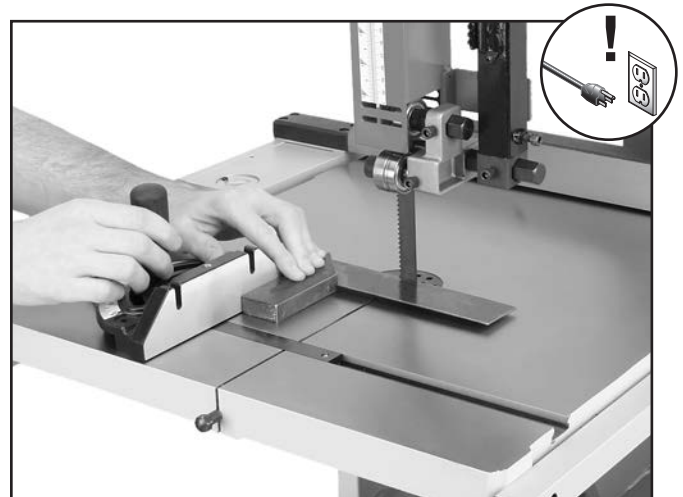


Figure 36. Example of squaring miter gauge to blade.

3. Loosen lock knob on miter gauge and adjust face flush with edge of square.
4. Tighten lock knob, and verify square rests flush and evenly against *both* miter gauge face *and* side of blade.

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

5. Loosen screw that secures angle pointer, adjust pointer to 0° mark on scale, then tighten screw to secure setting.





SECTION 4: OPERATIONS

Operation Overview

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

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

	<p>!WARNING To reduce your risk of serious injury, read this entire manual BEFORE using machine.</p>
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<p>!WARNING To reduce risk of eye injury from flying chips or lung damage from breathing dust, always wear safety glasses and a respirator when operating this machine.</p>	
	

<p>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.</p>
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To complete a typical operation, the operator does the following:

1. Examines workpiece to make sure it is suitable for cutting.
2. Adjusts table tilt, if necessary, to correct angle of desired cut.
3. If using fence, adjusts it for width of cut and then locks it in place. If using miter gauge, adjusts angle and locks it in place.
4. Loosens guide post lock knob, adjusts the upper blade guide height to just clear workpiece (no more than 1/4"), then re-tightens guide post lock knob.
5. Checks to make sure workpiece can safely pass all the way through blade without interference from other objects.
6. Puts on safety glasses and a respirator.
7. Starts dust collector, then bandsaw.
8. Holds workpiece firmly and flatly against both table and fence (or miter gauge), and then pushes workpiece into blade at a steady and controlled rate until cut is complete.

The operator is very careful to keep fingers away from blade and uses a push stick to feed narrow workpieces.
9. Stops bandsaw, then dust collector.



Basic Functions of a Bandsaw

A properly adjusted bandsaw can be safer to operate than most other saws and performs many types of cuts with ease and accuracy. It is capable of performing the following types of cuts:

Straight Cuts

- Mitters
- Angles
- Compound Angles
- Resawing
- Ripping
- Crosscutting

Irregular Cuts

- Simple and Complex Curves
- Duplicate Parts
- Circles
- Beveled Curves

Basic Cutting Tips

Here are some basic tips to follow when operating the bandsaw:

- Replace, sharpen, and clean blades often for best performance. Check guides, tension, and alignment settings periodically and adjust when necessary to keep the saw running in top condition.
- Use light and even pressure while cutting. Light feeding pressure makes it easier to cut straight and prevents undue friction or strain on the bandsaw components and the blade.
- Avoid twisting the blade when cutting around tight corners. Allow the blade to saw its way around the corners. Always use relief cuts when possible.
- Misusing the saw or using incorrect techniques (e.g. twisting the blade with the workpiece, incorrect feed rate, etc.) is unsafe and results in poor cuts.

Workpiece Inspection

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

Before cutting, inspect all workpieces for the following:

- **Material Type:** This machine is intended for cutting natural and man-made wood products, laminate covered wood products, and some plastics. Cutting drywall or cementitious backer board creates extremely fine dust and may reduce the life of the bearings. This machine is NOT designed to cut metal, glass, stone, tile, etc.; cutting these materials with a table saw may lead to injury.
- **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, cause kickback, or break the blade, which might then fly apart. Always visually inspect your workpiece for these items. If they can't be removed, DO NOT cut the workpiece.
- **Large/Loose Knots:** Loose knots can become dislodged during the cutting operation. Large knots can cause kickback and machine 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 blades, increases the risk of kickback, and yields poor results.
- **Excessive Warping:** Workpieces with excessive cupping, bowing, or twisting are dangerous to cut because they are unstable and often unpredictable when being cut. DO NOT use workpieces with these characteristics!
- **Minor Warping:** Workpieces with slight cupping can be safely supported if the cupped side is facing the table or the fence. On the contrary, a workpiece supported on the bowed side will rock during a cut and could cause kickback or severe injury.



Setting Upper Blade Guide Height

When cutting, the blade guides must always be positioned so they just clear (no more than $\frac{1}{4}$ ") the workpiece. The guide post, shown in **Figure 37**, allows the upper blade guide assembly to be quickly adjusted for height.

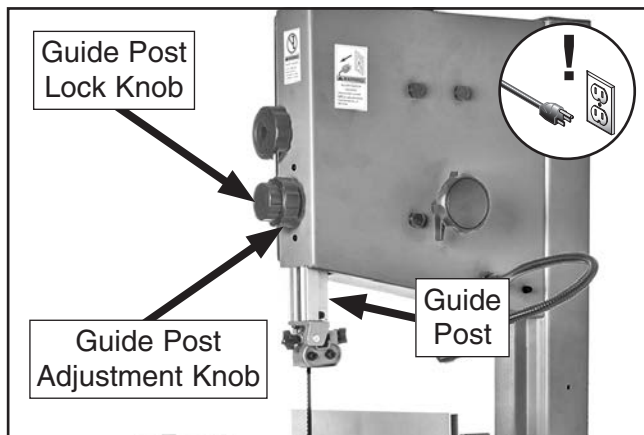


Figure 37. Guide post controls.

To adjust height of upper blade guides:

1. DISCONNECT MACHINE FROM POWER!
2. Loosen guide post lock knob.
3. Using guide post adjustment knob, position guide post so that blade guide assembly just clears (no more than $\frac{1}{4}$ ") workpiece.
4. Tighten guide post lock knob to secure setting.

Tilting Table

The table can be tilted from 0° – 45° right to make beveled cuts. A table tilt scale with indicator is provided on the trunnion, and a positive stop is provided for quickly returning the table back to 0° from a right-tilt setting (see **Figure 38**).

Note: The tilt scale on the trunnion serves as a guide only. For more accurate results, use a bevel gauge or protractor to set the desired table tilt relative to the blade.

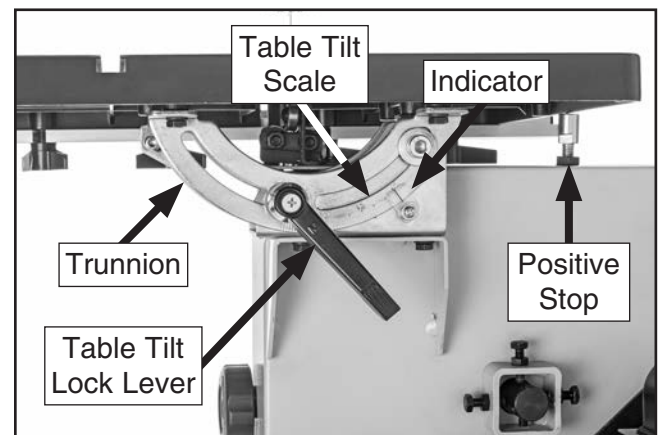


Figure 38. Table tilt controls.

Tilting Table

1. DISCONNECT MACHINE FROM POWER!
2. Loosen table tilt lock lever (see **Figure 38**).
3. Tilt table to desired angle, then tighten lock lever.



Using Positive Stop

Tool(s) Needed	Qty
Open-End Wrenches 10, 14mm	1 Ea.

The positive stop (see **Figure 39**) allows you to quickly return the table to 0° from a right-tilt setting. The positive stop is adjustable, allowing for calibration, or if desired, minor deviations from 0°.

To use positive stop:

1. DISCONNECT MACHINE FROM POWER!
2. Loosen table tilt lock lever (see **Figure 38** on **Page 32**).
3. Tilt table to desired angle, then secure position by tightening table tilt lock lever (see **Figure 38** on **Page 32**).
4. Loosen jam nut on stop bolt (see **Figure 39**), and turn bolt until it just touches bottom of table.

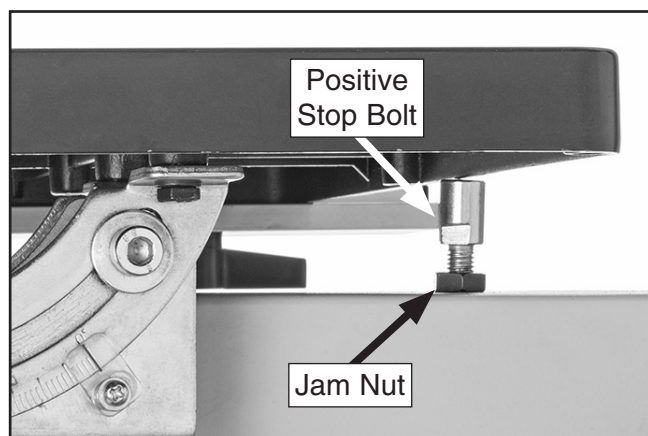


Figure 39. Location of positive stop bolt and jam nut.

5. Tighten jam nut to secure stop bolt setting.

Note: It is always a good idea to check table tilt scale and make sure positive stop bolt is correctly calibrated.

Checking/Calibrating Positive Stop

Tool(s) Needed	Qty
Open-End Wrenches 10, 14mm	1 Ea.
Machinist's Square	1

To check/calibrate positive stop:

1. DISCONNECT MACHINE FROM POWER!
2. Loosen table tilt lock lever, and tilt table to approximately 10° right.
3. Loosen positive stop jam nut, and lower positive stop bolt so it will not interfere with the following steps.
4. Place a machinist's square flat on table against side of blade, as illustrated in **Figure 40**.

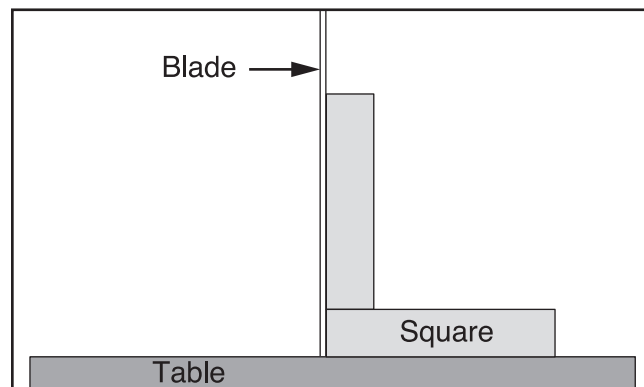


Figure 40. Squaring table to blade.

5. Tilt table until it is square with blade.
6. Adjust positive stop bolt so it just touches bottom of table, and tighten jam nut to secure position.
7. Check table to ensure it is square with blade. If necessary, repeat **Step 5**.

Note: If you wish to set the positive stop to an angle other than 0°, follow **Steps 1–5** for the desired angle.

8. Loosen screw on table tilt scale indicator, align pointer with zero on scale, then tighten screw.



Choosing Blades

Selecting the right blade requires a knowledge of the various blade characteristics to match the blade with the particular cutting operation.

Blade Terminology

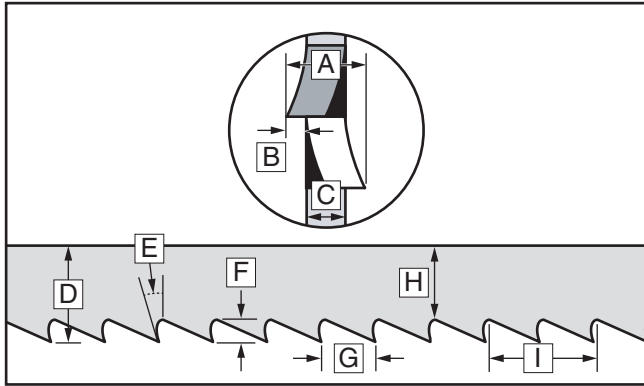


Figure 41. Bandsaw blade components.

- A. Kerf:** The amount of material removed by the blade during cutting.
- B. Tooth Set:** The amount each tooth is bent left or right along 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 face 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 Dimensions

Length Range..... 71½"–72½"
Width Range..... 1/8"–1/2"

Selecting the right blade requires a knowledge of the various blade characteristics to match the blade with the particular cutting operation.

Blade Length

Measured by the circumference, blade lengths are usually unique to the brand of your bandsaw and the distance between wheels. Blades will vary slightly even in the same length because of how they are welded. Refer to the **Accessories** section later in this manual for blade replacements from Grizzly.

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.

Always pick the size of blade that best suits your application.

- **Curve Cutting:** Use the chart in **Figure 42** to determine the correct blade for curve cutting. Determine the smallest radius curve that will be cut on your workpiece and use the corresponding blade width.

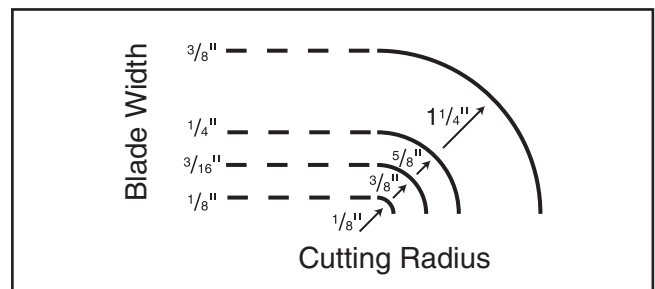


Figure 42. Recommended cutting radius per blade width.

- **Straight Cutting:** Use the largest width blade that you own. Large blades excel at cutting straight lines and are less prone to wander.



Tooth Style

Figure 43 illustrates the three main blade tooth styles:

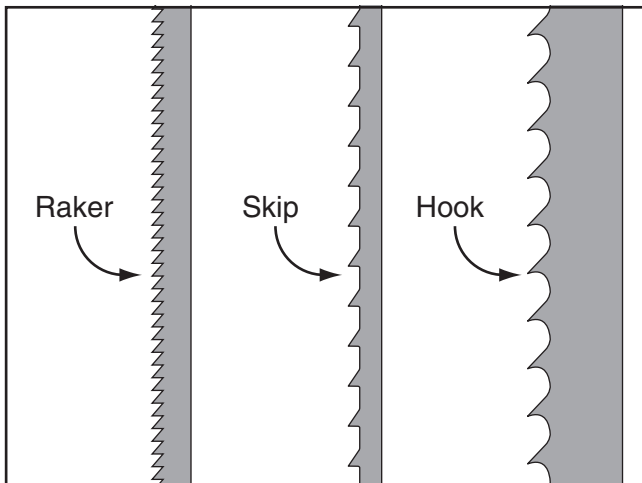


Figure 43. Main blade tooth styles.

- **Raker:** Considered to be the standard because the tooth size and shape are the same as the tooth gullet. The teeth on raker blades usually are very numerous, have no angle, and produce cuts by scraping the material. As a result, smooth cuts can be achieved without cutting fast or generating more heat than other tooth types.
- **Skip:** 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 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.

Tooth Pitch

Measured as TPI (teeth per inch), tooth pitch determines the number of 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 coarse-pitched blades on softer woods.

Tooth Set

Two common tooth sets for wood bandsaw blades are alternate and raker. Each different type of tooth set removes material in a different manner, leaving cuts with different characteristics (see **Figure 44**).

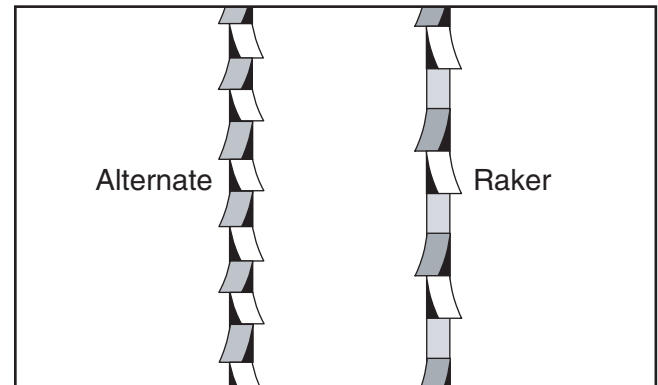


Figure 44. Common woodcutting bandsaw blade tooth sets.

- **Alternate:** An all-purpose arrangement where the teeth are bent evenly left and right of the blade.
- **Raker:** Three teeth in a recurring group—one bent left, one bent right, and then one that is not bent. The raker set is ideal for most contour cuts.



Blade Material

Bandsaw blades must meet two requirements: flexibility and hardness. The flexibility of a blade allows it to travel on the wheel as a band, while hardness allows the teeth to cut and hold an edge. Modern materials technology has allowed bandsaw blades to meet these requirements in various ways.

Carbon Steel: These blades are differentially heat treated to provide hard teeth that will hold an edge, and yet be flexible in the back.

Carbide Tooth: Extremely hard carbide is either welded onto or impregnated into the carbon steel blades, providing superior edge-holding characteristics (see **Figure 45**).

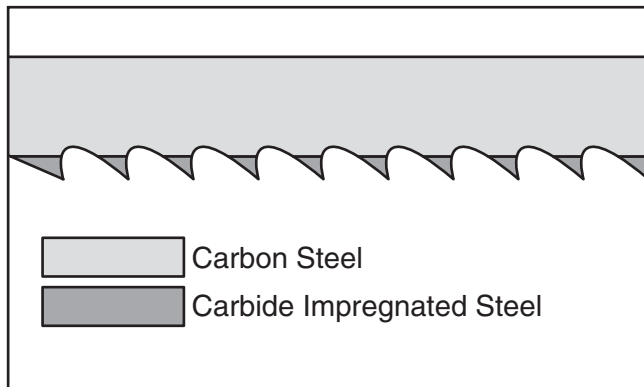


Figure 45. Carbide-tooth blade composition.

Bi-metal Blade: A strip of high-speed tool steel is precision welded to a flexible carbon blade, then teeth are ground into the blade to provide good edge-holding qualities for blades taking a lot of abuse (see **Figure 46**).

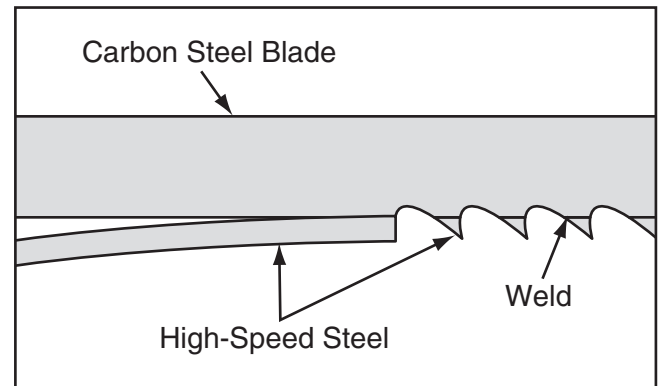







































Figure 46. Bi-metal blade composition.



Blade Selection Chart

Use the blade selection chart below as a general guide when selecting a blade for your operation.

Cutting Operation	Blade Width		
	Narrow ($\frac{1}{8}$ "– $\frac{1}{4}$ "	Medium ($\frac{3}{16}$ "– $\frac{1}{2}$ "	Wide ($\frac{1}{2}$ "– $\frac{3}{4}$ "
Resawing			 
Ripping Thin Stock			 
Ripping Thick Stock			 
Ripping Round Stock		 	 
Crosscutting Thin Stock			 
Crosscutting Thick Stock			 
Crosscutting Round Stock		  	  
Miter Cut			  
Tenons		 	 
Sharp Curves	 		
Gradual Curves		  	

Key					
Tooth Type			Tooth Pitch (Teeth Per Inch or TPI)		
					
Hook	Raker	Skip	Fine (14-32 TPI)	Medium (4-12 TPI)	Coarse (2-4 TPI)



Blade Care & Break-In

Blade Care

A bandsaw blade is a thin 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. Using the wrong blade will produce unnecessary heat and shorten the life of the 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 tooth tips and edges of a new blade are extremely sharp, and cutting at too fast of a feed rate fractures the beveled edges of the teeth and causes premature blade wear.

To properly break in a new blade:

1. Choose correct speed for blade and material of operation.
2. Reduce feed pressure by half for first 50–100 in² of material cut.
3. To avoid twisting blade when cutting, adjust feed pressure when total width of blade is in cut.

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 are subjected to.

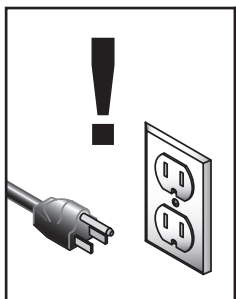
Blade breakage is also due to avoidable circumstances. Avoidable blade breakage is most often the result of poor care or judgement on the part of the operator when mounting or adjusting the blade or support guides.


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.
- Upper blade guide assembly set too high above the workpiece. Adjust the top blade guide assembly so that there is approximately $\frac{1}{8}$ "– $\frac{1}{4}$ " between the bottom of the assembly and the workpiece.
- Using a blade with a lumpy or improperly finished braze or weld.
- 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 no less than two teeth in contact with the workpiece at all times during cutting.



Removing/Installing Blade

	<p>⚠ WARNING Disconnect bandsaw from power BEFORE changing blade. Serious personal injury could occur if machine is started during this procedure.</p>
---	---

	<p>⚠ CAUTION LACERATION HAZARD! Bandsaw blades are sharp and difficult to handle. Wear heavy leather gloves while handling to reduce the risk of being cut.</p>
---	---

Items Needed	Qty
Heavy Leather Gloves.....	1 Pr.
Hex Wrench 4mm.....	1

Removing Blade

1. DISCONNECT MACHINE FROM POWER!
2. Release blade tension by rotating blade tension knob counterclockwise.
3. Adjust upper blade guide assembly all the way up, move blade guides completely away from blade, and remove table insert.
4. Remove fence rail.
5. Open upper and lower wheel covers.
6. Put on heavy leather gloves.

7. Slip blade off both wheels, slide it through table slot (see **Figure 47**), and remove it from machine.



Figure 47. Example of removing blade.

Installing Blade

1. DISCONNECT MACHINE FROM POWER!
2. Slide blade through table slot, ensuring that teeth are pointing down toward 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.*

3. Slip blade over wheels while making sure it is properly positioned between blade guards and guides.
4. Tension blade (refer to **Tensioning Blade** on **Page 22** for details).
5. Adjust blade tracking (see **Initial Blade Tracking** on **Page 20**).
6. Adjust upper/lower support bearings and blade guides (refer to **Adjusting Blade Support Bearings** and **Adjusting Blade Guide Bearings** on **Pages 24–25**).
7. Close wheel covers, and install table insert and fence rail.
8. Make sure fence is parallel to miter slot and, if necessary, adjust alignment (see **Page 28**).



Changing Blade Speed

The Model G0948 offers blade speeds of 1520 and 2620 FPM. Speed changes are made by repositioning the V-belt in different pulley grooves.

Keep in mind, cutting results are not just related to blade speed. Other factors include the type of workpiece, the blade being used for the operation, and the feed rate.

Use the chart below as a general guide for which blade speeds to use for various operations:

Type of Cutting Operation	Blade Speed (FPM)
General Woodworking	2620
Super Dense Hardwood	1520
Fast/Average Feed Rate	2620
Requires Slow Feed Rate	1520
Rough Edges Acceptable	2620
Requires Smooth Edges	1520
Quick, Production Cuts	2620
Detailed, Intricate Cuts	1520

Tool(s) Needed Qty
Hex Wrench 6mm..... 1

1. DISCONNECT MACHINE FROM POWER!
2. Loosen (2) motor mount cap screws (see **Figure 48**), and pivot motor counterclockwise to release belt tension.

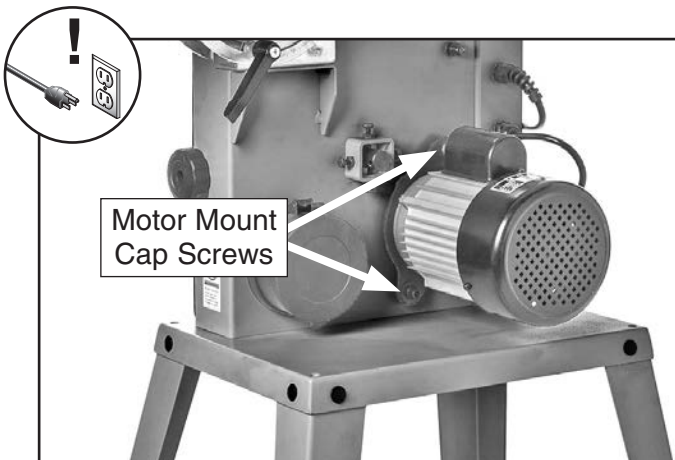


Figure 48. Location of motor mount cap screws.

3. Open lower wheel cover to reveal motor pulley, wheel pulley, and V-belt (see **Figure 49**).

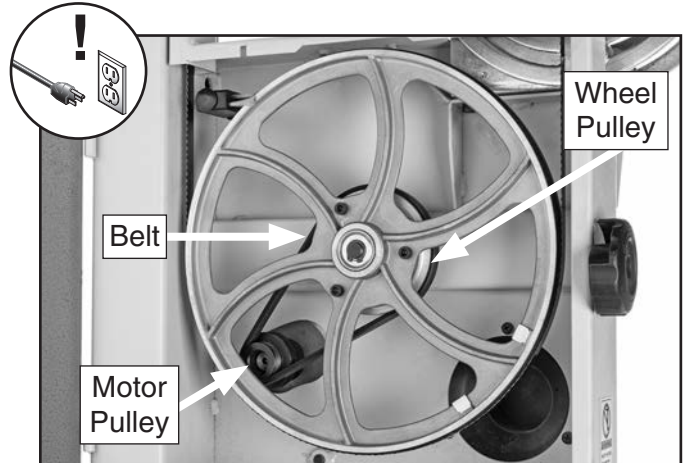


Figure 49. Location of belt and pulleys.

4. Position belt in pulley grooves for desired speed (see **Figure 50**).

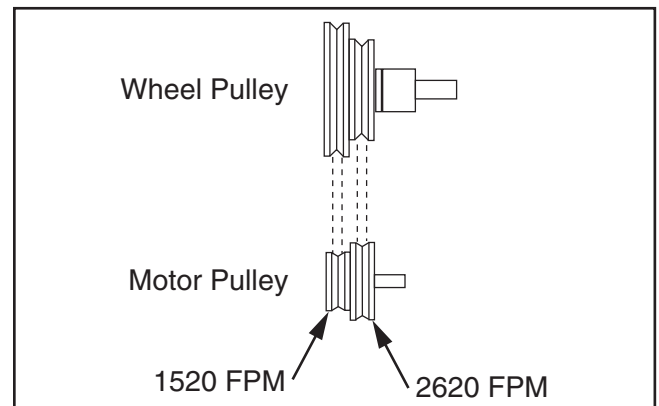


Figure 50. Belt positions on pulleys.

5. Pivot motor clockwise. Apply pressure on motor so there is approximately $\frac{3}{8}$ " belt deflection (see **Figure 51**), then tighten motor mount cap screws.

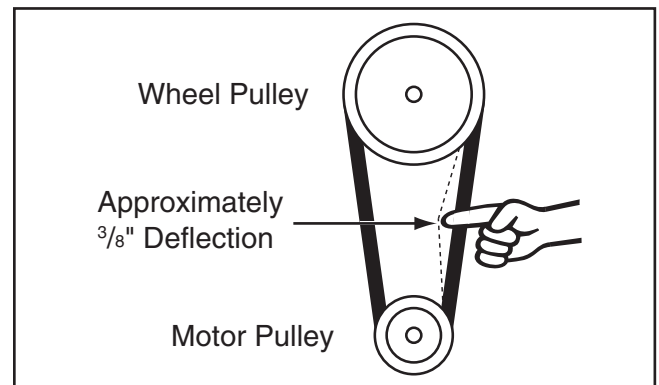


Figure 51. Correct belt deflection.

6. Close lower wheel cover.



Ripping

"Ripping" means cutting with the grain of the wood stock. For plywood and other processed wood, ripping simply means cutting down the length of the workpiece. Beveled rip cuts may be performed by tilting the table.

To make a rip cut:

1. Adjust fence to match width of cut on your workpiece, then lock fence in place.
2. Adjust blade guide assembly to proper height above workpiece.
3. After all safety precautions have been met, turn bandsaw **ON** and wait for it to come to full speed. Slowly feed workpiece into blade until blade is completely through workpiece. **Figure 52** shows an example of a ripping operation.

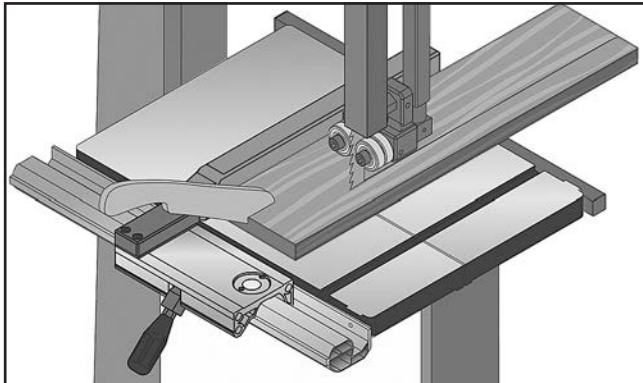


Figure 52. Example of a ripping operation.

!WARNING

ALWAYS use a push stick when ripping narrow pieces. Failure to follow these warnings may result in amputation or laceration injuries!

!WARNING

NEVER place fingers or hands in the line of cut. If you slip, your hands or fingers may go into the blade and may be cut.

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. Crosscuts can be 90° or angled using the miter gauge. Compound crosscuts are those where the miter is angled and the table tilted.

To make a crosscut:

1. Mark workpiece on edge where you want to begin cut.
2. Adjust the blade guide assembly to the correct height.
3. Adjust the miter gauge to the correct angle needed for cut.
4. Move fence out of the way. Place workpiece evenly against miter gauge, then line up mark with blade.
5. After all safety precautions have been met, turn bandsaw **ON** and wait for it to come to full speed. Slowly feed workpiece into the blade until blade is all the way through workpiece. **Figure 53** shows an example of a crosscutting operation.

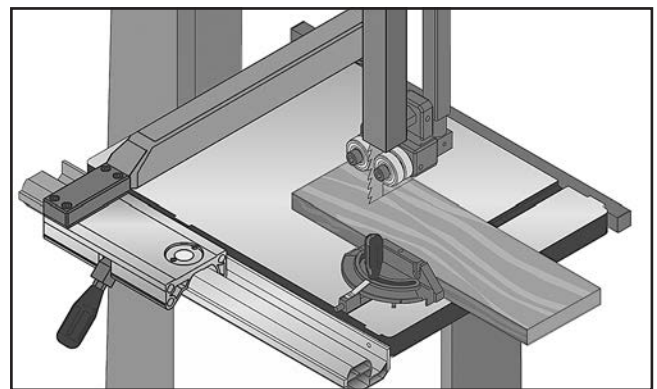


Figure 53. Example of a crosscutting operation with the miter gauge.



Resawing

"Resawing" means cutting the thickness of a board into two or more thinner boards (see **Figure 54** for an example). The maximum height of a board that can be resawn is limited by the maximum cutting height of the bandsaw.

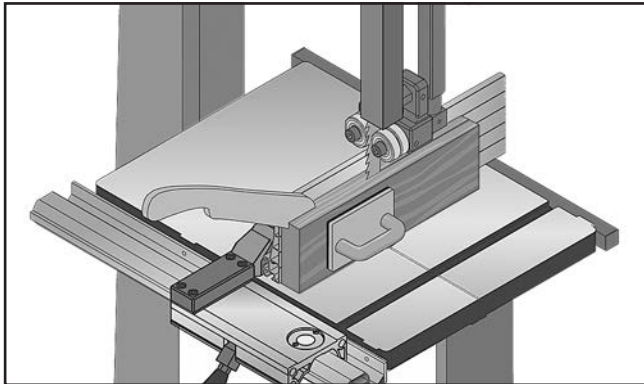


Figure 54. Example of a resawing operation.

One of the most important considerations for resawing is blade selection—a wide blade cuts straighter and is less prone to blade lead (see the **Blade Lead** subsection later in this manual for more information).

For most applications, use a blade with a hook or a skip tooth style. Choose blades with fewer teeth-per-inch (from 3 to 6 TPI), because they offer larger gullet capacities for clearing sawdust, which reduces heat buildup and strain on the motor.

!WARNING

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

Cutting Curves

When cutting curves, simultaneously feed and turn the stock carefully so the blade follows the layout line without twisting. If curves are sharp or tight, use a narrower blade with more TPI (teeth per inch) and make relief cuts to avoid having to back the workpiece away from the blade.

Always make short cuts first, then proceed to the longer cuts. Relief cuts reduce the chance of the blade being pinched or twisted. Relief cuts are cuts made through the waste portion of the workpiece and are stopped at the layout line, so when you're cutting along the layout line, waste wood is released from the workpiece, alleviating any pressure on the back of the blade. Relief cuts also make it easier to back the workpiece out once the saw blade has come to a stop, if needed.

NOTICE

The list below displays blade widths and the corresponding minimum radii for those blade widths.

Width	Min. Radius
1/8"	1/8"
3/16"	3/8"
1/4"	5/8"
3/8"	1 1/4"



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. However, before making stacked cuts, ensure that the table is perpendicular (90°) to the blade—otherwise, any error in this setting will be compounded in the workpieces.

To complete a stacked cut:

1. Align workpieces from top to bottom.
2. Secure all pieces together in a manner that will not interfere with 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. Lay out the shape you intend to cut on face of top piece.

4. Make relief cuts perpendicular to outline of your intended shape in areas where changes in blade direction could strain woodgrain or cause blade to bind.
5. Cut stack of pieces as though you were cutting a single piece. Follow your layout line with blade kerf on the waste side of your line (see **Figure 55** for an example of a stacked cut setup).

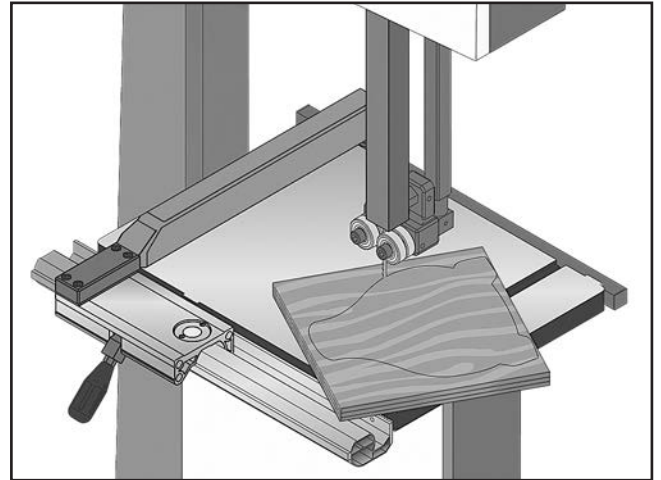


Figure 55. Example of a stacked cut setup.



SECTION 5: ACCESSORIES

!WARNING

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

NOTICE

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

Grizzly 72" Bandsaw Blades

Model	Width	TPI	Type	Gauge
T33130	1/8"	14	Raker	0.025
T33131	3/16"	4	Skip	0.025
T33132	3/16"	14	Raker	0.025
T33133	1/4"	4	Hook	0.025
T33134	1/4"	6	Hook	0.025
T33135	1/4"	10	Raker	0.025
T33136	3/8"	4	Hook	0.025
T33137	3/8"	6	Hook	0.025
T33138	3/8"	10	Raker	0.025
T33139	3/8"	14	Raker	0.025
T33140	1/2"	3	Hook	0.025
T33141	1/2"	4	Hook	0.025

Basic Eye Protection

T20501—Face Shield Crown Protector 4"

T20502—Face Shield Crown Protector 7"

T20503—Face Shield Window

T20451—"Kirova" Clear Safety Glasses

T20452—"Kirova" Anti-Reflective S. Glasses

T20456—DAKURA Safety Glasses



Figure 56. 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

If you work around dust everyday, a half-mask respirator can be a lifesaver. Also compatible with safety glasses!

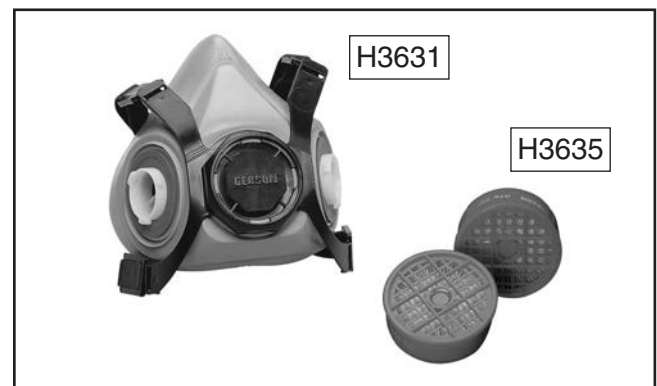


Figure 57. Half-mask respirator with disposable cartridge filters.

order online at www.grizzly.com or call 1-800-523-4777



- W1025—Hose Clamp 2"**
- W1317—Wire Hose Clamp 4"**
- D4226—Dust Collection Reducer 2" x 4" OD**
- D4206—4" x 10' Clear Hose**
- D4202—2" x 10' Clear Hose**
- W1007—Plastic Blast Gate 4"**
- W1053—Anti-Static Grounding Kit**

We've hand picked a selection of dust collection components commonly needed to connect your new machine to basic dust collection.



Figure 58. Dust collection accessories.

T26403—The Missing Shop Manual: Bandsaw

Dedicated to providing integral information about woodworking tools and techniques that other manuals overlook, the books in this series contain safety facts, explanations about basic project set up, and tips for maximizing tool performance. In Bandsaw, you will learn how to best utilize this essential workshop tool. Filled with clear diagrams and instructions, this pocket sized durable manual is ideal for quick reference in the workshop. 112 pages, soft cover.

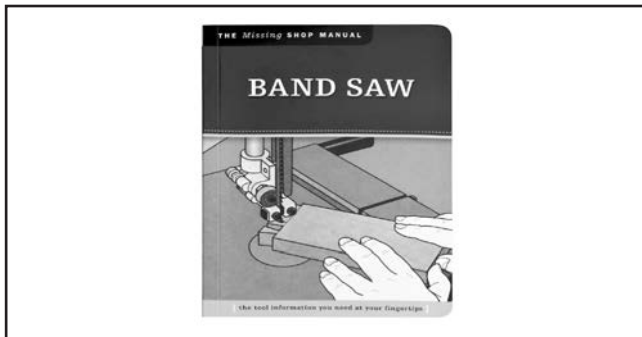


Figure 59. The Missing Shop Manual: Bandsaw.

G0944—1½ HP Wall-Mount Dust Collector

With an airflow capacity of 1250 CFM and a canister filter with a 1-micron filtration rating, this is the beast you need for all your small shop dust-capturing needs. The easy-to-hang French cleat-style mount makes hanging this unit quick, and clears up your floor space allowing for more room in a small shop.



Figure 60. G0944 1½ HP Wall-Mount Dust Collector with Canister Filter.

T10456—Heavy-Duty Anti-Fatigue Mat 3' x 5'

This Heavy-Duty Anti-Fatigue Mat features beveled edges and no-slip tread for safety and comfort. Open-hole design allows liquid to drain through, so it's perfect for wet or oily conditions. Measures 3' wide x 5' long x ¾" thick.

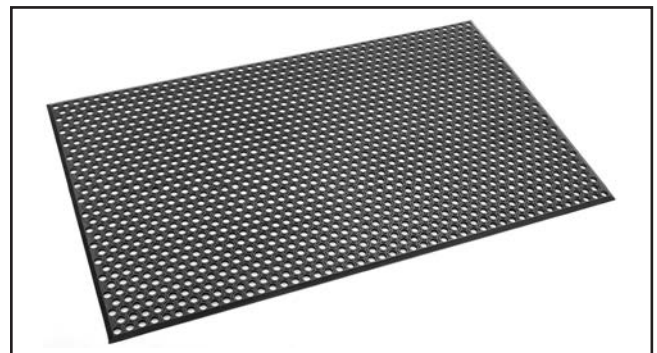


Figure 61. T10456 Anti-Fatigue Mat.

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T21580—36" Bevel Edge Straight Edge

These 36" Bevel Edge Straight Edges are made from hardened steel with satin chrome finish and are precision ground and lapped for straightness and parallelism.

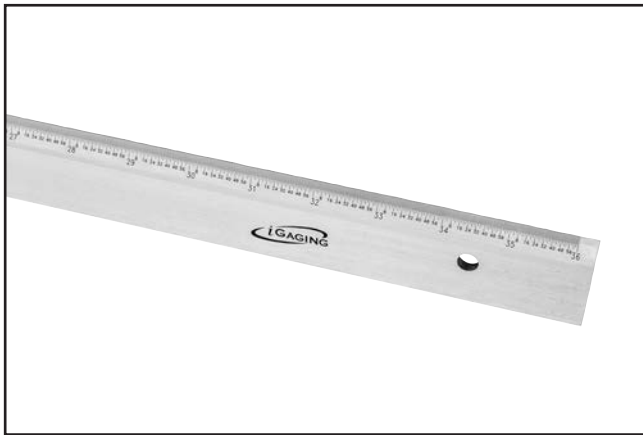


Figure 62. T21580 Bevel Edge Straight Edge.

H7978—6" Fractional Digital Caliper

Large LCD readout converts to decimal inch, fractional inch, and millimeters with the push of a button. Measure internal, external dimensions, depth, steps, and differential measurements. Features thumb roll and stainless steel construction. Range: 0-6", 0-150mm. Resolution: 0.0005", 0.01mm, $\frac{1}{128}$ ".

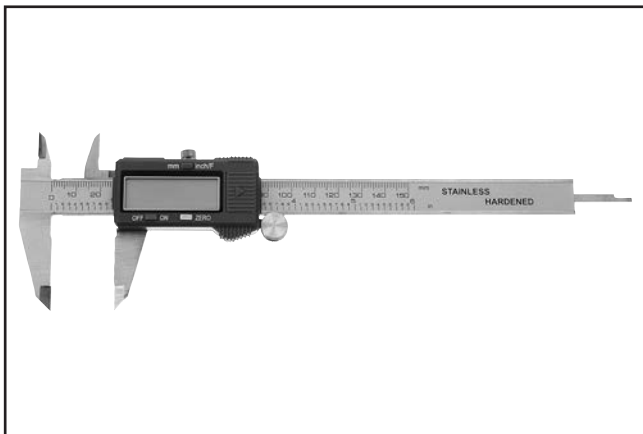


Figure 63. H7978 6" Fractional Digital Caliper.

T32407—Grip Snap-Ring Pliers Set, 10-Pc.

This plier set allows you to operate both internal and external rings. Includes 4 bent and 4 straight pliers made of heat-treated steel in sizes 5½" to 9". The 5" and 6" pliers have a 1.2mm (.047") tip; the 7½" and 8" pliers have a 1.8mm (.07") tip; and the 8½" and 9" pliers have a 2.3mm (0.9") tip. The set includes one 5" hook, one 5" pick, and an impact-resistant carrying case.

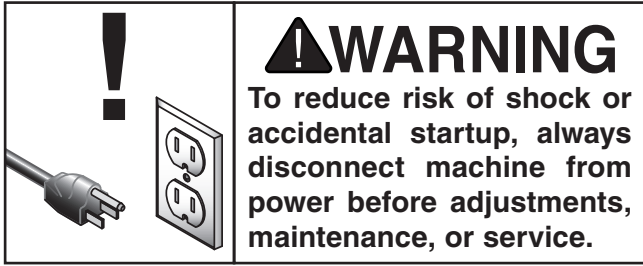


Figure 64. T32407 Grip Snap-Ring Plier Set.

order online at www.grizzly.com or call 1-800-523-4777



SECTION 6: MAINTENANCE



Schedule

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

Ongoing

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

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

Monthly

- Check belt for tension, damage, or wear.
- Remove blade and thoroughly clean all built-up sawdust from the rubber tires on the wheels.
- Clean/vacuum dust buildup from inside cabinet and off motor.

Cleaning & Lubricating

Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If resin has built up, use a resin dissolving cleaner to remove it.

Once a month, remove the blade and thoroughly clean all built-up sawdust from the rubber tires on the wheels.

If the table becomes difficult to tilt, lubricate the surfaces between the trunnions and the trunnion bracket with a dry lubricant (see **Figure 65**).



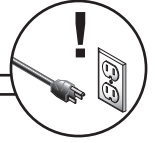
Figure 65. Model G4682 Dry Coating Lube.



SECTION 7: 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 start, or power supply breaker immediately trips after startup.	<ol style="list-style-type: none"> 1. Switch disabling key removed. 2. Incorrect power supply voltage or circuit size. 3. Power supply circuit breaker tripped or fuse blown. 4. Start capacitor at fault. 5. Centrifugal switch adjustment/contact point at fault. 6. Wiring broken, disconnected, or corroded. 7. ON/OFF switch at fault. 8. Motor or motor bearings at fault. 	<ol style="list-style-type: none"> 1. Install switch disabling key. 2. Ensure correct power supply voltage and circuit size (Page 11). 3. Ensure circuit is sized correctly and free of shorts. Reset circuit breaker or replace fuse. 4. Test/replace if at fault. 5. Adjust centrifugal switch/clean contact points. Replace either if at fault. 6. Fix broken wires or disconnected/corroded connections. 7. Replace switch. 8. Replace motor.
Machine stalls or is underpowered.	<ol style="list-style-type: none"> 1. Dull blade. 2. Workpiece material unsuitable for machine. 3. Feed rate/cutting speed too fast. 4. Workpiece crooked; fence loose or misadjusted. 5. Dust collection ducting problem. 6. Machine undersized for task. 7. Blade slipping on wheels or not properly tensioned. 8. Belt(s) slipping/pulleys misaligned. 9. Motor wired incorrectly. 10. Pulley slipping on shaft. 11. Motor overheated. 12. Extension cord too long. 13. Centrifugal switch/contact points at fault. 14. Motor or motor bearings at fault. 	<ol style="list-style-type: none"> 1. Sharpen/replace blade (Page 39). 2. Only cut wood/ensure moisture is below 20%. 3. Decrease feed rate/cutting speed. 4. Straighten or replace workpiece/adjust fence. 5. Clear blockages, seal leaks, use smooth wall duct, eliminate bends, close other branches. 6. Use correct blade/reduce feed rate or depth of cut. 7. Adjust blade tracking and tension (Pages 20–22). 8. Clean/tension/replace belt(s) (Page 52); ensure pulleys are aligned (Page 53). 9. Wire motor correctly (Page 59). 10. Tighten/replace loose pulley/shaft. 11. Clean motor, let cool, and reduce workload. 12. Move machine closer to power supply; use shorter extension cord (Page 12). 13. Adjust centrifugal switch/clean contact points. Replace either if at fault. 14. Replace motor.



Symptom	Possible Cause	Possible Solution
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> 1. Motor or component loose. 2. Blade weld at fault/teeth broken. 3. Blade at fault. 4. V-belt worn, loose, pulleys misaligned or belt slapping cover. 5. Pulley loose. 6. Motor mount loose/broken. 7. Motor fan rubbing on fan cover. 8. Centrifugal switch. 9. Motor bearings at fault. 	<ol style="list-style-type: none"> 1. Replace damaged or missing bolts/nuts or tighten if loose. 2. Replace blade (Page 39). 3. Replace warped/bent blade (Page 39); resharpen dull blade. 4. Inspect/replace belt with a new matched set (Page 52). Re-align pulleys if necessary (Page 53). 5. Secure pulley on shaft. 6. Tighten/replace. 7. Fix/replace fan cover; replace loose/damaged fan. 8. Replace switch. 9. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.
Blade or teeth break/crack.	<ol style="list-style-type: none"> 1. Blade tension incorrect. 2. Blade incorrect for application. 3. Excessive feed rate/pressure. 4. Cutting corners too sharply. 5. Blade dull/weld at fault. 6. Blade is tracking incorrectly. 7. Blade guides/support bearings not adjusted properly, allowing guides to hit blade teeth. 8. Wheel tires worn or incorrectly installed. 9. Fence or miter slot out of alignment with blade. 10. Bad bearings on wheels or guide bearings. 	<ol style="list-style-type: none"> 1. Adjust blade tension (Page 22). 2. Use correct blade for application (Page 37). 3. Reduce feed rate/pressure. 4. Use a wider arc on outside cuts, or use relief cuts to make tight inside cuts. 5. Replace blade (Page 39). 6. Adjust blade tracking (Page 20). 7. Adjust blade guide bearings properly so guides cannot contact teeth during operation (Pages 24–25). 8. Replace or re-install tire. 9. Align table miter slot and fence with blade (Pages 27–28). 10. Replace wheels and/or guide bearings.
Blade slows, smokes, shows overheating or wears on one side.	<ol style="list-style-type: none"> 1. Blade contacting table insert. 2. Blade guides worn or misadjusted. 3. Blade installed backwards. 4. Too much side pressure when feeding workpiece. 5. Wheels are out of alignment. 6. Dull, bell-mouthed, or incorrect blade. 7. Fence not parallel with blade. 8. Table top surface is not parallel or square to blade. 9. V-belt loose or slipping. 	<ol style="list-style-type: none"> 1. Adjust blade guide bearings to eliminate excess side pressure (Pages 24–25); properly align table (Page 27). 2. Adjust blade guide bracket. 3. Check blade rotation. Re-install blade if necessary (Page 39). 4. Feed workpiece straight into blade. 5. Adjust wheels to be coplanar (Page 53). 6. Replace blade (Page 39). 7. Adjust fence parallel with blade (Page 28). 8. Adjust/shim table/trunnion position until blade and table are parallel and square (Page 27). 9. Tighten V-belt. Replace if worn or oily (Page 51).
Finished workpieces are rough or show scoring.	<ol style="list-style-type: none"> 1. Blade is overloaded and twists. 2. Blade TPI too coarse. 3. Blade is loose and fluttering. 4. Blade tracking is incorrect. 5. Blade has missing/bent teeth or faulty weld. 	<ol style="list-style-type: none"> 1. Decrease feed rate; ensure proper TPI (Page 34). 2. Use correct blade for material and speed of cut (Page 37). 3. Adjust blade tension as required (Page 22). 4. Adjust blade tracking (Page 20). 5. Replace blade (Page 39).
Gullets loaded with chips.	<ol style="list-style-type: none"> 1. Excessive feed rate/pressure. 2. Blade TPI is too fine. 	<ol style="list-style-type: none"> 1. Reduce feed rate/pressure. 2. Install correct blade (Page 34).



Symptom	Possible Cause	Possible Solution
Table is hard to tilt.	<ol style="list-style-type: none"> 1. Table tilt lock lever is engaged. 2. Sawdust or pitch trapped between trunnion and base. 3. Metal burrs on trunnion. 	<ol style="list-style-type: none"> 1. Disengage table tilt lock lever (Page 32). 2. Remove table and clean trunnion sliding surfaces free of sawdust or pitch. 3. Remove burrs.
Table does not tilt to 45 or 0 degrees.	<ol style="list-style-type: none"> 1. Table tilt scale indicator not calibrated. 2. Positive stop not set correctly. 	<ol style="list-style-type: none"> 1. Calibrate table tilt scale indicator (Page 33). 2. Adjust positive stop (Page 33).
Miter bar binds in miter slot.	<ol style="list-style-type: none"> 1. Miter slot dirty or gummed up. 2. Miter bar bent. 	<ol style="list-style-type: none"> 1. Carefully clean miter slot. 2. Replace.
Blade tracks incorrectly or comes off wheels.	<ol style="list-style-type: none"> 1. Tracking is not adjusted properly. 2. Wheels are not coplanar. 3. Blade tension too loose. 4. Blade guides/support bearings improperly adjusted. 5. Feeding workpiece too fast. 6. Incorrect blade for operation. 7. Blade is bell-mouthed, worn, or dull. 8. Wheel is damaged or worn. 	<ol style="list-style-type: none"> 1. Adjust tracking (Page 20). 2. Adjust wheels to be coplanar (Page 53). 3. Increase blade tension (Page 22). 4. Properly adjust blade guides/support bearings (Pages 24–25). 5. Feed workpiece slower. 6. Install correct blade (Page 37). 7. Install new blade (Page 39), and remove tension from blade when not in use. 8. Replace wheel.
Cut is crooked or blade wanders (blade lead).	<ol style="list-style-type: none"> 1. Excessive feed rate/pressure. 2. Blade tension too loose. 3. Blade is too narrow or tooth type/TPI is incorrect for the cut. 4. Inadequate blade support. 5. Blade dull or has damaged tooth set from improper blade guide/support bearing adjustment. 6. Blade tracking is incorrect. 7. Table is loose. 8. Fence or miter slot out of alignment with blade. 9. Blade guides/support bearings improperly adjusted. 10. Tooth set is uneven or teeth are sharper on one side than the other. 	<ol style="list-style-type: none"> 1. Reduce feed rate/pressure. 2. Increase blade tension (Page 22). 3. Use wider blade. Ensure tooth type and TPI are correct (Page 34). 4. Position upper blade guides to just clear workpiece. Properly adjust blade guides/support bearings (Pages 24–25). 5. Replace blade (Page 39). 6. Adjust blade tracking (Page 20). 7. Tighten table trunnion mounting bolts or tilt lock lever. 8. Align miter slot and fence with blade (Pages 27–28). 9. Properly adjust blade guides/support bearings (Pages 24–25). 10. Replace blade (Page 39).
Blade dulls prematurely.	<ol style="list-style-type: none"> 1. Excessive feed rate/pressure. 2. Wrong blade tooth type or TPI. 3. Blade is twisted. 4. Blade is slipping on wheel. 5. Blade guides hitting teeth, ruining tooth set. 	<ol style="list-style-type: none"> 1. Reduce feed rate/pressure. 2. Use blade with correct tooth type and TPI (Page 34). 3. Re-install blade; replace (Page 39). 4. Adjust blade tension (Page 34). 5. Properly adjust guide bearings (Pages 24–25).
Backside of blade deformed/cracked.	<ol style="list-style-type: none"> 1. Excessive feed rate/pressure. 2. Blade tension too high. 3. Blade support bearings improperly adjusted. 	<ol style="list-style-type: none"> 1. Reduce feed rate/pressure. 2. Adjust blade tension (Page 34). 3. Properly adjust blade support bearings (Page 24).
Sawdust buildup inside cabinet.	<ol style="list-style-type: none"> 1. Blade brush worn or misadjusted. 2. Clogged dust port. 3. Low CFM (airflow) from dust collection system. 	<ol style="list-style-type: none"> 1. Properly adjust brush; replace if necessary (Page 57). 2. Clean dust port. 3. Inspect ducting for leaks/clogs and repair as necessary; move dust collector closer to machine; install a stronger dust collector (Page 19).



Checking/Adjusting Belt Tension

To ensure optimum power transmission from the motor to the blade, the belt must be in good condition and operate under proper tension.

Belt tension should be checked at least every month—more often if the bandsaw is used daily. If the belt shows signs of cracks, fraying, and excessive wear, replace it as instructed in **Replacing Belt** on **Page 52**.

Item(s) Needed	Qty
Hex Wrench 6mm.....	1

Checking Belt Tension

1. DISCONNECT MACHINE FROM POWER!
2. Open lower wheel cover.
3. Check belt condition and deflection. The belt is properly tensioned if there is approximately $\frac{3}{8}$ " deflection. Deflection is checked by pushing belt with moderate pressure, as shown in **Figure 66**, and noting how much it moves.

— If belt is not properly tensioned, perform **Adjusting Belt Tension** procedure.

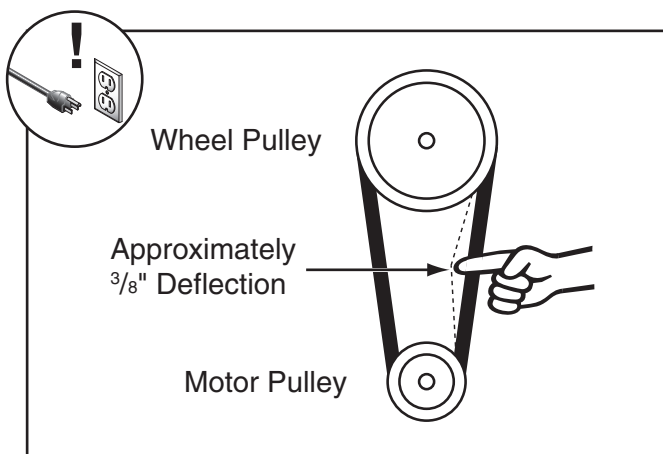


Figure 66. Checking belt tension.

Adjusting Belt Tension

1. DISCONNECT MACHINE FROM POWER!
2. Loosen motor mount cap screws shown in **Figure 67**.

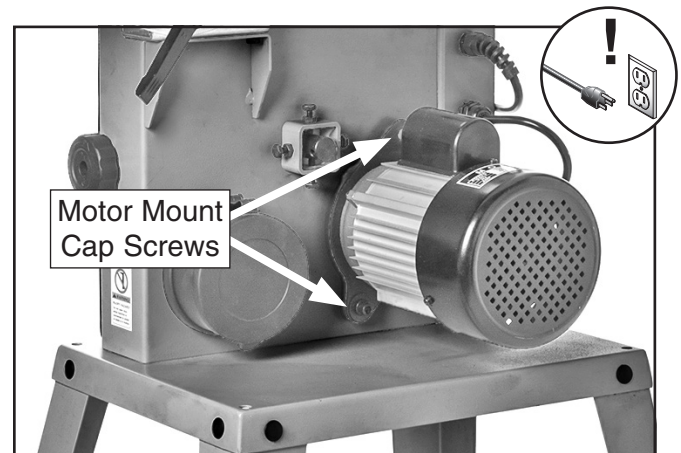


Figure 67. Location of motor mount cap screws used for adjusting belt tension.

3. Push motor to the right (as viewed from back of machine) until you feel moderate tension, then tighten both cap screws.
4. Check belt tension. If necessary, repeat **Steps 2–3** until there is approximately $\frac{3}{8}$ " deflection in belt.
5. Close wheel cover.



Replacing Belt

To ensure optimum power transmission from the motor to the blade, the belt must be in good condition and be properly tensioned.

Replace the belt if it shows signs of cracking, fraying, or excessive wear.

Item(s) Needed	Qty
Hex Wrench 6mm.....	1
Retaining Ring Pliers.....	1
Heavy Leather Gloves.....	1 Pr.
Replacement Belt (Part # P0948105).....	1

To replace belt:

1. DISCONNECT MACHINE FROM POWER!
2. Put on heavy leather gloves and remove blade from machine (refer to **Removing/Installing Blade** on **Page 39**).
3. Loosen motor mount cap screws (see **Figure 67** on **Page 51**).
4. Pivot motor to the right (as viewed from back of bandsaw) to release belt tension.
5. Open lower wheel cover and remove belt from motor pulley.

6. Remove external retaining ring from lower wheel shaft (see **Figure 68**) and remove lower wheel.

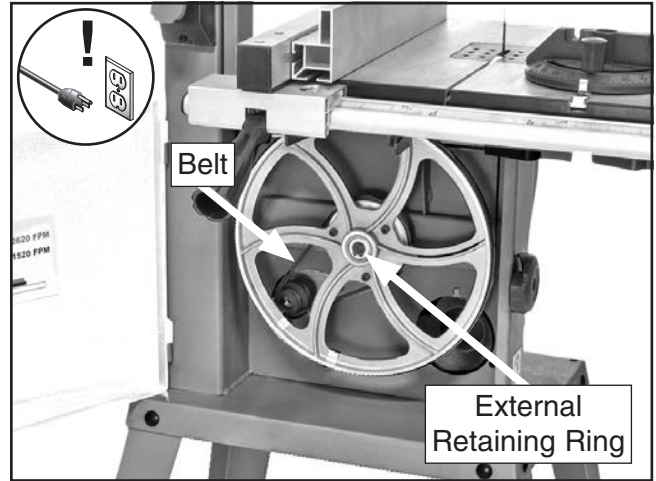


Figure 68. Belt change components inside lower wheel compartment.

7. Install new belt on both pulleys, and then re-install wheel and retaining ring.
8. Properly tension belt, as instructed in **Adjusting Belt Tension** on **Page 51**.
9. Install blade, properly track and tension blade (see **Pages 20 & 22**), and adjust support bearings and guide bearings (see **Pages 24–25**).



Aligning Wheels

Wheel alignment is important for optimal performance from your bandsaw. Wheels are properly aligned when they are parallel with each other and in the same plane or “coplanar” (see the illustration in the figure to the right).

When wheels are coplanar, the bandsaw is more likely to cut straight without wandering; and vibration, heat, and blade wear are considerably decreased because the blade is automatically balanced on the wheel.

Bringing the wheels into alignment may require a combination of shimming a wheel and adjusting the position of the lower wheel shaft.

Checking Wheel Alignment

Tool(s) Needed	Qty
Precision Straightedge 3'.....	1

To check wheel alignment:

1. DISCONNECT MACHINE FROM POWER!
2. Remove table.
3. With blade on and properly tensioned, hold a straightedge close to center of both wheels. Make sure straightedge fully extends across rims of both wheels, as shown in **Figure 69**.

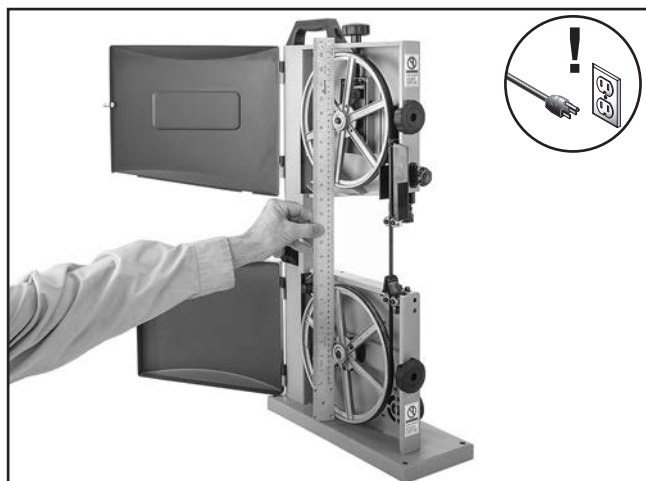


Figure 69. Example of checking if wheels are coplanar.

4. Check wheel alignment, and adjust tracking knob to bring both wheels into alignment as much as possible. If wheels cannot be adjusted coplanar, use **Figure 70** to determine how to proceed with alignment adjustments.

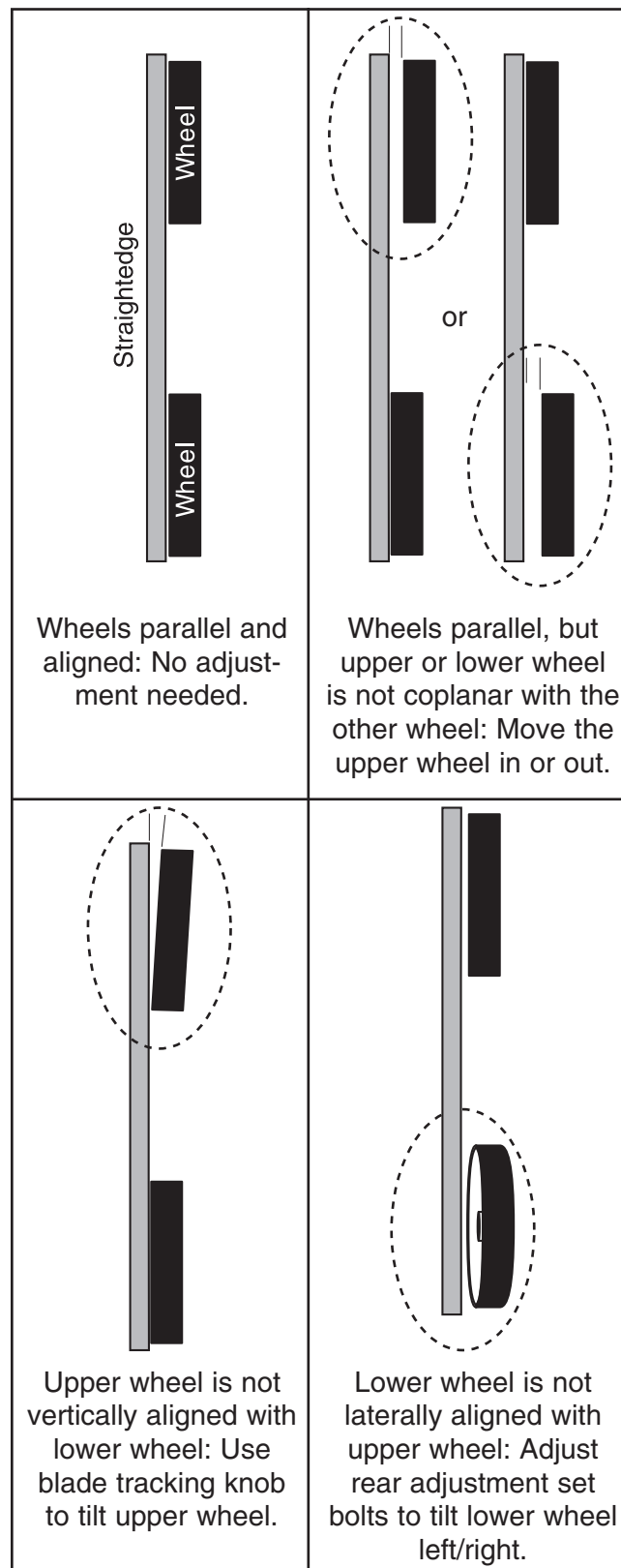


Figure 70. Wheel alignment illustration.



Shimming a Wheel

A wheel that is parallel with the other wheel, but is not coplanar, must be shimmed by the distance that it is not in the same plane with the other wheel.

Tip: *Standard washers work well for shimming the wheel because they can easily be stacked to get the desired height.*

Item(s) Needed	Qty
Precision Straightedge 3'.....	1
Fine Ruler.....	1
Retaining Ring Pliers.....	1
Heavy Leather Gloves.....	1 Pr.
Shims.....	As Needed

To shim a wheel:

1. DISCONNECT MACHINE FROM POWER!
2. Adjust upper wheel tracking so that it is parallel with lower wheel.
3. With straightedge touching both rims of wheel that does not need to be adjusted, measure the distance away from the other wheel with a fine ruler, as shown in **Figure 71**. The distance measured with the ruler is the distance this wheel must be shimmed.

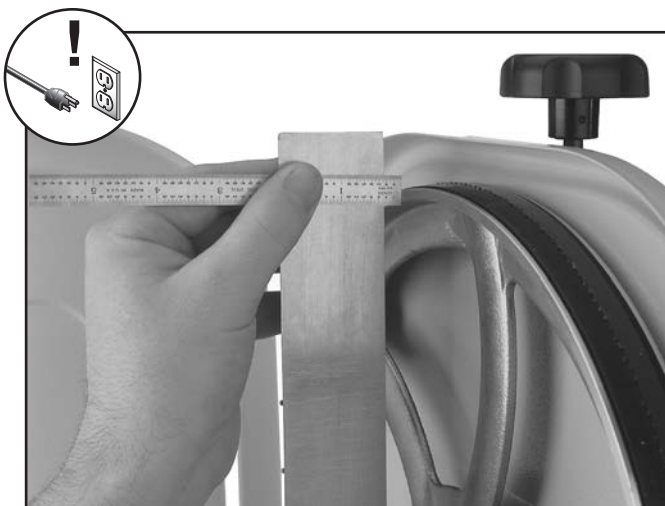


Figure 71. Example of measuring the distance to shim the wheel to be coplanar.

4. Remove blade.
5. Remove wheel to be shimmed. Place as many shims as necessary to correct gap measured in **Step 3** onto wheel shaft.

6. Re-install wheel and secure it in place.
7. Re-install blade and properly tension it.
8. Perform previous **Checking Wheel Alignment** procedure. If necessary to make the wheels parallel, repeat this procedure.
9. The first time you get the wheels coplanar, place a mark on each wheel where you held the straightedge, then use this position again in the future if you need to repeat the procedure. This assures repeated accuracy every time you adjust the wheels.
10. Close wheel covers.

Adjusting Lower Wheel Shaft Position

If the lower wheel is tilted laterally (side to side), perform the following procedure to make it coplanar with the upper wheel.

There are four adjustment bolts with hex nuts in the lower wheel bracket, shown in **Figure 72**, that adjust the wheel tilt from side-to-side and up-and-down.

Note: *If you make a mistake during the following procedure, it can be very difficult to correct. Therefore, it is important to double check wheel alignment (see **Page 53**), and troubleshoot all other possible solutions (see **Troubleshooting on Page 48**) prior to adjusting the lower wheel shaft position.*

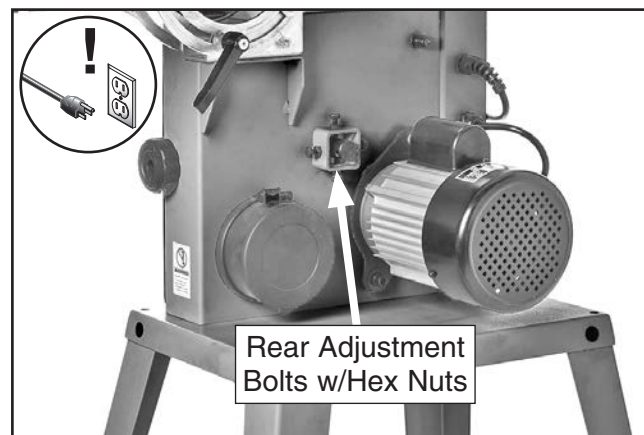


Figure 72. Location of rear lateral adjustment components.



Item(s) Needed	Qty
Precision Straightedge 3'.....	1
Open-End Wrench or Socket 10mm	1
Pencil or Marker	1

To adjust lower wheel laterally:

1. DISCONNECT MACHINE FROM POWER!
2. Remove fence and table from machine.
3. Check wheels at **A** and **B** locations (see **Figure 73**). The wheels should align.
 - If wheels *align*, no adjustment is required.
 - If wheels *do not align*, they require lateral adjustment (see **Figure 74**). Proceed to **Step 4**.
4. Mark upper and lower wheels with a pencil or marker to indicate measuring locations (see **Figure 73**).

Note: *Marking the wheels ensures more accurate results in case there are irregularities in the wheels.*

5. Loosen hex nuts on rear left and right adjustment bolts (see **Figure 72** on **Page 54**).
6. Rotate left and right adjustment bolts until lower wheel is coplanar with upper wheel, see **Figure 74**.

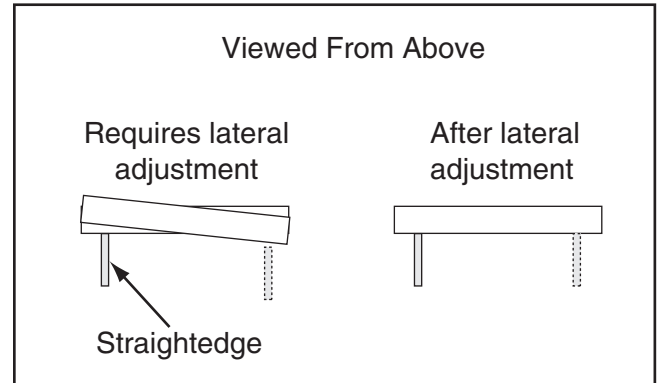


Figure 74. Before and after lateral wheel alignment (viewed from above).

7. Tighten hex nuts loosened in **Step 5**.

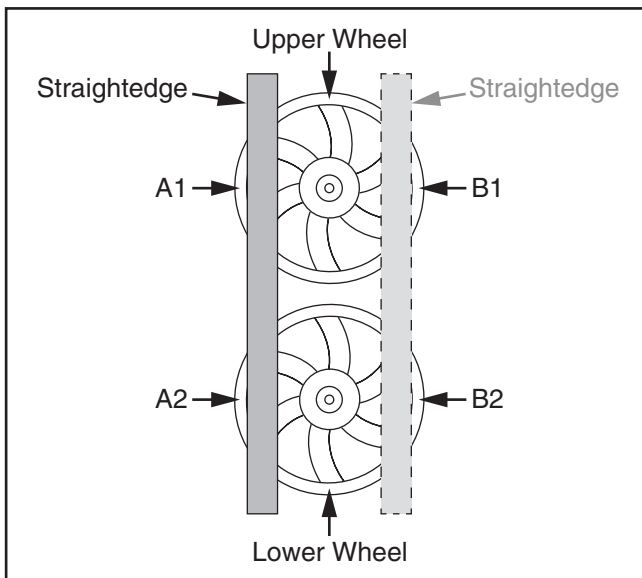


Figure 73. Example of using a straightedge to check lateral wheel alignment.



Blade Lead

Bandsaw blades may wander off the cut line when sawing, as shown in **Figure 75**. This is called blade lead.

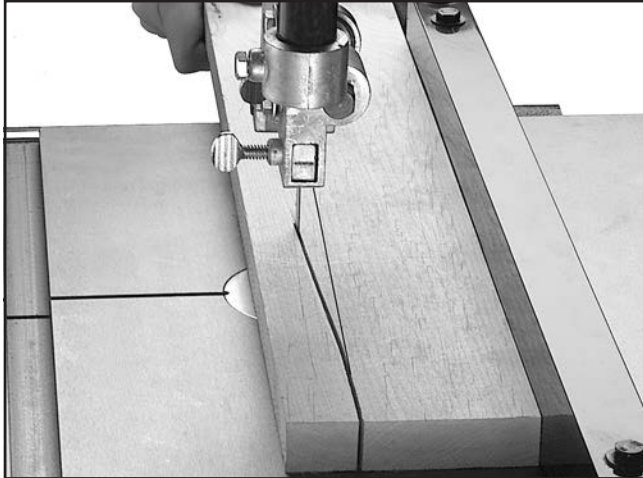


Figure 75. Example of blade lead.

Blade lead is usually caused by too fast of a feed rate, a dull or abused blade, or improper blade tension. If your blade is sharp/undamaged, properly tensioned, and you still have blade lead, perform the following procedures.

Correcting Blade Lead

1. Make sure blade is properly tensioned, and blade guides are adjusted correctly.
2. Use less pressure when feeding workpiece through cut.
3. Make sure miter slot and fence are parallel to blade line (see **Aligning Table** and **Aligning Fence** procedures for detailed information).
4. Perform test cut with bandsaw.

— If there is still blade lead present, compensate for this condition by skewing the fence, as instructed in the following procedures.

Skewing Fence

Item(s) Needed	Qty
Hex Wrench 4mm.....	1
Scrap Wood $\frac{3}{4}$ " x 3" x 17"	1
Clamp 4"	1

1. Cut a piece of scrap wood approximately $\frac{3}{4}$ " thick x 3" wide x 17" long. On wide face of board, draw a straight line parallel to long edge.
2. Slide bandsaw fence out of way and cut along the line halfway through the board. Turn bandsaw **OFF** and wait for blade to stop. Do not move board.
3. Clamp board to bandsaw table, then slide fence over to board so it barely touches one end of board.
4. Loosen fence adjustment cap screws, skew fence so it is parallel with scrap piece, then tighten cap screws.
5. Make a few cuts using fence.

— If blade lead is still present, repeat **Steps 1–4** until blade and fence are parallel with each other.



Adjusting Wheel Brush

The lower wheel has a brush (see **Figure 76**) that is designed to sweep sawdust off the tire and blade during operation. In order to work properly, the brush must make firm contact with the tire.

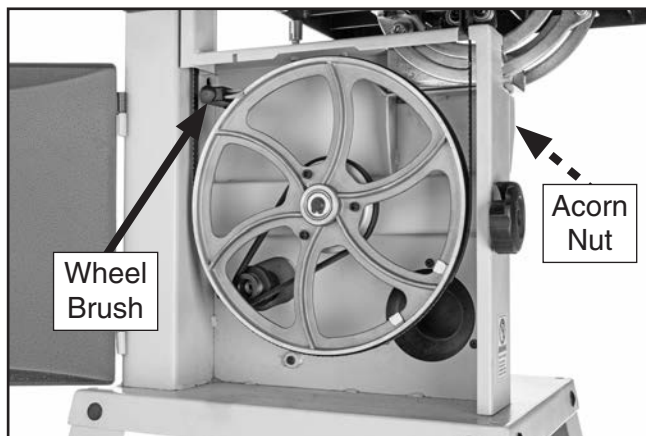


Figure 76. Location of wheel brush.

Tool(s) Needed:	Qty
Wrench or Socket 13mm.....	1

To adjust wheel brush:

1. DISCONNECT MACHINE FROM POWER!
2. Open lower wheel cover.
3. On rear of machine, loosen acorn nut that secures wheel brush in position (see **Figure 76**).
4. Adjust wheel brush so it makes firm, even contact with wheel without bending the bristles, then tighten acorn nut to secure wheel brush in place.



SECTION 8: WIRING

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

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

WARNING

Wiring Safety Instructions

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

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

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

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

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

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











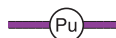



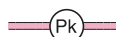
CAPACITORS/INVERTERS. Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

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

NOTICE

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

COLOR KEY

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



Electrical Components

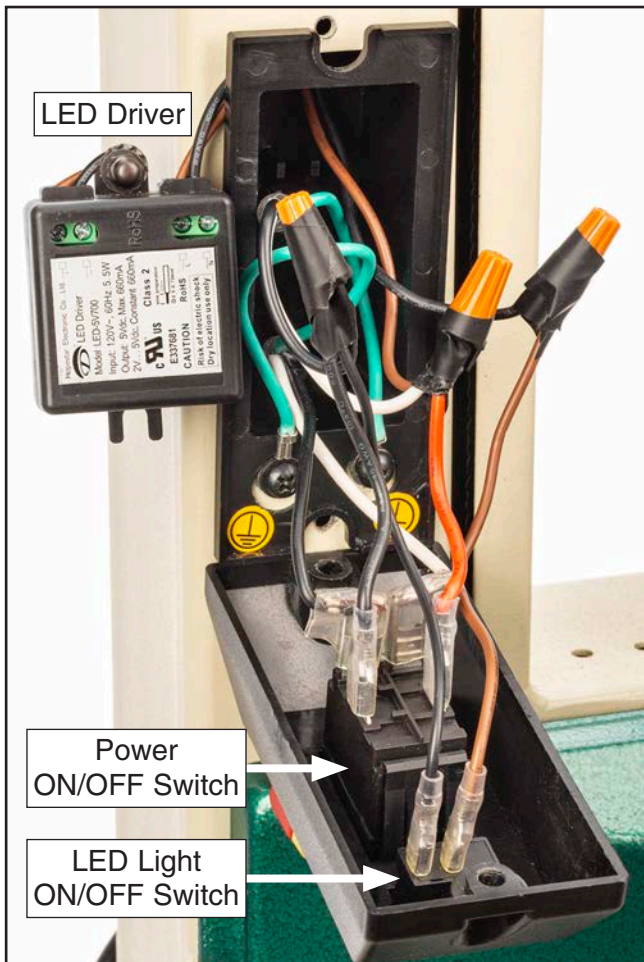


Figure 77. ON/OFF switch wiring.



Figure 78. Start capacitor wiring.



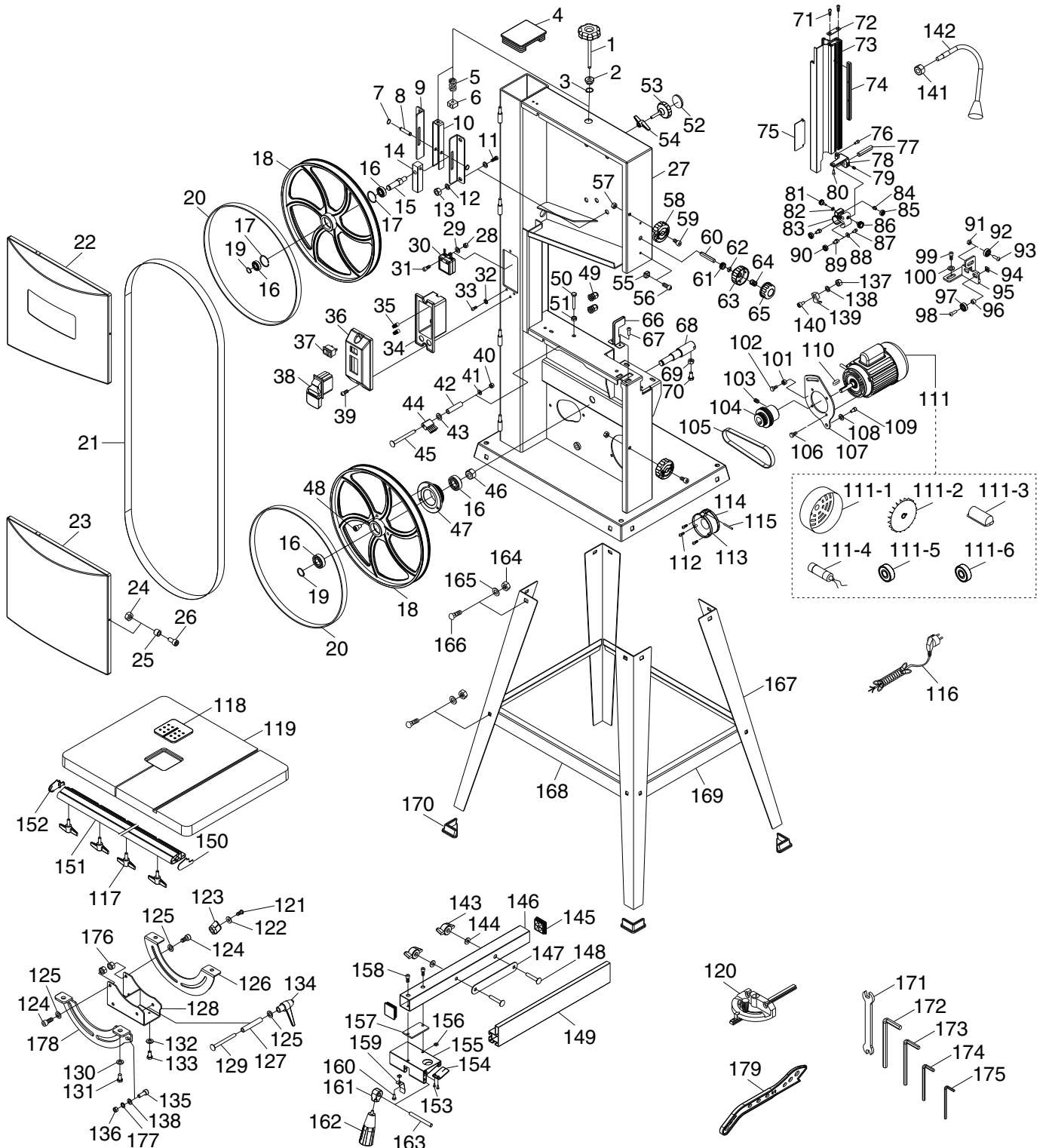
Figure 79. Work light wiring.



SECTION 9: 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
1	P0948001	KNOB BOLT M8-1.25 X 102, 6-LOBE, D60
2	P0948002	BUSHING
3	P0948003	EXT RETAINING RING 15MM
4	P0948004	FRAME CAP
5	P0948005	COMPRESSION SPRING 4 X 19 X 30
6	P0948006	TENSION NUT M8-1.25
7	P0948007	EXT RETAINING RING 8MM
8	P0948008	SHAFT
9	P0948009	GUIDE PLATE
10	P0948010	PULLING PLATE
11	P0948011	HEX BOLT M8-1.25 X 16
12	P0948012	FLAT WASHER 8MM
13	P0948013	HEX NUT M8-1.25
14	P0948014	TENSION BLOCK
15	P0948015	SHAFT
16	P0948016	BALL BEARING 6000ZZ
17	P0948017	INT RETAINING RING 26MM
18	P0948018	WHEEL 10"
19	P0948019	EXT RETAINING RING 10MM
20	P0948020	TIRE
21	P0948021	SAW BLADE 72" X 3/8" 6-TPI HOOK
22	P0948022	UPPER WHEEL COVER
23	P0948023	LOWER WHEEL COVER
24	P0948024	LOCK NUT M6-1
25	P0948025	SPACER
26	P0948026	CAP SCREW M6-1 X 16
27	P0948027	FRAME
28	P0948028	HEX NUT M4-.7
29	P0948029	FLAT WASHER 4MM
30	P0948030	LED DRIVER HOPESTAR LED-5V700 120V 5.5W
31	P0948031	CAP SCREW M4-.7 X 12
32	P0948032	INT TOOTH WASHER 5MM
33	P0948033	PHLP HD SCR M5-.8 X 12
34	P0948034	SWITCH BOX
35	P0948035	WIRE NUT 18G
36	P0948036	SWITCH BOX COVER
37	P0948037	ON/OFF SWITCH DKLD AN-18 250V 6A
38	P0948038	ON/OFF SWITCH DKLD AN17 125V 20A
39	P0948039	PHLP HD SCR M5-.8 X 10
40	P0948040	HEX NUT M8-1.25
41	P0948041	FLAT WASHER 8MM
42	P0948042	BUSHING
43	P0948043	FLAT WASHER 8MM
44	P0948044	BRUSH
45	P0948045	CARRIAGE BOLT M8-1.25 X 70
46	P0948046	HEX NUT M14-2
47	P0948047	WHEEL PULLEY
48	P0948048	CAP SCREW M5-.8 X 10
49	P0948049	STRAIN RELIEF TYPE-3 M16-1.5
50	P0948050	STOP BOLT M8-1.25 X 22
51	P0948051	HEX NUT M8-1.25
52	P0948052	KNOB COVER

REF	PART #	DESCRIPTION
53	P0948053	KNOB BOLT M8-1.25 X 42, 8-LOBE, D60
54	P0948054	KNOB M8-1.25, D72, WING
55	P0948055	GUIDE BLOCK M4-.7
56	P0948056	PHLP HD SCR M4-.7 X 8
57	P0948057	LOCK NUT M6-1
58	P0948058	KNOB 6MM, 10-LOBE, D55
59	P0948059	CAP SCREW M6-1 X 16
60	P0948060	THREADED SHAFT M8-1.25 X 12, 38L
61	P0948061	GEAR 15T
62	P0948062	BUSHING
63	P0948063	KNOB 8MM, 10-LOBE, D50
64	P0948064	COMPRESSION SPRING 1.6 X 22 X 25
65	P0948065	KNOB COVER
66	P0948066	LOWER BLADE GUARD
67	P0948067	CAP SCREW M6-1 X 10
68	P0948068	LOWER WHEEL SPINDLE
69	P0948069	HEX NUT M6-1
70	P0948070	HEX BOLT M6-1 X 20
71	P0948071	TAP SCREW 4.8 X 13
72	P0948072	PLATE
73	P0948073	UPPER BLADE GUIDE ASSEMBLY
74	P0948074	RACK
75	P0948075	SLIDING COVER
76	P0948076	CAP SCREW M5-.8 X 6
77	P0948077	CONNECTING SHAFT
78	P0948078	SUPPORT BLOCK
79	P0948079	SET SCREW M6-1 X 8
80	P0948080	TAP SCREW M8 X 13
81	P0948081	KNOB BOLT M5-.8 X 22, 4-LOBE, D22
82	P0948082	FLAT WASHER 5MM
83	P0948083	BEARING SUPPORT
84	P0948084	T-SLOT NUT M5-.8
85	P0948085	BALL BEARING 607ZZ
86	P0948086	KNOB BOLT M5-.8 X 8, 4-LOBE, D22
87	P0948087	CAP SCREW M5-.8 X 16
88	P0948088	FLAT WASHER 5MM
89	P0948089	T-SLOT NUT M5-.8
90	P0948090	BALL BEARING 607ZZ
91	P0948091	HEX NUT M6-1
92	P0948092	BALL BEARING 626ZZ
93	P0948093	CAP SCREW M6-1 X 16
94	P0948094	SQUARE NUT M6-1
95	P0948095	GUIDE PLATE
96	P0948096	BUSHING
97	P0948097	BALL BEARING 626ZZ
98	P0948098	CAP SCREW M6-1 X 20
99	P0948099	CAP SCREW M6-1 X 10
100	P0948100	FLAT WASHER 6MM
101	P0948101	HEX NUT M6-1
102	P0948102	HEX BOLT M6-1 X 20
103	P0948103	SET SCREW M6-1 X 8
104	P0948104	MOTOR PULLEY



Main Parts List (Cont.)

REF	PART #	DESCRIPTION
105	P0948105	POLY V-BELT PT400
106	P0948106	HEX BOLT M6-1 X 16
107	P0948107	MOTOR MOUNTING PLATE
108	P0948108	FLAT WASHER 8MM
109	P0948109	CAP SCREW M8-1.25 X 20
110	P0948110	KEY 5 X 5 X 25 RE
111	P0948111	MOTOR 1/2HP 120V 1-PH
111-1	P0948111-1	MOTOR FAN COVER
111-2	P0948111-2	MOTOR FAN
111-3	P0948111-3	CAPACITOR COVER
111-4	P0948111-4	S CAPACITOR 35M 350V 1-5/8 X 2-1/2
111-5	P0948111-5	BALL BEARING 6202ZZ (FRONT)
111-6	P0948111-6	BALL BEARING 6201ZZ (REAR)
112	P0948112	TAP SCREW M4.2 X 13
113	P0948113	DUST PORT
114	P0948114	DUST PORT COVER
115	P0948115	ROLL PIN 3 X 22
116	P0948116	POWER CORD 18G 3W 72" 5-15P
117	P0948117	KNOB BOLT M8-1.25 X 18, D72, WING
118	P0948118	TABLE INSERT
119	P0948119	TABLE
120	P0948120	MITER GAUGE
121	P0948121	PHLP HD SCR M4-.7 X 12
122	P0948122	FLAT WASHER 4MM
123	P0948123	POINTER
124	P0948124	SHOULDER SCREW M8-1.25 X 12, 8 X 8
125	P0948125	FLAT WASHER 8MM
126	P0948126	TRUNNION (REAR)
127	P0948127	BUSHING
128	P0948128	TRUNNION BRACKET
129	P0948129	CARRIAGE BOLT M8-1.25 X 70
130	P0948130	FLAT WASHER 6MM
131	P0948131	HEX BOLT M6-1 X 10
132	P0948132	FLAT WASHER 6MM
133	P0948133	HEX BOLT M6-1 X 12
134	P0948134	ADJ HANDLE M8-1.25 , 72L
135	P0948135	CAP SCREW M5-.8 X 12
136	P0948136	HEX NUT M5-.8
137	P0948137	HEX NUT M5-.8
138	P0948138	FLAT WASHER 5MM
139	P0948139	CORD CLAMP 3/8"

REF	PART #	DESCRIPTION
140	P0948140	CAP SCREW M5-.8 X 12
141	P0948141	HEX NUT M10-1.5
142	P0948142	LED LIGHT NANJING 12V 1W
143	P0948143	KNOB M6-1, D32, WING
144	P0948144	FLAT WASHER 6MM
145	P0948145	FENCE CAP
146	P0948146	FENCE SUPPORT
147	P0948147	GUIDE PLATE
148	P0948148	CARRIAGE BOLT M6-1 X 55
149	P0948149	FENCE
150	P0948150	FENCE RAIL CAP (RIGHT)
151	P0948151	FENCE RAIL
152	P0948152	FENCE RAIL CAP (LEFT)
153	P0948153	TAP SCREW M2.9 X 9.5
154	P0948154	POINTER
155	P0948155	FENCE BASE
156	P0948156	SQUARE NUT M5-.8
157	P0948157	SPACER
158	P0948158	CAP SCREW M5-.8 X 10
159	P0948159	SPRING PLATE
160	P0948160	PHLP HD SCR M5-.8 X 8
161	P0948161	FENCE HANDLE LOCKING CAM
162	P0948162	KNOB BOLT M6-1 X 10, D35, TAPERED
163	P0948163	SHAFT
164	P0948164	HEX NUT M8-1.25
165	P0948165	FLAT WASHER 8MM
166	P0948166	CARRIAGE BOLT M8-1.25 X 16
167	P0948167	LEG
168	P0948168	LONG BRACE
169	P0948169	SHORT BRACE
170	P0948170	FOOT
171	P0948171	WRENCH 10 X 13MM OPEN-ENDS
172	P0948172	HEX WRENCH 6MM
173	P0948173	HEX WRENCH 5MM
174	P0948174	HEX WRENCH 4MM
175	P0948175	HEX WRENCH 3MM
176	P0948176	LOCK NUT M8-1.25
177	P0948177	LOCK WASHER 5MM
178	P0948178	TRUNNION (FRONT)
179	P0948179	PUSH STICK



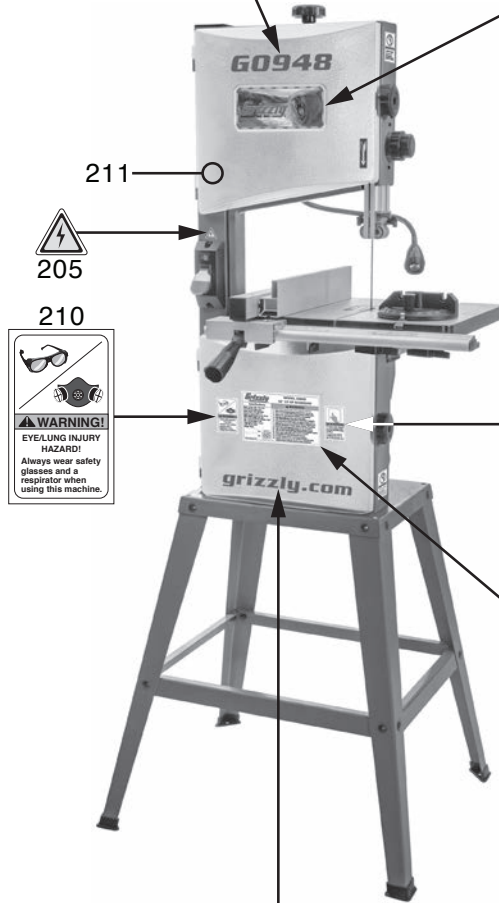
Labels & Cosmetics

201 **G0948**



202

203



210



211

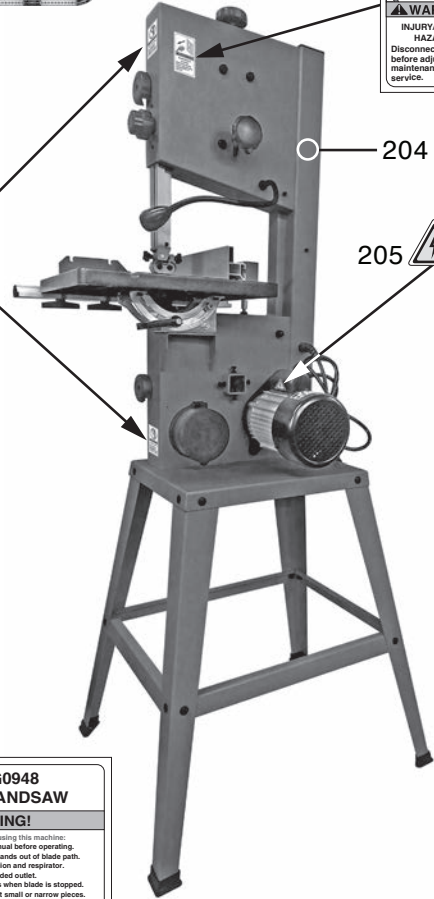
207



206



204



208

Grizzly Industrial

MODEL G0948
10" 1/2 HP BANDSAW

Specifications

Motor: 1/2 HP, 120V, 1-Ph, 60Hz
Full Load Amp Draw: 3.5A
Blade Speed: 1500, 3000 FPM
Standard Blade Length: 72"
Blade Length Range: 71 1/2" - 72 1/2"
Blade Width Range: 1/8" - 1/2"
Max. Cutting Width Left of Blade: 9-3/4"
Max. Cutting Height: 6-1/8"
Table Size: 14-3/16" x 12-5/8"
Table Tilt: 0° / 45°
Weight: 69 lbs.

WARNING!

To reduce risk of serious injury when using this machine:

1. Read and understand owner's manual before operating.
2. Never touch moving blade. Keep hands out of blade path.
3. Always wear approved eye protection and respirator.
4. Only plug power cord into a grounded outlet.
5. Only remove jammed cutoff pieces when blade is stopped.
6. Use push stick or holding jig to cut small or narrow pieces.
7. Disconnect power before changing blades or adjusting saw.
8. Maintain adjustment of blade tension, tracking, and guides.
9. Keep upper guide adjusted to just clear the workpiece.
10. Hold workpiece firmly against table to maintain control.
11. Only run saw with wheel covers closed and all guards in place.
12. Never reach under table while blade is in motion.
13. Remove/secure loose clothing and long hair.
14. DO NOT operate in rain or use in wet locations.
15. Prevent unauthorized use by children or untrained users; restrict access or disable machine when unattended.

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REF	PART #	DESCRIPTION
201	P0948201	MODEL NUMBER LABEL
202	P0948202	GRIZZLY INDUSTRIAL LOGO LABEL
203	P0948203	DISCONNECT POWER LABEL
204	P0948204	TOUCH-UP PAINT, GRIZZLY GREEN
205	P0948205	ELECTRICITY LABEL
206	P0948206	DO NOT OPEN DOOR LABEL

REF	PART #	DESCRIPTION
207	P0948207	READ MANUAL LABEL
208	P0948208	MACHINE ID LABEL
209	P0948209	GRIZZLY.COM LABEL
210	P0948210	EYE/LUNG INJURY LABEL
211	P0948211	TOUCH-UP PAINT, GRIZZLY BEIGE

!WARNING

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



WARRANTY & RETURNS

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

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

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

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

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

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

To take advantage of this warranty, you must register it at <https://www.grizzly.com/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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