MODEL G0994
10" VERTICAL METAL BANDSAW
OWNER'S MANUAL
(For models manufactured since 08/24)

#SGCSLW23260 PRINTED IN CHINA V1.09.24

******Keep for Future Reference******

⚠ 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

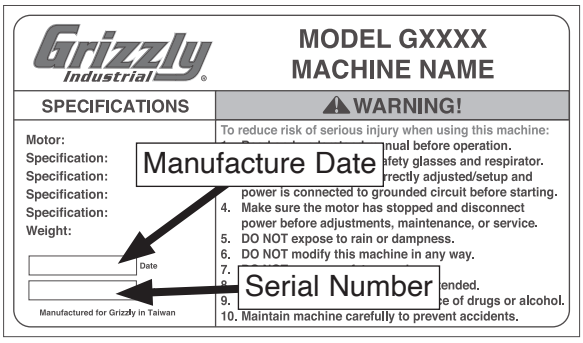
Manual Accuracy

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**.

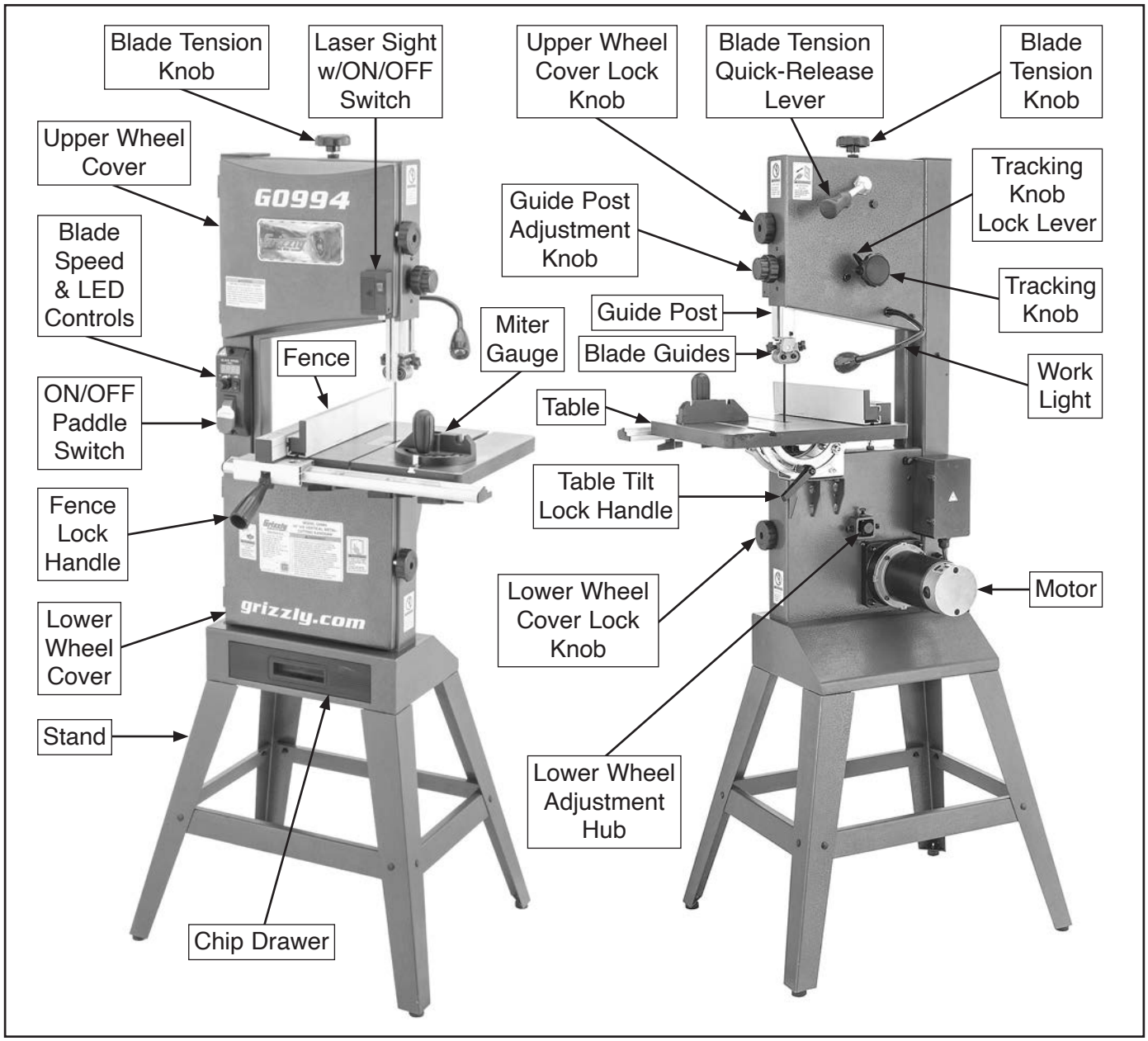
If you find this to be the case, and the difference between the manual and machine leaves you confused or unsure about something, check our website for an updated version. We post current manuals and manual updates for free on our website at **www.grizzly.com**.

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.



Identification

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

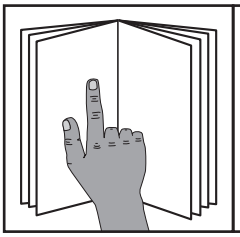


⚠WARNING

For Your Own Safety Read Instruction Manual Before Operating the Bandsaw

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 support 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

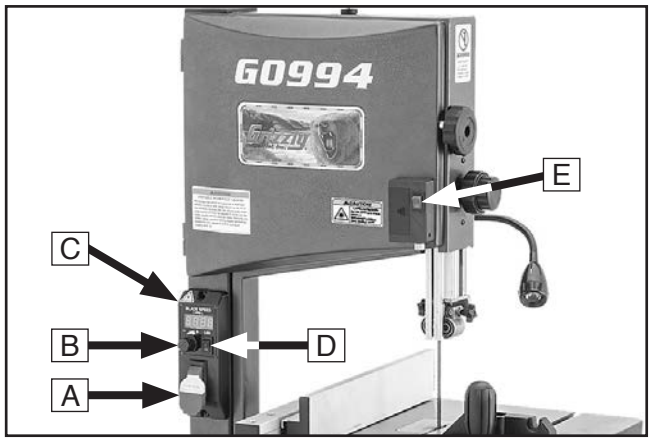


Figure 1. Power controls.

A. ON/OFF Paddle Switch w/Removable Key: Turns machine ***ON*** and ***OFF***. Remove key to disable machine.

B. Blade Speed Control Knob: Adjusts blade speed.

C. Blade Speed Digital Readout: Indicates blade speed in feet per minute (FPM).

D. Work Light ON/OFF Switch: Turns light ***ON*** and ***OFF***. Illuminates cutting area for better visibility.

E. Laser ON/OFF Switch: Projects down length of blade and onto workpiece to help guide cut.

Fence & Miter Gauge

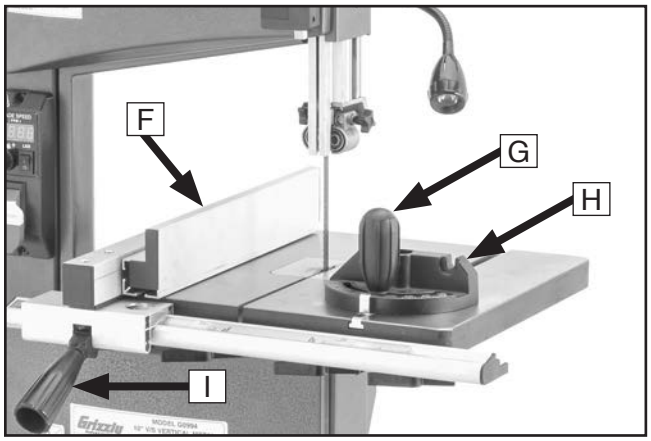


Figure 2. Fence and miter gauge controls.

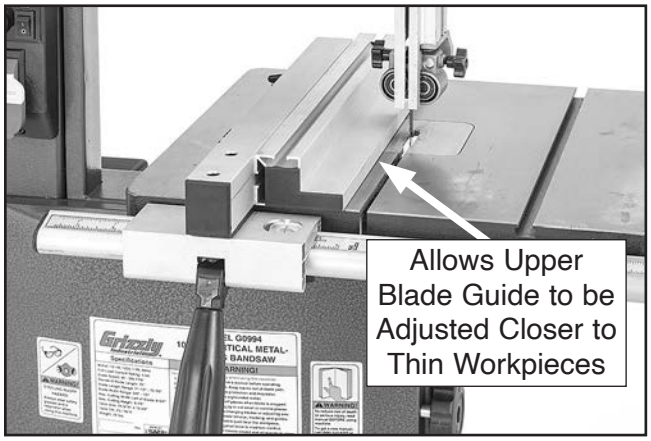


Figure 3. Fence mounted in horizontal position.

F. Fence: 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.

G. Miter Gauge Lock Knob: Secures angle position of miter gauge.

H. Miter Gauge: Typically used for cross cuts. Can be adjusted from 0°–60° left or right.

I. Fence Lock Handle: Secures fence position.

Guide Post

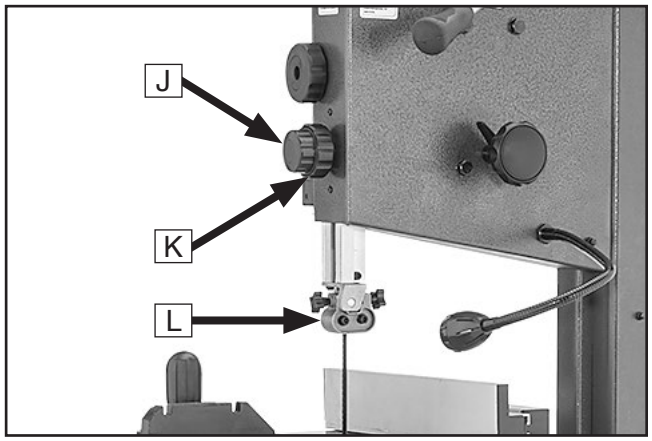


Figure 4. Guide post controls.

J. Guide Post Lock Knob: Secures height of blade guides.

K. Guide Post Adjustment Knob: Rotate to adjust height of blade guides above workpiece.

L. Upper Blade Guide: Supports blade above workpiece during operations.

Table Tilt

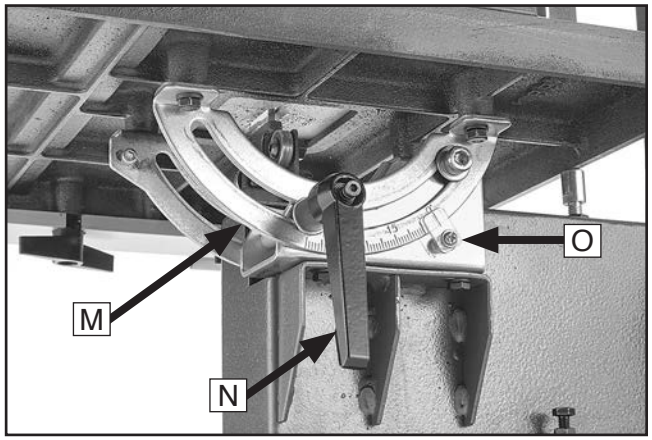


Figure 5. Table tilt controls.

M. Trunnion w/Table Tilt Scale: Functions as a tilting base for table. Graduated in degrees from 0°–45° for setting bevel angle.

N. Table Tilt Lock Lever: Secures table tilt angle setting.

O. Table Tilt Indicator: Shows angle of table tilt.

Blade Tension & Tracking

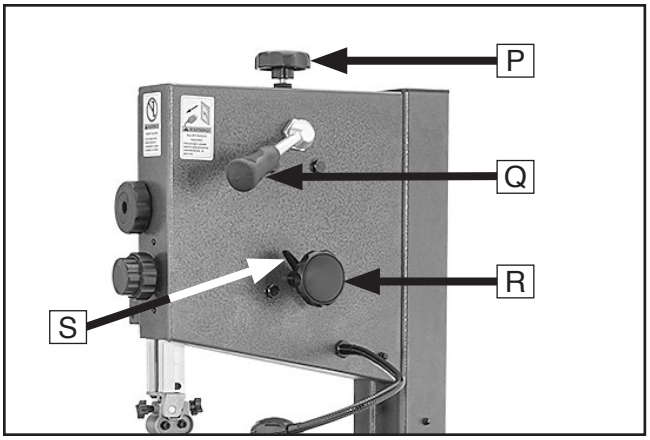


Figure 6. Blade tension and tracking controls.

P. Blade Tension Adjustment Knob: Rotate to adjust blade tension (see **Page 21**).

Q. Blade Tension Quick-Release Lever: Raise to release blade tension for quick blade removal and installation; lower to add pre-set tension to blade.

R. Blade Tracking Knob: Rotate to adjust blade tracking (see **Page 19**).

S. 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 G0994 10" VERTICAL METAL BANDSAW

Product Dimensions:

Weight	80 lbs.
Width (side-to-side) x Depth (front-to-back) x Height	28 x 22 x 59 in.
Footprint (Length x Width)	18-1/2 x 23 in.

Shipping Dimensions:

Type	Cardboard
Content	Machine
Weight	86 lbs.
Length x Width x Height	40 x 18 x 15 in.
Must Ship Upright	No

Electrical:

Power Requirement	120V, Single-Phase, 60 Hz
Full-Load Current Rating	4.5A
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	3/4 HP
Phase	Single-Phase
Amps	4.5A
Speed	900 - 2800 RPM
Type	Brush DC
Power Transfer	Chain
Bearings	Sealed & Permanently Lubricated

Main Specifications:

Main Specifications

Bandsaw Size	10 in.
Max Cutting Width (Left of Blade)	9-5/8 in.
Max Cutting Width (Left of Blade) w/Fence	6-1/8 in.
Max Cutting Height	6 in.
Blade Speeds	85 - 265 FPM

Blade Information

Standard Blade Length	72 in.
Blade Length Range	71-1/2 - 72-1/2 in.
Blade Width Range	3/8 - 1/2 in.
Blade Guides	Ball Bearing
Guide Post Adjustment Type	Rack & Pinion
Has Quick-Release	Yes

Table Information

Table Length	14-3/16 in.
Table Width	12-5/8 in.
Table Thickness	1 in.
Table Tilt	Right 0 - 45 deg.
Table Tilt Adjustment Type	Manual
Floor-to-Table Height	36-1/2 in.
Includes Fence	Yes
Fence Locking Position	Front
Miter Gauge Included	Yes

Construction Materials

Table	Cast Iron
Trunnion	Steel
Fence	Extruded Aluminum
Base/Stand	Steel
Body/Frame	Steel
Wheels	Cast Aluminum
Tires	Rubber
Wheel Covers	Steel
Paint Type/Finish	Powder Coat

Other Related Information

Wheel Diameter	10 in.
Wheel Width	3/4 in.
Tire Width	1/2 in.
Has Work Light	Yes
Light Socket Type	3.5V LED
Maximum Bulb Wattage	1W
Has Laser Guide	Yes
Laser Classification	Class II
Laser Wavelength	650nm
Laser Maximum Output	1mW

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:

Adjustable Blade Speed (85 - 265 FPM)
Laser Guide
LED Work Light
Locking Fence
Metal Miter Gauge
3/4 HP Motor w/Chain Drive
Quick-Release Blade Tensioner

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 loose clothing, gloves, neckties, 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 Vertical Metal 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. Long-term respiratory damage can occur from breathing metal dust created while cutting. To reduce these risks, 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. Always allow blade to reach full speed before starting cut. Cutting workpiece before blade is at full speed could cause blade to grab workpiece and pull hands into blade. DO NOT start machine with workpiece contacting blade.

BLADE CONDITION. Do not operate with dirty, dull, or badly worn blades. Inspect blades for cracks and missing teeth before each use. Always maintain proper blade tension and tracking.

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.

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 cutting 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.

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

FIRE HAZARD. Keep flammable materials away from machine during operations. Use EXTREME CAUTION if cutting magnesium. Using the wrong cutting fluid will lead to chip fire and possible explosion.

HOT SURFACES. Contact with hot surfaces from machine components, ejections of hot chips, swarf, and the workpiece itself can cause burns.

UNSTABLE WORKPIECES. An unstable workpiece that unexpectly moves during cut can draw operator's hand into blade, causing serious injury. If workpiece cannot be safely supported, DO NOT cut workpiece on this machine. Examples are chains, cables, round/oblong-shaped workpieces, those with internal/built-in moving/rotating parts, 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.

⚠WARNING

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

Full-Load Current Rating

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

Full-Load Current Rating at 120V .... 4.5 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
Plug/Receptacle ..... NEMA 5-15

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!

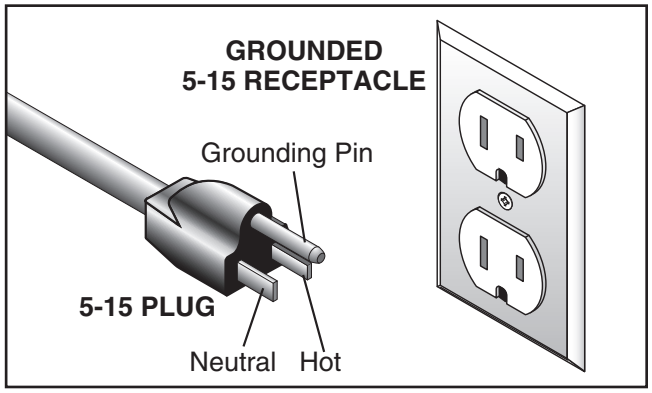
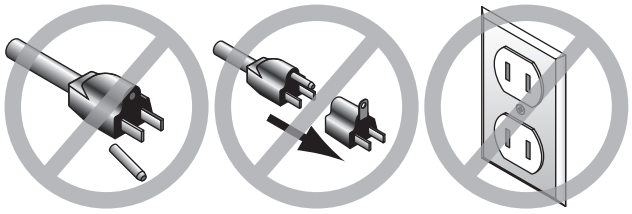


Figure 7. Typical 5-15 plug and receptacle.

⚠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

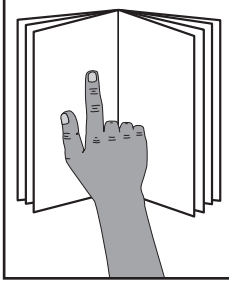
We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

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.

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.
• Phillips Head Screwdriver #2	1
• Feeler Gauge 0.016"	1
• Straightedge 36"	1
• Ruler	1
• Shims	As Needed
• Machinist's Square	1
• Level 18"	1
• Wrench or Socket 10mm	1
• Hex Wrench 6mm	1

Unpacking

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

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

Inventory

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

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

NOTICE

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

Inventory (Figure 8)	Qty
A. Bandsaw w/Trunnion	1
B. Fence Rail	1
C. Table w/Insert	1
D. Miter Gauge	1
E. Fence Assembly	1
F. Wing Bolts M8-1.25 x 18	4
G. Open-Ends Wrench 10/13mm	1
H. Hex Wrenches 3, 4, 5 mm	1 Ea.
I. Stand Braces (Long)	2
J. Stand Braces (Short)	2
K. Stand Legs	4
L. Rubber Feet	4
M. AAA Batteries	2
N. Hardware (Not Shown):	
—Flat Washers 8mm	4
—Hex Nuts M8-1.25	4
—Cap Screws M6-1 x 12	8
—Carriage Bolts M6-1 x 12	8
—Flat Washers 6mm	16
—Hex Nuts M6-1	8

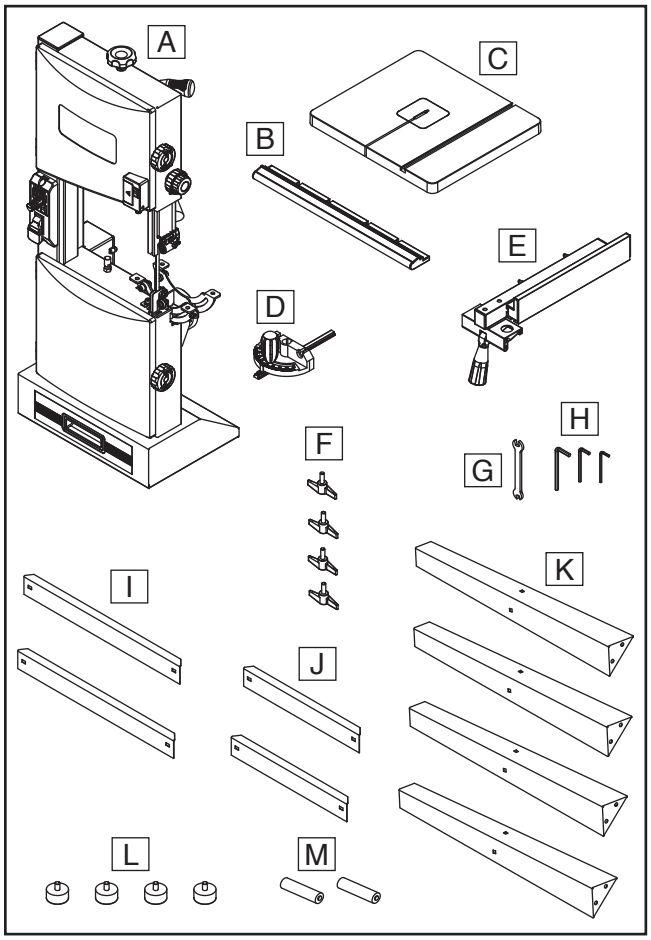
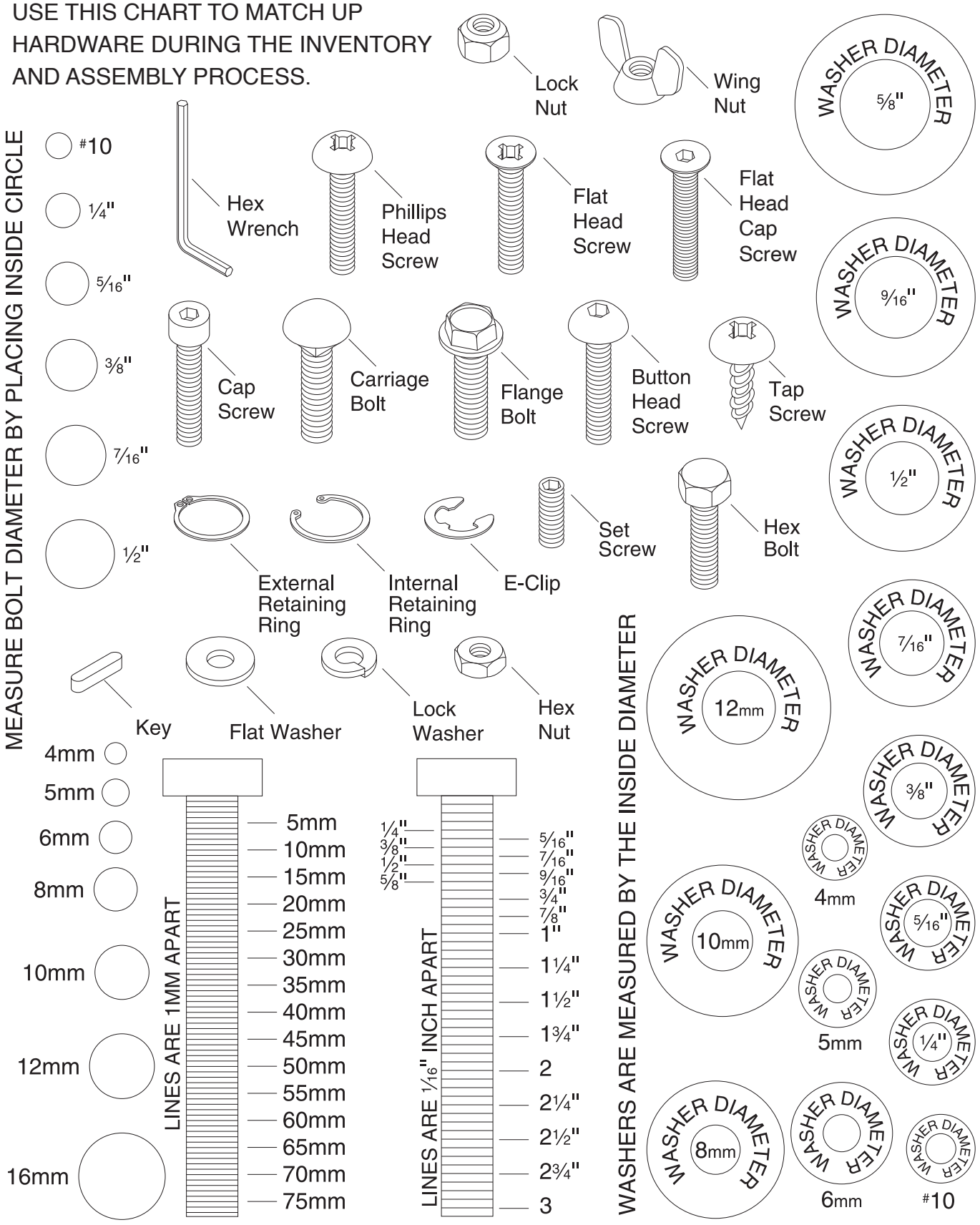


Figure 8. Inventory.

Hardware Recognition Chart

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



Site Considerations

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.

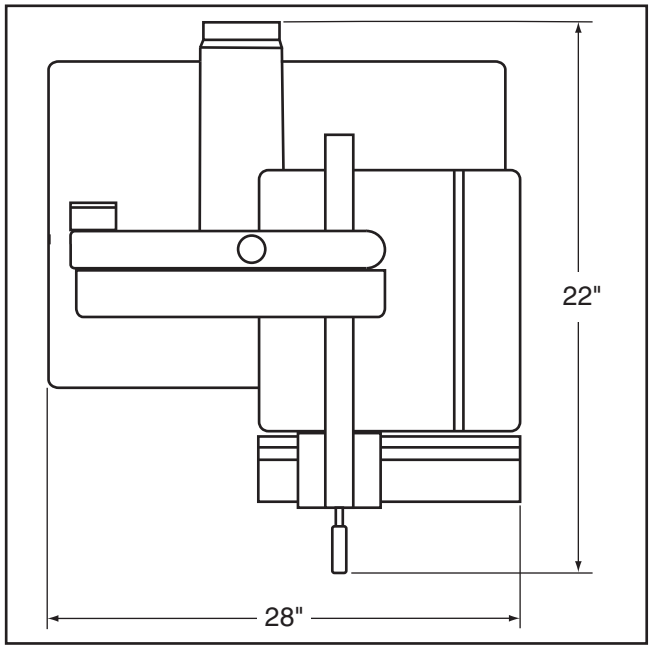
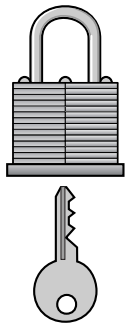


Figure 9. Minimum working clearances.



⚠CAUTION

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.

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).

⚠CAUTION

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

To assemble machine:

1. Locate (4) stand legs (see **Figure 10**) and attach (1) rubber foot to bottom of each leg, using M8-1.25 nut and 8mm flat washer. Only hand tighten for now.

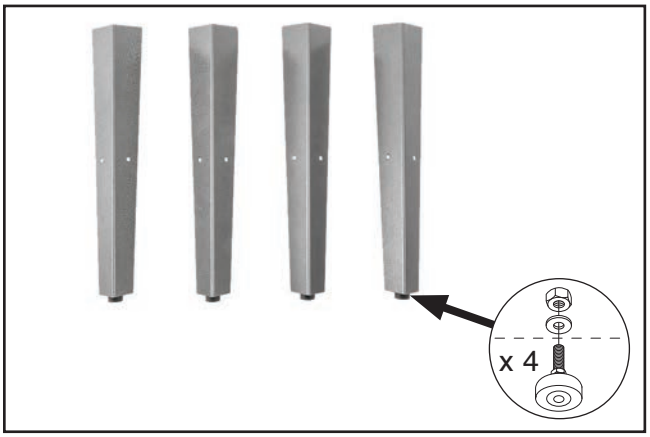


Figure 10. Rubber feet attached to stand legs.

2. Attach (1) short brace to (2) stand legs with (2) M6-1 x 12 carriage bolts, 6mm flat washers, and M6-1 hex nuts, as shown in **Figure 11**. Only hand tighten for now.

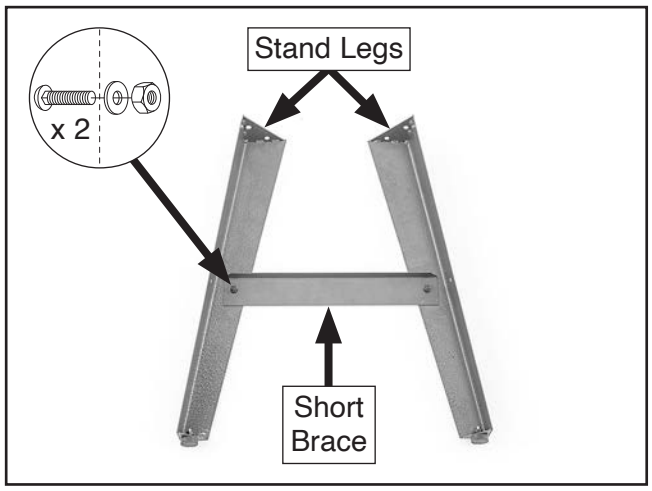


Figure 11. Stand legs attached to short brace.

3. Repeat **Step 2** with remaining short brace and (2) stand legs.

4. Attach (2) leg assemblies with (2) long braces using (4) M6-1 x 12 carriage bolts, 6mm flat washers, and M6-1 hex nuts, as shown in **Figure 12**. Only hand tighten for now.

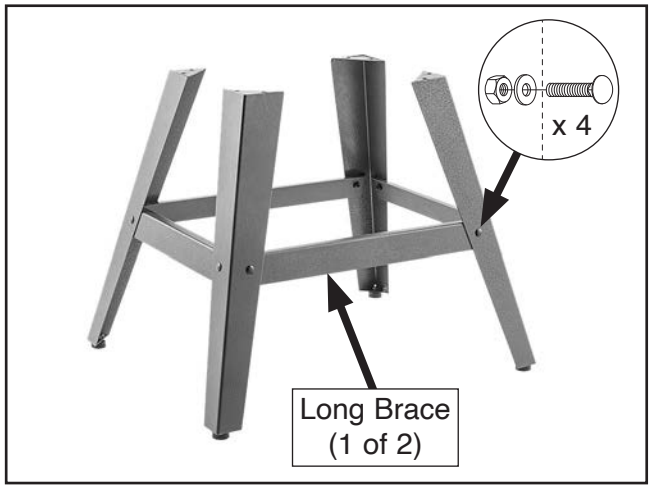


Figure 12. Leg assemblies attached with long braces.

5. Lay machine down horizontally (see **Figure 13**) with help from an assistant. Prop up base with a board.

6. Attach stand to machine base with (8) M6-1 x 12 cap screws and 6mm flat washers (see **Figure 13**).

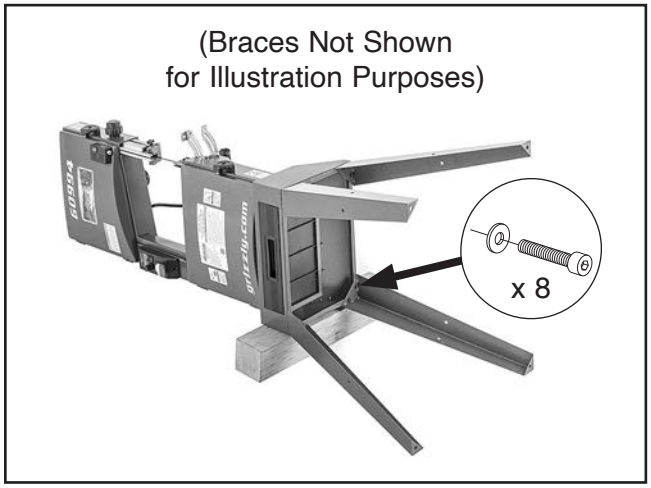


Figure 13. Machine attached to stand.

7. Stand machine upright with aid from an assistant. Tighten all fasteners on legs and braces.

8. Level machine by adjusting feet as needed, then tighten hex nuts to secure position.

9. Remove (4) pre-installed M6-1 x 10 hex bolts and 6mm flat washers from base of table (see **Figure 14**).

10. Slide table past saw blade through table slot, and secure table to trunnions with fasteners removed in **Step 9** (see **Figure 14**).

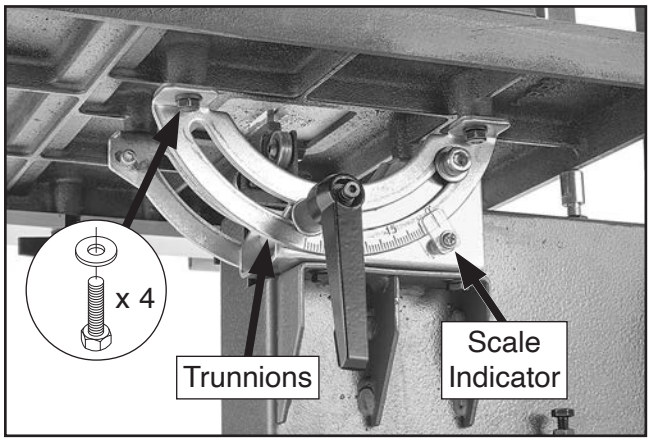


Figure 14. Table attached to trunnions.

11. Completely raise upper blade guide assembly, then place machinist's square flat on table against side of blade (see **Figure 15**).

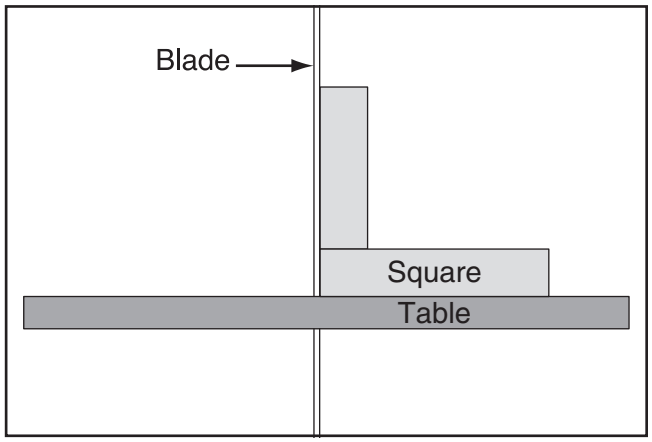


Figure 15. Using a square to adjust table perpendicular to the side of blade.

12. Loosen table lock lever, and tilt table until square is flat against side of blade. When complete, tighten lock lever.

13. Loosen screw on scale indicator (see **Figure 14** on **Page 17**), set indicator to "0", and tighten screw.

14. Attach fence rail to front of table with (4) wing bolts (see **Figure 16**).

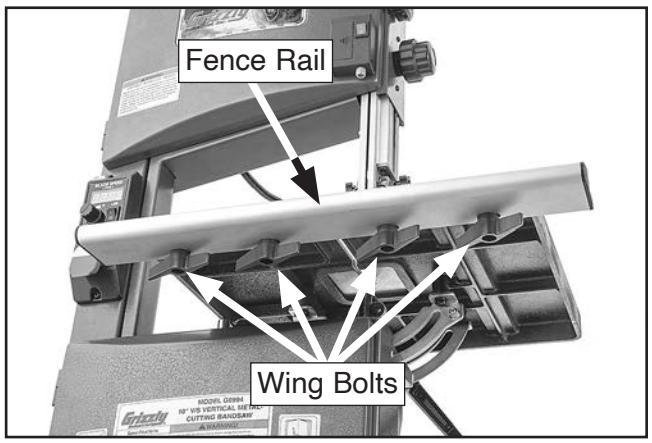


Figure 16. Fence rail attached to front of table.

15. Raise fence lock lever to up position and install fence on fence rail, as shown in **Figure 17**. Push fence lock lever down to secure.

16. Open laser guide cover (see **Figure 17**) and install (2) AAA batteries, matching positive and negative terminals. Replace cover when done.

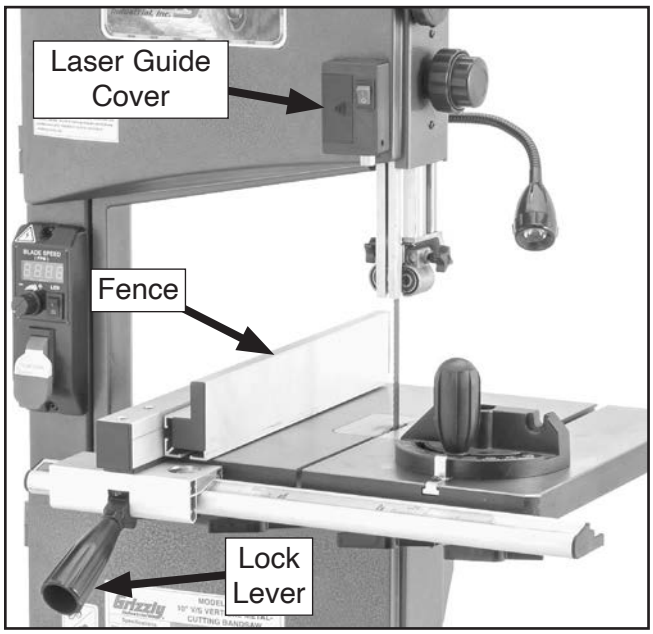


Figure 17. Fence installed on fence rail.

Adjustment Overview

The bandsaw is a very versatile cutting machine. However, it has multiple components that must be properly adjusted for the best 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 (**Page 19**)
2. Test Run (**Page 20**)
3. Tensioning Blade (**Page 21**)
4. Adjusting Blade Support Bearings (**Page 22**)
5. Adjusting Blade Guide Bearings (**Page 24**)
6. Aligning Table (**Page 26**)
7. Aligning Fence (**Page 27**)
8. Calibrating Miter Gauge (**Page 28**)
9. Calibrating Fence Scale (**Page 50**)

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.

As the wheels spin, a properly tracking blade naturally tracks at the center of the wheel (see **Figure 18**).

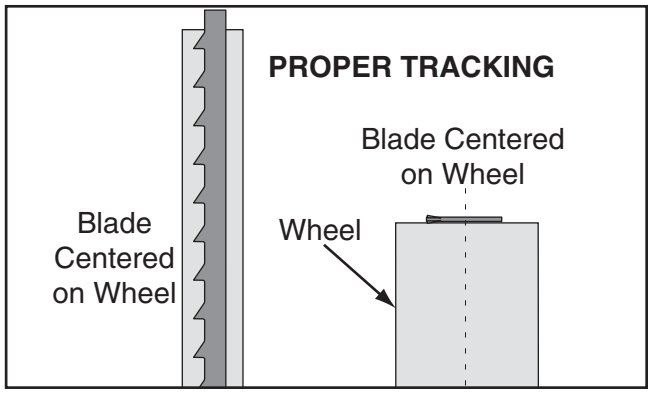


Figure 18. Blade centered on wheel.

The bandsaw wheels must be aligned for optimal machine performance. Properly aligned wheels are parallel and coplanar (see **Figure 19**).

Improper blade tension and cutting practices can negatively affect blade tracking. Familiarizing yourself with the ideas and conditions described in **Figure 19** will help you recognize when your wheel alignment may need to be adjusted (refer to **Aligning Wheels** on **Page 47** for detailed instructions on adjusting the tracking).

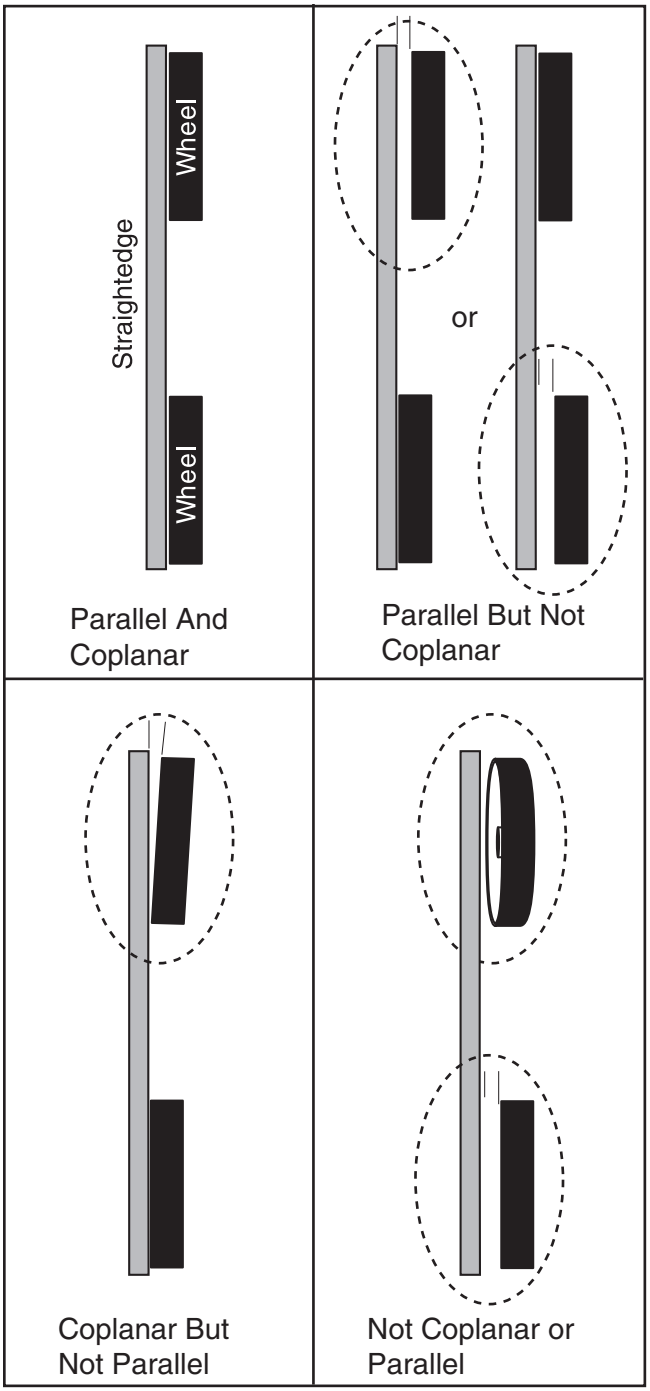


Figure 19. Wheel alignment and misalignment examples.

The wheels on the G0994 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 performing other adjustments.

⚠WARNING

The following procedure involves making adjustments while the machine is under power. Make sure the upper and lower doors are closed while the motor is running. Operating the machine with one or more doors open can cause serious injury from laceration or entanglement.

To perform initial blade tracking:

1. Move guide post all the way up, and move upper/lower blade guides and support bearings away from blade.

2. Connect machine to power. Turn motor ***ON*** for approximately 3–4 seconds, then turn motor ***OFF***. Allow blade to come to a complete stop.

3. Open upper door and inspect blade position on wheel (see **Figure 18** on **Page 19**).

   — If blade rides in center of upper wheel, then bandsaw is tracking properly and no additional adjustments are needed. Skip to **Step 9**.

   — If blade *does not* ride in center of upper wheel, proceed to **Step 4**.

4. Close upper door and loosen lock lever on blade tracking knob.

5. Run motor for 3–4 seconds while turning blade tracking knob slightly clockwise (to shift blade inward) or counterclockwise (to shift blade outward). Start with a small adjustment (about a ¼ turn). Large adjustments may cause blade to jump off wheel.

6. Tighten lock lever immediately after turning blade tracking knob.

7. Turn motor ***OFF*** and allow blade to come to a complete stop. Open upper door and inspect blade position to confirm proper tracking.

8. If needed, repeat **Steps 5–7** until blade tracks properly (see **Figure 18** on **Page 19**).

9. Close upper wheel cover and secure, then proceed to Test Run.

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 ON/OFF switch disables the switch properly.

⚠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. Lower upper blade guide assembly to approximately 1" over table.

3. Turn blade speed control knob all the way counterclockwise.

4. Turn machine ***ON*** and verify motor operation. Motor should run smoothly and without problems or unusual noises.

5. With machine still ***ON***, slowly turn blade speed control knob back and forth. Watch blade and blade speed digital readout to test variable speed function.

6. Turn machine ***OFF***.

7. Remove switch disabling key, as shown in **Figure 20**.

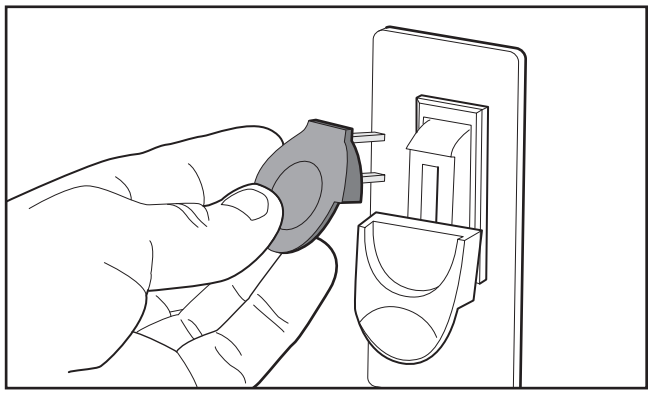


Figure 20. Removing key from ON/OFF paddle switch.

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

   — If the machine *does not* start, the switch disabling feature is working correctly.

   — If the machine *does* start, immediately stop the machine. The switch disabling feature 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 blade life, and making other bandsaw adjustments easier. 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.

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

To tension blade:

1. DISCONNECT MACHINE FROM POWER!

2. Make sure blade is properly tracking (refer to **Initial Blade Tracking** on **Page 19**).

3. Raise guide post all the way and move upper and lower blade guides away from blade.

4. Engage blade tension quick-release lever to apply tension to blade.

5. Using moderate pressure, push center of blade with moderate force (see **Figure 21**).

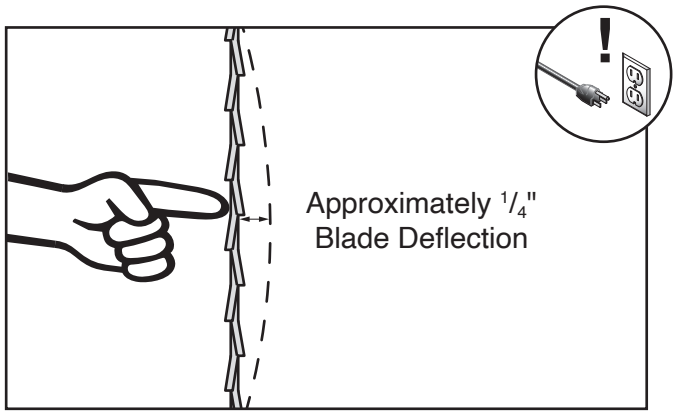


Figure 21. Blade deflection correctly tensioned.

NOTICE

To prolong blade life, release tension on the blade if the machine will be idle for an extended period of time.

   — If blade deflects approximately ¼", it is properly tensioned. Proceed to **Step 6**.

   — If blade deflects less than ¼", it is over-tensioned. Rotate blade tensioning knob counterclockwise two full turns and repeat **Step 5**.

   — If blade deflects ¼" or more, it is under-tensioned. Apply tension to blade incrementally and repeat **Step 5** until properly tensioned.

6. Adjust blade guides (refer to **Adjusting Blade Support Bearings** on **Page 24**).

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 19**) and tensioned (see **Tensioning Blade** on **Page 21**) correctly before performing this procedure.

Adjusting Upper Support Bearing

1. DISCONNECT MACHINE FROM POWER!

2. Loosen support bearing adjustment knob (see **Figure 22**).

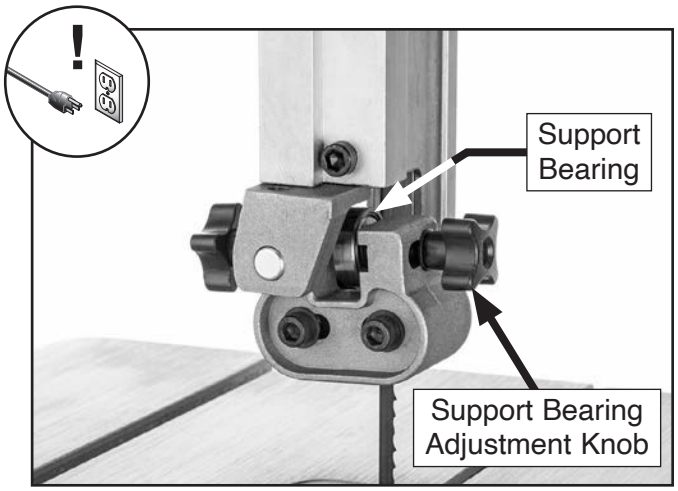


Figure 22. Upper support bearing components.

3. Position support bearing approximately 0.016" away from back of blade (see **Figure 23**).

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

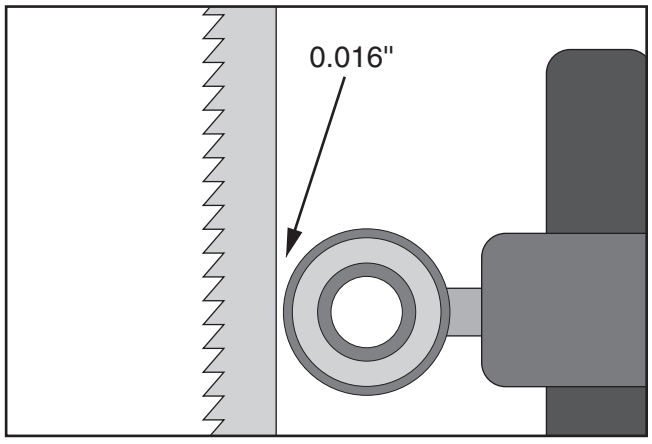


Figure 23. Bearing positioned 0.016" away from back of blade.

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

Adjusting Lower Support Bearing

1. DISCONNECT MACHINE FROM POWER!

2. Loosen button head cap screw (see **Figure 24**).

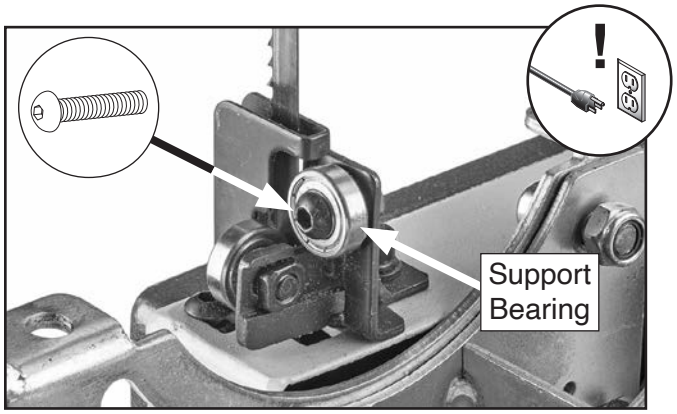


Figure 24. Location of lower support bearing (table removed for clarity).

3. Position support bearing approximately 0.016" away from back of blade, as illustrated in **Figure 23**.

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 (see **Initial Blade Tracking** on **Page 19**) and tensioned correctly (see **Tensioning Blade** on **Page 21**) before performing this procedure.

Adjusting Upper Blade Guide Bearings

1. DISCONNECT MACHINE FROM POWER!

2. Loosen guide bearing adjustment knob shown in **Figure 25**, then laterally position guide bearings just behind blade gullets, as illustrated in **Figure 26**. Tighten knob to secure setting.

   Note: *Guide bearings should be positioned behind gullets a distance equal to that of support bearing behind blade (see **Adjusting Blade Support Bearings** on **Page 22** for reference).*

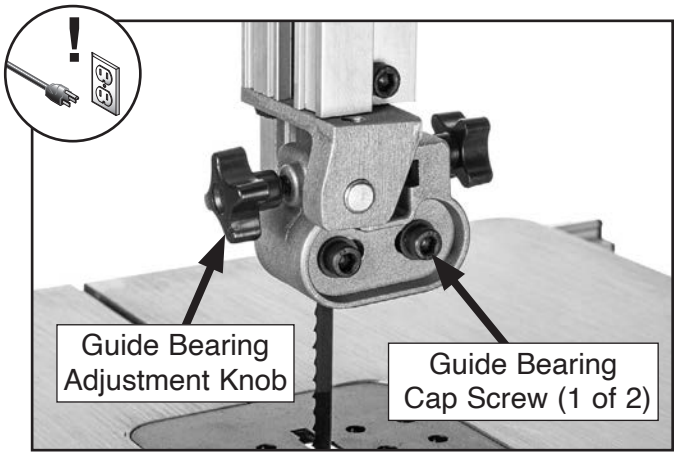


Figure 25. Upper guide bearing components.

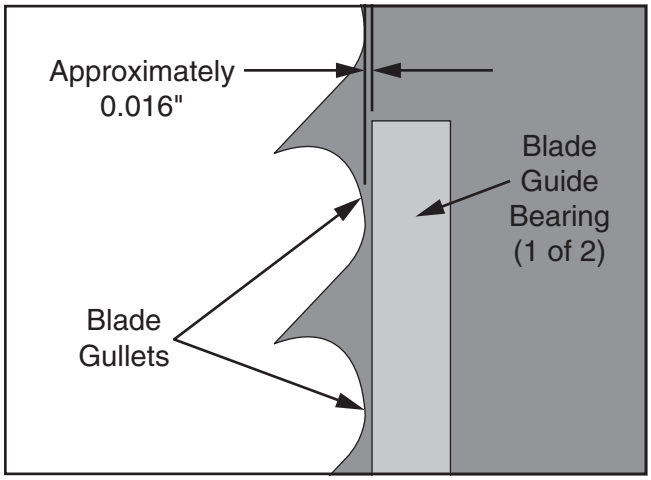


Figure 26. Blade guide bearing positioned just behind blade gullets.

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

NOTICE

Blade teeth are angled out slightly, protruding wider than blade thickness; this is known as blade "tooth set" (see Figure 27). If teeth contact guide bearings during operation, damage may occur. Therefore, support bearing must be set to prevent teeth from contacting guide bearings during operation (refer to Adjusting Blade Support Bearings on Page 22).

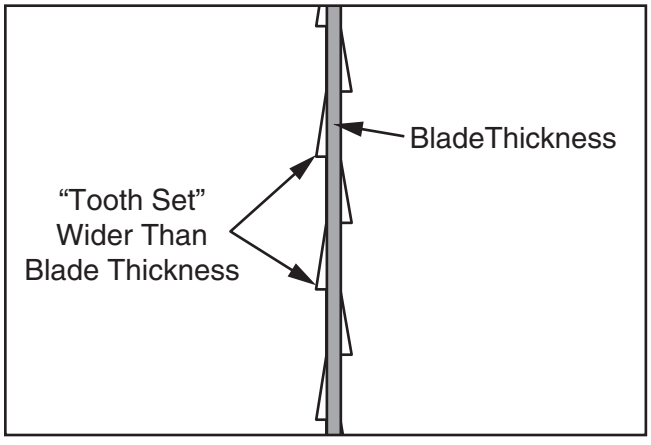


Figure 27. Illustration of blade "tooth set".

3. Loosen both guide bearing cap screws (see **Figure 25** on **Page 24**), then position guide bearings so they evenly and lightly touch sides of blade (see **Figure 28**) without deflecting it one way or the other.

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

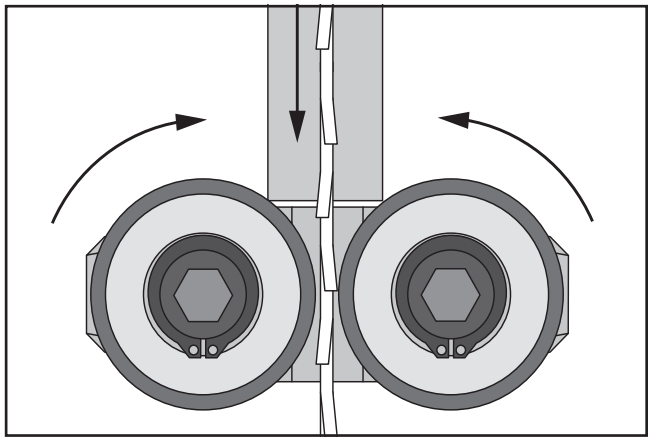


Figure 28. Blade guide bearings evenly and lightly touching sides of blade.

4. 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

1. DISCONNECT MACHINE FROM POWER!

2. Loosen guide bearing cap screw (see **Figure 29**), then laterally position guide bearings just behind blade gullets, as illustrated in **Figure 26**, then tighten cap screw to secure setting.

   Note: *Guide bearings should be positioned behind gullets a distance equal to that of support bearing behind blade (see **Figure 23** on **Page 23** for reference).*

3. Loosen both guide bearing screws (see **Figure 29**), then position guide bearings so they evenly and lightly touch sides of blade (see **Figure 28**) without deflecting it one way or the other.

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

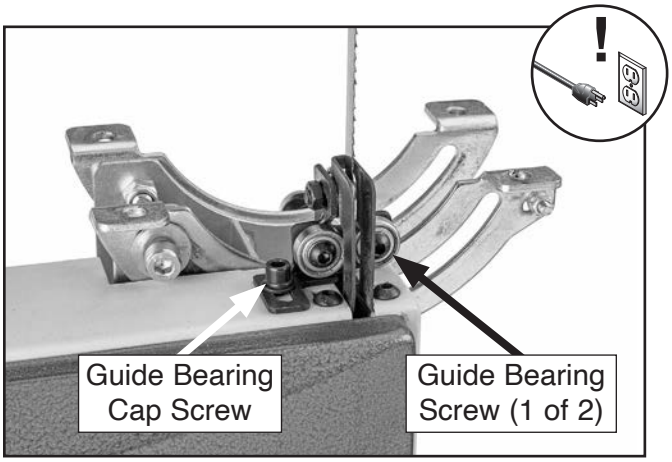


Figure 29. Lower blade guide components (table removed for clarity).

Aligning Table

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

Adjusting Miter Slot Parallelism

1. Make sure blade is tracking properly and correctly tensioned (see **Initial Blade Tracking** on **Page 19,** and **Tensioning Blade** on **Page 21**).

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 30**).

4. Measure distance between straightedge and miter slot (see **Figure 30**). 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**.

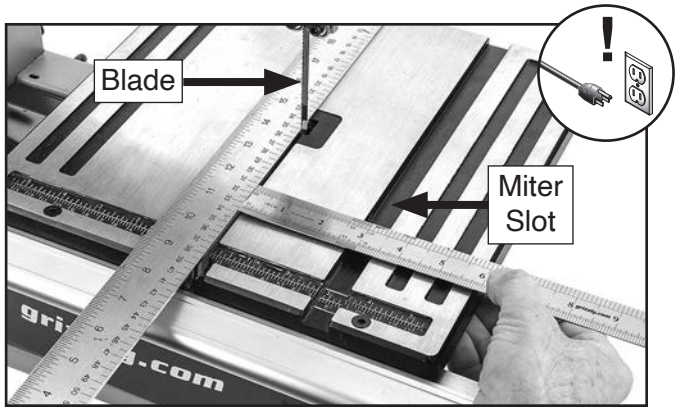


Figure 30. Example of placing a straightedge along blade and measuring to miter slot.

5. Loosen (4) trunnion hex bolts that secure table (see **Figure 31**).

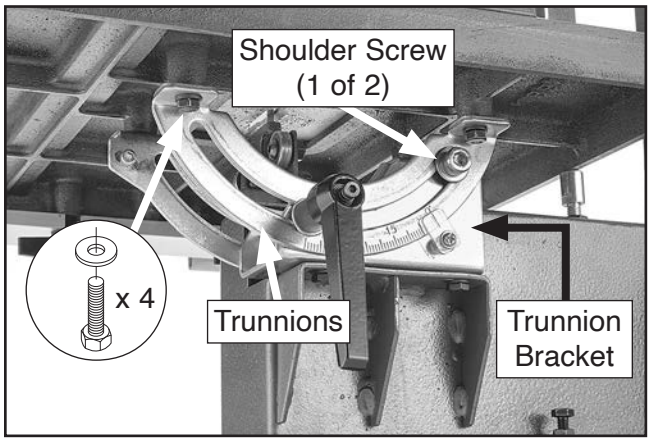


Figure 31. Trunnion components.

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.

   Note: *For operations requiring a high degree of accuracy, tighten shoulder screws securing trunnions to trunnion bracket to increase table rigidity (see **Figure 31**).*

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 32** on **Page 27.** Table should be perpendicular to back of blade.

   — If table *is* perpendicular to back of blade, no adjustment is necessary; proceed to **Aligning Fence** on **Page 27**.

   — If table *is not* perpendicular to back of blade, you must shim table. Proceed to **Step 3**.

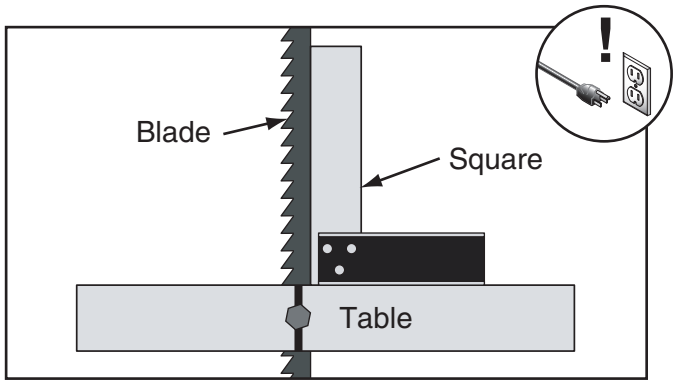


Figure 32. Squaring back of blade and table.

3. Determine which trunnion is on low side of table, then remove (2) hex bolts (see **Figure 31** 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 (2) hex bolts, then repeat **Step 2** to verify adjustment.

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.

To align fence:

1. DISCONNECT MACHINE FROM POWER!

2. Make sure table is aligned with blade (see **Adjusting Miter Slot Parallelism** on **Page 26** for instructions).

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 33**). Adjust fence parallel with miter slot, then tighten cap screws to secure setting.

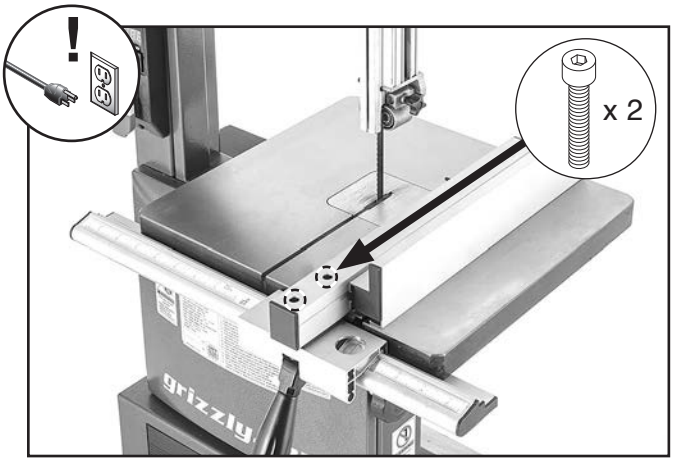


Figure 33. Location of fence adjustment cap screws.

Calibrating Miter Gauge

To ensure cutting accuracy when using the miter gauge, the face of the miter gauge must be 90° to the side of the blade. Refer to **Aligning Fence** on **Page 27.**

Tools Needed	**Qty**
Phillips Head Screwdriver #2	1
Square	1

To calibrate miter gauge:

1. Place miter gauge on a flat surface.

2. Hold square against miter head as shown in **Figure 34**.

— If square rests flush and evenly against *both* miter head *and* miter bar, then no adjustments are necessary.

— If square *does not* rest flush, miter gauge must be calibrated. Proceed to **Step 3**.

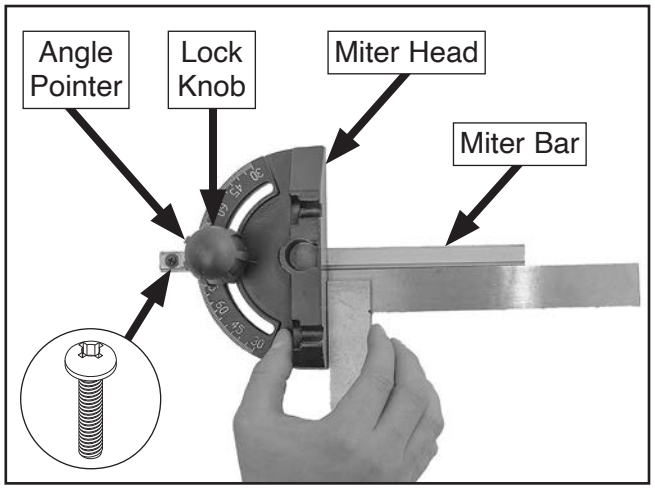


Figure 34. Squaring miter head to miter bar.

3. Loosen lock knob and hold square flush against miter head.

4. Pivot miter head until square rests flush and evenly against *both* miter head *and* miter bar.

5. Tighten lock knob and verify miter head and miter bar remain flush against square.

Note: *Tightening lock knob may affect adjustment.*

6. Loosen screw securing angle pointer (see **Figure 34**).

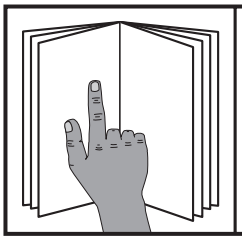
7. Adjust pointer to 0° mark on scale, then tighten screw to secure setting.

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.



⚠WARNING

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

⚠WARNING

To reduce risk of eye injury from flying chips, always wear safety glasses when operating this machine.

NOTICE

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

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

1. Examines workpiece to make sure it is suitable for cutting.
2. Checks to make sure blade tension is correct, and blade guides are positioned correctly.
3. Adjusts blade speed for type of material being cut.
4. Marks cut line on workpiece.
5. Adjusts upper blade guide height to approximately ⅛"—¼" above workpiece for maximum support.
6. Puts on safety glasses and a respirator, rolls up sleeves, and secures any clothing or hair that could get entangled with moving parts.
7. Turns bandsaw ***ON***, and turns laser sight ***ON*** if needed.
8. Holds workpiece firmly and flatly against table and either fence (or miter gauge), then pushes workpiece into blade at a steady and controlled rate until cut is complete.

   Note: *Depending on workpiece material, operator may apply a small amount of oil-based cutting fluid on cutting area to keep it from overheating and smoking.*
9. Turns bandsaw and laser sight ***OFF***.

⚠WARNING

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

Operation Tips

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

Tips for Cutting:

- Keep the upper blade guides adjusted to approximately ¼" above the workpiece to provide proper support for the blade during cutting operations.
- Replace, sharpen, and clean blades as necessary. Make adjustments periodically to keep the saw running in top condition.
- Use light and even pressure while cutting. Light contact with the blade makes it easier to follow lines and prevents extra friction.
- Avoid twisting the blade when cutting around tight corners. Use the proper width of blade for the radius of the corner and make relief cuts.
- Misusing the bandsaw or using incorrect techniques is unsafe and results in poor cuts. Remember—the blade does the cutting with the operator's guidance.
- Never start a cut with the blade in contact with the workpiece, and do not start a cut on a sharp edge of the workpiece.
- Pay attention to the characteristics of the chips when cutting—they are good indicators of proper blade speed and feed rate. See **Chip Inspection Chart** on **Page 35** for more information.

⚠WARNING

ELECTROCUTION HAZARD

This bandsaw is not designed to be used with water soluble cutting fluid or coolant. If needed, use a small amount of oil-based lubricant.

Workpiece Inspection

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

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

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

Blade Selection

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

Blade Terminology

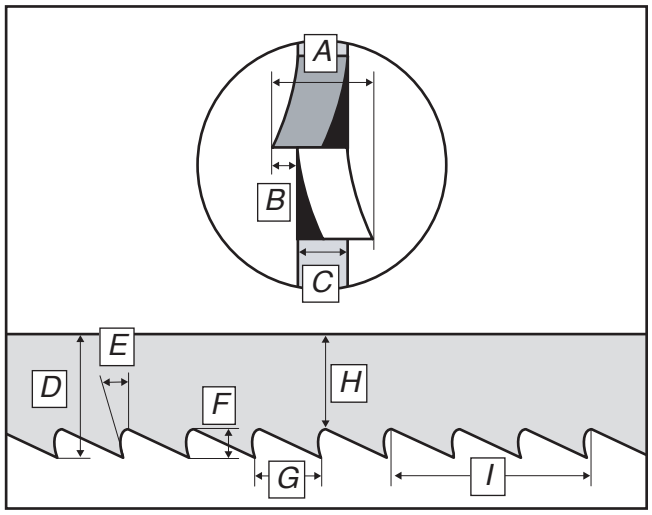


Figure 35. Bandsaw blade terminology.

A. Kerf: The amount of material removed by the blade during cutting.

B. Tooth Set: The amount each tooth is bent left or right from the blade.

C. Gauge: The thickness of the blade.

D. Blade Width: The widest point of the blade measured from the tip of the tooth to the back edge of the blade.

E. Tooth Rake: The angle of the tooth 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. Blade Pitch or TPI: The number of teeth per inch measured from gullet to gullet.

Blade Length

Measured by the blade circumference, blade lengths are usually unique to the brand of your bandsaw and the distance between the wheels.

Blade Length Range.....71½"–72½"

Blade Width

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

G0994 Blade Width Range ..... ⅜"–½"

- **Curve Cutting:** Determine smallest radius curve that will be cut on your workpiece and then choose blade that can accommodate that curve. A ⅜" blade can cut curve with minimum radius of 1¼". A ½" blade can cut curve with minimum radius of 2½".

Tooth Set

Three common tooth sets are straight, raker, and wavy (see **Figure 36**), each removing material in a different manner to make the kerf in the workpiece.

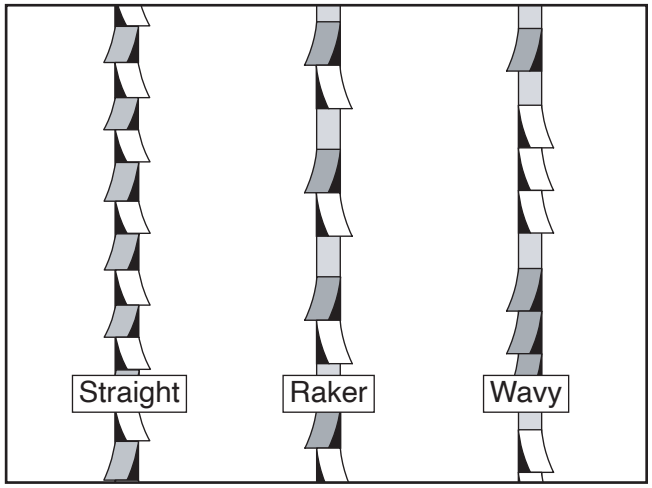


Figure 36. Bandsaw tooth sets.

- **Straight:** An all-purpose arrangement of bending the teeth evenly left and right of the blade. Generally used for milder metals.

- **Raker:** Three teeth in a recurring group—one bent left, next one bent right, and then a non-set tooth. The raker is ideal for most contour cuts.

- **Wavy:** Generally three or more teeth in a group that are bent one way, followed by a non-set tooth, then another group bent the other way. Recommended for straight cuts in thin metals or thin-wall tubing.

Tooth Type

The most common tooth types are described below and illustrated in **Figure 37**.

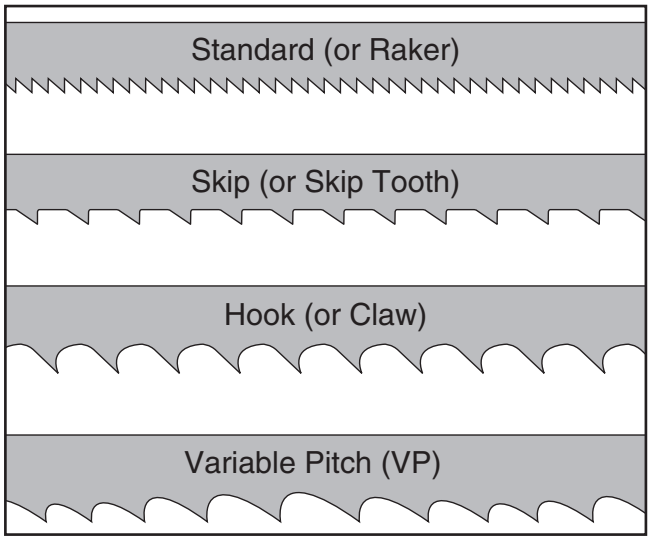


Figure 37. Bandsaw blade tooth types.

Standard or Raker: Equally spaced teeth set, "0" rake angle. Recommended for all-purpose use.

Variable Pitch (VP): Varying gullet depth and tooth spacing, "0" rake angle, excellent chip removing capacity, and smooth cutting.

Hook or Claw: Wide gullets (round or flat), equally spaced teeth, positive rake angle, and fast cut with good surface finish.

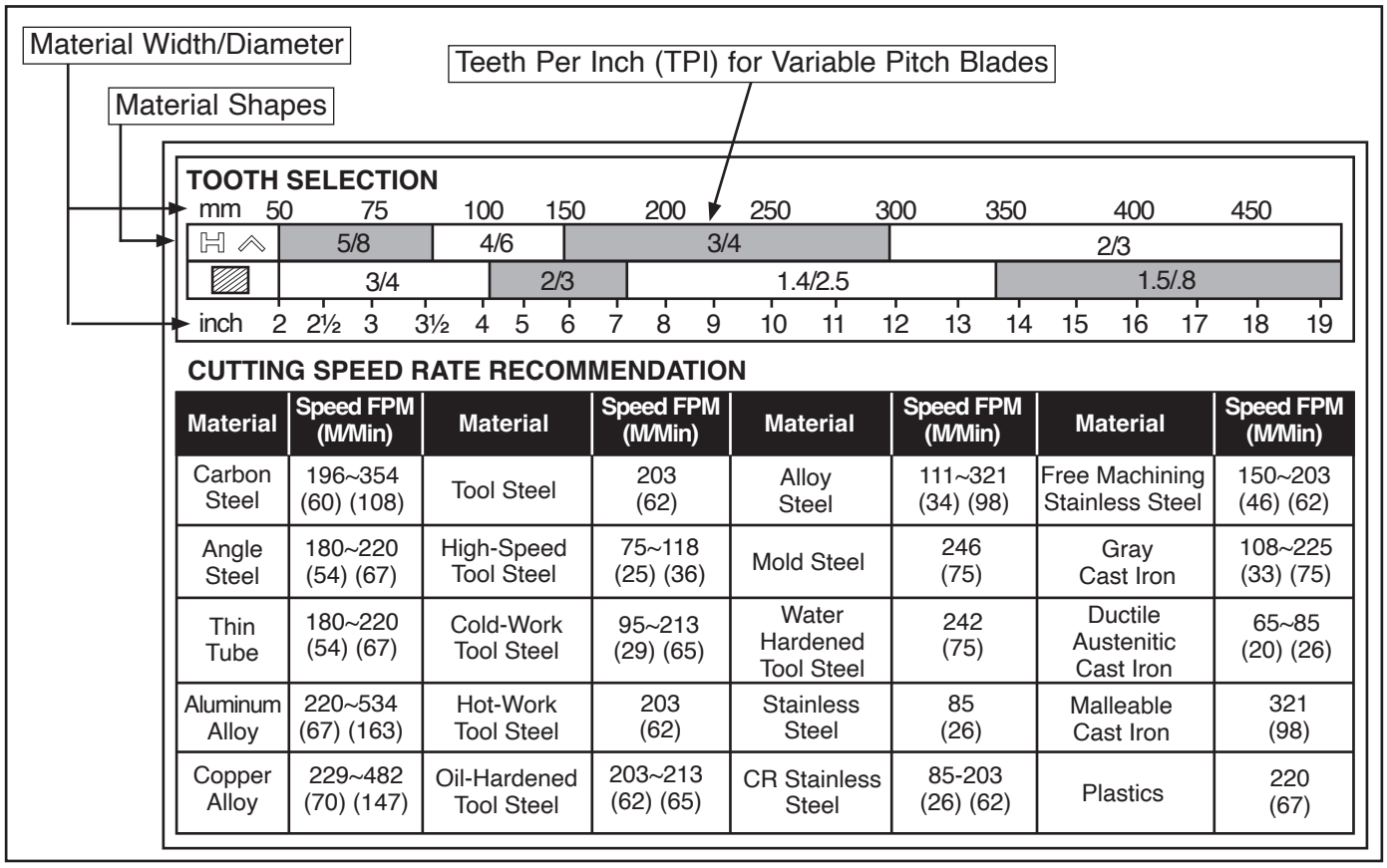
Skip or Skip Tooth: Wide, flat gullets, a "0" rake angle, equally spaced teeth, and recommended for non-ferrous materials.

Blade Pitch (TPI)

The chart below is a basic starting point for choosing teeth per inch (TPI) for variable tooth pitch blades and standard raker set bi-metal blades/HSS blades. However, for exact blade specifications that are correct for your operation, contact the blade manufacturer.

To select correct blade pitch:

1. Measure material thickness. This measurement is length of cut taken from where tooth enters workpiece, sweeps through, and exits workpiece.
2. Refer to "Material Width/Diameter" row of blade selection chart in **Figure 38**, and read across to find workpiece thickness you need.
3. Refer to "Material Shapes" row and find shape of material to be cut.
4. In applicable row, read across to right and find box where row and column intersect. Minimum teeth per inch (TPI) recommended for variable tooth pitch blades is listed in box.
5. "Cutting Speed Rate Recommendation" section of chart offers guidelines for various metals. Choose speed closest to number shown.



CUTTING SPEED RATE RECOMMENDATION

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

Figure 38. General guidelines for blade selection and speed chart.

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.

Use the **Chip Inspection Chart** on **Page 35** to check blade efficiency.

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 in^2 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 ⅛"–¼" 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.

NOTICE

To prolong blade life, release tension on the blade if the machine will be idle for an extended period of time.

Chip Inspection Chart

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

Chip Appearance	Chip Description	Chip Color	Blade Speed	Feed Pressure	Additional Actions
	Thin & Curled	Silver	***Good***	***Good***	
	Hard, Thick & Short	Brown or Blue	Decrease	Decrease	Lubricate with Light Oil
	Hard, Strong & Thick	Brown or Blue	Decrease	Decrease	Lubricate with Light Oil
	Hard, Strong & Thick	Silver or Light Brown	***Good***	Decrease Slightly	Check Blade Pitch
	Hard & Thin	Silver	Increase	Decrease	Check Blade Pitch
	Straight & Thin	Silver	***Good***	Increase	
	Powdery	Silver	Decrease	Increase	
	Curled Tight & Thin	Silver	***Good***	Decrease	Check Blade Pitch

Figure 39. Chip inspection chart.

Setting Upper Blade Guide Height

When cutting, the blade guides must always be positioned so they just clear (no more than ¼") the workpiece. The guide post (see **Figure 40**) allows the upper blade guide assembly to be quickly adjusted for height.

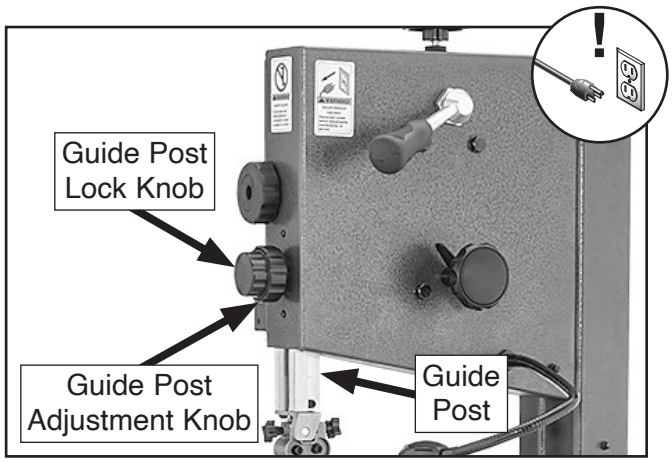


Figure 40. Guide post controls.

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 ¼") 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 41**).

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.*

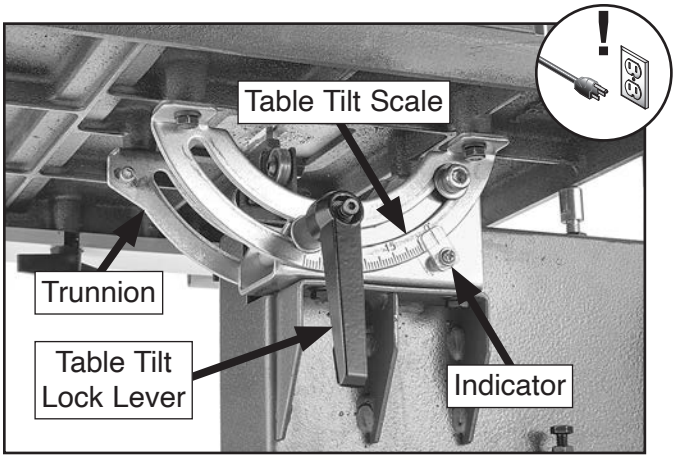


Figure 41. Table tilt controls.

Tilting Table

1. DISCONNECT MACHINE FROM POWER!
2. Loosen table tilt lock lever (see **Figure 41**).
3. Tilt table to desired angle, then tighten lock lever.

Using Positive Stop

Tools Needed **Qty**
Open-End Wrenches 10, 14mm .....1 Ea.

The positive stop (see **Figure 42**) 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.

3. Tilt table to desired angle, then secure position by tightening table tilt lock lever.

4. Loosen jam nut on stop bolt (see **Figure 42**), and turn bolt until it just touches bottom of table.

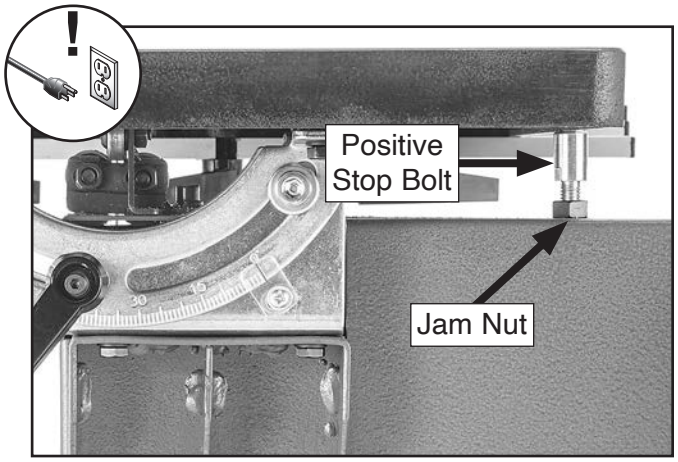


Figure 42. Location of positive stop bolt and jam nut.

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

Tools 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 (see **Figure 41**), 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 43**.

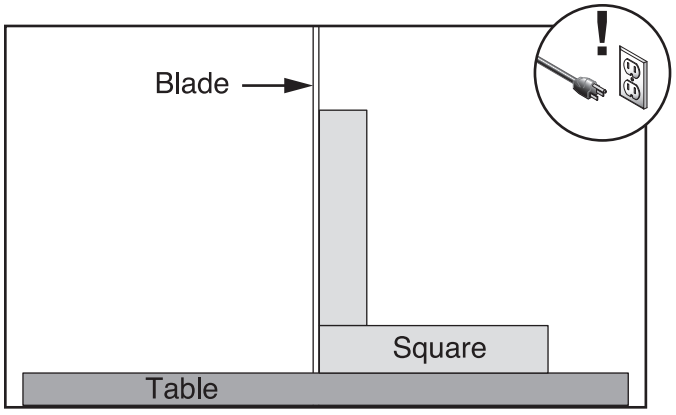


Figure 43. Squaring table to blade.

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 positive stop to an angle other than 0°, follow **Steps 1–5** for desired angle.*

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

Adjusting Blade Speed

Model G0994 is capable of blade speeds between 85 and 265 FPM (Feet Per Minute). To adjust the speed, turn the machine ***ON***, allow the blade to reach full speed, then rotate the blade speed control knob until the display shows the desired speed (see **Figure 44**).

Note: *Refer to **Figure 38** on **Page 33** for blade speed guidelines for various metals*.

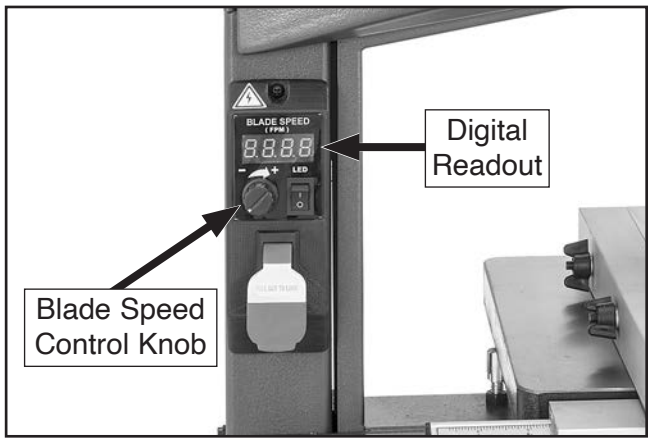
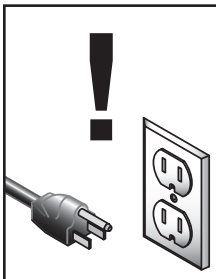


Figure 44. Blade speed controls.

Removing/Installing Blade



⚠WARNING

Disconnect bandsaw from power BEFORE changing blade. Serious personal injury could occur if machine is started during this procedure.

⚠CAUTION

LACERATION HAZARD! Bandsaw blades are sharp and difficult to handle. Wear heavy leather gloves while handling to reduce the risk of being cut.

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

Removing Blade

1. DISCONNECT MACHINE FROM POWER!

2. Release blade tension using quick-release lever on back side of upper wheel cover (see **Identification** on **Page 3**).

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 45**), and remove it from machine.

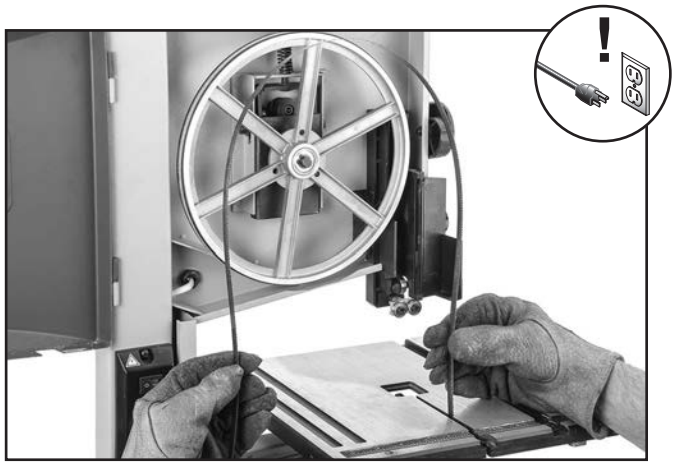


Figure 45. Example of removing blade.

Installing Blade

1. DISCONNECT MACHINE FROM POWER!

2. Slide blade through table slot, ensuring that teeth are pointing down toward table.

   Note: *If teeth will not point downward in any orientation, blade is inside out. Remove 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 21**).

5. Adjust blade tracking (see **Initial Blade Tracking** on **Page 19**).

6. Adjust upper/lower support bearings and blade guides (see **Adjusting Blade Support Bearings** on **Page 23** and **Adjusting Blade Guide Bearings** on **Page 24**).

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 **Aligning Fence** on **Page 27**).

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.

72" Bi-Metal Bandsaw Blades

MODEL	Width	TPI	Gauge
T34247	¼"	10-14 VP	.025
T34248	⅜"	10-14 VP	.025
T34249	½"	8-12 VP	.025
T34250	½"	14-18 VP	.025

Recommended Metal Protectants

G5562—SLIPIT® 1 Qt. Gel
G5563—SLIPIT® 11 Oz. Spray

Figure 46. Recommended products for protecting unpainted cast iron/steel parts on machinery.

T28922—Bear Crawl "Cub" Mobile Base
The Cub version of the Bear Crawl was designed for small-footprint machines weighing up to 900 lbs. It features wide-inline fixed casters and outrigger swivel casters to keep your equipment moving effortlessly on almost any surface. This is a high-quality mobile base that will make your shop more convenient and efficient and will keep your equipment stable and rolling for years to come. Adjusts from 14" x 14" to 22½" x 22½"!

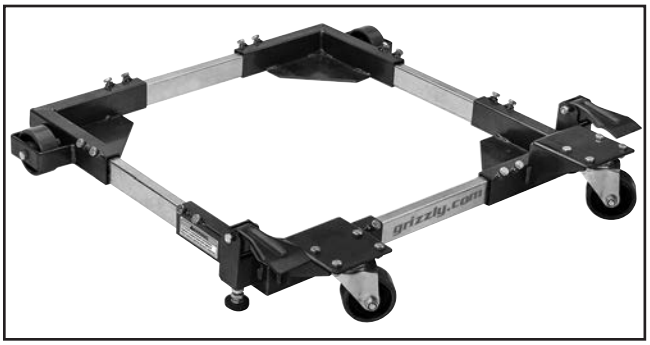


Figure 47. T28922 Bear Crawl "Cub" Mobile Base.

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 is perfect for wet or oily conditions. Measures 3' wide x 5' long x ⅜" thick.

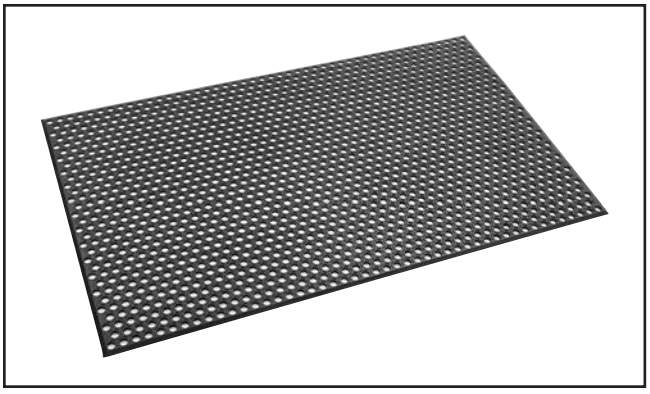
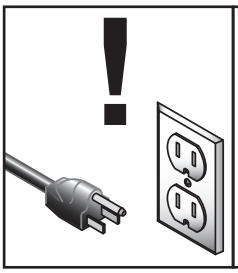


Figure 48. T10456 Anti-Fatigue Mat.

SECTION 6: MAINTENANCE



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

Schedule

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

Ongoing
To 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
- Clean/vacuum metal chip buildup from inside cabinet and off motor.
- Lubricate drive chain.

Emptying Chip Tray

Clean out chip tray before it becomes overfilled. Remove tray and any accumulated metal chips. Do not store near heat or anything likely to produce sparks, as some types of metal dust can be flammable. If you are not disposing of collected metal dust immediately, keep it in an approved, closed-top metal container stored away from fire hazards until you are ready to do so.

Cleaning & Protecting

Cleaning the Model G0994 is relatively easy. Vacuum excess metal chips and flakes, and wipe off the remaining dust with a dry cloth.

Lubrication

The bearings on your bandsaw are factory lubricated and sealed. Leave them alone unless they need to be replaced.

If the table becomes difficult to tilt, lubricate the surfaces between the trunnions and trunnion bracket with a dry lubricant.

Guide Post

Lubrication Type ..... Dry Coating Lube
Amount .....Thin Coat
Frequency..... As Needed

To lubricate guide post:

Spray a small amount of dry lubricant up the channel on side of guide post (see **Figure 49**). Spray at a steep angle to lubricate pinion gear behind guide post adjustment knob.

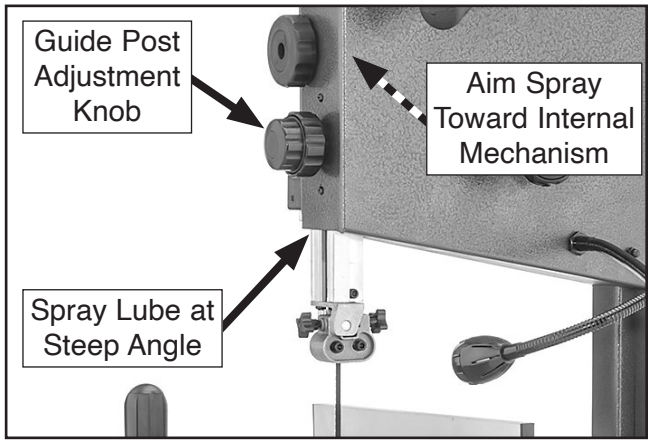


Figure 49. Guidepost lubrication points.

Drive Chain

Lubrication Type .....Dry Lube or Light Oil
Amount .....Thin Coat
Frequency.....Monthly

Tools Needed	Qty
Retaining Ring Pliers	1
Hex Wrench 4mm	1
Phillips Head Screwdriver #2	1

⚠CAUTION

LACERATION HAZARD! Bandsaw blades are sharp and difficult to handle. Wear heavy leather gloves while handling to reduce the risk of being cut.

To lubricate drive chain:

1. DISCONNECT MACHINE FROM POWER!

2. Remove blade (see **Removing/Installing Blade** on **Page 38**).

3. Remove retaining ring from lower wheel spindle (see **Figure 50**), then remove (3) cap screws on wheel hub.

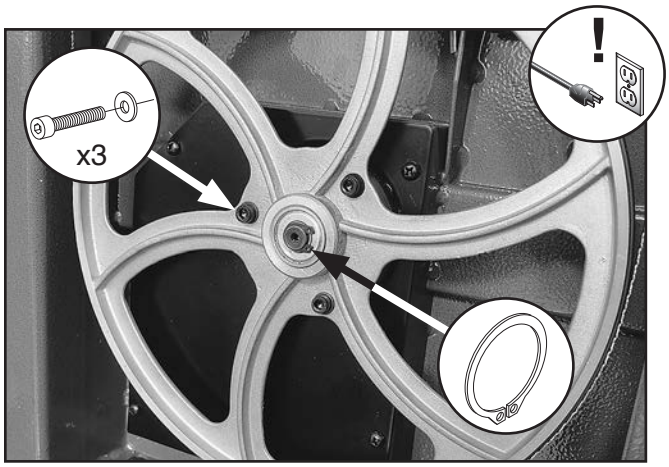


Figure 50. Removing lower wheel.

4. Pull wheel from spindle.

5. Remove (4) Phillips head screws from drive chain cover (see **Figure 51**), then remove cover.

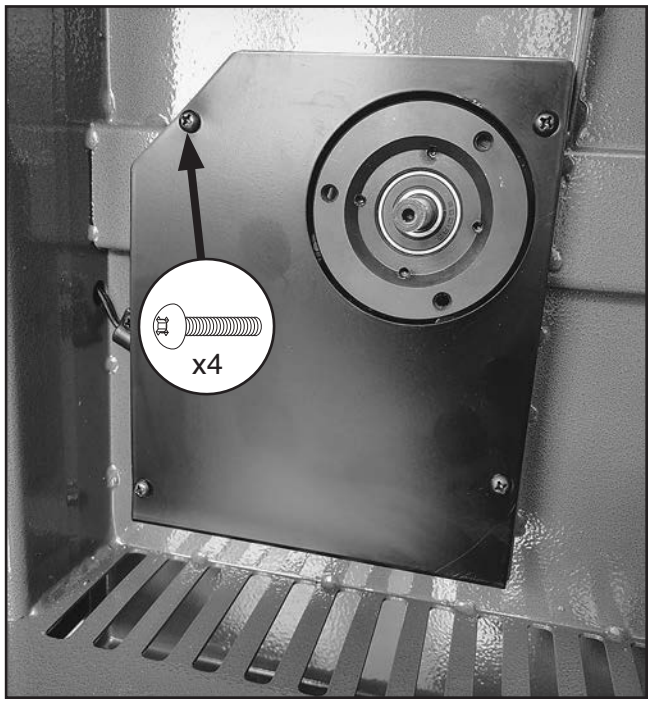


Figure 51. Removing drive chain cover.

6. Inspect chain and sprockets for wear (see **Figure 52**). Brush and vacuum metal dust if needed.

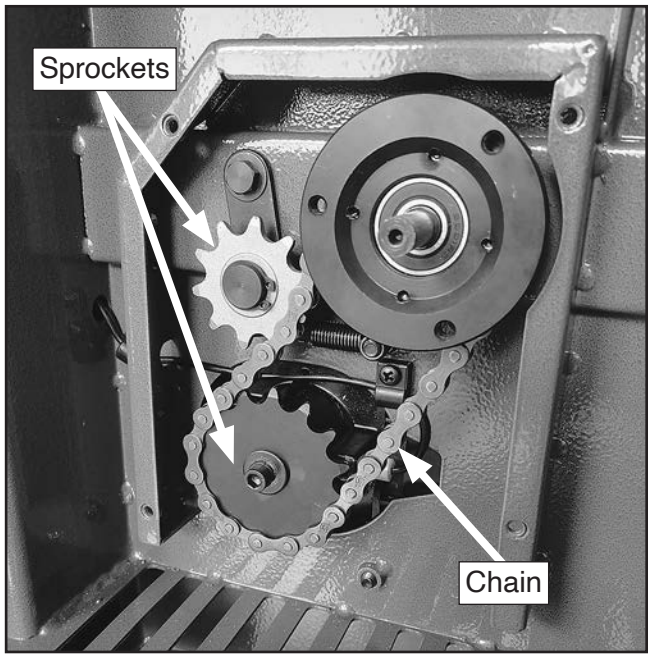


Figure 52. Location of drive chain components.

7. Lubricate chain lightly with dry lube or light oil. Wipe surface with cloth, leaving an even layer of lubricant.

8. Install drive chain cover and secure with Phillips head screws removed in **Step 5**.

9. Install lower wheel and secure with cap screws and retaining ring removed in **Step 3**.

10. Install blade (see **Removing/Installing Blade** on **Page 38**).

11. Tension blade (see **Tensioning Blade** on **Page 21**).

12. Adjust blade tracking (see **Initial Blade Tracking** on **Page 19**).

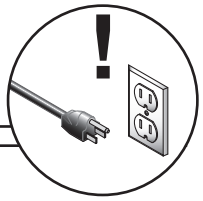
Table Trunnions

If the table becomes difficult to tilt, lubricate the surfaces between the trunnions and trunnion bracket with dry lubricant.

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.	1. Switch disabling key removed. 2. OFF button not reset. 3. Power supply circuit breaker tripped or fuse blown. 4. Incorrect power supply voltage or circuit size. 5. Plug/receptacle at fault/wired incorrectly. 6. Motor speed potentiometer at fault. 7. Motor wires connected incorrectly. 8. Start capacitor at fault. 9. Wiring broken, disconnected, or corroded. 10. ON/OFF switch at fault. 11. Motor or motor bearings at fault. 12. Circuit board (PCB) at fault.	1. Install switch disabling key. 2. Press OFF button completely until it clicks. 3. Ensure circuit is free of shorts. Reset circuit breaker or replace fuse. 4. Ensure correct power supply voltage and circuit size (**Page 11**). 5. Test for good contacts; correct the wiring (**Page 54**). 6. Test/replace if at fault. 7. Correct motor wiring connections (**Page 54**). 8. Test/replace if at fault. 9. Fix broken wires or disconnected/corroded connections (**Page 54**). 10. Replace switch. 11. Replace motor. 12. Inspect/replace if at fault.
Machine stalls or is underpowered.	1. Dull blade. 2. Feed rate/cutting speed too fast. 3. Workpiece crooked; fence misadjusted. 4. Wrong workpiece material (metal). 5. Machine undersized for task. 6. Blade slipping on wheels or not properly tensioned. 7. Feed rate too aggressive for motor blade. 8. Motor speed potentiometer at fault. 9. Motor wires connected incorrectly. 10. Plug/receptacle at fault/wired incorrectly. 11. Machine undersized for task. 12. Motor overheated. 13. Extension cord too long. 14. Motor or motor bearings at fault.	1. Sharpen/replace blade (**Page 38**). Use correct blade (**Page 31**). 2. Decrease feed rate/cutting speed. 3. Straighten or replace workpiece/adjust fence. 4. Use correct type/size of metal. 5. Use correct blade/reduce feed rate or depth of cut. 6. Adjust blade tracking and tension (**Page 5**). 7. Reduce feed pressure and speed. 8. Test/replace if at fault. 9. Correct motor wiring connections (**Page 54**). 10. Test for good contacts/correct wiring (**Page 54**). 11. Use correct, sharp blade; reduce feed rate/depth of cut; use cutting fluid if possible. 12. Clean motor, let cool, and reduce workload. 13. Move machine closer to power supply; use shorter extension cord. 14. Replace motor.

Motor & Electrical (Cont.)

Symptom	Possible Cause	Possible Solution
Machine has vibration or noisy operation.	1. Motor or component loose. 2. Stand fasteners loose or feet not adjusted properly. 3. Motor mount loose/broken. 4. Blade damaged or warped. 5. Motor bearings at fault.	1. Replace damaged or missing bolts/nuts or tighten if loose. 2. Tighten machine to stand or adjust feet to stabilize machine. 3. Tighten/replace. 4. Replace blade (**Page 38**). 5. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.
LED does not illuminate.	1. Lens covered with dust. 2. Wiring broken, disconnected, or corroded. 3. LED switch at fault.	1. Clean lens. 2. Fix broken wires or disconnected/corroded connections (**Page 54**). 3. Replace laser switch (**Page 54**).
Laser sight beam diffracted or not illuminating	1. Debris on lens. 2. Batteries dead.	1. Wipe lens clean of debris. 2. Replace batteries (**Page 51**).
Laser guide does not illuminate	1. Lens covered with dust. 2. Wiring broken, disconnected, or corroded. 3. Laser module(s) damaged/at fault. 4. Laser switch at fault	1. Clean lens. 2. Fix broken wires or disconnected/corroded connections (**Page 54**). 3. Replace laser module(s). 4. Replace laser switch (**Page 54**).

Operation

Symptom	Possible Cause	Possible Solution
Backside of blade deformation/ cracking.	1. Excessive feed rate/pressure. 2. Blade tension too high. 3. Blade support bearings improperly adjusted.	1. Reduce feed rate/pressure. 2. Adjust blade tension (**Page 21**). 3. Adjust blade support bearings (**Page 23**).
Blade or teeth break/crack.	1. Blade tension is too tight. 2. Blade is incorrect for application. 3. Excessive feed rate/pressure. 4. Cutting corners too sharply. 5. Blade is dull or worn/weld at fault. 6. Blade is tracking incorrectly. 7. Blade guides/support bearing not adjusted properly, allowing blade teeth to hit guides while cutting.	1. Reduce blade tension (**Page 21**). 2. Use correct blade for application (**Page 31**). 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 38**). 6. Properly adjust blade tracking (**Page 19**). 7. Adjust blade guides/support bearings so teeth cannot contact guides during operation (**Page 22 & Page 24**).
Blade slows, smokes, shows overheating or wears on one side.	1. Blade contacting table insert. 2. Blade guides are misadjusted or worn. 3. Blade installed backwards. 4. Too much side pressure when feeding workpiece. 5. Wheels are out of alignment. 6. Fence not parallel with blade. 7. Dull, bell-mouthed, or incorrect blade	1. Adjust blade guides to eliminate any side pressure (**Page 25**). Properly align table (**Page 26**). 2. Adjust guides (**Page 24**). Replace blade guides if worn. 3. Check blade rotation. Reverse blade if necessary (**Page 38**). 4. Feed workpiece straight into blade. 5. Adjust wheels to be coplanar (**Page 47**). 6. Adjust fence parallelism with blade (**Page 27**). 7. Replace blade (**Page 38**).

Operation (Cont.)

Finished workpieces are rough or show scoring.	1. Blade is overloaded and twists. TPI is too fine. Blade is too narrow for cutting task. 2. Blade TPI is too coarse or tooth style incorrect. 3. Blade is loose and fluttering. 4. Blade tracking is incorrect. 5. Blade has missing/bent teeth, or faulty weld	1. Decrease feed rate; ensure proper TPI (**Page 31**). 2. Correct blade for material & speed of cut (**Page 31**). 3. Properly adjust blade tension (**Page 21**). 4. Adjust blade tracking (**Page 19**). 5. Replace blade (**Page 38**).
Table is hard to tilt.	1. Table tilt lock knobs are engaged. 2. Metal chips trapped between trunnion & base.	1. Disengage table tilt lock knobs (**Page 36**). 2. Remove table and clean trunnion sliding surfaces.
Table does not accurately tilt to 45 or 0 degrees.	1. Table tilt scale pointer not calibrated. 2. Positive stop not set correctly.	1. Calibrate table tilt scale pointer (**Page 36**). 2. Adjust positive stop (**Page 37**).
Miter bar binds in miter slot.	1. Miter slot dirty or gummed up. 2. Miter bar is bent.	1. Carefully clean miter slot. 2. Replace.
Blade tracks incorrectly, or comes off wheels.	1. Tracking is not adjusted properly. 2. Wheels are not coplanar. 3. Blade tension too loose. 4. Blade guides/support bearings not adjusted properly. 5. Feeding workpiece too fast. 6. Incorrect blade for operation. 7. Blade is bell-mouthed, worn, or dull. 8. Rubber tire or wheel is damaged or worn.	1. Adjust tracking (**Page 19**). 2. Adjust wheels to be coplanar (**Page 47**). 3. Increase blade tension (**Page 21**). 4. Adjust blade guides/support bearings (**Page 22** & **Page 24**). 5. Feed workpiece slower. 6. Install correct blade (**Page 31**). 7. Install new blade and remove tension from blade when not in use. 8. Replace rubber tires or wheel and remove tension from blade when not in use.
Cut is crooked or blade wanders.	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. 6. Blade tracking is incorrect. 7. Table is loose. 8. Fence or miter slot out of alignment with blade. 9. Tooth set is uneven or teeth are sharper on one side than the other.	1. Reduce feed rate/pressure. 2. Increase blade tension (**Page 21**). 3. Use wider blade so tooth type & TPI are correct (**Page 31**). 4. Adjust blade guides/support bearings (**Page 22** & **Page 24**). 5. Replace blade (**Page 38**). 6. Adjust blade tracking (**Page 19**). 7. Tighten table trunnion mounting bolts or tilt lock lever. 8. Align table miter slot (**Page 26**) and fence (**Page 27**) with blade. 9. Properly adjust blade guides/support bearings (**Page 22** & **Page 24**); replace blade (**Page 38**).
Blade dulls prematurely or metal sticks to blade.	1. Excessive feed rate/pressure. 2. Wrong blade tooth type or TPI for cutting operation/material. 3. Blade is twisted. 4. Blade is slipping on wheel. 5. Blade guides hitting teeth, ruining tooth set.	1. Reduce feed rate/pressure. 2. Use blade with correct tooth type & TPI (**Page 31**). 3. Replace blade (**Page 38**). 4. Adjust blade tension (**Page 21**). 5. Properly adjust guides (**Page 24**).
Gullets loaded with chips.	1. Wrong cutting speed. 2. Blade TPI is too fine.	1. Adjust cutting speed. 2. Install correct blade (**Page 31**).
Backside of blade deformation/ cracking.	1. Excessive feed rate/pressure. 2. Blade tension too high. 3. Blade support bearings improperly adjusted.	1. Reduce feed rate/pressure. 2. Adjust blade tension (**Page 21**). 3. Adjust blade support bearings (**Page 23**).

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 **Figure 54**).

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 Needed **Qty**
Precision Straightedge 3'..... 1

To check wheel alignment:

1. DISCONNECT MACHINE FROM POWER!

2. Remove (4) M6-1 x 10 hex bolts and 6mm flat washers from base of table (see **Figure 14 on Page 17**), then slide table out along blade slot.

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 53.**

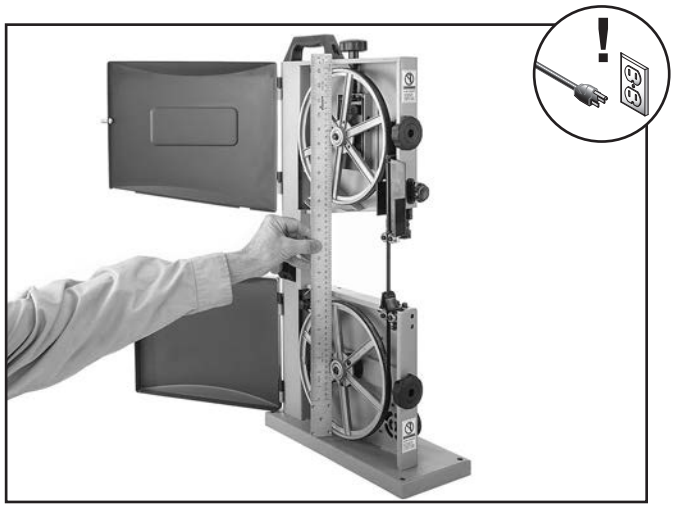
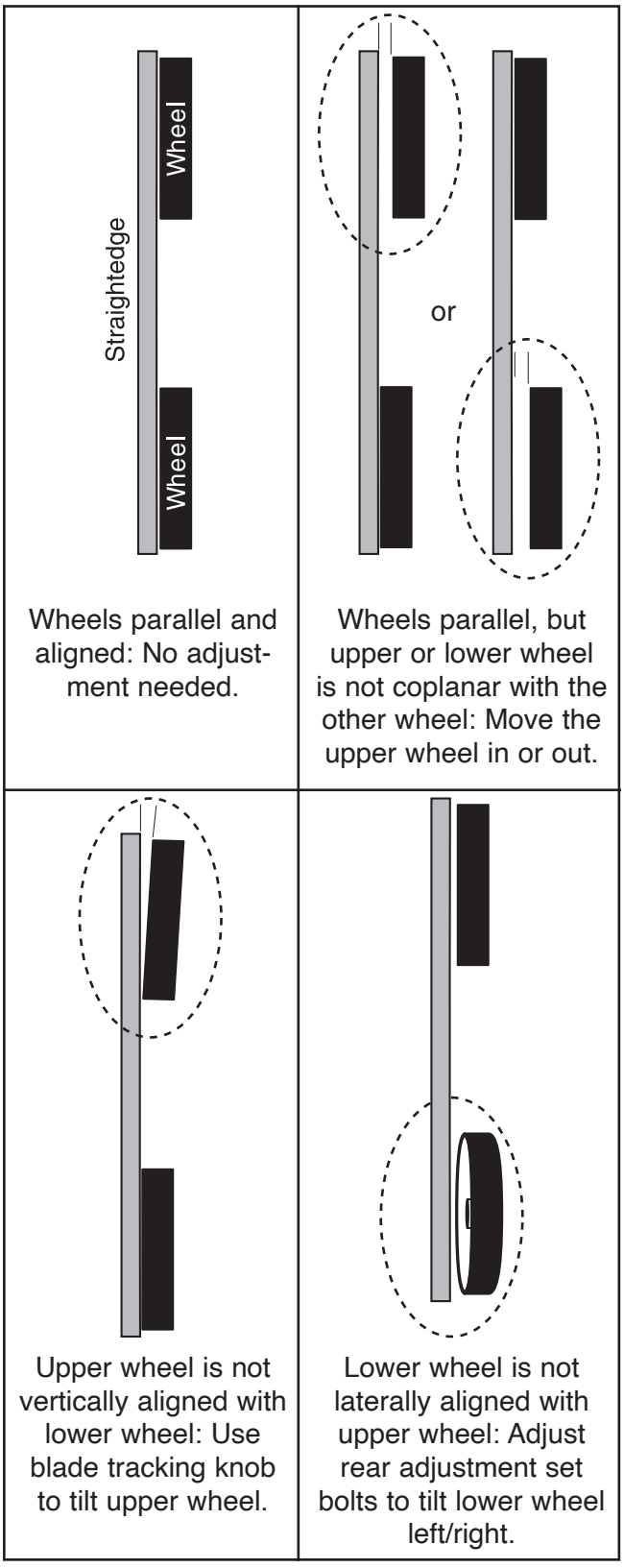


Figure 53. Example of checking if wheels are coplanar.

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 54** to determine how to proceed with alignment adjustments.



Wheels parallel and aligned: No adjustment needed.

Wheels parallel, but upper or lower wheel is not coplanar with the other wheel: Move the upper wheel in or out.

Upper wheel is not vertically aligned with lower wheel: Use blade tracking knob to tilt upper wheel.

Lower wheel is not laterally aligned with upper wheel: Adjust rear adjustment set bolts to tilt lower wheel left/right.

Figure 54. 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.*

Items 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 distance away from other wheel with a fine ruler, as shown in **Figure 55**. Distance measured with ruler is distance this wheel must be shimmed.

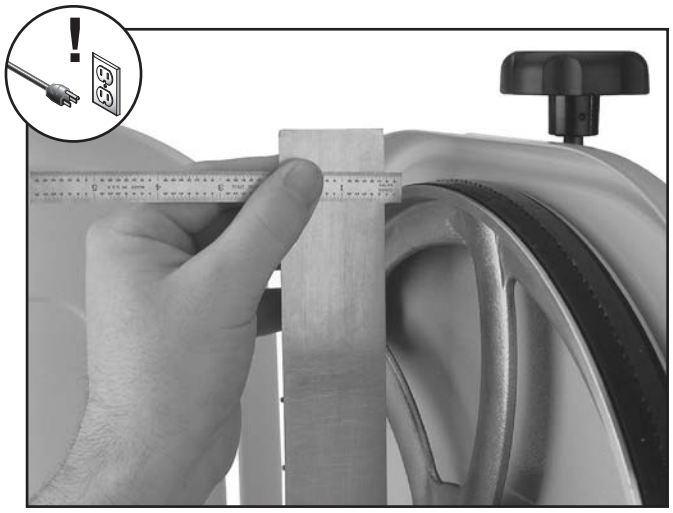


Figure 55. Example of measuring distance to shim wheel to be coplanar.

4. Remove blade (see **Removing Blade** on **Page 39**).

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

6. Install wheel and secure it in place.

7. Install blade and properly tension it.

8. Perform previous **Checking Wheel Alignment** procedure. If necessary to make wheels parallel, repeat this procedure.

9. The first time you get wheels coplanar, place a mark on each wheel where you held straightedge, then use this position again in the future if you need to repeat procedure. This assures repeated accuracy every time you adjust 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 (4) adjustment bolts with hex nuts in the lower wheel bracket, shown in **Figure 56**, that adjust the wheel tilt from side-to-side and up-and-down.

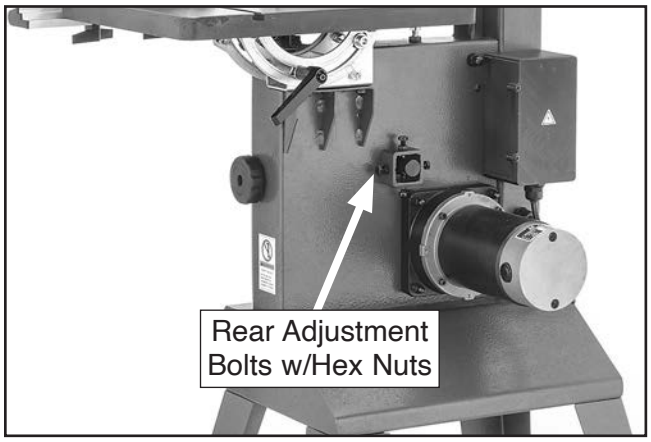


Figure 56. Location of rear lateral adjustment components.

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 **Figure 57**), and troubleshoot all other possible solutions (see **Troubleshooting** on **Page 44**) prior to adjusting the lower wheel shaft position.*

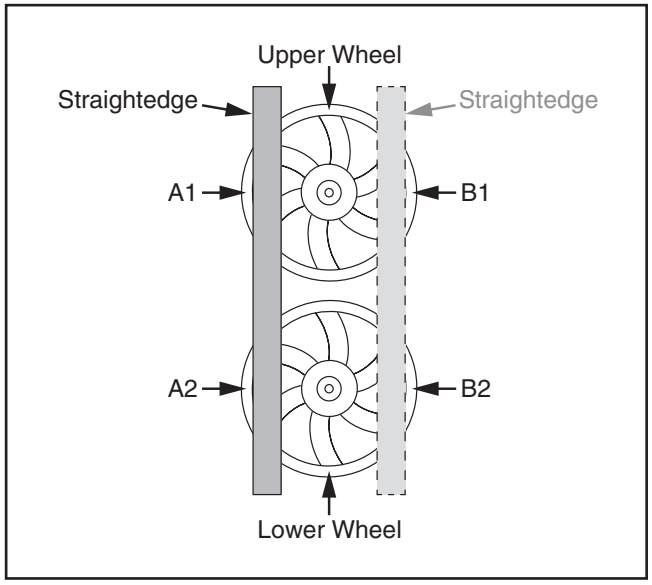


Figure 57. Example of using a straightedge to check lateral wheel alignment.

Items 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 57**). Wheels should align.

— If wheels *align*, no adjustment is required.

— If wheels *do not align*, they require lateral adjustment (see **Figure 58**). Proceed to **Step 4**.

4. Mark upper and lower wheels with a pencil or marker to indicate measuring locations (see **Figure 57**).

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

5. Loosen hex nuts on rear left and right adjustment bolts (see **Figure 56** on **Page 48**).

6. Rotate left and right adjustment bolts until lower wheel is coplanar with upper wheel (see **Figure 54** on **Page 47**).

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

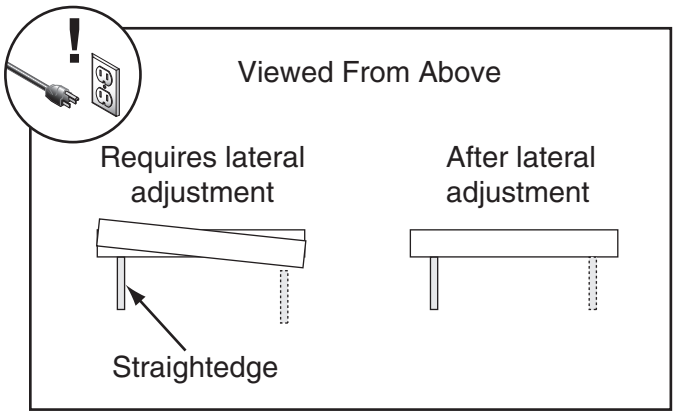


Figure 58. Before and after lateral wheel alignment (viewed from above).

8. Install fence and table.

Adjusting Wheel Brush

The lower wheel has a brush (see **Figure 59**) that is designed to sweep dust off the tire and blade during operation. In order to work properly, the brush must make firm contact with the tire.

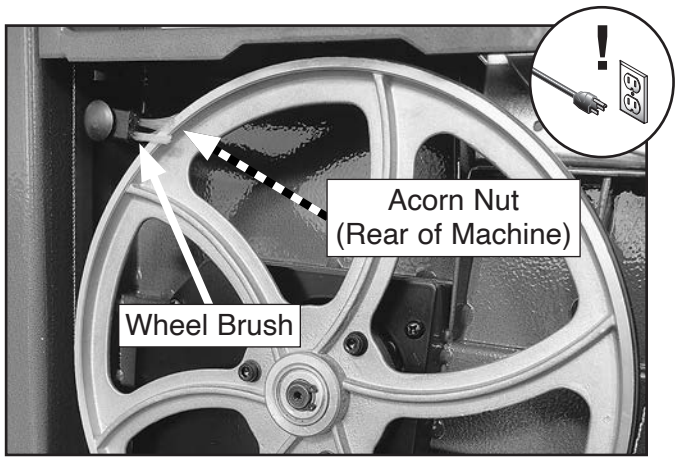


Figure 59. Wheel brush location.

Tool Needed	Qty
Wrench or Socket 13mm	1

To adjust wheel brush:

1. DISCONNECT MACHINE FROM POWER!
2. Open lower wheel cover and loosen acorn nut on rear of machine.
3. Adjust wheel brush so it makes firm, even contact with wheel without bending bristles, then tighten acorn nut to secure position.

Calibrating Fence Scale

The fence shows cut width on one of four scales (see **Figure 60**). Choose the appropriate scale according to fence orientation (vertical or horizontal) and fence position relative to the blade (left of blade / right of blade). Perform a test cut, and compare the cut piece with the scale reading. If they do not match, you will need to recalibrate.

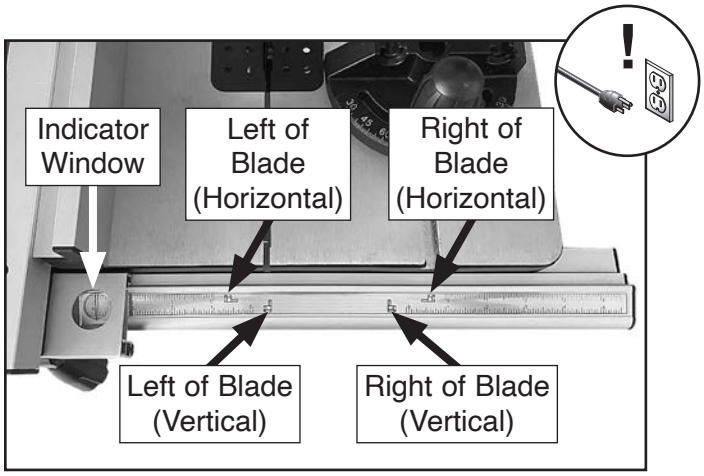


Figure 60. Location of fence scales.

To calibrate fence scale:

1. DISCONNECT MACHINE FROM POWER!
2. Loosen (4) wing nuts beneath fence rail (see **Figure 16** on **Page 18**) so rail can slide easily without falling off.
3. Unlock fence lever and slide fence so it lightly touches blade.
4. Hold fence in place, keeping it parallel with blade slot.
5. Use your other hand to slide fence rail to zero mark on appropriate scale.
6. Tighten (4) wing nuts.
7. Perform another test cut to verify scale accuracy. Repeat **Steps 2–6** as needed.

   Note: *All four scales will be accurate once one scale is properly calibrated.*

Adjusting Laser Guide

If the laser guide beam does not illuminate directly down the path of the blade, it needs adjustment.

Tool Needed **Qty**
Hex Wrench 3mm..... 1

To adjust laser guide:

1. DISCONNECT MACHINE FROM POWER!

2. Loosen set screw on side of laser (see **Figure 61**).

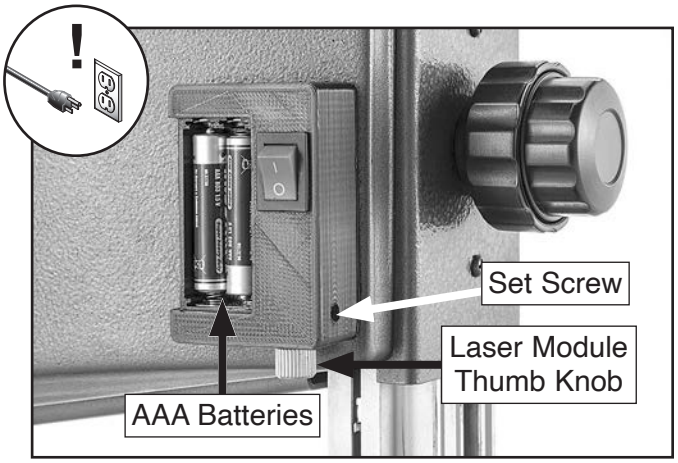


Figure 61. Laser guide components.

3. Turn laser guide ***ON***, then rotate laser module thumb knob (see **Figure 62**) until beam illuminates directly down front edge of blade.

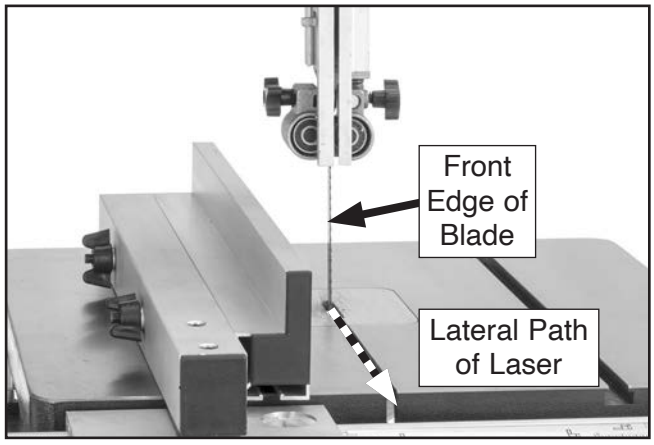


Figure 62. Lateral path of laser.

— If laser is *aligned*, proceed to **Step 6**.

— If laser is *misaligned*, open upper wheel cover and loosen (2) Phillips head screws behind laser (see **Figure 63**).

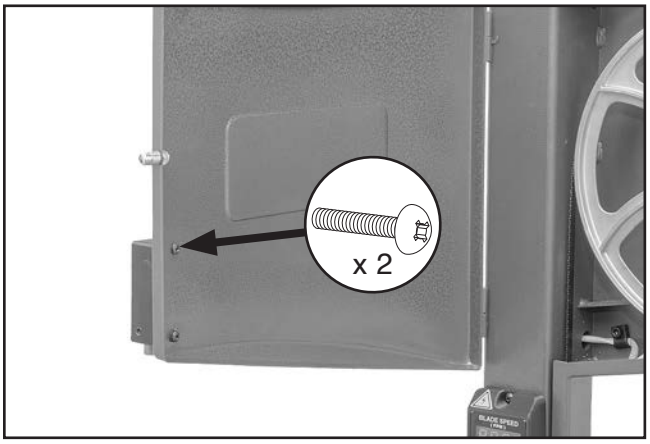


Figure 63. Location of laser mounting screws.

4. Rotate laser assembly until laser is correctly aligned.

5. Tighten (2) Phillips head screws loosened in **Step 3**.

6. Turn laser guide ***OFF*** and tighten set screw loosened in **Step 2**.

Replacing Laser Guide Batteries

To replace laser guide batteries, open laser guide cover (see **Figure 61**) and replace (2) AAA batteries, matching positive and negative terminals. Replace cover when done.

Brush Replacement

The G0994 is equipped with a brush DC motor that uses two carbon brushes to transmit electrical current inside the motor. These brushes are considered to be regular "wear items" or "consumables" that need to be replaced during the life of the motor. The frequency of required replacement is often related to how much the motor is used and how hard it is pushed.

NOTICE

Replace both carbon brushes at the same time when motor no longer reaches full power, or when brushes measure less than ¼" long (new brushes are ⅝" long).

If your machine is used frequently, we recommend keeping an extra set of these replacement brushes on-hand to avoid any downtime.

Items Needed	Qty
Carbon Motor Brushes (P0994111-1)	2
Penny (or Dime)	1
Shop Vacuum	1
Clean Shop Rags	As Needed

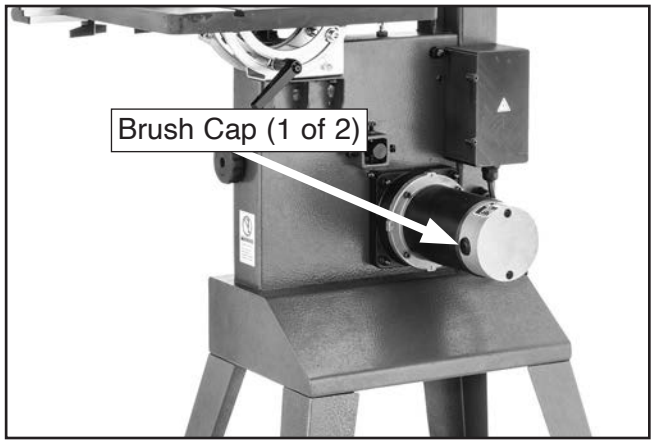


Figure 64. Location of brush caps.

To inspect and replace motor brushes:

1. DISCONNECT MACHINE FROM POWER!
2. Vacuum all dust and debris from motor area.
3. Unscrew brush caps (see **Figure 64**) and pull springs to remove brushes (see **Figure 65**).

   Note: *Carbon brush is attached to spring. Carbon portion of new brush is ⅝" long.*

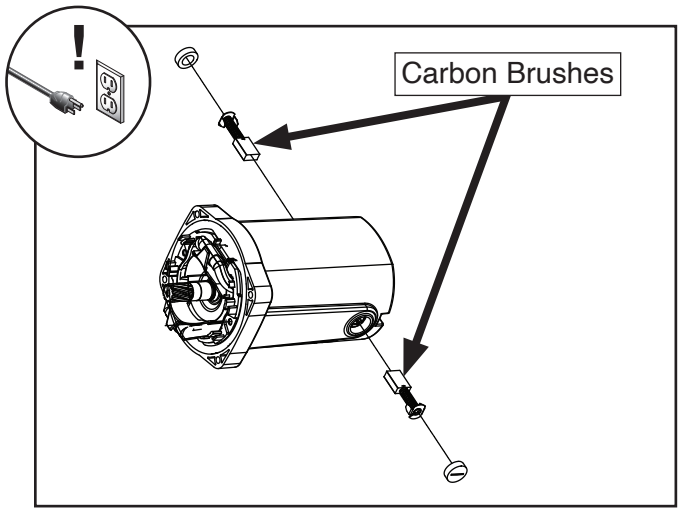


Figure 65. Location of carbon brushes.

4. Check brushes for wear. If brush is worn to less than ¼" in length, replace both brushes.
5. Insert brush assemblies (positioning them so they slide into built-in slots) into brush sockets, then press brush cover against spring and tighten.
6. Perform **Test Run** procedure on **Page 20**.

   — If motor *does* start and runs properly, motor brush replacement is complete.

   — If motor *does not* start or run properly, brushes are not correctly aligned in sockets, or there is another problem with motor or wiring. Refer to **Wiring Diagram** on **Page 54** for assistance.

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 aftermarket parts.

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

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

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

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

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

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

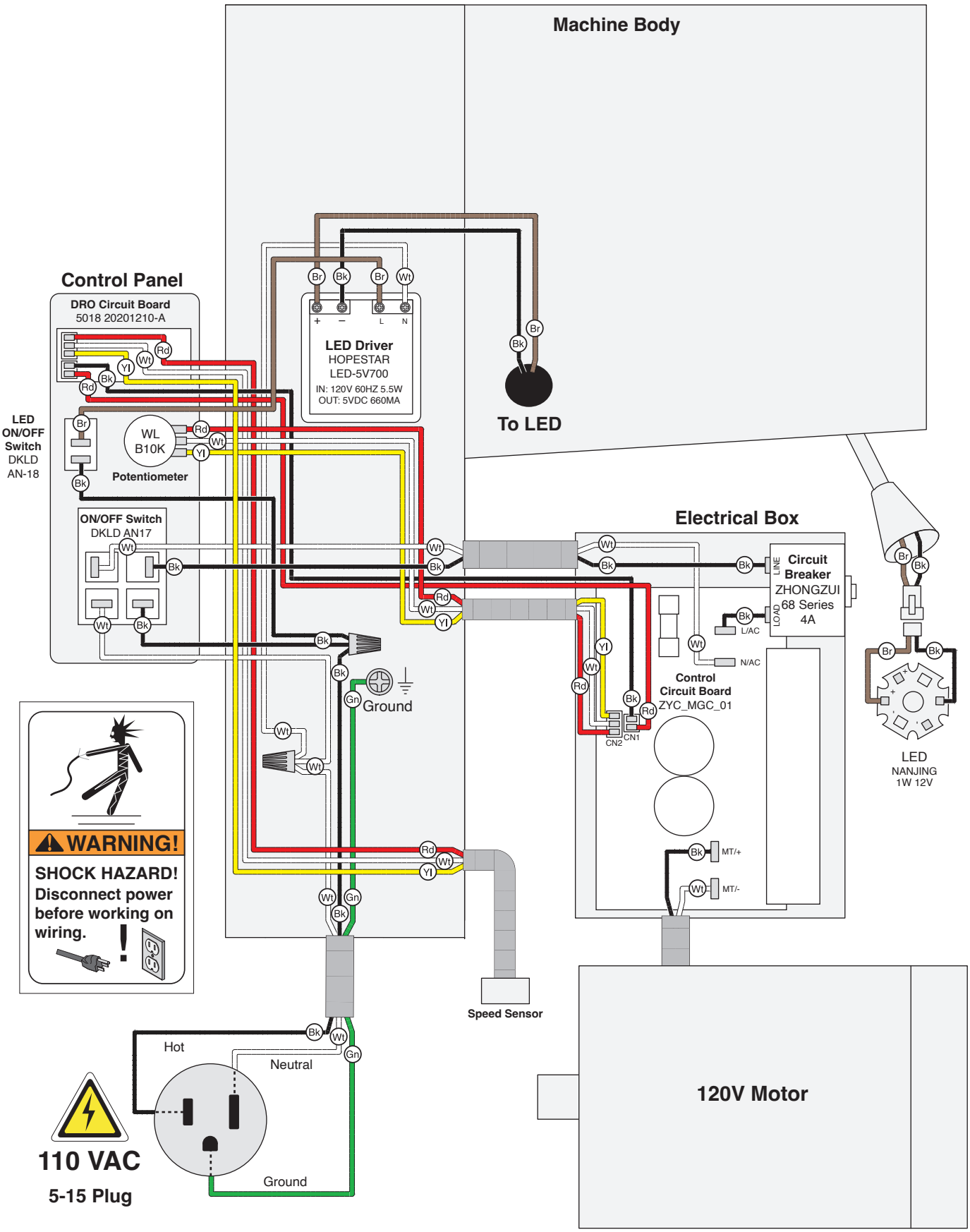
NOTICE

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	Bk	BLUE	Bl	YELLOW	Yl	LIGHT BLUE	Lb
WHITE	Wt	BROWN	Br	YELLOW GREEN	Yg	BLUE WHITE	Bw
GREEN	Gn	GRAY	Gy	PURPLE	Pu	TURQUOISE	Tu
RED	Rd	ORANGE	Or	PINK	Pk		

Wiring Diagram



STOP *READ ELECTRICAL SAFETY ON Page 53!*

Electrical Components

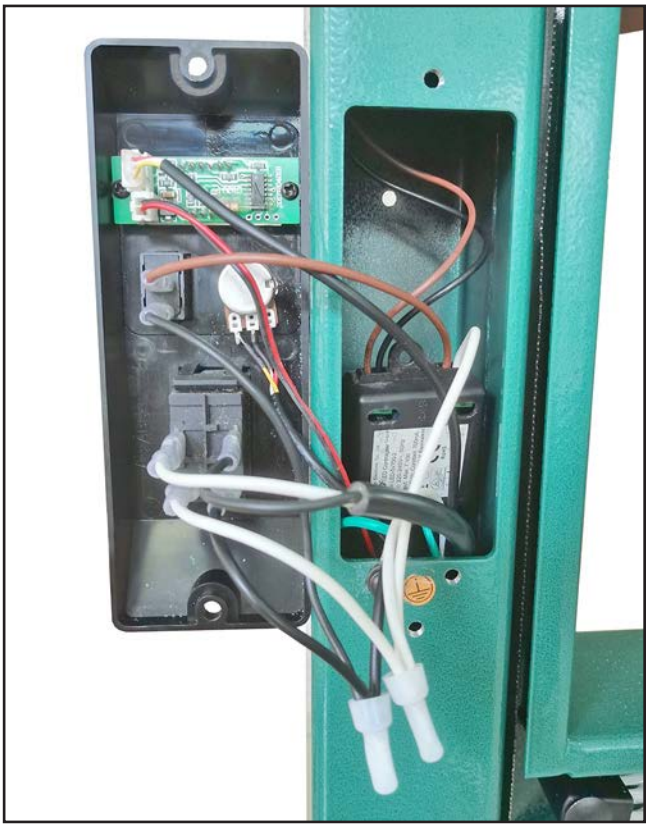


Figure 66. Control panel wiring.

Figure 68. Electrical box wiring.

Figure 67. LED wiring.

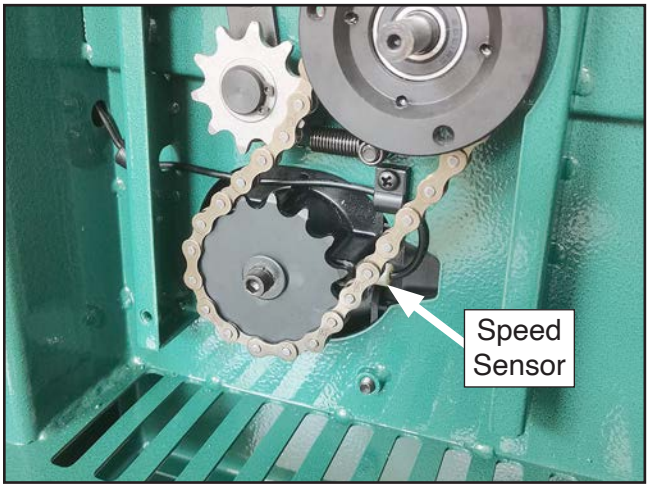
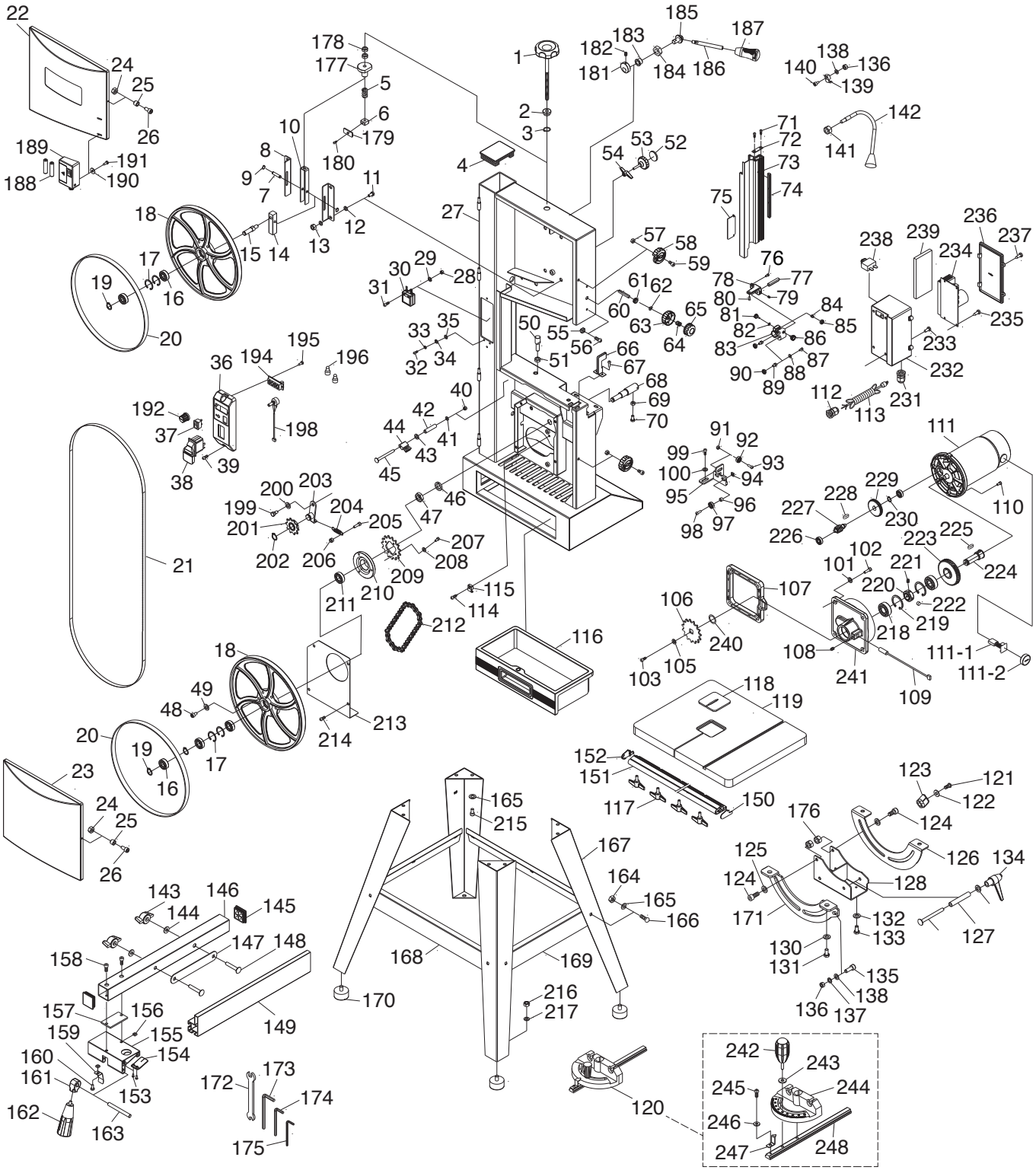


Figure 69. Location of speed sensor.

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	P0994001	KNOB BOLT M8-1.25 X 115
2	P0994002	BUSHING
3	P0994003	EXT RETAINING RING 15MM
4	P0994004	FRAME CAP
5	P0994005	COMPRESSION SPRING 4 X 19 X 30
6	P0994006	TENSION NUT M8-1.25
7	P0994007	SHAFT
8	P0994008	GUIDE PLATE
9	P0994009	EXT RETAINING RING 8MM
10	P0994010	PULLING PLATE
11	P0994011	HEX BOLT M8-1.25 X 16
12	P0994012	FLAT WASHER 8MM
13	P0994013	HEX NUT M8-1.25
14	P0994014	TENSION BLOCK
15	P0994015	SHAFT
16	P0994016	BALL BEARING 6000-2RS
17	P0994017	INT RETAINING RING 26MM
18	P0994018	WHEEL 10" UPPER/LOWER
19	P0994019	EXT RETAINING RING 10MM
20	P0994020	TIRE
21	P0994021	SAW BLADE 72" X 3/8" X .02 14TPI
22	P0994022	UPPER WHEEL COVER
23	P0994023	LOWER WHEEL COVER
24	P0994024	LOCK NUT M6-1
25	P0994025	SPACER
26	P0994026	CAP SCREW M6-1 X 16
27	P0994027	FRAME
28	P0994028	HEX NUT M4-.7
29	P0994029	FLAT WASHER 4MM
30	P0994030	LED DRIVER HOPESTAR LED-5V700 12V 5.5W
31	P0994031	CAP SCREW M4-.7 X 12
32	P0994032	PHLP HD SCR M5-.8 X 10
33	P0994033	LOCK WASHER 5MM
34	P0994034	FLAT WASHER 5MM
35	P0994035	EXT TOOTH WASHER 5MM
36	P0994036	SWITCH BOX
37	P0994037	ON/OFF SWITCH DKLD AN-18 250V 6A
38	P0994038	ON/OFF SWITCH DKLD AN17 125V 20A
39	P0994039	PHLP HD SCR M5-.8 X 10
40	P0994040	HEX NUT M8-1.25
41	P0994041	FLAT WASHER 8MM
42	P0994042	BUSHING
43	P0994043	FLAT WASHER 8MM
44	P0994044	BRUSH
45	P0994045	CARRIAGE BOLT M8-1.25 X 70
46	P0994046	LOCK WASHER 14MM

REF	PART #	DESCRIPTION
47	P0994047	HEX NUT M14-2 THIN
48	P0994048	CAP SCREW M5-.8 X 16
49	P0994049	LOCK WASHER 5MM
50	P0994050	STOP BOLT M8-1.25 X 22
51	P0994051	HEX NUT M8-1.25
52	P0994052	KNOB COVER
53	P0994053	KNOB BOLT M8-1.25 X 42
54	P0994054	KNOB M8-1.25
55	P0994055	GUIDE BLOCK M4-.7
56	P0994056	PHLP HD SCR M4-.7 X 8
57	P0994057	LOCK NUT M6-1
58	P0994058	KNOB 6MM
59	P0994059	CAP SCREW M6-1 X 16
60	P0994060	THREADED SHAFT M8-1.25 X 12, 38L
61	P0994061	GEAR 15T
62	P0994062	BUSHING
63	P0994063	KNOB 8MM
64	P0994064	COMPRESSION SPRING 1.6 X 22 X 25
65	P0994065	KNOB COVER
66	P0994066	LOWER BLADE GUIDE
67	P0994067	CAP SCREW M6-1 X 10
68	P0994068	LOWER WHEEL SPINDLE
69	P0994069	HEX NUT M6-1
70	P0994070	HEX BOLT M6-1 X 20
71	P0994071	TAP SCREW M4.8 X 13
72	P0994072	PLATE
73	P0994073	UPPER BLADE GUIDE
74	P0994074	RACK
75	P0994075	SLIDING COVER
76	P0994076	CAP SCREW M5-.8 X 6
77	P0994077	CONNECTING SHAFT
78	P0994078	SUPPORT BLOCK
79	P0994079	SET SCREW M6-1 X 8
80	P0994080	TAP SCREW M8 X 13
81	P0994081	KNOB BOLT M5-.8 X 22
82	P0994082	FLAT WASHER 5MM
83	P0994083	BEARING SUPPORT
84	P0994084	T-SLOT NUT M5-.8
85	P0994085	BALL BEARING 607-2RS
86	P0994086	KNOB BOLT M5-.8 X 8
87	P0994087	CAP SCREW M5-.8 X 16
88	P0994088	FLAT WASHER 5MM
89	P0994089	T-SLOT NUT M5-.8
90	P0994090	BALL BEARING 607-2RS
91	P0994091	HEX NUT M6-1
92	P0994092	BALL BEARING 626-2RS

Main Parts List (Cont.)

REF	PART #	DESCRIPTION
93	P0994093	BUTTON HD CAP SCR M6-1 X 16
94	P0994094	SQUARE NUT M6-1
95	P0994095	GUIDE PLATE
96	P0994096	BUSHING
97	P0994097	BALL BEARING 626-2RS
98	P0994098	BUTTON HD CAP SCR M6-1 X 20
99	P0994099	CAP SCREW M6-1 X 10
100	P0994100	FLAT WASHER 6MM
101	P0994101	FLAT WASHER 6MM
102	P0994102	CAP SCREW M6-1 X 30
103	P0994103	CAP SCREW M6-1 X 12
105	P0994105	FENDER WASHER 6MM
106	P0994106	DRIVE SPROCKET 15T
107	P0994107	MOTOR BRACKET SPACER
108	P0994108	SET SCREW M6-1 X 8
109	P0994109	SPEED SENSOR W/CORD
110	P0994110	CAP SCREW M5-.8 X 20
111	P0994111	MOTOR 3/4 HP 120V 1PH DC
111-1	P0994111-1	MOTOR BRUSHES (2PC)
111-2	P0994111-2	MOTOR CAP
112	P0994112	STRAIN RELIEF 7MM
113	P0994113	POWER CORD 18G 3W 72" 5-15P
114	P0994114	TAP SCREW M4.2 X 16
115	P0994115	CORD CLAMP 4MM
116	P0994116	CHIP DRAWER
117	P0994117	KNOB BOLT M8-1.25 X 18
118	P0994118	TABLE INSERT
119	P0994119	TABLE
120	P0994120	MITER GAUGE
121	P0994121	PHLP HD SCR M4-.7 X 12
122	P0994122	FLAT WASHER 4MM
123	P0994123	POINTER
124	P0994124	SHOULDER SCREW M8-1.25 X 12, 8 X 8
125	P0994125	FLAT WASHER 8MM
126	P0994126	TRUNNION (REAR)
127	P0994127	BUSHING
128	P0994128	TRUNNION BRACKET
129	P0994129	CARRIAGE BOLT M8-1.25 X 70
130	P0994130	FLAT WASHER 6MM
131	P0994131	HEX BOLT M6-1 X 10
132	P0994132	FLAT WASHER 6MM
133	P0994133	HEX BOLT M6-1 X 12
134	P0994134	ADJ HANDLE M8-1.25
135	P0994135	CAP SCREW M5-.8 X 12
136	P0994136	HEX NUT M5-.8
137	P0994137	LOCK WASHER 5MM
138	P0994138	FLAT WASHER 5MM
139	P0994139	CORD CLAMP 3/8"
140	P0994140	CAP SCREW M5-.8 X 12
141	P0994141	HEX NUT M10-1.5
142	P0994142	LED LIGHT NANJING 3.5V 1W
143	P0994143	KNOB M6-1

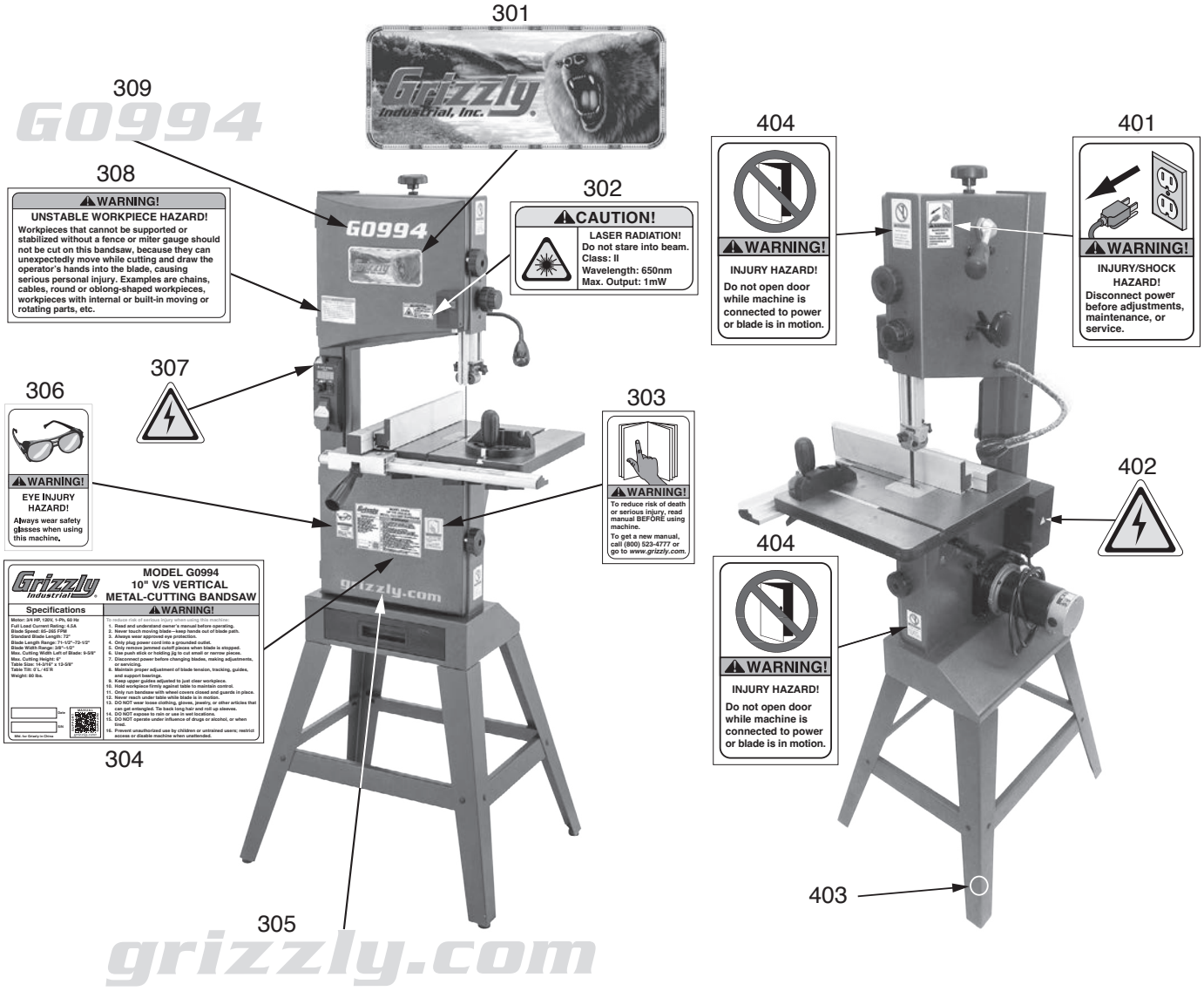
REF	PART #	DESCRIPTION
144	P0994144	FLAT WASHER 6MM
145	P0994145	FENCE CAP
146	P0994146	FENCE SUPPORT
147	P0994147	GUIDE PLATE
148	P0994148	CARRIAGE BOLT M6-1 X 55
149	P0994149	FENCE
150	P0994150	FENCE RAIL CAP (RIGHT)
151	P0994151	FENCE RAIL
152	P0994152	FENCE RAIL CAP (LEFT)
153	P0994153	TAP SCREW M2.9 X 9.5
154	P0994154	POINTER
155	P0994155	FENCE BASE
156	P0994156	SQUARE NUT M5-.8
157	P0994157	SPACER
158	P0994158	CAP SCREW M5-.8 X 10
159	P0994159	SPRING PLATE
160	P0994160	PHLP HD SCR M5-.8 X 8
161	P0994161	FENCE HANDLE LOCKING CAM
162	P0994162	KNOB BOLT M6-1 X 10
163	P0994163	SHAFT
164	P0994164	HEX NUT M6-1
165	P0994165	FLAT WASHER 6MM
166	P0994166	CARRIAGE BOLT M6-1 X 12
167	P0994167	LEG
168	P0994168	LONG BRACE
169	P0994169	SHORT BRACE
170	P0994170	FOOT M8-1.25 X 13
171	P0994171	TRUNNION (FRONT)
172	P0994172	WRENCH 10 X 13 OPEN-ENDS
173	P0994173	HEX WRENCH 5MM
174	P0994174	HEX WRENCH 4MM
175	P0994175	HEX WRENCH 3MM
176	P0994176	LOCK NUT M8-1.25
177	P0994177	TENSION BRACKET
178	P0994178	HEX NUT M8-1.25
179	P0994179	LIMIT PLATE
180	P0994180	CAP SCREW M5-.8 X 8
181	P0994181	CAM
182	P0994182	SET SCREW M6-1 X 8
183	P0994183	BUSHING
184	P0994184	HEX NUT M20-1.5 THIN
185	P0994185	HUB M10-1.5
186	P0994186	STUD -DE M10-1.5 X 10, M12-1.75 X 10, 112
187	P0994187	KNOB M12-1.75
188	P0994188	BATTERY AAA
189	P0994189	LASER ASSEMBLY
190	P0994190	FENDOR WASHER 4MM
191	P0994191	TAP SCREW M3.5 X 13
192	P0994192	SPEED ADJUST KNOB
194	P0994194	SPEED DISPLAY
195	P0994195	TAP SCREW M2.9 X 10

Main Parts List (Cont.)

REF	PART #	DESCRIPTION
196	P0994196	WIRE CONNECTOR
198	P0994198	POTENTIOMETER WLB10K W/CORD
199	P0994199	SHOULDER SCREW M6-1 X 8, 8 x 4
200	P0994200	FLAT WASHER 8MM
201	P0994201	TENSION SPROCKET 10T
202	P0994202	EXT RETAINING RING 15MM
203	P0994203	TENSION SPROCKET BRACKET
204	P0994204	EXTENSION SPRING 1.2 X 10 X 35
205	P0994205	CAP SCREW M6-1 X 40
206	P0994206	LOCK NUT M6-1
207	P0994207	CAP SCREW M4-.7 X 12
208	P0994208	LOCK WASHER 4MM
209	P0994209	SPINDLE SPROCKET 15T
210	P0994210	FLANGE
211	P0994211	BALL BEARING 6001-2RS
212	P0994212	CHAIN 32 LINKS
213	P0994213	CHAIN COVER
214	P0994214	PHLP HD SCR M5-.8 X 10
215	P0994215	CAP SCREW M6-1 X 12
216	P0994216	HEX NUT M8-1.25
217	P0994217	FLAT WASHER 8MM
218	P0994218	BALL BEARING 6202-2RS
219	P0994219	INT RETAINING RING 35MM
220	P0994220	SPEED SENSOR RING
221	P0994221	SET SCREW M6-1 X 6
222	P0994222	MAGNET

REF	PART #	DESCRIPTION
223	P0994223	GEAR 50T
224	P0994224	SHAFT
225	P0994225	KEY 5 X 5 X 10
226	P0994226	BALL BEARING 607-2RS
227	P0994227	GEAR SHAFT 10T
228	P0994228	KEY 4 X 4 X 6
229	P0994229	GEAR 43T
230	P0994230	EXT RETAINING RING 11MM
231	P0994231	STRAIN RELIEF 7MM
232	P0994232	ELECTRICAL BOX
233	P0994233	PHLP HD SCR M5-.8 X 10
234	P0994234	MOTOR DRIVE CIRCUIT BOARD
235	P0994235	TAP SCREW M3.5 X 5
236	P0994236	ELECTRICAL BOX COVER
237	P0994237	TAP SCREW M3.5 X 13
238	P0994238	CIRCUIT BREAKER ZHONGZUI 68 SERIES 4A
239	P0994239	FOAM SCREEN
240	P0994240	FLAT WASHER 15.5 X 24 X 1
241	P0994241	GEARBOX
242	P0994242	KNOB BOLT M6-1 X 22
243	P0994243	FLAT WASHER 6MM
244	P0994244	MITER GAUGE
245	P0994245	PHLP HD SCR M4-.7 X 8
246	P0994246	FLAT WASHER 4MM
247	P0994247	POINTER
248	P0994248	GUIDE BAR

Labels & Cosmetics



REF	PART #	DESCRIPTION
301	P0994301	GRIZZLY INDUSTRIAL LOGO LABEL
302	P0994302	LASER LABEL
303	P0994303	READ MANUAL LABEL
304	P0994304	MACHINE ID LABEL
305	P0994305	GRIZZLY.COM LABEL
306	P0994306	EYE/LUNG INJURY LABEL
307	P0994307	ELECTRICITY LABEL

REF	PART #	DESCRIPTION
308	P0994308	UNSTABLE WORKPIECE LABEL
309	P0994309	MODEL NUMBER LABEL
401	P0994401	DISCONNECT POWER LABEL
402	P0994402	ELECTRICITY LABEL
403	P0994403	TOUCH-UP PAINT, GRIZZLY GREEN
404	P0994404	DO NOT OPEN DOOR LABEL

⚠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.

For further information about the warranty, visit **https://www.grizzly.com/forms/warranty** or scan the QR code below to be automatically directed to our warranty page.

WARRANTY

grizzly.com