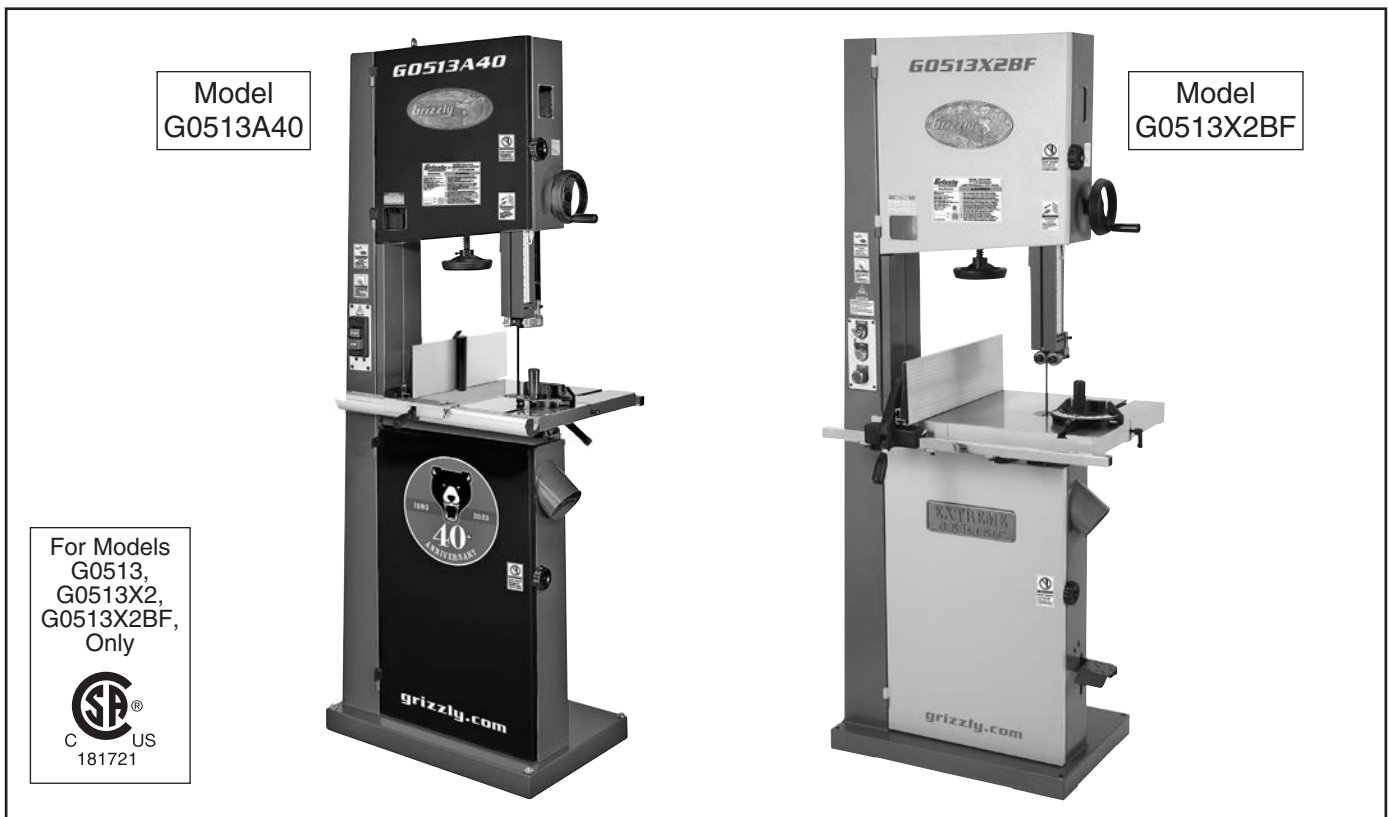


Grizzly **Industrial, Inc.**®

MODEL G0513 SERIES HEAVY-DUTY 17" BANDSAW OWNER'S MANUAL (MODELS G0513, G0513A40 & EXTREME MODELS G0513X2, G0513X2BF)



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**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE
OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.**
(FOR MACHINES MFD. SINCE 08/22) #TS15097 PRINTED IN TAIWAN

V4.08.22

 **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

G0513 Series Combination Manual

The G0513 Series Bandsaws share many similarities. Thus, this combination manual includes information for all four models of the G0513 Series Bandsaws.

Unless otherwise specified, information applies to all models. Headers are used to identify information that only applies to specific models.


Manual Accuracy

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

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

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

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

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

Manufacture Date

Serial Number



Controls & Components



Refer to the following figures and 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 minimize your risk of injury when operating this machine.

Control Panel

Models G0513, G0513A40 & G0513X2

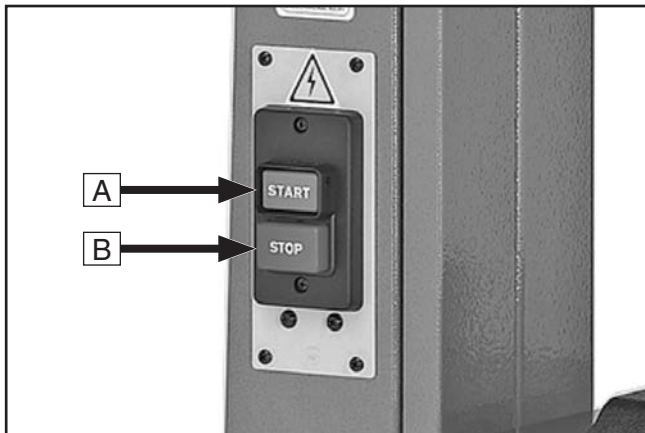


Figure 1. Control panel with START/STOP buttons.

- A. START Button:** Turns motor **ON** when pressed. Button can be disabled by inserting disabling pin or padlock through button (refer to **Page 43** for details).
- B. STOP Button:** Turns motor **OFF** when pressed.

Model G0513X2BF

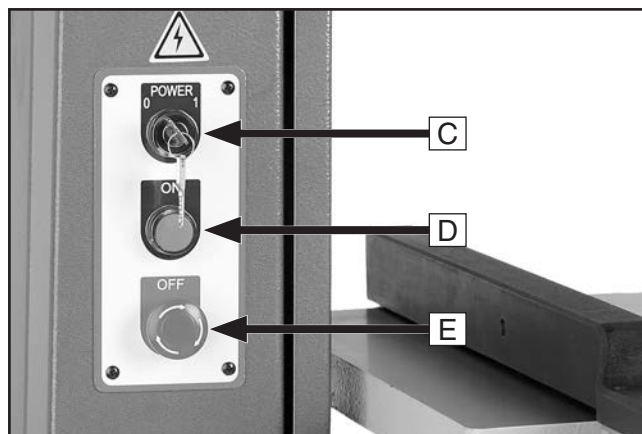


Figure 2. Control panel with master power switch and disabling key.

- C. Master Power Key Switch:** Turns incoming power **ON** and **OFF**. Requires key.
- D. ON Button:** Turns motor **ON** when pressed.
- E. OFF Button:** Turns motor **OFF** when pressed. Motor will not start until switch is reset. Twist clockwise to reset.



Front Controls

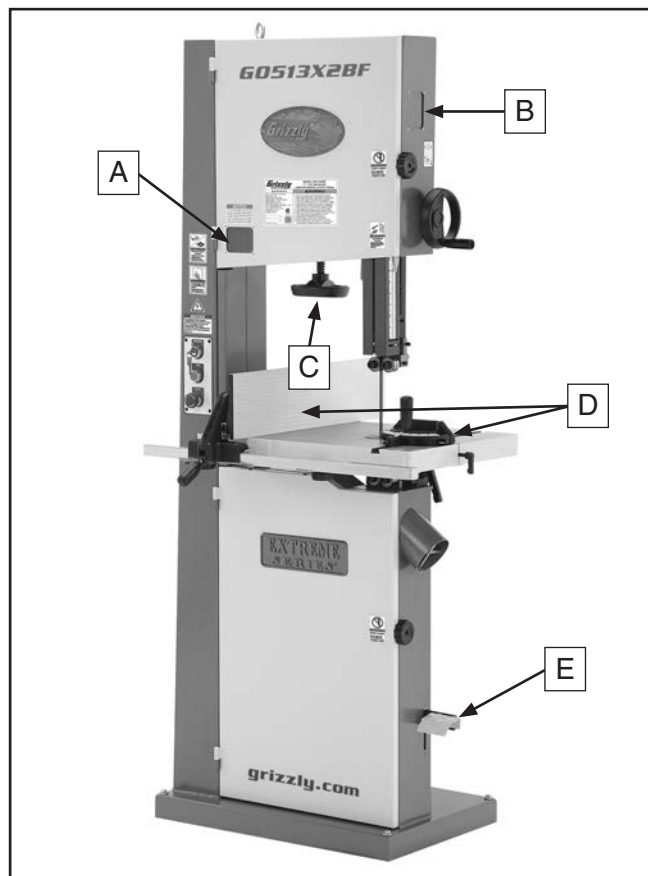


Figure 3. Front controls (G0513X2BF shown).

- A. Blade Tension Scale:** Displays blade tension using numbers 1–8. For reference only—after proper tension for particular blade has been determined.
- B. Blade Tracking Window:** Allows you to monitor blade tracking on the wheel without opening the wheel cover.
- C. Blade Tension Handwheel:** Increases/decreases blade tension (refer to **Page 28** for more information).
- D. Fence and Miter Gauge:** Supports workpiece for controlled straight or angled cuts.
- E. Foot Brake (Model G0513X2BF):** Quickly stops bandsaw blade and turns motor **OFF**.

Motor Brake

The Model G0513X2BF has a motor brake that activates and quickly stops the blade when the OFF button is used or the foot pedal is pressed.

Rear Controls

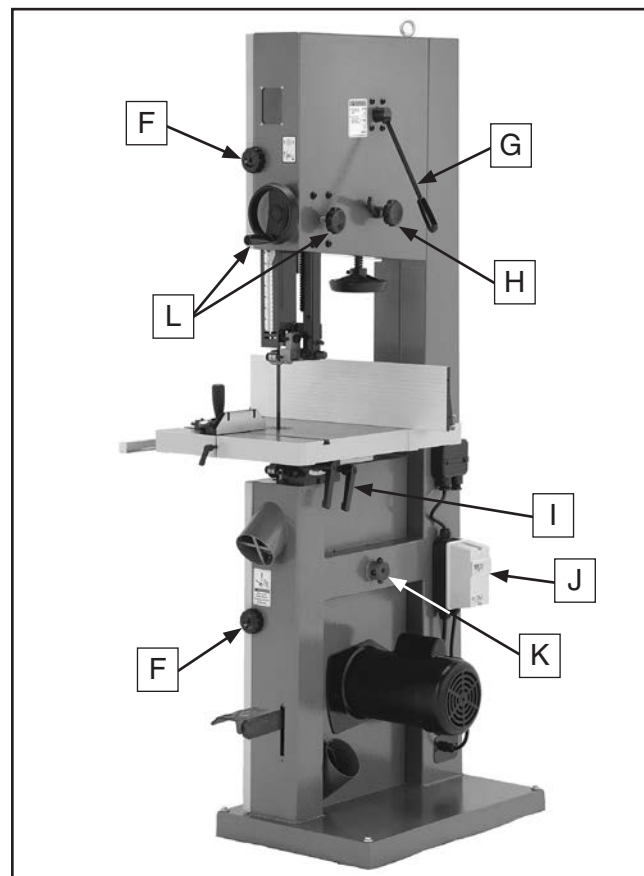


Figure 4. Rear controls (G0513X2BF shown).

- F. Wheel Cover Lock Knobs:** Secure the wheel covers.
- G. Quick-Release Blade Tension Lever:** Adjusts blade tension for quick blade changes.
- H. Tracking Control Knob and Lock Lever:** Moves and locks upper wheel tilt for blade tracking.
- I. Table Tilt Controls:** Adjusts table tilt and locks the table in place.
- J. Magnetic Switch:** Provides thermal overload protection for the motor.
- K. Lower Wheel Adjustment Hub:** Used when adjusting coplanarity of the wheels.
- L. Guide Post Handwheel and Lock Knob:** Quickly moves the upper guide post to the desired height; locks setting.





MACHINE DATA SHEET

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

MODEL G0513 SERIES 17" BANDSAWS

| Model Number | G0513 | G0513A40 | G0513X2 | G0513X2BF |
|---|-----------------------------------|----------|-----------------------------|--|
| Product Dimensions | | | | |
| Weight | 266 lbs. | 309 lbs. | 325 lbs. | 357 lbs. |
| Width (side-to-side) x Depth (front-to-back) x Height | 32" x 32" x 73" | | | |
| Footprint (Length x Width) | 27" x 18" | | | |
| Shipping Dimensions | | | | |
| Type | Wood Slat Crate | | | |
| Weight | 322 lbs. | 364 lbs. | 421 lbs. | 428 lbs. |
| Length x Width x Height | 20" x 30" x 81" | | 21" x 31" x 81" | |
| Electrical | | | | |
| Power Requirement | 110V/220V, Single-Phase, 60 Hz | | | 220V, Single-Phase, 60 Hz |
| Prewired Voltage | 220V | | | |
| Full-Load Current Rating | 20A at 110V 10A at 220V | | 19A at 110V 9.5A at 220V | 8.7A |
| Minimum Circuit Size | 30A at 110V, 15A at 220V | | | 15A |
| Connection Type | Cord & Plug | | | |
| Power Cord Included | Yes | | | No |
| Included Power Cord Type | 14 AWG, 72 in. | | | N/A |
| Recommended Power Cord | N/A | | | "S"-Type, 3-Wire, 14 AWG, 300 VAC |
| Plug Included | No | | | |
| Recommended Plug Type | L5-30 for 110V / 6-15 for 220V | | | 6-15 |
| Switch Type | ON/OFF Push Button | | | Magnetic w/Thermal Overload Protection |
| Motor | | | | |
| Horsepower | 2 HP | | | |
| Phase | Single-Phase | | | |
| Amperage | 20A at 110V / 10A at 220V | | | 8.7A |
| Speed | 1720 RPM | | | |
| Type | TEFC Capacitor-Start Induction | | | |
| Power Transfer | Belt | | | |
| Bearings | Shielded & Permanently Lubricated | | | |
| Centrifugal Switch/Contacts Type | External | | | |
| Operation | | | | |
| Blade Speeds | 1700, 3500 FPM | | | |
| Table Tilt | Left 10°, Right 45° | | Left 5°, Right 45° | |



| Model Number | G0513 | G0513A40 | G0513X2 | G0513X2BF |
|---|---|---|---|----------------------------------|
| Cutting Capacities | | | | |
| Max. Cutting Height | 12 ¹ / ₈ " | | 12" | |
| Max Cutting Width (Left of Blade) | 16 ¹ / ₄ " | 16 ¹ / ₈ " | 16 ¹ / ₄ " | |
| Max Cutting Width (Left of Blade) w/Fence | 14 ⁵ / ₈ " | 14 ⁷ / ₈ " | | 15" |
| Max Cutting Width (Left of Blade) w/Resaw Fence | N/A | 13 ¹ / ₄ " | | 12 ¹ / ₄ " |
| Blade Information | | | | |
| Standard Blade Length | 131 ¹ / ₂ " | | | |
| Blade Length Range | 130 ¹ / ₂ "–131 ¹ / ₂ " | | | |
| Blade Width Range | 1 ¹ / ₈ "–1" | | | |
| Blade Guide Type | Roller Disc, Ball Bearings | | Ball Bearings | |
| Guide Post Adjustment Type | Rack & Pinion | | | |
| Has Quick Release | Yes | | | |
| Table Dimensions | | | | |
| Length x Width x Thickness | 17" x 17" x 1 ¹ / ₂ " | | 23 ⁵ / ₈ " x 17 ¹ / ₄ " x 1 ¹ / ₂ " | |
| Floor to Table Height | 37 ¹ / ₂ " | | | |
| Fence Information | | | | |
| Fence Locking Position | Front | | | |
| Adjustable for Blade Lead | Yes | | | |
| Resaw Fence Included | No | Yes | | |
| Construction | | | | |
| Table | Precision-Ground Cast Iron | | | |
| Trunnion | Steel | | Cast Iron | |
| Fence | Deluxe Extruded Aluminum | Cast Iron Fence w/Extruded Aluminum Resaw Fence | | |
| Base/Stand | Pre-Formed Steel | | | |
| Frame/Body | Pre-Formed Steel | | | |
| Wheels | Computer-Balanced Cast Aluminum | | Computer-Balanced Cast Iron | |
| Wheel Tire | Polyurethane | | | |
| Wheel Covers | Pre-Formed Steel | | | |
| Paint Type/Finish | Powder Coated | | | |
| Other Related Information | | | | |
| Foot Brake | No | | Yes | |
| Motor Brake | No | | Yes | |
| Wheel Diameter | 16 ³ / ₄ " | | | |
| Wheel Width | 1 ¹ / ₄ " | | | |
| Dust Ports | 2 at 4" | | | |
| Other Specifications | | | | |
| Country of Origin | Taiwan | | | |
| Warranty | 1 Year | | | |
| ISO Factory | Yes | | | |
| Serial Number Location | ID Label on Upper Wheel Cover | | | |
| CSA Certified | Yes | No | Yes | |



SECTION 1: SAFETY

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

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

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

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

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

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

Safety Instructions for Machinery

⚠ WARNING

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

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

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

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

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

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

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



WARNING

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



Additional Safety for Bandsaws

WARNING

Serious cuts, amputation, or death can occur from contact with the moving saw blade during operation or if blade breakage occurs. Serious injury or death can also occur from getting fingers, hair, or clothing entangled in moving parts if the machine is operated while the doors are open. To reduce this risk, anyone operating this machine MUST completely heed the hazards and warnings below.

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

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

BLADE SPEED. Cutting workpiece before blade is at full speed could cause blade to grab workpiece and pull hands into blade. Allow blade to reach full speed before starting cut. **DO NOT** start machine with workpiece contacting blade.

FEED RATE. To avoid risk of workpiece slipping and causing operator injury, always feed stock evenly and smoothly.

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

CLEARING JAMS AND CUTOFFS. Always stop bandsaw and disconnect power before clearing scrap pieces that get stuck between blade and table insert. Use brush or push stick, not hands, to clean chips/cutoff scraps from table.

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

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

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

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

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

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

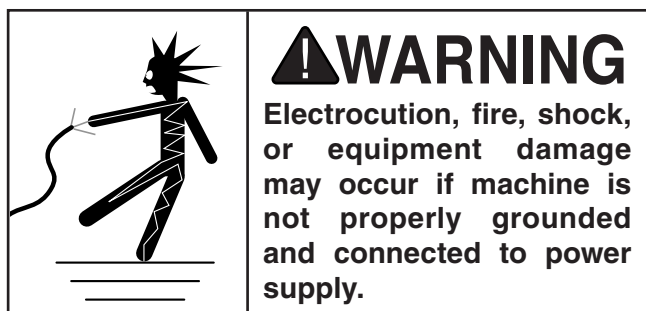
WORKPIECE MATERIAL. This machine is intended for cutting natural and man-made wood products, and laminate covered wood products. This machine is **NOT** designed to cut metal, glass, stone, tile, etc.



SECTION 2: POWER SUPPLY

Availability

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



Full-Load Current Rating

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

G0513 & G0513A40

Full-Load Current Rating at 220V10 Amps

Full-Load Current Rating at 110V.....20 Amps

G0513X2

Full-Load Current Rating at 220V9.5 Amps

Full-Load Current Rating at 110V.....19 Amps

G0513X2BF

Full-Load Current Rating at 220V8.7 Amps

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

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

Circuit Information

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

! CAUTION

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

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

! 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.



Circuit Requirements for 220V

These machines are prewired to operate on a power supply circuit that has a verified ground and meets the following requirements:

| Model Number | G0513, G0513A40, G0513X2 | G0513X2BF |
|---|-----------------------------------|-----------|
| Circuit Requirements For 220V Operation: | | |
| Nominal Voltage | 208V, 220V, 230V, 240V | |
| Cycle | 60 Hz | |
| Phase | Single-Phase | |
| Power Supply Circuit | 15 Amps | |
| Plug/Receptacle | NEMA 6-15 | |
| Power Cord | "S"-Type, 3-Wire, 14 AWG, 300 VAC | |

Circuit Requirements for 110V

Models G0513, G0513A40, and G0513X2 can be converted to operate on a power supply circuit that has a verified ground and meets the requirements listed below. (Refer to **Voltage Conversion** instructions for details.)

| Model Number | G0513, G0513A40, G0513X2 | G0513X2BF |
|---|-----------------------------------|-----------|
| Circuit Requirements For 110V Operation: | | |
| Nominal Voltage | 110V, 115V, 120V | N/A |
| Cycle | 60 Hz | |
| Phase | Single-Phase | |
| Power Supply Circuit | 30 Amps | |
| Plug/Receptacle | NEMA L5-30 | |
| Power Cord | "S"-Type, 3-Wire, 12 AWG, 300 VAC | |

Grounding Requirements

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

Grounding Requirements for 220V: The plug specified under "Circuit Requirements for 220V Operation" on this page has a grounding pin that must be attached to the equipment-grounding wire inside the specified power cord. The plug must only be inserted into a matching receptacle (see **Figure 5**) that is properly installed and grounded in accordance with all local codes and ordinances.

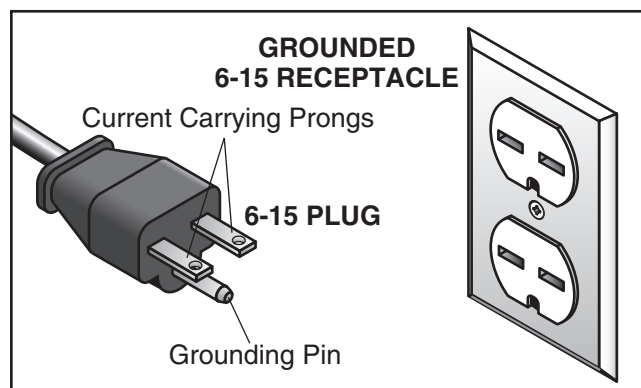


Figure 5. Typical 6-15 plug and receptacle.



Grounding Requirements for 110V: The plug specified under “Circuit Requirements for 110V Operation” on the previous page has a grounding prong that must be attached to the equipment-grounding wire inside the specified power cord. The plug must only be inserted into a matching receptacle (see **Figure 6**) that is properly installed and grounded in accordance with all local codes and ordinances.

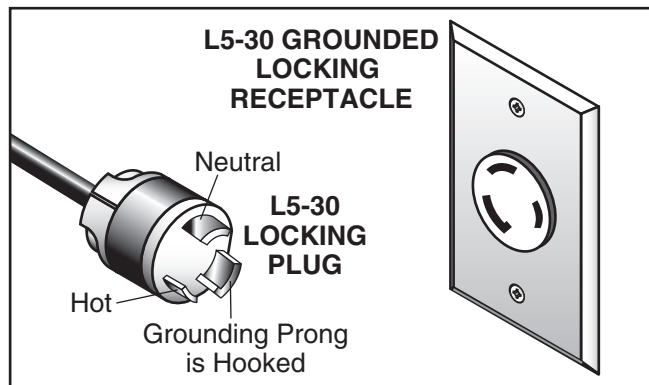


Figure 6. Typical L5-30 plug and receptacle.

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!

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.

CAUTION

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

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 at 220V14 AWG**
- Minimum Gauge Size at 110V12 AWG**
- Maximum Length (Shorter is Better).....50 ft.**

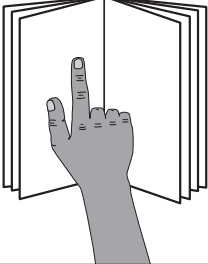
Voltage Conversion

Models G0513, G0513A40, & G0513X2

The voltage conversion **MUST** be performed by a qualified electrician. To perform the voltage conversion, install the correct plug and rewire the motor to the new voltage, according to the provided wiring diagram. *If the diagram included on the motor conflicts with the one in this manual, the motor may have changed since the manual was printed. Use the diagram provided on the motor.*




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

Needed for Setup

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

| Description | Qty |
|--|--------------|
| • Additional People | 1 |
| • Safety Glasses | 1 per Person |
| • Cleaner/Degreaser | As Needed |
| • Disposable Shop Rags..... | As Needed |
| • Forklift/Strap or Chain w/Lifting Hook (Rated for at least 1000 lbs.) | 1 Each |
| • 1x4 & 2x4 Shims (Optional)..... | 1 Each |
| • Feeler Gauges 0.004", 0.016"..... | 1 Each |
| • Straightedge 12" | 1 |
| • Fine Ruler | 1 |
| • Machinist's Square | 1 |
| • Hex Wrench 6mm..... | 1 |
| • Dust Collection System | 1 |
| • Dust Hose 4" | 2 |
| • Hose Clamps 4" | 2 |

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.*

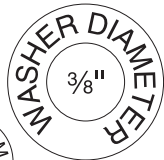
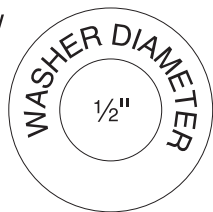
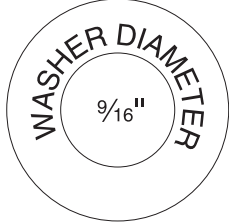
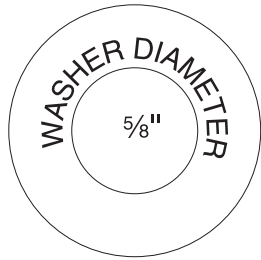
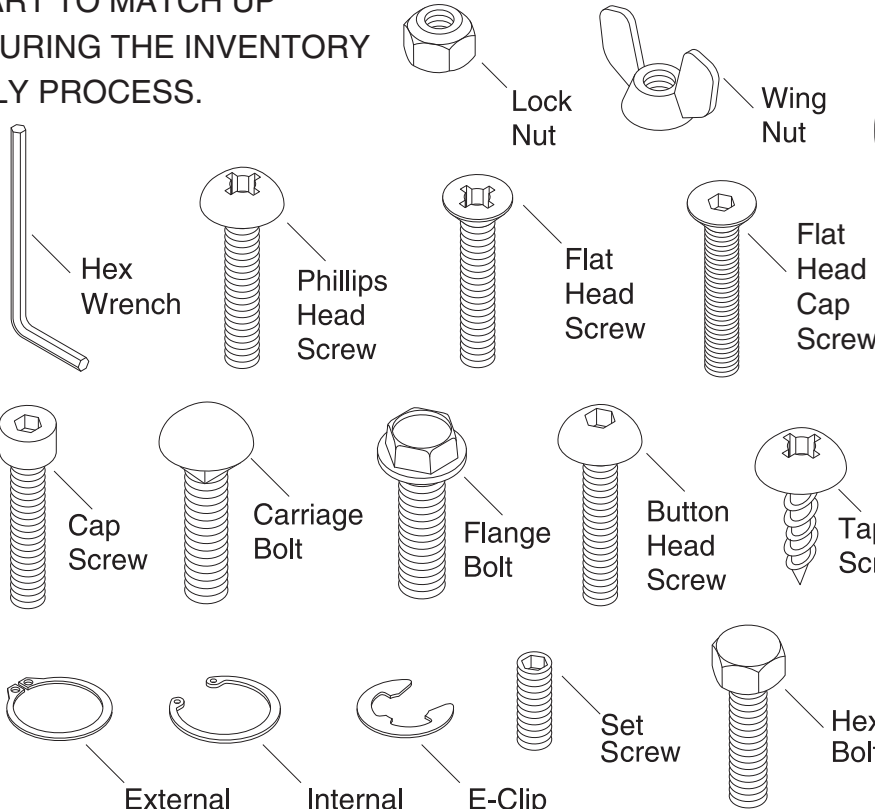


Hardware Recognition Chart

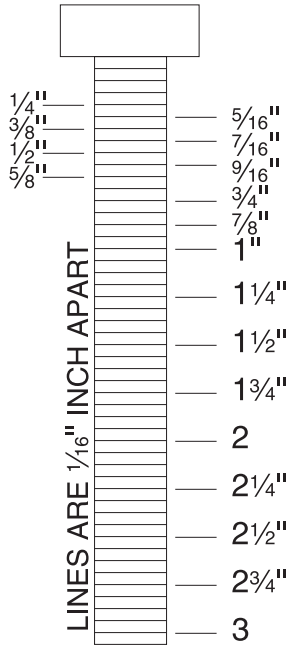
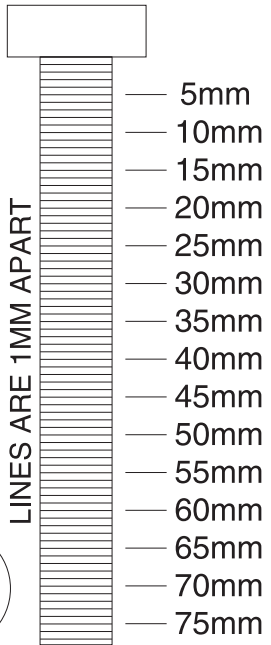
USE THIS CHART TO MATCH UP
HARDWARE DURING THE INVENTORY
AND ASSEMBLY PROCESS.

MEASURE BOLT DIAMETER BY PLACING INSIDE CIRCLE

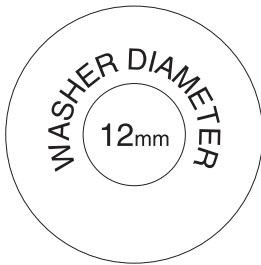
- #10
- 1/4"
- 5/16"
- 3/8"
- 7/16"
- 1/2"



- 4mm
- 5mm
- 6mm
- 8mm
- 10mm
- 12mm
- 16mm



WASHERS ARE MEASURED BY THE INSIDE DIAMETER



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.

G0513

| Inventory (Figures 7–8) | Qty |
|-------------------------------|-----|
| A. Bandsaw (not shown) | 1 |
| B. Table | 1 |
| C. Miter Gauge | 1 |
| D. Rear Rail | 1 |
| E. Fence Assembly | 1 |
| F. Guide Post Handwheel | 1 |
| G. Front Rail | 1 |

| Hardware & Tools (Not Shown) | Qty |
|---|--------|
| • Flat Washers 8mm (Table) | 4 |
| • Lock Washers 8mm (Table) | 4 |
| • Hex Bolts M8-1.25 x 16 (Table) | 4 |
| • Hex Bolt M8-1.25 x 90 (Positive Stop) | 1 |
| • Hex Nuts M8-1.25 (Positive Stop, Fence) ... | 2 |
| • Cap Screws M6-1 x 16 (Fence) | 2 |
| • Hex Bolts M6-1 x 20 (Fence) | 2 |
| • Lock Washers 6mm (Fence) | 2 |
| • Flat Washers 6mm (Fence) | 2 |
| • Hex Nut M6-1 (Fence) | 1 |
| • Table Pin | 1 |
| • Table Insert | 1 |
| • Fence Handle M8-1.25 x 22 (Fence) | 1 |
| • Rail Pad M6-1 x 18 (Fence) | 1 |
| • Hex Wrenches 5, 8mm | 1 Each |
| • Open-End Wrench 10 x 13mm | 1 |



Figure 7. Table and miter gauge.

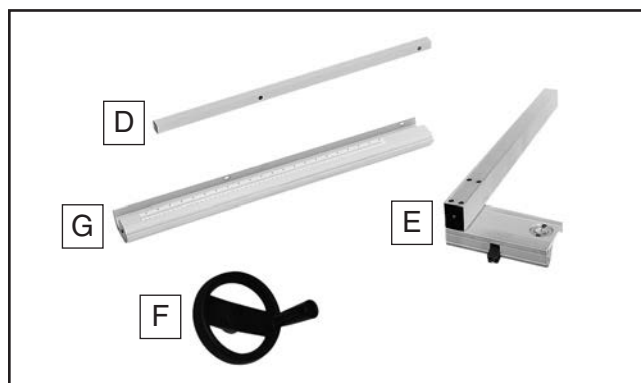


Figure 8. Fence components and handwheel.

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.



G0513A40

Inventory (Figures 9–10)

| | Qty |
|------------------------------|-----|
| A. Bandsaw (not shown)..... | 1 |
| B. Table..... | 1 |
| C. Miter Gauge..... | 1 |
| D. Rear Rail | 1 |
| E. Resaw Fence | 1 |
| F. Fence Assembly..... | 1 |
| G. Drift Bar | 1 |
| —Fender Washer 8mm..... | 1 |
| —Adjustable Handle..... | 1 |
| H. Guide Post Handwheel..... | 1 |
| I. Front Rail..... | 1 |

Hardware & Tools (Not Shown)

| | Qty |
|--|--------|
| • Flat Washers 8mm (Table, Fence, Rail)..... | 5 |
| • Lock Washers 8mm (Table, Rail) | 4 |
| • Hex Bolts M8-1.25 x 25 (Table)..... | 4 |
| • Hex Bolt M8-1.25 x 90 (Positive Stop)..... | 1 |
| • Hex Nuts M8-1.25 (Positive Stop, Fence)... | 2 |
| • Cap Screws M6-1 x 16 (Rear Rail)..... | 2 |
| • Hex Bolt M6-1 x 20 (Front Rail)..... | 2 |
| • Lock Washers 6mm (Rail) | 2 |
| • Flat Washers 6mm (Rail)..... | 2 |
| • Table Pin..... | 1 |
| • Table Insert..... | 1 |
| • Locking Handle M8-1.25 x 44 (Fence) | 1 |
| • Fence Handle M8-1.25 x 22 (Fence)..... | 1 |
| • Moving Plate (Fence)..... | 1 |
| • Hex Wrenches 5, 8mm..... | 1 Each |
| • Open-End Wrench 10 x 13mm..... | 1 |



Figure 9. Table and miter gauge.

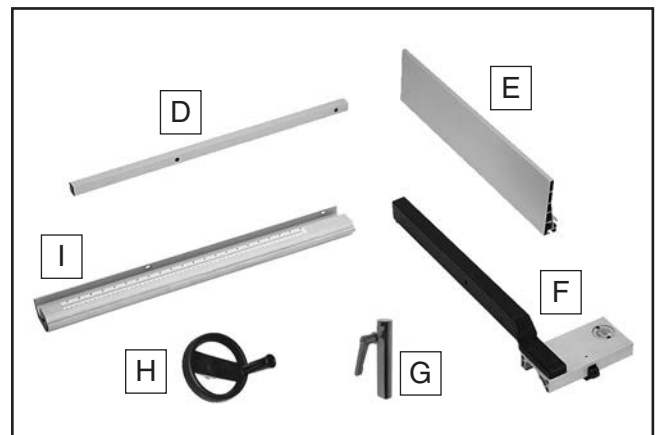


Figure 10. Fence components and handwheel.



G0513X2

Shipping Inventory (Figures 11–12) Qty

| | | |
|----|----------------------|---|
| A. | Bandsaw (not shown) | 1 |
| B. | Table | 1 |
| C. | Miter Gauge | 1 |
| D. | Rear Rail | 1 |
| E. | Resaw Fence | 1 |
| F. | Fence Assembly | 1 |
| G. | Guide Post Handwheel | 1 |
| H. | Front Rail | 1 |

Hardware & Tools (Not Shown) Qty

- Flat Washers 8mm (Table, Fence, Rail)..... 5
- Lock Washers 8mm (Table, Rail) 4
- Hex Bolts M8-1.25 x 25 (Table) 4
- Hex Bolt M8-1.25 x 90 (Positive Stop)..... 1
- Hex Nuts M8-1.25 (Positive Stop, Fence)... 2
- Cap Screws M6-1 x 16 (Rear Rail)..... 2
- Hex Bolt M6-1 x 20 (Front Rail)..... 2
- Lock Washers 6mm (Rail) 2
- Flat Washers 6mm (Rail)..... 2
- Table Pin..... 1
- Table Insert..... 1
- Locking Handle M8-1.25 x 44 (Fence) 1
- Fence Handle M8-1.25 x 22 (Fence)..... 1
- Moving Plate (Fence)..... 1
- Hex Wrenches 5, 8mm..... 1 Each
- Open-End Wrench 10 x 13mm..... 1



Figure 11. Table and miter gauge.

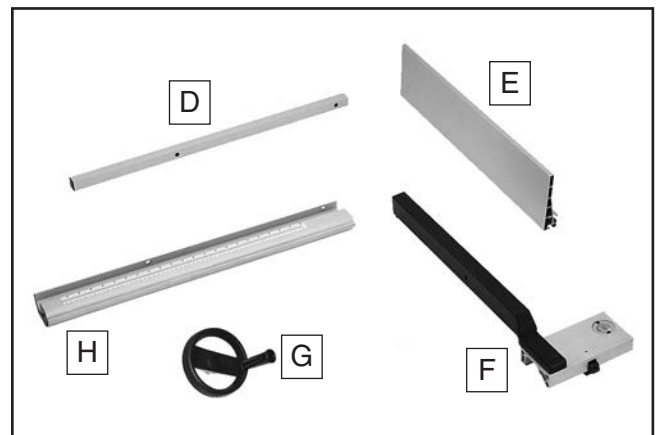


Figure 12. Fence components and handwheel.



G0513X2BF

Inventory (Figures 13–14)

| | Qty |
|-------------------------------|-----|
| A. Bandsaw (not shown) | 1 |
| B. Table | 1 |
| C. Miter Gauge | 1 |
| D. Front Rail | 1 |
| E. Resaw Fence | 1 |
| F. Fence Assembly | 1 |
| G. Guide Post Handwheel | 1 |

Hardware & Tools (Not Shown)

| | Qty |
|---|--------|
| • Flat Washers 8mm (Table, Fence, Rail) | 8 |
| • Lock Washers 8mm (Table, Rail) | 5 |
| • Hex Bolts M8-1.25 x 25 (Table) | 4 |
| • Hex Bolt M8-1.25 x 90 (Positive Stop) | 1 |
| • Hex Nut M8-1.25 (Positive Stop) | 1 |
| • Cap Screws M6-1 x 20 (Rail) | 3 |
| • Cap Screw M8-1.25 x 20 (Rail) | 1 |
| • Lock Washers 6mm (Rail) | 3 |
| • Flat Washers 6mm (Rail) | 3 |
| • Table Pin | 1 |
| • Table Inserts | 1 |
| • Locking Handle M8-1.25 x 44 (Fence) | 1 |
| • Moving Plate (Fence) | 1 |
| • Knobs M8-1.25 x 20 | 2 |
| • Rail Plates | 3 |
| • Hex Wrenches 5, 8mm | 1 Each |
| • Open End Wrench 10 x 13mm | 1 |



Figure 13. Table and miter gauge.

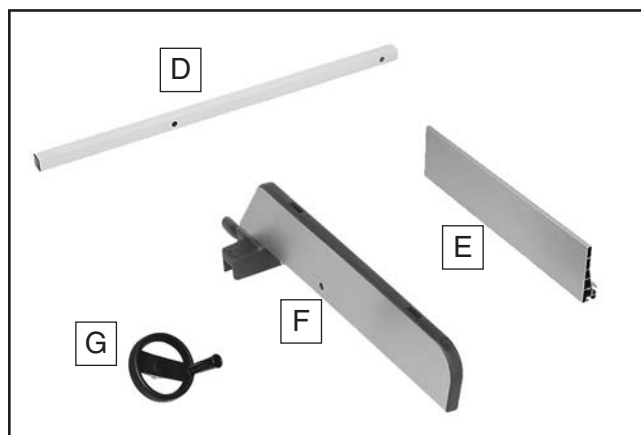


Figure 14. Fence components and handwheel.



Cleanup

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

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

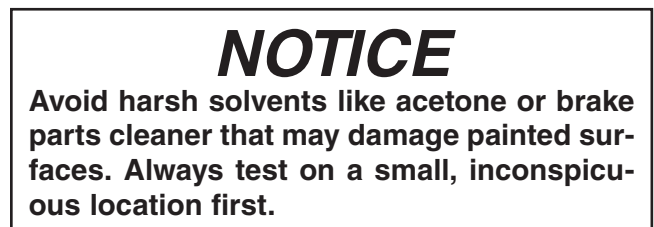
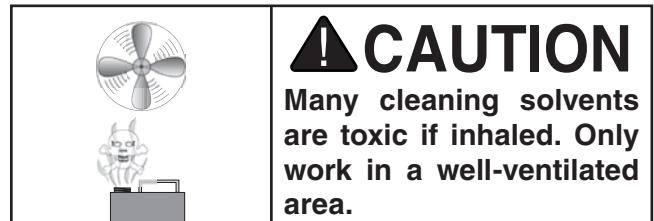
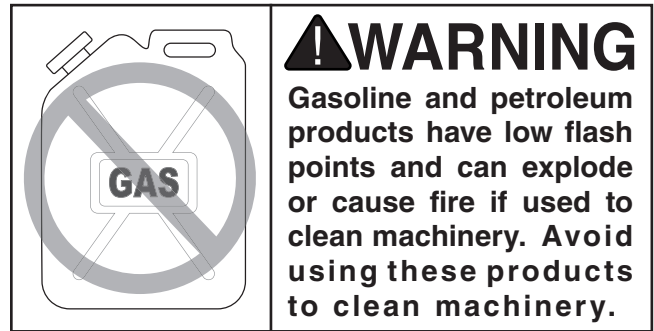
There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

Before cleaning, gather the following:

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

Basic steps for removing rust preventative:

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



T23692—Orange Power Degreaser

A great product for removing the waxy shipping grease from the *non-painted* parts of the machine during clean up.



Figure 15. T23692 Orange Power Degreaser.



Site Considerations

Floor Load

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

Placement Location

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your new machine. See **Figure 16** for the minimum working clearances.

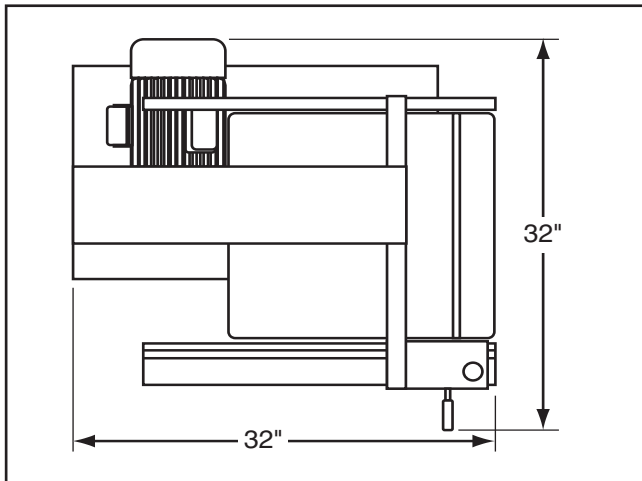
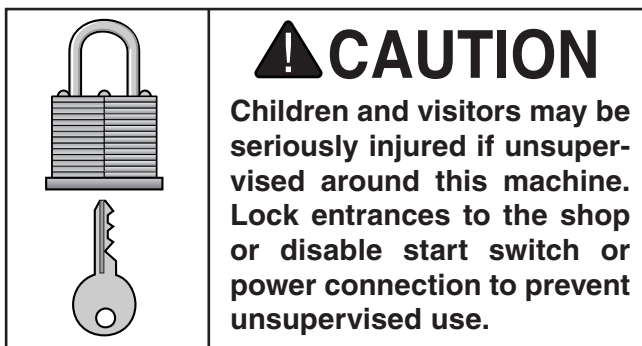
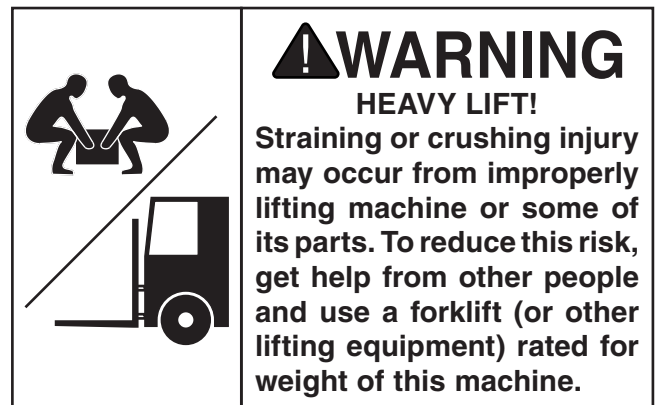


Figure 16. Minimum working clearances.



Lifting & Placing Bandsaw



Special care should be taken when moving this bandsaw. To reduce your risk of injury or accidental damage, use one of the following methods to lift or move the bandsaw.

Using Forklift & Eye Bolt

1. Use a forklift to move the crate to a prepared location, then remove the crate from the shipping pallet.
2. Unbolt the bandsaw from the pallet.
3. Place the lifting hook through the eye bolt at the top of the machine (see **Figure 17**), and lift the bandsaw slowly with a forklift.

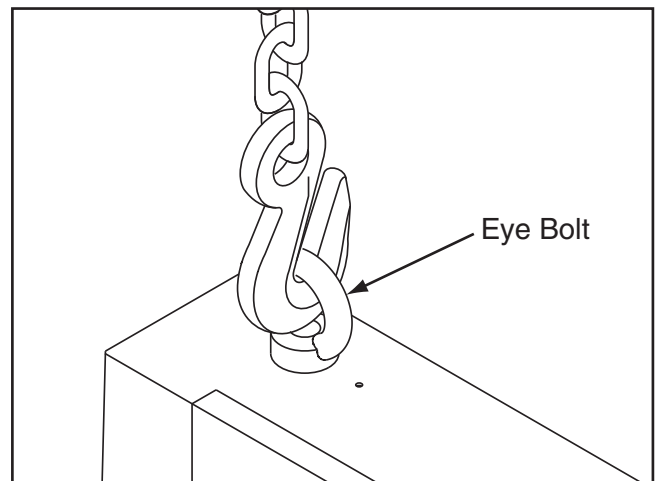


Figure 17. Lifting the bandsaw.

4. Remove the pallet and slowly set the bandsaw into position.



Using Forklift & Wood Blocks

1. Use a forklift to move the crate to a prepared location, then remove the crate from the shipping pallet.
2. Unbolt the bandsaw from the pallet.
3. Carefully place the forklift forks under the head. Insert a 1x4 block between the head and the left fork, and a 2x4 block between the head and right fork so the bandsaw is level, as shown in **Figure 18**.

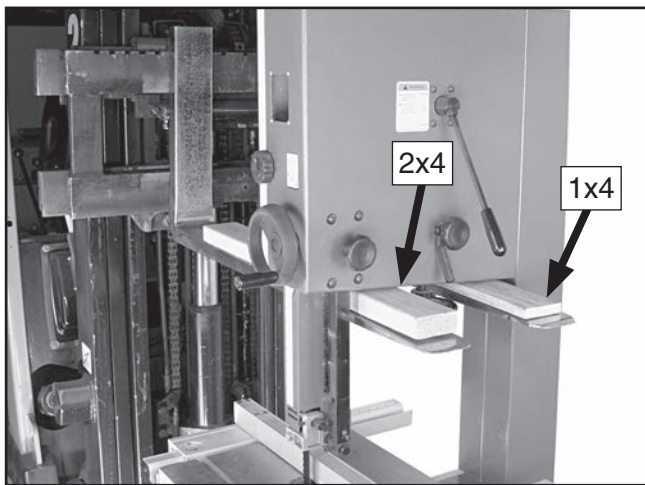


Figure 18. Example of lifting bandsaw with forklift using wood blocks.

4. Lift the bandsaw off of the pallet, remove the pallet, then slowly set the bandsaw into position.

Note: If you are concerned about your forklift forks hitting the tension handwheel, remove the handwheel before positioning the forks, then re-install it after the bandsaw has been moved.

! WARNING

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

Anchoring to Floor

Number of Mounting Holes 4
Diameter of Mounting Hardware..... 1/2"

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

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

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

Anchoring to Concrete Floors

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

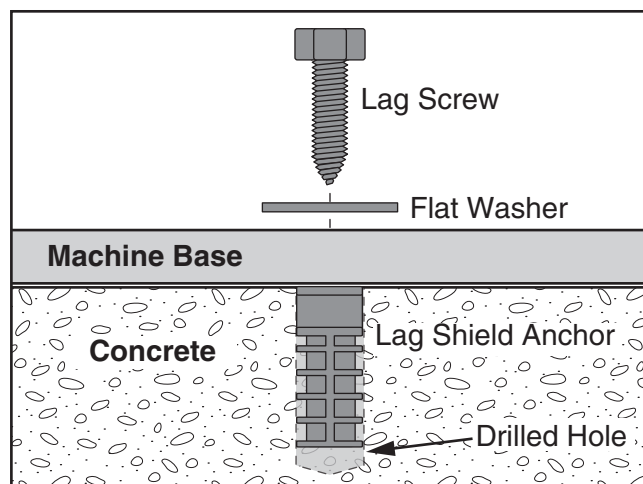


Figure 19. Popular method for anchoring machinery to a concrete floor.



Assembly

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

To assemble machine:

1. Secure guide post handwheel on handwheel shaft flat with set screw (see **Figure 20**).

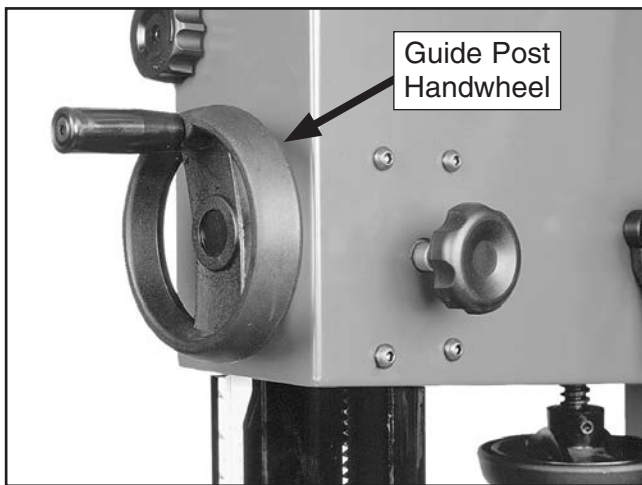


Figure 20. Guide post handwheel installed.

2. Thread M8-1.25 hex nut halfway onto M8-1.25 x 90 positive stop bolt (see **Figure 21**).
3. Thread positive stop bolt into threaded hole on bandsaw body (see **Figure 21**).

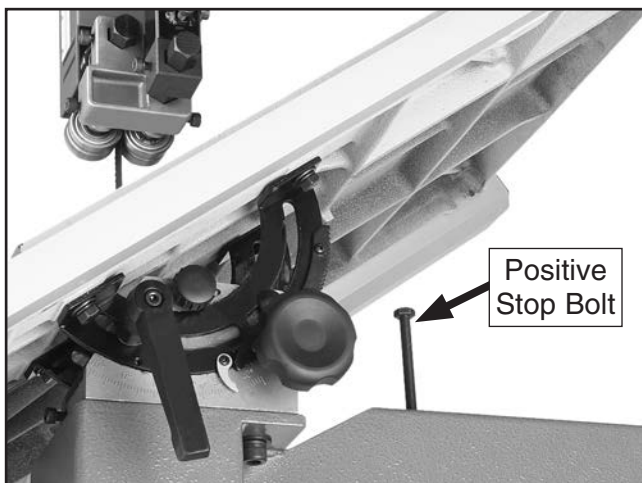


Figure 21. Positive stop bolt installed.

4. Loosen blade tension by rotating quick-release tension lever clockwise, as shown in **Figure 22**.

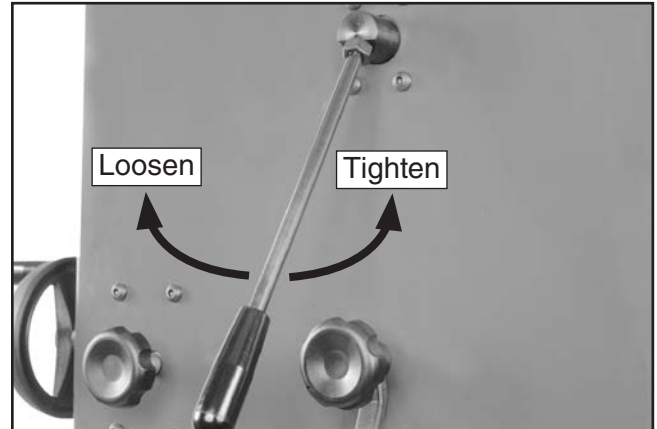
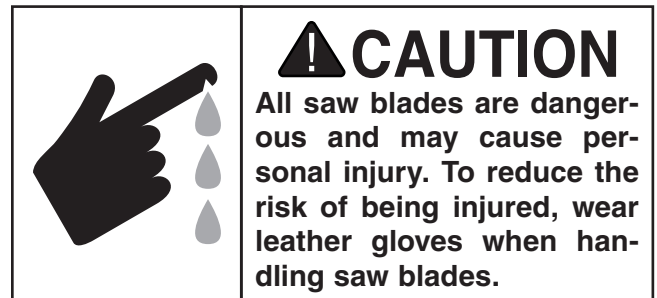


Figure 22. Quick-release tension lever.

5. Adjust upper and lower blade guides away from blade. Refer to **Adjusting Blade Guides** beginning on **Page 35** for more details.



6. Remove the saw blade (refer to **Changing Blade** on **Page 51** for detailed instructions).
7. With the help of another person, lift the table onto the trunnions.



NOTICE

The table is heavy and requires two people to lift it onto the trunnions. Remove the saw blade to make table installation easier.

8. **Models G0513 and G0513A40:** Secure table to trunnions, as shown in **Figure 23**, with (4) M8-1.25 x 16 hex bolts, 8mm lock washers, and 8mm flat washers.

Models G0513X2 G0513X2BF: Secure table to trunnions with (4) M8-1.25 x 25 hex bolts, 8mm lock washers, and 8mm flat washers.

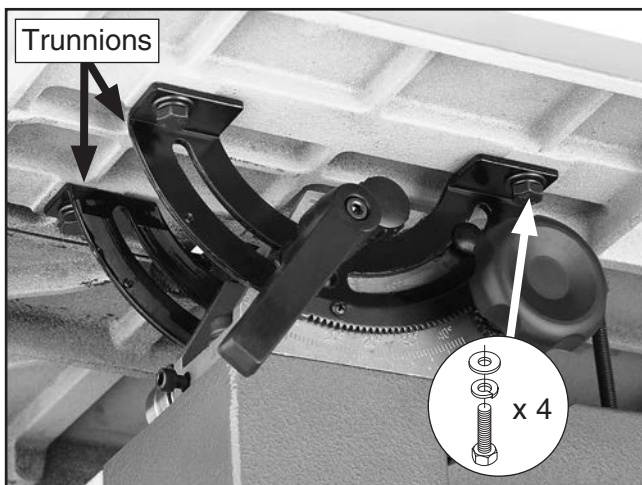


Figure 23. Mounting the table.

9. Re-install saw blade.

Models G0513, G0513A40 & G0513X2

10. Attach rear rail to table with (2) M6-1 x 16 cap screws, as shown in **Figure 24**.
11. Attach front rail with (2) M6-1 x 20 hex bolts, 6mm lock washers, and 6mm flat washers, as shown in **Figure 24**.

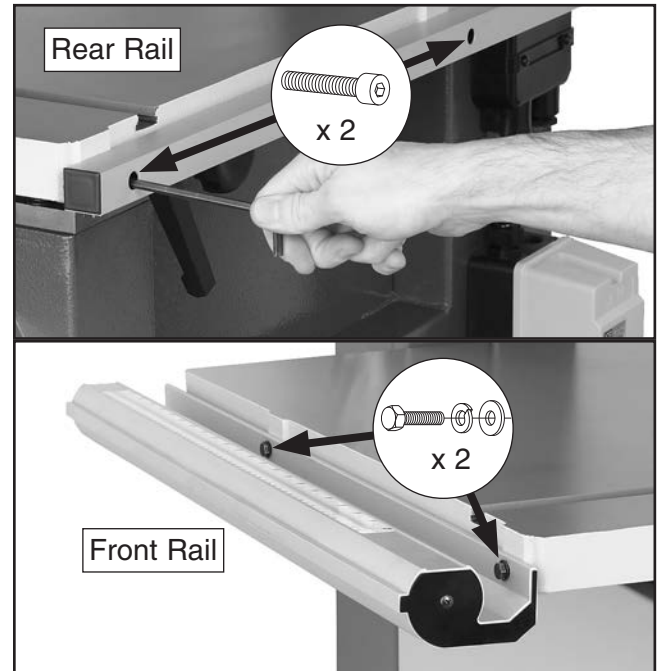


Figure 24. Rail installation.

12. Install (1) M8-1.25 hex nut on fence handle, then thread handle into fence assembly, as shown in **Figure 25**. Tighten hex nut against fence pivot block to secure handle.

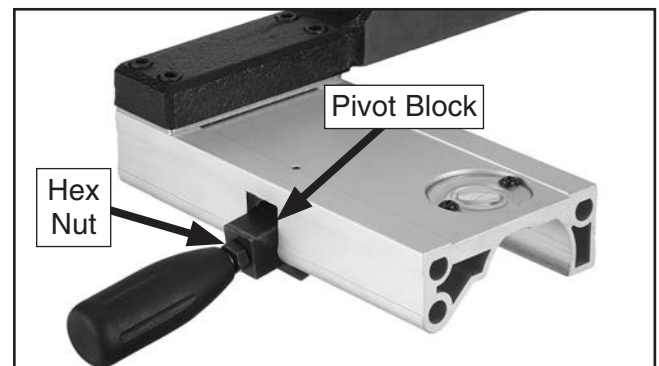


Figure 25. Example of handle installed on fence assembly.



13. Pull fence handle up and place fence assembly on front rail (see **Figures 26–27**).

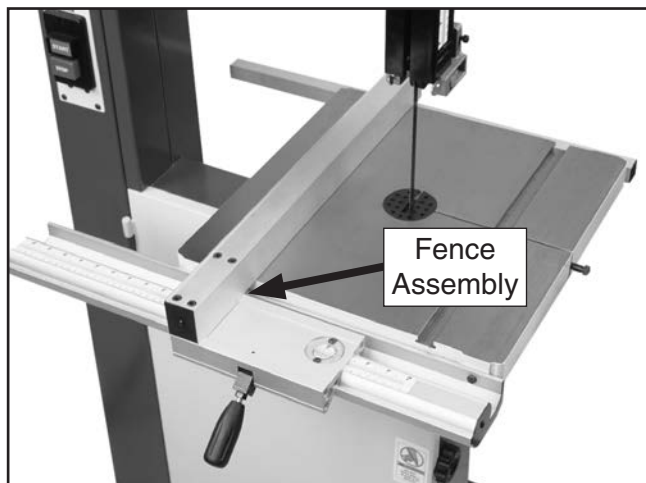


Figure 26. Fence assembly installed on G0513.

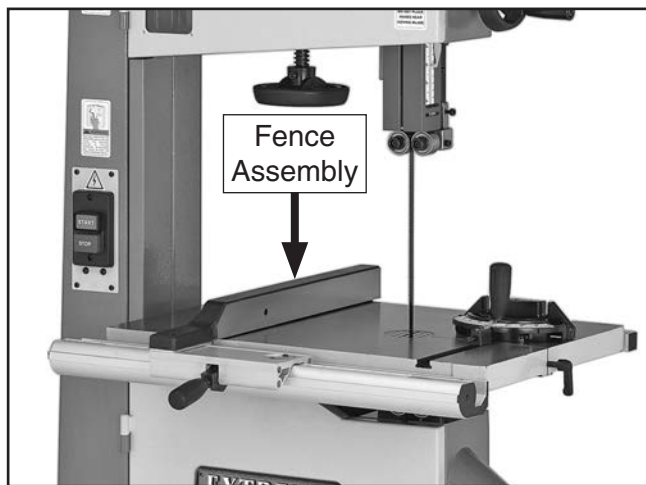


Figure 27. Fence assembly installed on G0513A40 and G0513X2.

14. Push fence handle down to lock fence assembly in place.
15. Adjust rear rail pad until there is an even gap between bottom of fence and table, then tighten rail pad hex nut against fence.

Model G0513X2BF

16. Attach rail plates to front rail with (3) M6-1 x 20 cap screws, 6mm lock washers, and 6mm flat washers (see **Figure 28**).

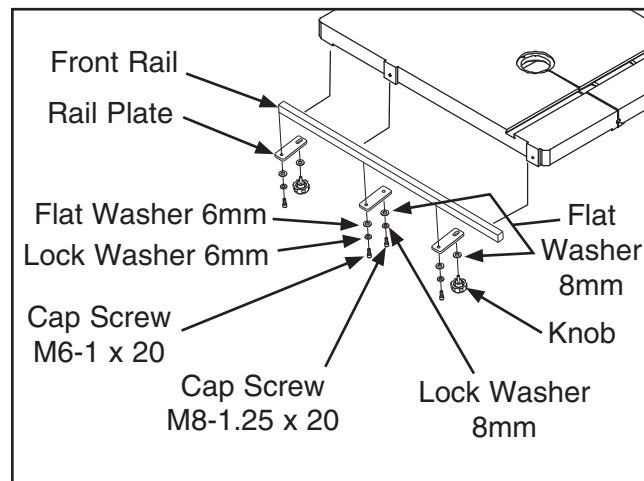


Figure 28. Installing front rail onto table.

17. Attach outer two rail plates with round, elongated mounting holes to outer part of table bottom with (2) M8-1.25 x 20 knobs and 8mm flat washers.
18. Attach remaining rail plate with round mounting holes using (1) M8-1.25 x 20 cap screw, 8mm lock washer, and 8mm flat washer (see **Figure 28**).
19. Thread fence handle into fence, then tighten hex nut against fence pivot block (see **Figure 29**).

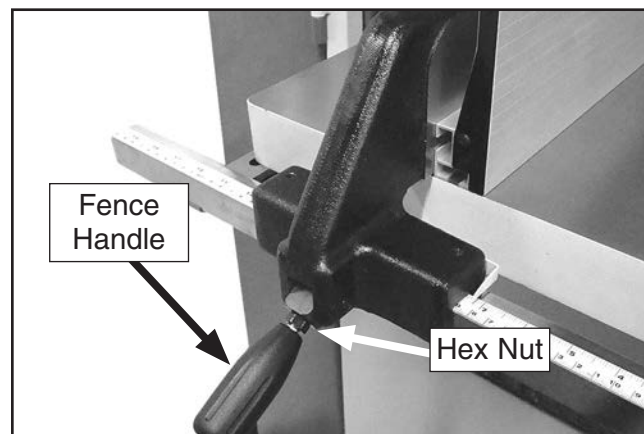


Figure 29. Fence handle components.



20. Install fence on left-hand side of blade.
21. Place fence flush against bandsaw blade (see **Figure 30**).

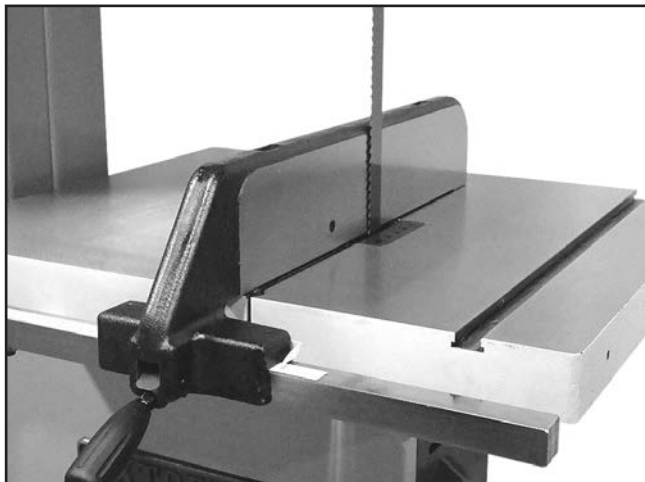


Figure 30. Fence flush with blade.

22. Loosen pointer adjustment nut (see **Figure 31**) and set pointer in line with "0" on measurement scale on rail.

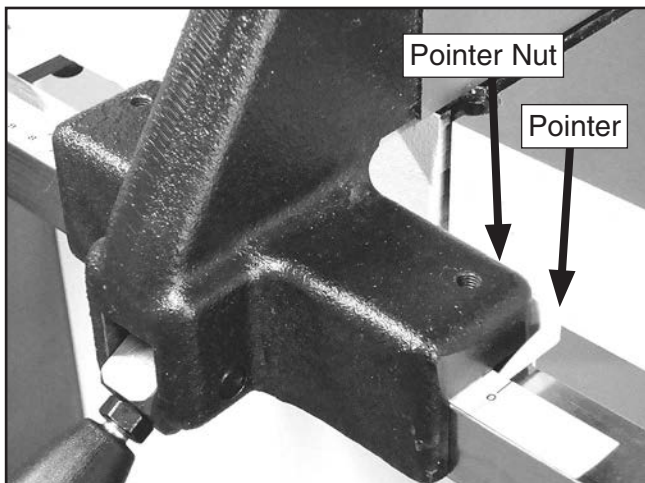


Figure 31. Calibrating fence pointer (adjustment nut out of view).

23. Re-tighten pointer adjustment nut.

Models G0513A40, G0513X2 & G0513X2BF

24. Place 8mm flat washer on locking handle (see **Figure 32**), slide it through hole in fence, then thread moving plate onto end of locking handle threads.
25. Slide resaw fence over moving plate, as shown in **Figure 32**, so moving plate fits inside channel of resaw fence, then tighten locking handle.

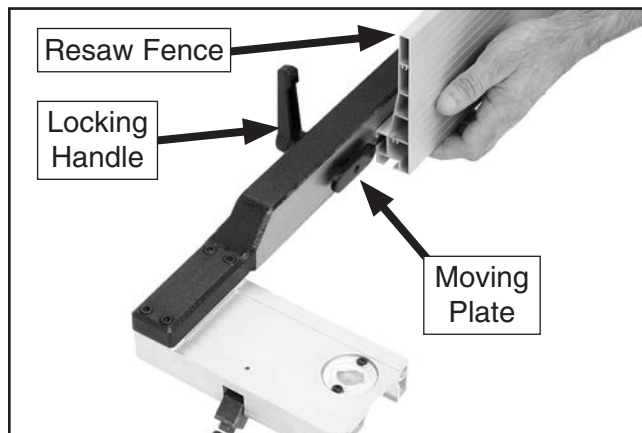


Figure 32. Attaching resaw fence.

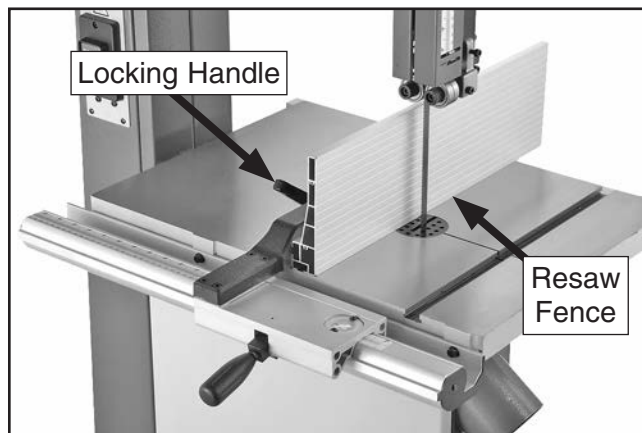


Figure 33. Resaw fence properly installed.



Model G0513A40

26. Insert adjustable handle with fender washer through the back of resaw fence (see **Figure 34**).

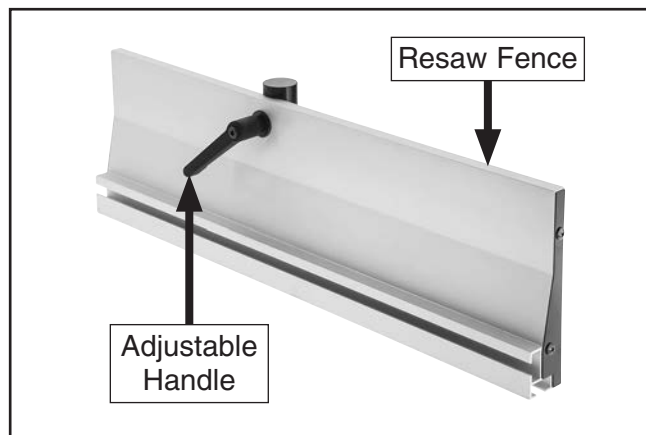


Figure 34. Adjustable handle installed on drift bar.

27. Secure drift bar using adjustable handle (see **Figure 35**). Make sure drift bar is flat against resaw fence and is straight up and down.

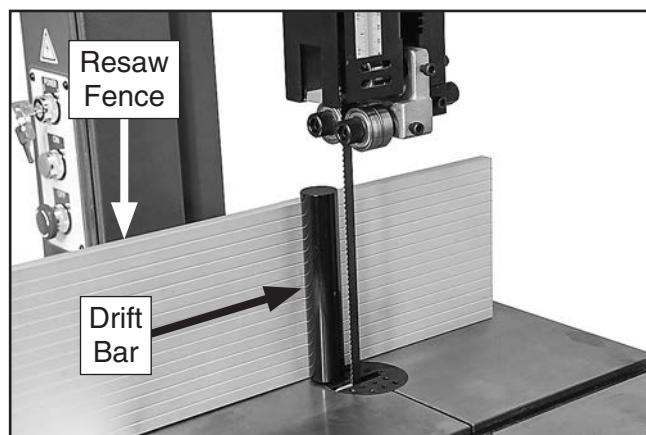


Figure 35. Drift bar installed on resaw fence.

Dust Collection

⚠ CAUTION

DO NOT operate this bandsaw without an adequate dust collection system. This saw creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

Recommended CFM at Dust Port: 400 CFM

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

To connect a dust collection hose:

1. Fit a 4" dust hose over each dust port and secure them in place with a hose clamp (see **Figure 36**).



Figure 36. Dust hose attached to bottom dust port.

2. Tug the hoses to make sure they do not come off.

Note: A tight fit is necessary for proper performance.



Adjustment Overview

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

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

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

Initial Blade Tracking

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

Bandsaw wheels are either flat or crowned and both shapes track differently. This bandsaw has crowned wheels. As the wheels spin, a properly tracking blade naturally tracks at the center of the wheel (see **Figure 37**).

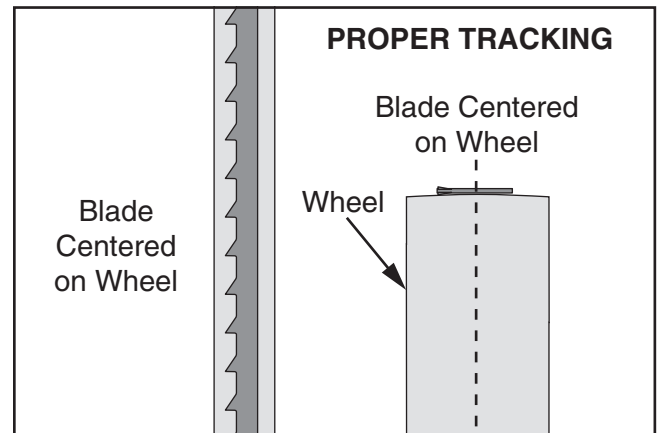
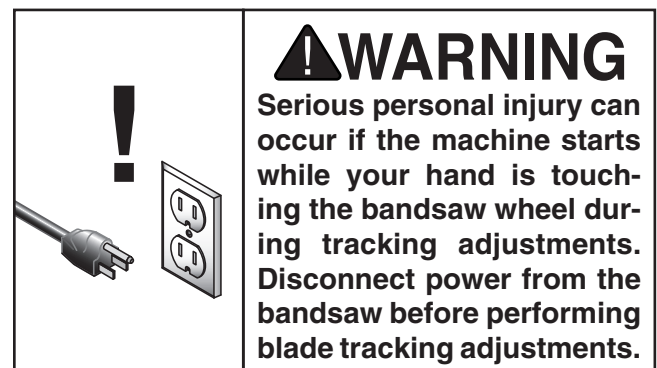


Figure 37. Blade centered on crown of wheel.

Blade tracking is primarily affected by the tilt of the upper wheel, known as "center tracking." However, the alignment of both wheels plays an important part as well (see **Aligning Wheels** on **Page 71** for more details).

The wheels on this bandsaw were aligned at the factory, so center tracking is the only adjustment that needs to be performed when the saw is new.



To adjust blade tracking:

1. DISCONNECT MACHINE FROM POWER!
2. Adjust upper and lower blade guides away from blade, and raise upper guides approximately $\frac{2}{3}$ of the way up (refer to **Adjusting Blade Guides** on **Page 35** for detailed instructions).

Note: *When adjusting the blade tracking for the test run in this procedure, the blade must have approximately the same amount of tension as when under operating conditions. After the test run is successfully completed, you will be instructed on how to more accurately tension the blade for optimum results.*
3. Move blade tension quick-release lever down to apply tension to blade.
4. Open upper wheel cover.
5. Rotate blade tension handwheel until tension scale (see **Figure 38**) is between 4 and 6. Rotate handwheel *clockwise* to *increase* blade tension. Rotate handwheel *counter-clockwise* to *decrease* blade tension.

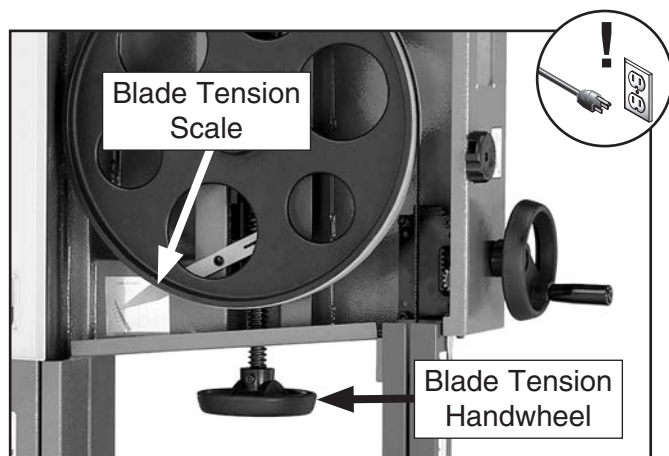


Figure 38. Blade tensioning controls.

6. Loosen the lock lever on the back of the bandsaw (see **Figure 39**) so that the blade tracking knob can rotate.

⚠ CAUTION

The wheels may have sharp edges, and the blade teeth may extend beyond the edge, creating a laceration hazard. Be careful when turning the wheels by hand.

7. Rotate upper wheel by hand several times and watch how blade rides on crown of wheel. Refer to **Figure 37** on **Page 27** for an illustration of this concept.

— If the blade consistently rides in the center of the upper wheel, it is tracking properly and no adjustments are necessary; proceed to **Step 9**.

— If the blade does *not* consistently ride in the center of the upper wheel, it is not tracking properly; proceed to **Step 8**.
8. Adjust tracking control knob (see **Figure 39**) in small amounts and continue to rotate upper wheel by hand at the same time until blade consistently rides in center of bandsaw tire.

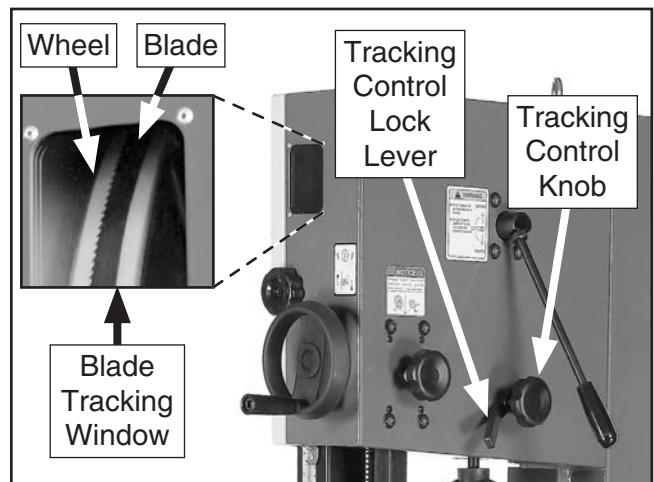


Figure 39. Blade tracking controls.

9. Tighten tracking control lock lever, then close and secure upper wheel cover.

Note: *For the best performance from your saw, regularly maintain proper tracking of the blade. Fine tune tracking must be done with the bandsaw turned **ON**. Refer to **Page 33** for more information.*



Power Cord Connection (G0513X2BF)

⚠️ WARNING

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

The power cord connection MUST be performed by an electrician or qualified service personnel.

| Items Needed | Qty |
|--|-----------|
| Cord "S"-Type, 3-Wire, 14 AWG, 300 VAC, at least 6 ft. long..... | 1 |
| Phillips Screwdriver #2..... | 1 |
| Wire Nuts for (2) 14 AWG Wires..... | 3 |
| Electrical Tape..... | As Needed |

To connect the power cord to the machine:

1. Attach the required plug to the cord per the plug manufacturer's instructions (refer to **Power Supply** beginning on **Page 10** for specifications and the NEMA plug wiring on **Page 76**).
2. Remove the power supply junction box cover from the right rear of the bandsaw (see **Figure 40**). It is secured by two screws.

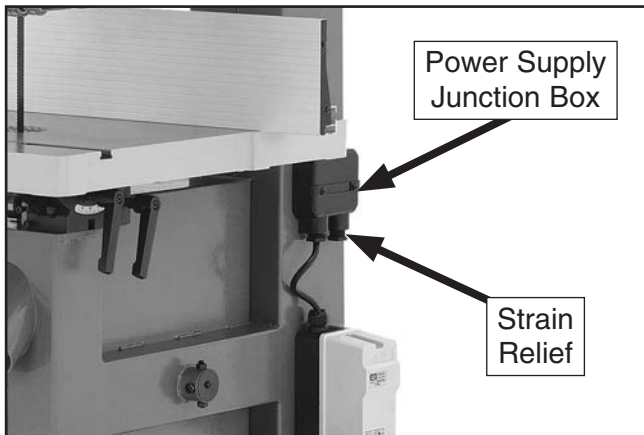


Figure 40. Power supply junction box on rear of bandsaw.

3. Loosen the right strain relief on the junction box, then feed the cord into the box with enough slack in the wires to make the connections.
4. Re-tighten the strain relief around the cord. Tug on it to make sure the wires inside the box will not move.
5. Connect the incoming ground wire to the ground post, as shown in **Figure 41**.

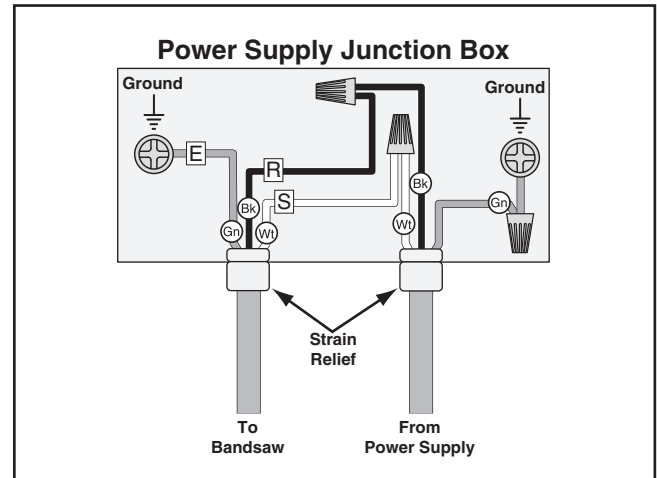


Figure 41. Incoming power cord connections.

6. Secure the two incoming hot wires to the black and white wires from the bandsaw with wire nuts, then wrap the nuts and wires with electrical tape to make sure they will not come loose.
7. Re-attach the junction box cover.



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.

G0513, G0513A40 & G0513X2

The Test Run consists of verifying the following:
1) The motor powers up and runs correctly, and
2) the switch disabling pin 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. Connect machine to power supply.
3. Turn machine **ON**, verify motor operation, and then turn machine **OFF**.

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

4. Insert disabling pin through switch button.

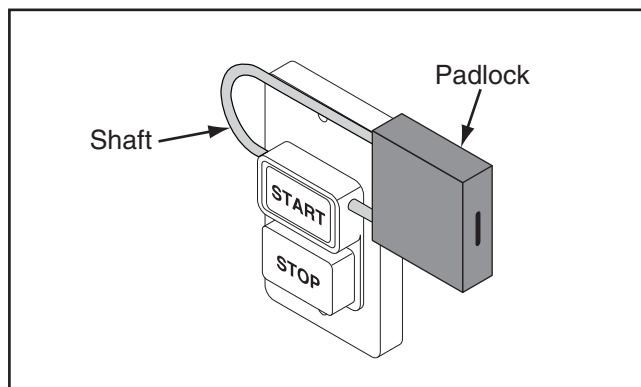


Figure 42. Disabling pin through switch button.

5. Try to start machine by pressing switch button. Machine should **NOT** start.
 - If the machine *does not* start, the safety feature of the switch disabling pin is working correctly.
 - If the machine *does* start, immediately turn it **OFF**, disconnect power, and contact customer service for assistance. The safety feature of the switch disabling pin is **NOT** working properly and must be replaced before further using the machine.



G0513X2BF

The Test Run consists of verifying the following: 1) The motor powers up and runs correctly, 2) the safety feature of the OFF button works correctly, and 3) the foot brake pedal works correctly.

WARNING

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

WARNING

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

To test run machine:

1. Clear all setup tools away from machine.
2. Press OFF button in.
3. Connect machine to power supply.
4. Insert key into Master Power Key Switch, then rotate switch to "1" position (see **Figure 43**). This turns incoming power **ON**.
5. Twist OFF button clockwise until it springs out (see **Figure 43**). This resets switch so machine can start.
6. Press ON button (see **Figure 43**) to turn machine **ON**. Verify motor starts up and runs smoothly without any unusual problems or noises.

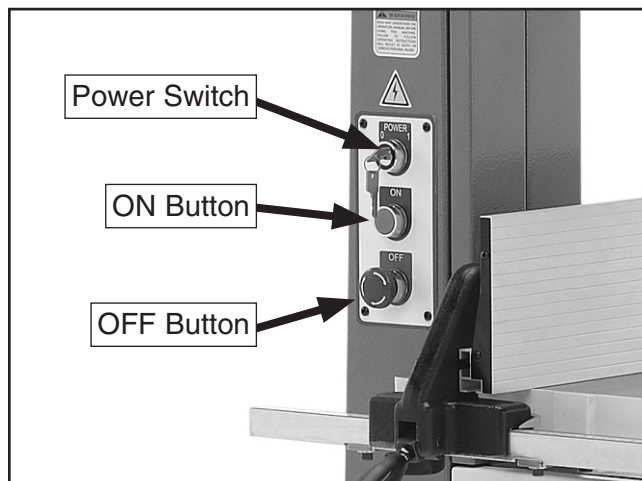


Figure 43. G0513X2BF control panel.

7. Press OFF button to turn machine **OFF**.
8. **WITHOUT** resetting OFF button, try to start machine by pressing ON button. Machine should not start.
 - If the machine *does not* start, the safety feature of the OFF button is working correctly.
 - If the machine *does* start, immediately turn it **OFF**, disconnect power, and contact customer service for assistance. The safety feature of the OFF button is **NOT** working properly and must be replaced before further using the machine.
9. Repeat **Steps 5–6** to turn machine **ON**.
10. Allow motor to reach full speed, then step on foot brake pedal. Blade should stop moving and motor should turn **OFF**.
 - If the blade *does not* stop moving, or the motor *does not* turn **OFF**, the foot brake feature is not working correctly. Turn machine **OFF**, disconnect power immediately, and contact customer service for assistance.



Tensioning Blade

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

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

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

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

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

The Flutter Method

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

To tension bandsaw blade using flutter method:

1. DISCONNECT MACHINE FROM POWER!
2. Make sure the blade is properly center tracking as instructed in **Initial Blade Tracking** on **Page 27**.
3. Raise guide post all the way, and move upper and lower guide bearings away from blade (refer to **Page 35** for more information).
4. Engage blade tension quick-release lever to apply tension to blade.
5. Connect bandsaw to power, then turn it **ON**.
6. Use blade tension handwheel to slowly decrease blade tension until you see blade start to flutter.
7. Slowly increase tension until blade stops fluttering, then tighten blade tension adjustment knob an additional $\frac{1}{8}$ to $\frac{1}{4}$ of a turn.
8. DISCONNECT MACHINE FROM POWER!
9. Adjust blade guides as described in **Adjusting Blade Support Bearings** and **Adjusting Blade Guides** on **Pages 34–35**.



The Deflection Method

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

To tension bandsaw blade using deflection method:

1. DISCONNECT MACHINE FROM POWER!
2. Make sure the blade is properly tracking as instructed in the **Initial Blade Tracking** on **Page 27**.
3. Raise guide post all the way and move upper and lower guide bearings away from blade (refer to **Page 35** for more information).
4. Engage blade tension quick-release lever to apply tension to blade.
5. Using moderate pressure, push center of blade sideways.
 - If blade deflects approximately $\frac{1}{4}$ ", it is properly tensioned. Proceed to **Step 6**.
 - If blade deflects less than $\frac{1}{4}$ ", it is over-tensioned. Rotate blade tension handwheel counterclockwise two full turns and repeat **Step 5**.
 - If blade deflects $\frac{1}{4}$ " or more, blade is not properly tensioned. Rotate blade tension handwheel clockwise to incrementally tension blade, and repeat **Step 5** until blade is properly tensioned.
6. Adjust blade guides as described in **Adjusting Blade Support Bearings** and **Adjusting Blade Guide** on **Pages 34–35**.

Fine Tune Tracking

During setup, the blade was tracked without the machine connected to power (refer to **Page 27**). In this procedure, the bandsaw is turned **ON** to perform fine tuning of the tracking. Make small changes with the blade tracking knob as you monitor the effect on the blade tracking.

To fine tune blade tracking:

1. Close wheel covers and turn bandsaw **ON**.
2. Observe blade tracking path through clear tracking window on right edge of bandsaw (see **Figures 44–45**).

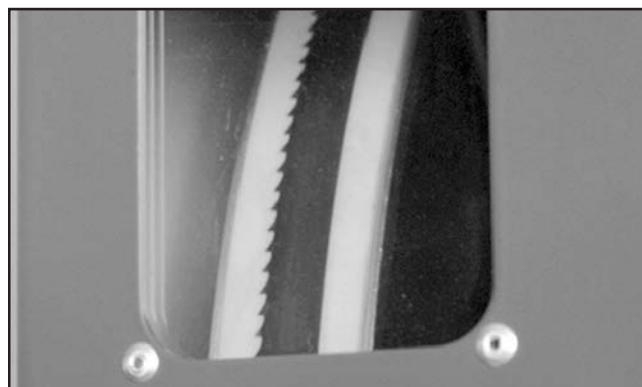


Figure 44. Example of blade, viewed through tracking window.

3. If necessary, loosen tracking control lock lever and use tracking control knob (see **Figure 45**) to adjust the blade so it tracks on the center of the wheel.
4. Tighten tracking control lock lever (see **Figure 45**) to secure setting, then turn machine **OFF**.

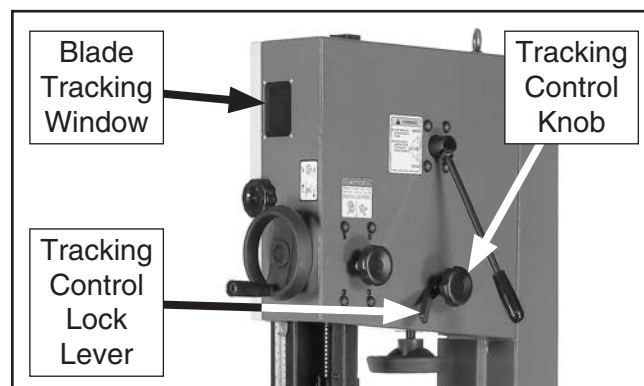


Figure 45. Fine-tune tracking controls.



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.

There are support bearings on the upper and lower blade guide assemblies. Both adjust in the same manner. The following instructions refer to the upper support bearings.

Important: To ensure best results while cutting, make sure the blade is tracking and tensioned correctly before performing this procedure.

| Tools Needed | Qty |
|--------------------------|-----|
| Hex Wrench 5mm..... | 1 |
| Feeler Gauge 0.016"..... | 1 |

To adjust support bearing:

1. DISCONNECT MACHINE FROM POWER!
2. Loosen support bearing adjustment screw (see **Figure 46**).

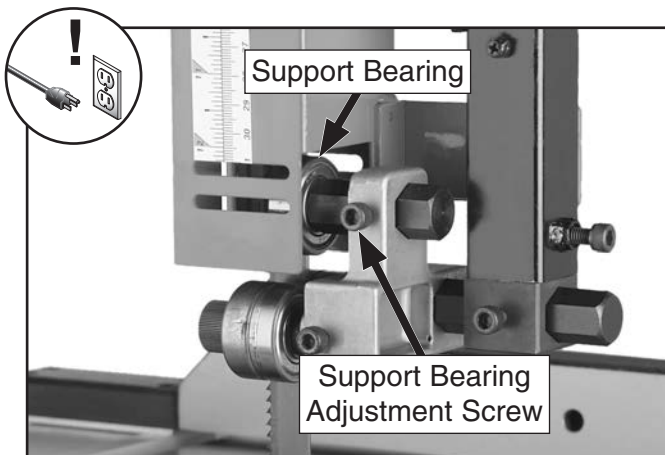


Figure 46. Upper support bearing controls.

3. Position support bearing approximately 0.016" away from back of blade, as illustrated in **Figure 47**.

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

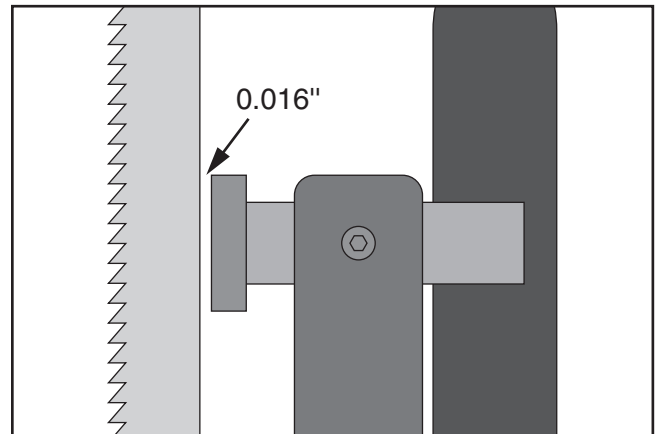


Figure 47. Bearing positioned approximately 0.016" away from back of blade.

4. Tighten adjustment cap screw to lock support bearing in place.



Adjusting Blade Guides

The blade guides provide side-to-side support to keep the blade straight while cutting. These guides are adjustable in two ways—forward-and-back and side-to-side.

To keep the blade straight while cutting, the blade guides must be as close to the sides of the blade without exerting any clamping pressure. This distance is typically about 0.004".

To prevent damage to the blade teeth as the blade deflects back while cutting, the guides must be behind the teeth gullets the same amount as the support bearing is behind the blade, which is typically about 0.016" (see **Figure 47** on the previous page for an illustration of this relationship).

Note: Models G0513 and G0513A40 use carbide discs as guides; models G0513X2 and G0513X2BF use ball bearings.

NOTICE

Before adjusting the blade guides, make sure the blade is tracking properly (Page 27) and that it is correctly tensioned (Page 32).

IMPORTANT: Although the function and the distance adjustment of the blade guides is the same for all the G0513 Series Models, the guide controls are not all the same. Use the set of instructions on the following pages that is correct for your model of bandsaw.

Models G0513 & G0513A40

Tools Needed

| | Qty |
|-----------------------------------|--------|
| Hex Wrench 5mm..... | 1 |
| Feeler Gauges 0.004", 0.016"..... | 1 Each |
| Fine Ruler..... | 1 |

To adjust the upper blade guides:

1. DISCONNECT MACHINE FROM POWER!
2. Loosen the thumb screws shown in **Figure 48**.

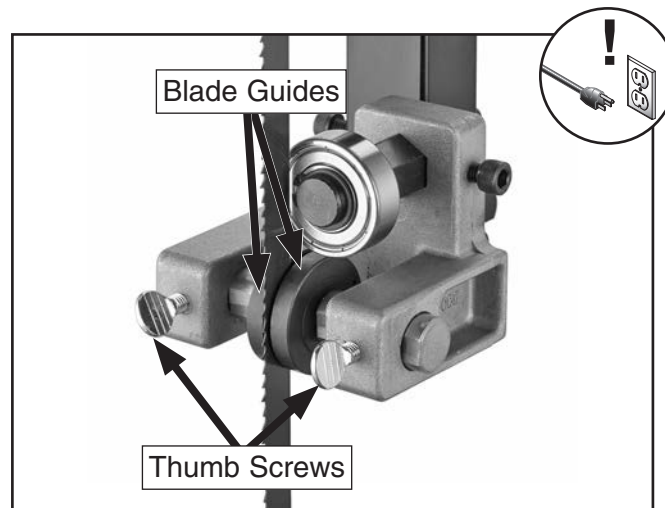


Figure 48. Upper blade guide components (guide post cover removed for clarity).

3. By hand, adjust the distance of the guides approximately 0.004" from the sides of the blade (see **Figure 49**), then re-tighten the thumb screws to secure the setting.

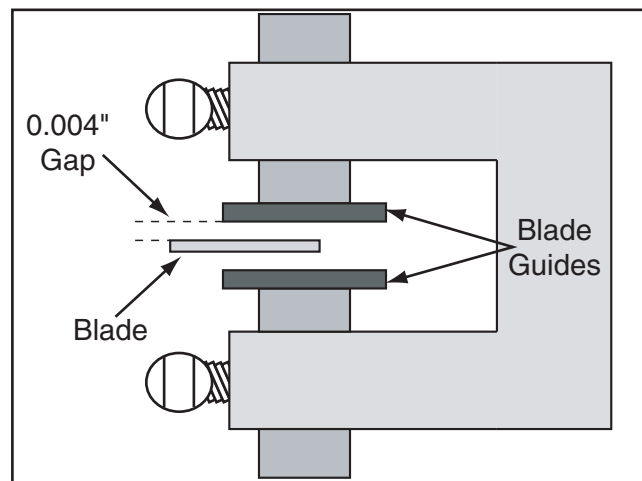


Figure 49. Correct gap between guide guides and blade.



- Loosen the guide block cap screw shown in **Figure 50**.

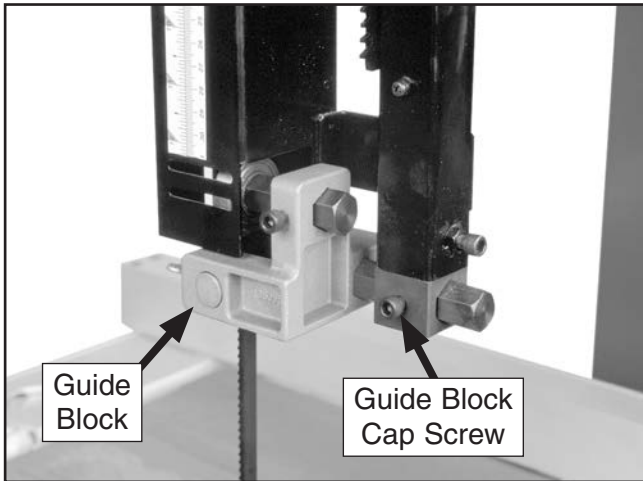


Figure 50. Back of upper blade guides.

- By hand, slide the guide block to position the blade guides approximately 0.016" behind the teeth gullets (see **Figure 51**), then re-tighten the guide block cap screw to secure the setting.

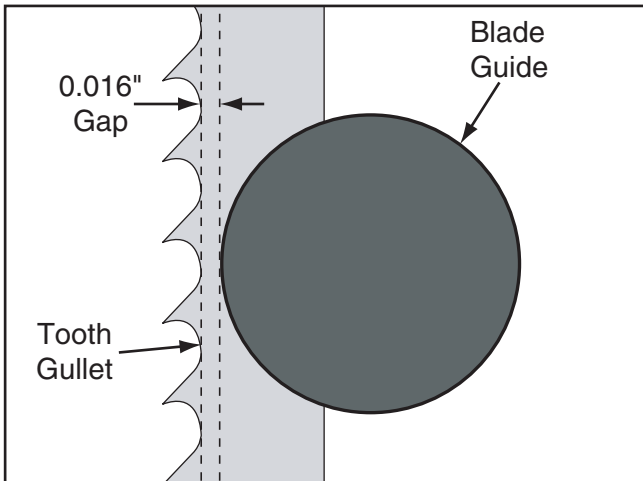


Figure 51. Correct guide alignment behind the teeth gullets.

NOTICE

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

The lower blade guides are adjusted in the same manner as the upper blade guides. However, some controls are different. Refer to **Figure 52** to become familiar with these controls.

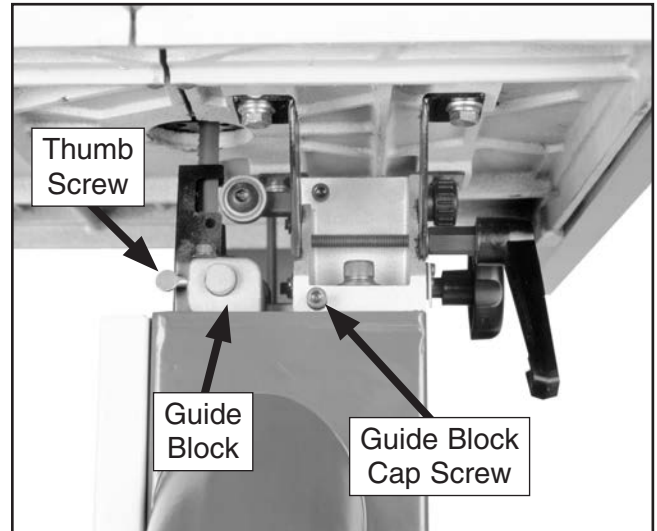


Figure 52. Lower blade guide controls.



Models G0513X2 & G0513X2BF

| Tools Needed | Qty |
|-----------------------------------|--------|
| Hex Wrench 5mm..... | 1 |
| Feeler Gauges 0.004", 0.016"..... | 1 Each |

Note: The upper and lower guide bearings are adjusted in the same manner.

To adjust the upper and lower blade guide bearings:

1. DISCONNECT MACHINE FROM POWER!
2. Familiarize yourself with the blade guide controls shown in **Figure 53**.

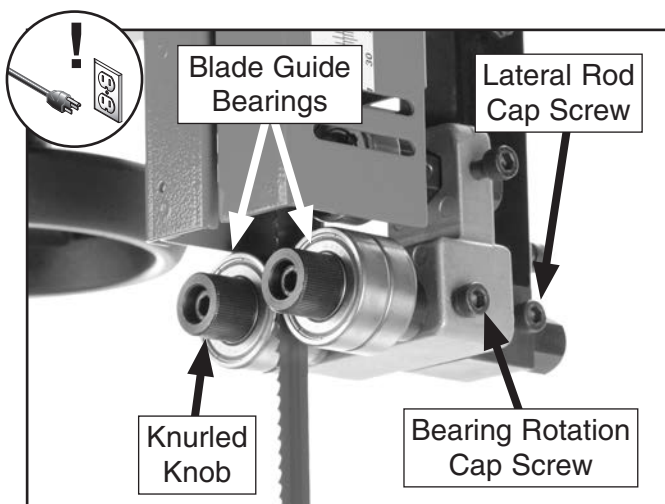


Figure 53. Blade guide controls.

NOTICE

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

3. Loosen the lateral rod cap screw and slide the guide block to position the blade guides approximately 0.016" behind the blade gullets, as illustrated in **Figure 54**.

Note: The 0.016" spacing is ideal, although with larger blades it may not be possible. In such cases, adjust the guide bearings as far forward as possible to the blade gullets, and still maintain the proper support bearing spacing adjustment.

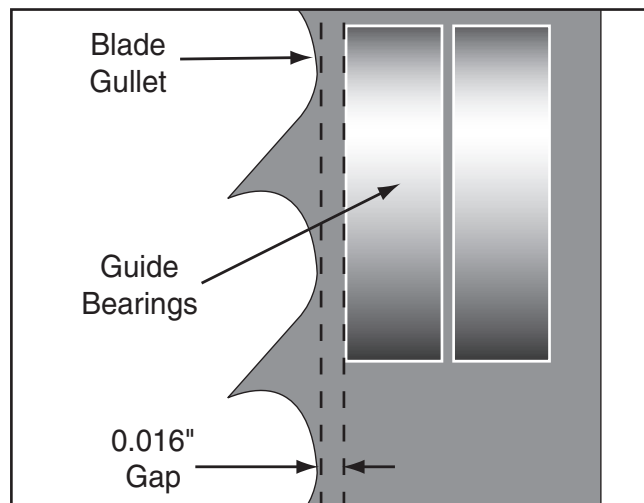


Figure 54. Lateral adjustment of blade guides.

4. Tighten the lateral rod cap screw to secure the setting.
5. Loosen both bearing rotation cap screws.
6. Rotate the knurled knob to position the bearings approximately 0.004" away from the blade.
7. Re-tighten the cap screws to lock the blade guide bearings in position.



Aligning Table

To ensure cutting accuracy, the table should be aligned so that the miter slot is parallel to the bandsaw blade, and that the table is perpendicular (front to back) to the blade. These procedures work best with a wide ($\frac{3}{4}$ ") blade installed.

| Tools Needed | Qty |
|----------------------------|-----|
| Straightedge | 1 |
| Fine Ruler | 1 |
| Square | 1 |
| Wrench or Socket 13mm..... | 1 |

Adjusting Miter Slot Parallelism

1. Make sure that the blade is tracking properly and that it is correctly tensioned (refer to **Pages 34–35**).
2. **DISCONNECT MACHINE FROM POWER!**
3. Place an accurate straightedge along blade so that it lightly touches both front and back of blade without going across a tooth (see **Figure 55**).
4. Use a fine ruler to measure the distance between the straightedge and the miter slot (see **Figure 55**). The distance should be the same at the front and the back of the table.
 - If the distance *is* the same at the front and back of the table, no adjustment is necessary; proceed to **Adjusting Table Perpendicular to Blade** on **Page 39**.
 - If the distance *is not* the same at the front and back of the table, it must be adjusted; proceed to **Step 5**.

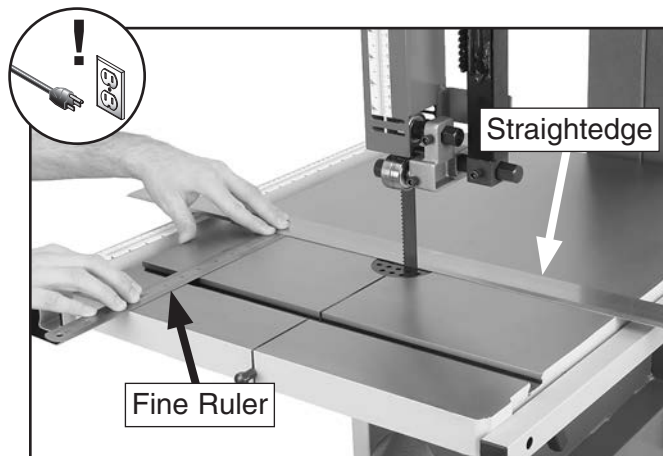


Figure 55. Checking miter slot parallelism.

5. Loosen trunnion bolts that secure table (see **Figure 56**).

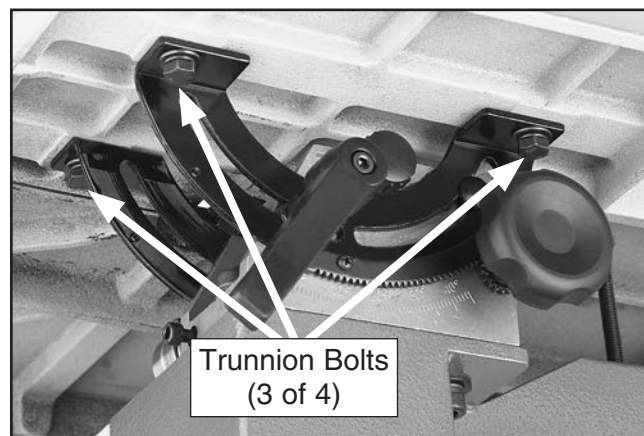


Figure 56. Location of trunnion bolts.

6. Adjust table until distance between straightedge and miter slot is the same at front and back of table.
7. Retighten trunnion bolts, then repeat **Step 4** to verify adjustment.



Adjusting Table Perpendicular to Blade

1. DISCONNECT MACHINE FROM POWER!
2. Place a square on the table and against the back of the blade, as shown in **Figure 57**. The table should be perpendicular to the back of the blade.
 - If the table *is* perpendicular to the back of the blade, no adjustment is necessary; proceed to **Aligning Fence** on **This Page**.
 - If the table *is not* perpendicular to the back of the blade, you must shim the table; proceed to **Step 3**.

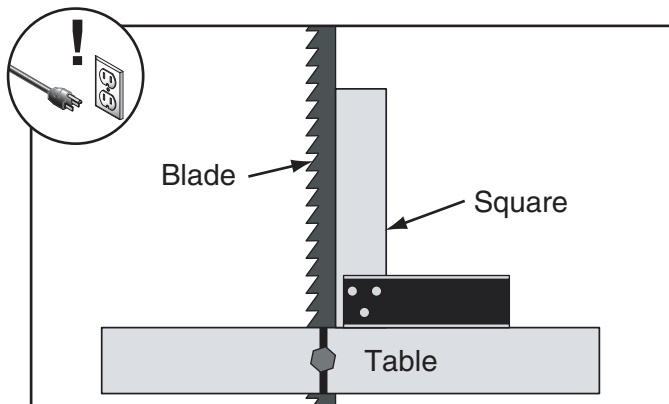


Figure 57. Squaring back of blade and table.

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

Aligning Fence

To ensure cutting accuracy, the fence should be aligned parallel with the blade. This is achieved by aligning the fence to the miter slot *after* miter slot parallelism is properly adjusted, as instructed on **Page 38**.

Note: Occasionally, even after aligning the fence, a symptom known as "blade lead" will develop, requiring the fence to be skewed slightly to compensate for the blade lead problem. Refer to **Blade Lead** on **Page 67** for more information on blade lead and skewing the fence.

Tools Needed

| | Qty |
|---------------------|-----|
| Hex Wrench 5mm..... | 1 |

Models G0513 & G0513A40

1. DISCONNECT MACHINE FROM POWER!
2. Make sure table is aligned with blade (see **Aligning Table** on **Page 38** for detailed instructions).
3. Install the fence next to the miter slot.
4. Loosen the four cap screws located on the top face of the fence (see **Figures 58–59**).



Figure 58. G0513 fence caps screws.





Figure 59. G0513A40 fence cap screws.

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

Model G0513X2BF

1. DISCONNECT MACHINE FROM POWER!
2. Make sure the table is aligned with the blade (see **Aligning Table** on **Page 38** for detailed instructions).
3. Install the fence and lock it in place next to the miter slot.
4. Loosen the end knobs and the center cap screw that secure the front rail to the table (see **Figure 60**).

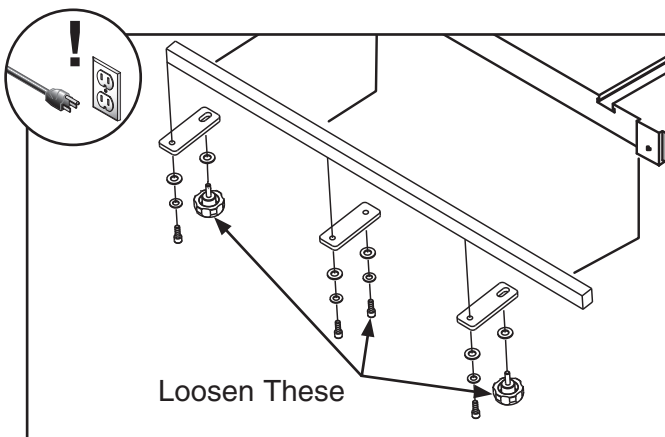


Figure 60. Loosen these knobs and cap screw.

5. Adjust the fence face parallel with the edge of the miter slot, as shown in **Figure 61**.



Figure 61. Example of fence parallel with miter slot.

6. Tighten the knobs and cap screw that secure the rail to the table, being careful not to move the fence.

Adjusting Positive Stop

The positive stop allows the table to be quickly and accurately returned to the horizontal (0°) position after being adjusted to a different angle.

| Tools Needed | Qty |
|---------------------------|------------|
| Machinist's Square | 1 |
| Open-End Wrench 13mm..... | 1 |

To adjust the positive stop:

1. DISCONNECT MACHINE FROM POWER!
2. Adjust the blade tension until the mark on the blade tension scale is between 4 and 6.
3. Loosen the hex nut that locks the positive stop bolt in place.



4. Raise the guide post and place a machinist's square on the table next to the side of the blade, as illustrated in **Figure 62**. Adjust the table square with the blade, then secure it with the table tilt lock lever.

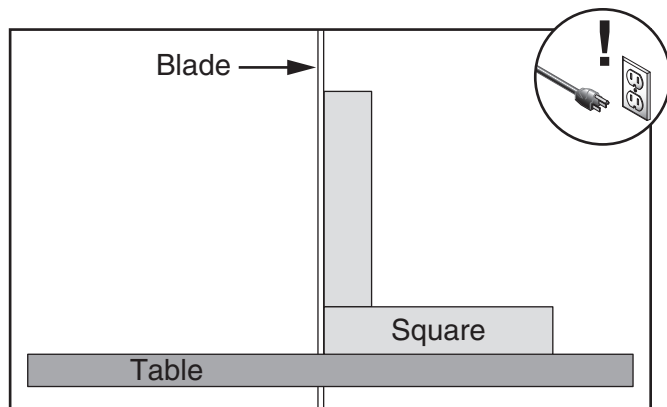


Figure 62. Squaring table to blade.

5. Adjust the positive stop bolt against the bottom of the table and secure it by tightening the hex nut against the trunnion bracket.
6. Check the adjustment for accuracy.
7. Loosen the screw on the pointer, but do not remove it.
8. Align the tip of the pointer with the 0° mark on the table tilt scale, then re-tighten the screw to secure the setting.

Calibrating Miter Gauge

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

| Tools Needed | Qty |
|------------------------------|-----|
| Square..... | 1 |
| Phillips Screwdriver #2..... | 1 |

To calibrate the miter gauge:

1. DISCONNECT MACHINE FROM POWER!
2. Place one edge of square against face of miter gauge and other edge of square against blade side, as shown in **Figure 63**.

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

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

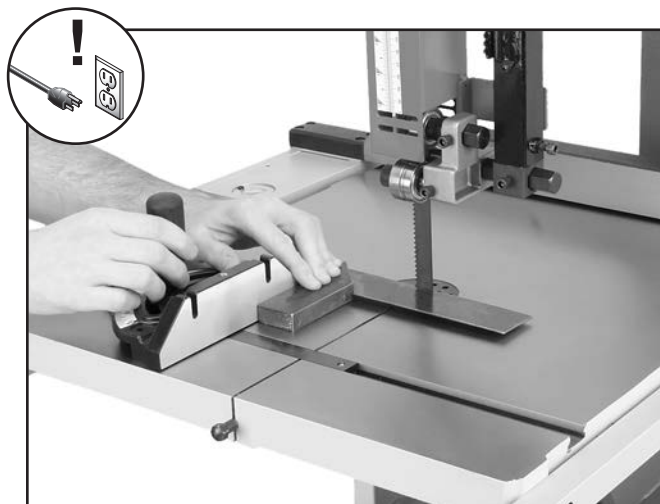


Figure 63. Squaring miter gauge to blade.

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

Note: Sometimes the tightening procedure can affect the adjustment.

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

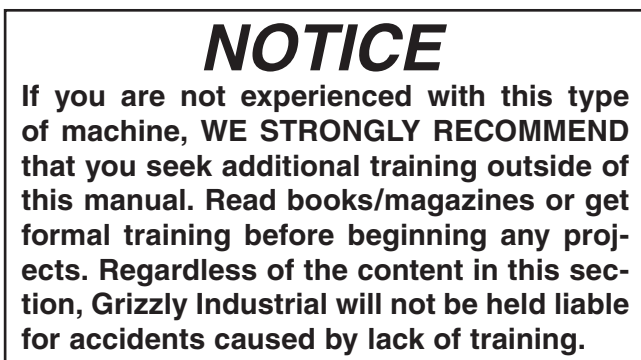
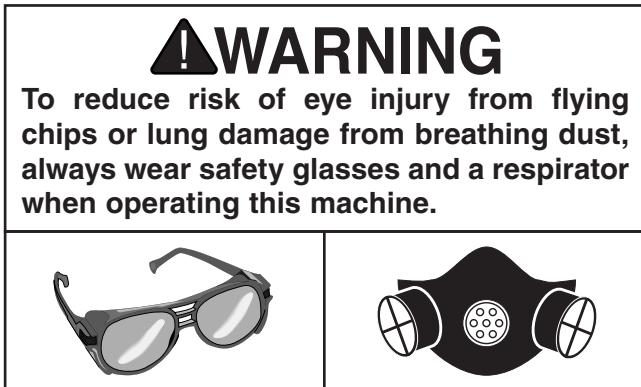


SECTION 4: OPERATIONS

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.



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

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

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



Disabling & Locking Switch (G0513, G0513A40, G0513X2)

The switch can be disabled and locked by inserting a padlock through the power button, as shown in **Figure 64**. Locking the switch in this manner can prevent unauthorized operation of the machine, which is especially important if the machine is not stored inside an access-restricted building.

IMPORTANT: Locking the switch with a padlock only restricts its function. It is not a substitute for disconnecting power from the machine when adjusting or servicing.

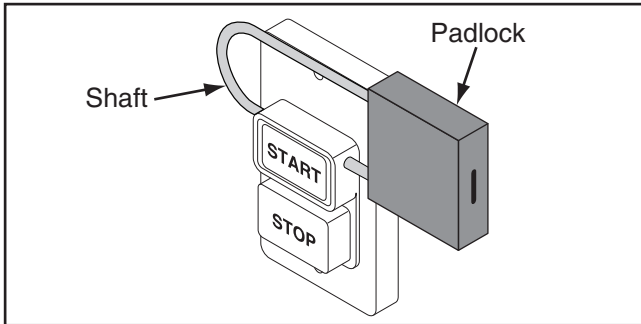


Figure 64. Switch disabled by a padlock.

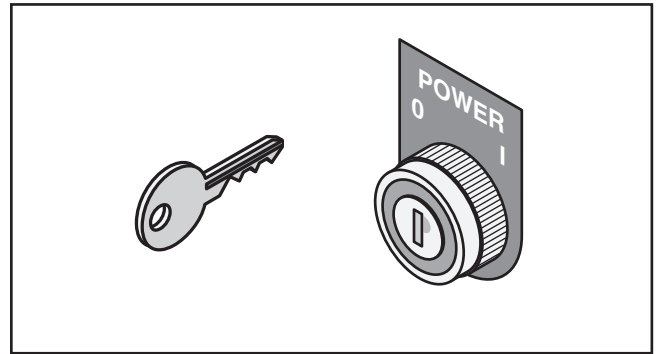
NOTICE

The padlock shaft diameter is important to the disabling function of the switch. With any padlock used to lock the switch, test the switch after installation to ensure that it is properly disabled.

Disabling & Locking Switch (G0513X2BF)

The power switch can be disabled and locked by removing the key, as shown. Locking the switch in this manner can prevent unauthorized operation of the machine, which is especially important if the machine is not stored inside an access-restricted building.

IMPORTANT: Locking the power switch with a key only restricts its function. It is not a substitute for disconnecting power from the machine when adjusting or servicing.



⚠ WARNING

Children or untrained people can be killed or seriously injured by this machine. This risk increases with unsupervised operation. To help prevent unsupervised operation, remove the key from the switch before leaving machine unattended! Place key in a well-hidden or secure location.



General Overview

The bandsaw is one of the most versatile wood cutting tools in the shop. It is capable of performing many different cutting functions including:

Straight Cuts

- Miters
- Angles
- Compound Angles
- Resawing
- Ripping
- Crosscutting

Irregular Cuts

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

A properly adjusted and tuned bandsaw can be safer to operate than most other saws and performs many functions with ease and accuracy.

Basic Cutting Tips

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

- Replace, sharpen, and clean blades as necessary and make adjustments periodically to keep the saw always running in top condition.
- Use a light and even feed rate while cutting. Light contact with the blade will permit easier line following and prevent undue friction.
- Avoid trying to turn tight corners because this will twist the blade. Remember, you must saw around corners.
- Misuse of the saw or using incorrect techniques is unsafe and results in frustration and poor cuts. Remember—the blade does the cutting with the operator's guidance.

Workpiece Inspection

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

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

- **Material Type:** This machine is intended for cutting natural and man-made wood products, and laminate covered wood products. Cutting drywall or cementitious backer board creates extremely fine dust, which may reduce the life of the bearings. This machine is NOT designed to cut metal, glass, stone, tile, etc.
- **Foreign Objects:** Nails, staples, dirt, rocks and other foreign objects are often embedded in wood. While cutting, these objects can become dislodged and hit the operator or break the blade, which might then fly apart. Always visually inspect your workpiece for these items. If they can't be removed, do NOT cut the workpiece.
- **Large/Loose Knots:** Loose knots can become dislodged during the cutting operation. Large knots can cause blade damage. Choose workpieces that do not have large/loose knots or plan ahead to avoid cutting through them.
- **Wet or "Green" Stock:** Cutting wood with a moisture content over 20% causes unnecessary wear on the blade and yields poor results.
- **Excessive Warping:** Workpieces with excessive cupping, bowing, or twisting are dangerous to cut because they are unstable and can move unpredictably when being cut. DO NOT cut excessively warped wood.
- **Minor Warping:** Workpieces with slight cupping can be safely supported if the cupped side faces the table or fence. On the contrary, a workpiece supported on the bowed side will rock during a cut, leading to loss of control.



Tilting Table

To make beveled cuts, the table can be tilted as indicated below:

| Model | Tilt Specifications |
|--------------------------|---------------------|
| G0513, G0513A40 | 10° left, 45° right |
| G0513X2, G0513X2BF | 5° left, 45° right |

A table tilt scale with pointer 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 **Figures 65–66**).

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.*

Models G0513 & G0513A40

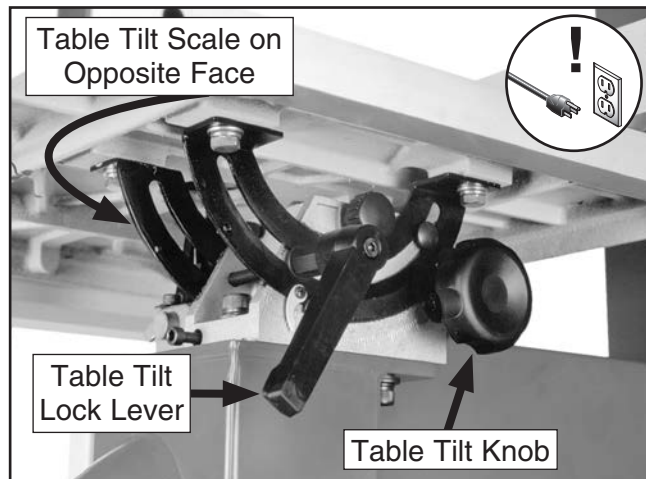


Figure 65. Table tilt controls (G0513 and G0513A40 rear view).

Models G0513X2 & G0513X2BF

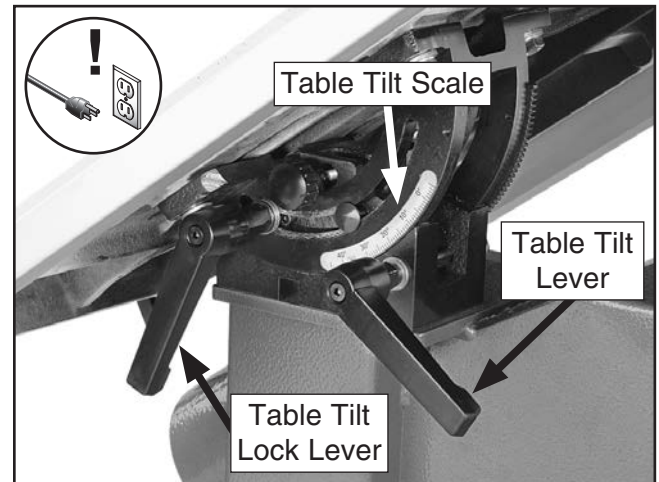


Figure 66. Table tilt controls (G0513X2 & G0513X2BF rear view).

To tilt the table:

1. DISCONNECT MACHINE FROM POWER!
2. Loosen the lock lever to enable table movement.
3. Use the table tilt knob/lever to adjust the angle of the table as displayed on the angle indicator scale.
4. Secure the table with the lock lever/knob before continuing operation.



Setting Upper Blade Guide Height

When cutting, the blade guides must always be positioned so they just clear (no more than $\frac{1}{4}$ ") the workpiece. The guide post, shown in **Figure 67**, allows the upper blade guide assembly to be quickly adjusted for height.

To adjust height of upper blade guides:

1. DISCONNECT MACHINE FROM POWER!
2. Loosen guide post lock knob (see **Figure 67**).

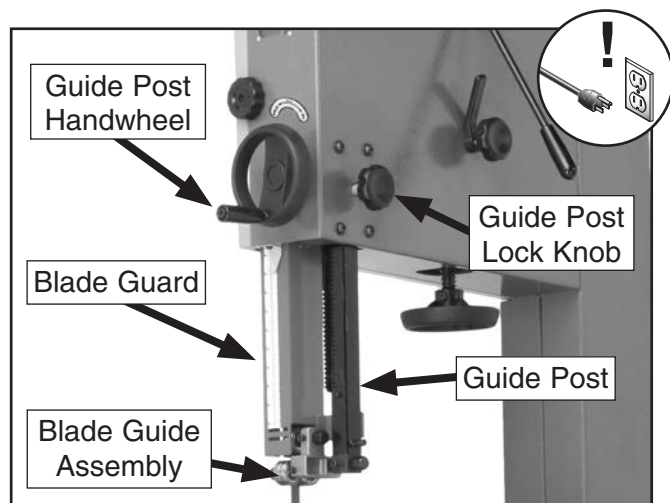


Figure 67. Guide post controls.

3. Use guide post elevation handwheel to adjust height of guide post so that blade guide assembly just clears (no more than $\frac{1}{4}$ ") workpiece.
4. Retighten lock knob to secure setting.

Blade Selection

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

Blade Terminology

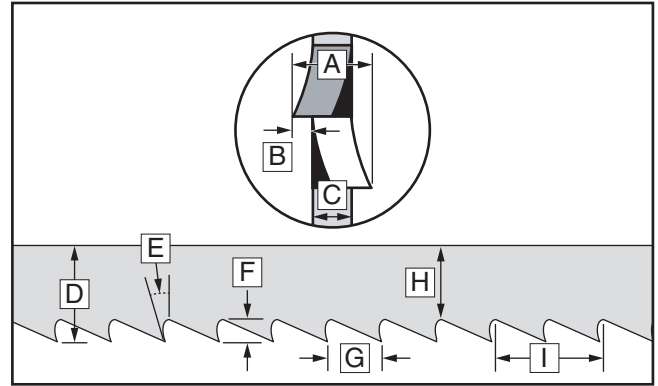


Figure 68. Bandsaw blade components.

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



Blade Dimensions

Length Range..... 130¹/₂"–131¹/₂"
 Width Range..... ¹/₈"–1"

Blade Length

Measured by the blade circumference, blade lengths are specific to each bandsaw. They are determined by the wheel diameter and distance between the wheels. Blades will vary slightly even in the same length because of how they are welded. Refer to the **Accessories** section later in this manual for blade replacements from Grizzly.

Blade Width

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

- **Curve Cutting:** Use the chart in **Figure 69** to determine the correct blade for curve cutting. Determine the smallest radius curve that will be cut on your workpiece and use the corresponding blade width (refer to **Cutting Curves** on **Page 56** for more information).

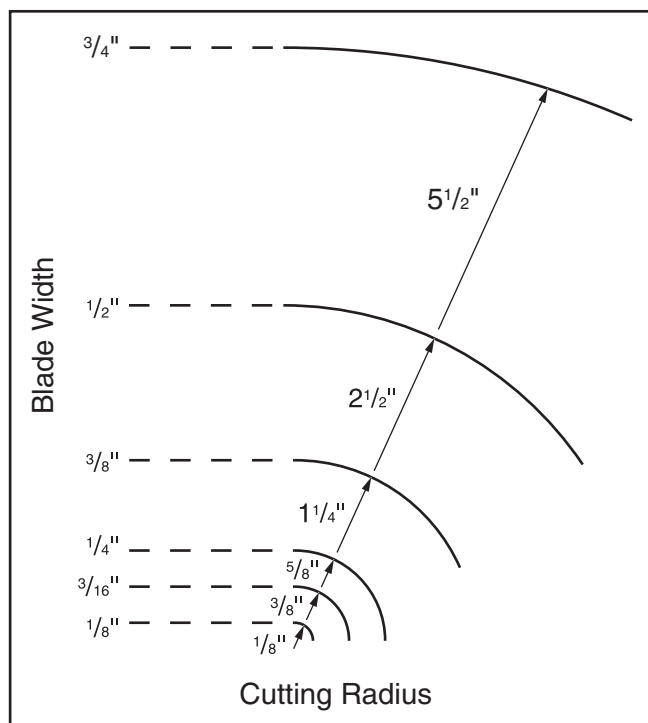


Figure 69. Recommended cutting radius per blade width.

- **Straight Cutting:** Use the largest width blade that you own. Large blades excel at cutting straight lines and are less prone to wander (known as blade lead—refer to **Page 67** for more information on blade lead).

Tooth Style

Figure 70 illustrates the three main blade tooth styles:

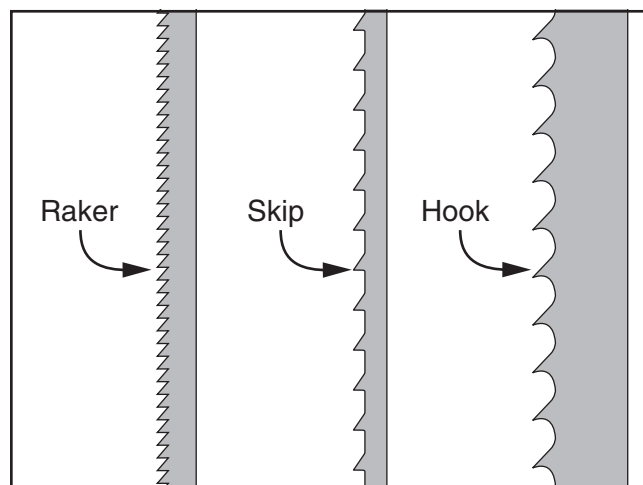


Figure 70. Main blade tooth styles.

- **Raker:** Considered to be the standard because the tooth size and shape are the same as the tooth gullet. The teeth on raker blades usually are very numerous, have no angle, and produce cuts by scraping the material. As a result, smooth cuts can be achieved without cutting fast or generating more heat than other tooth types.
- **Skip:** Similar to a raker blade that is missing every other tooth. Because of the design, skip toothed blades have a much larger gullet than raker blades, and therefore, cut faster and generate less heat. However, these blades also leave a rougher cut than raker blades.
- **Hook:** The teeth have a positive angle (downward) which makes them dig into the material, and the gullets are usually rounded for easier waste removal. These blades are excellent for the tough demands of resawing and ripping thick material.



Tooth Pitch

Measured as TPI (teeth per inch), tooth pitch determines the number of teeth. More teeth per inch (fine pitch) will cut slower, but smoother; while fewer teeth per inch (coarse pitch) will cut rougher, but faster. As a general rule, choose blades that will have at least three teeth in the material at all times. Use fine-pitched blades on harder woods and coarse-pitched blades on softer woods.

Tooth Set

Two common tooth sets for wood bandsaw blades are alternate and raker. Each different type of tooth set removes material in a different manner, leaving cuts with different characteristics (see **Figure 71**).

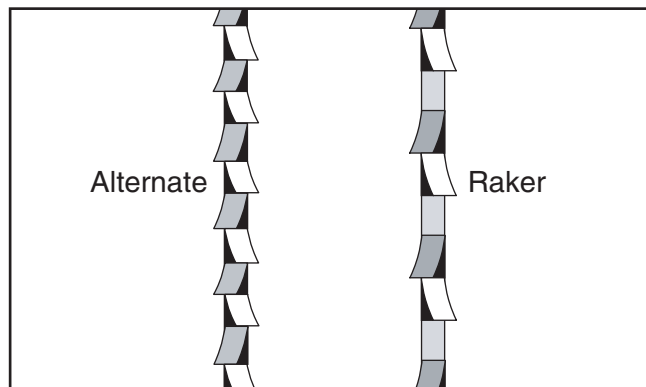


Figure 71. Common woodcutting bandsaw blade tooth sets.

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

Blade Material

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

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

Carbide Tooth: Extremely hard carbide is either welded onto or impregnated into the carbon steel blades, providing superior edge-holding characteristics (see **Figure 72**).

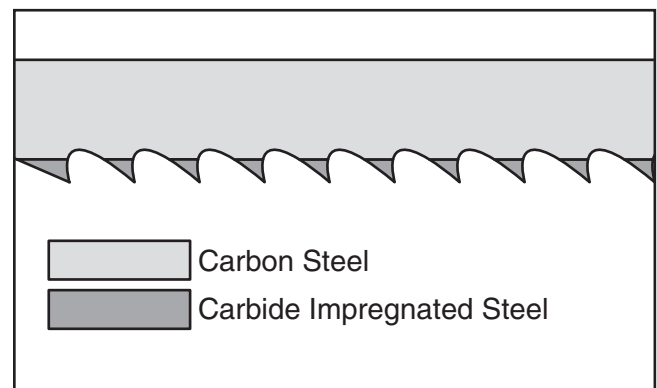


Figure 72. Carbide-tooth blade composition.

Bi-metal Blade: A strip of high-speed tool steel is precision welded to a flexible carbon blade, then teeth are ground into the blade to provide good edge-holding qualities for blades taking a lot of abuse (see **Figure 73**).

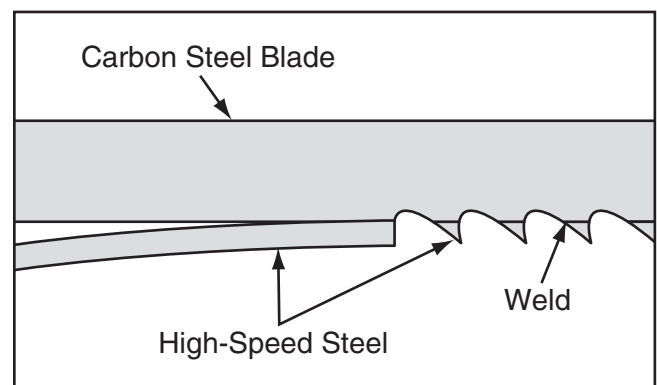








































Figure 73. Bi-metal blade composition.



Blade Selection Chart

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

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

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



Blade Care & Break-In

Blade Care

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

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

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

Blade Break-In

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

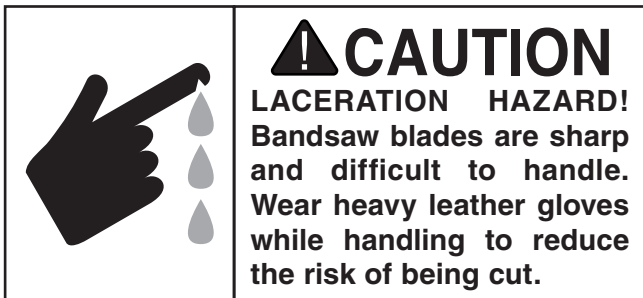
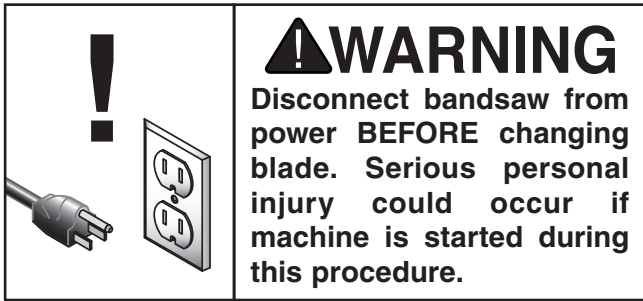
Blade breakage is also due to avoidable circumstances. Avoidable blade breakage is most often the result of poor care or judgement on the part of the operator when mounting or adjusting the blade or support guides.

The most common causes of blade breakage are:

- Faulty alignment or adjustment of the blade guides.
- Forcing or twisting a wide blade around a short radius.
- Feeding the workpiece too fast.
- Dull or damaged teeth.
- Over-tensioned blade.
- Top blade guide assembly set too high above the workpiece. Adjust the top blade guide assembly so that there is approximately $\frac{1}{8}$ "– $\frac{1}{4}$ " between the bottom of the assembly and the workpiece.
- Using a blade with a lumpy or improperly finished braze or weld.
- Continuously running the bandsaw when not in use.
- Leaving the blade tensioned when not in use.
- Using the wrong pitch (TPI) for the workpiece thickness. The general rule of thumb is to have not less than two teeth in contact with the workpiece at all times during cutting.



Changing Blade



Blade changes entail removing the existing blade, installing the new blade, then properly adjusting the blade tension and tracking.

Removing Blade

1. DISCONNECT MACHINE FROM POWER!
2. Release blade tension by turning blade tension quick-release lever to the left (see **Figure 74**).
3. Remove table insert and table pin (see **Figure 74**). Adjust upper and lower guide bearings as far away from blade as possible.

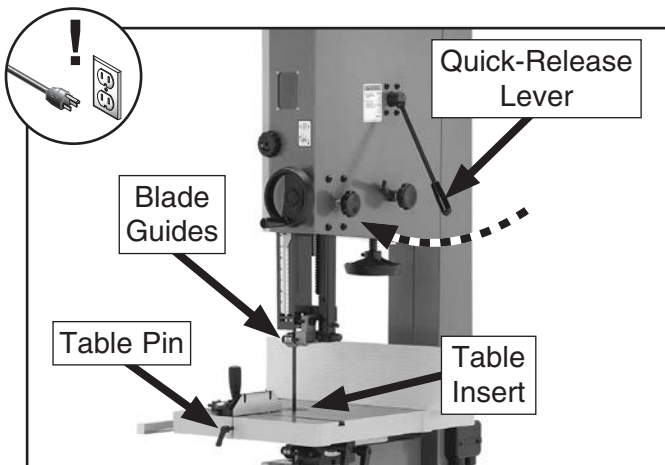


Figure 74. Blade changing controls (G0513X2 shown).

4. Open the upper and lower wheel covers, and with gloved hands, slide the blade off of both wheels.
5. Rotate the blade 90° and slide it through the slot in the table to remove it.

Installing Blade

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

Note: If the teeth will not point downward in any orientation, the blade is inside-out. Remove the blade, and twist it right side-out.
3. Slip the blade through the blade guides, and mount it on the upper and lower wheels (see **Figure 75**).

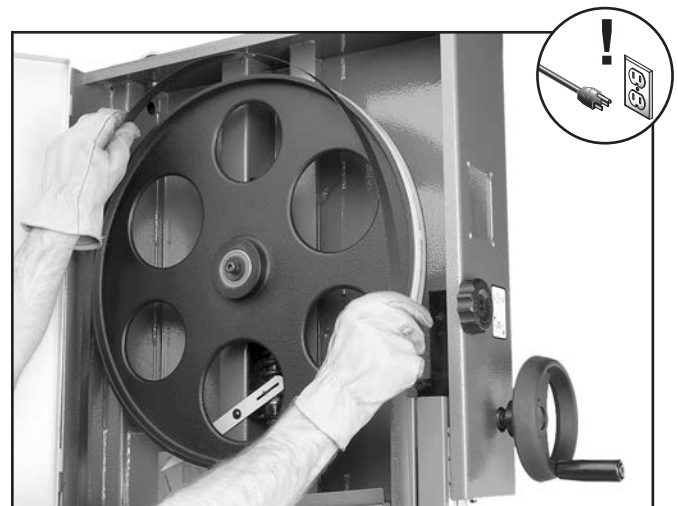


Figure 75. Placing blade on the wheels.

4. Tighten the blade tension lever.
5. Adjust the blade tension (refer to **Page 32**) and blade tracking (refer to **Page 33**).
6. Adjust the upper/lower guides and the support bearings (refer to instructions beginning on **Page 34**).
7. Close the wheel covers.
8. Replace the table insert and table pin.



Changing Blade Speed

The blade speed can be adjusted to 1700 or 3500 FPM. Speed adjustments are made by moving the V-belt position on the motor and wheel pulleys.

Most woodcutting can be performed successfully at the higher blade speeds. Slower blade speeds generally produce better results when cutting hardwoods, intricate curves, or when an exceptionally smooth cut is desired.

Use the chart below as a general guide to blade speed:

| Type of Cutting Operation | Blade Speed (FPM) |
|---------------------------|-------------------|
| Most Species of Wood | 3500 |
| Super Dense Hardwood | 1700 |
| Fast/Average Feed Rate | 3500 |
| Requires Slow Feed Rate | 1700 |
| Rough Edges Acceptable | 3500 |
| Requires Smooth Edges | 1700 |
| Quick, Production Cuts | 3500 |
| Detailed, Intricate Cuts | 1700 |

| Tool Needed | Qty |
|---------------------|-----|
| Hex Wrench 8mm..... | 1 |

To adjust the blade speed:

1. DISCONNECT MACHINE FROM POWER!
2. Loosen motor mount cap screws (see **Figure 76**), and rotate motor to loosen the V-belt.



Figure 76. Motor mount cap screws.

3. Refer to **Figure 77** to locate the correct V-belt position for the desired blade speed and move the V-belt to the indicated pulleys.

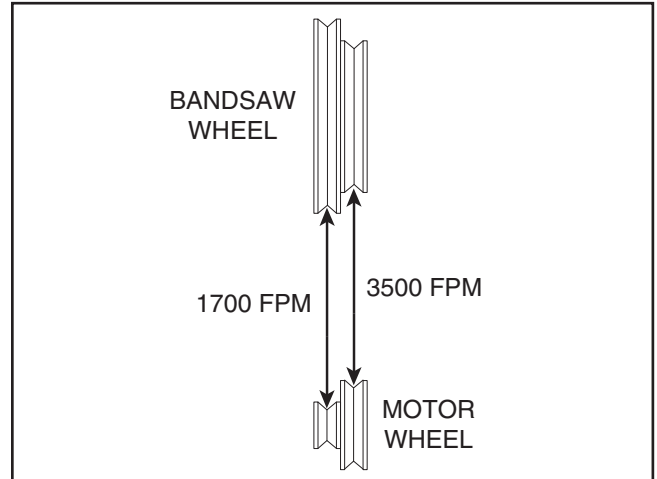


Figure 77. V-belt speeds.

4. Rotate the motor to tension the V-belt, then tighten the motor mount cap screws.
5. Check the V-belt tension by applying moderate pressure between the pulleys (see **Figure 78**). If deflection is not approximately $\frac{3}{4}$ ", re-tension the V-belt until it is.

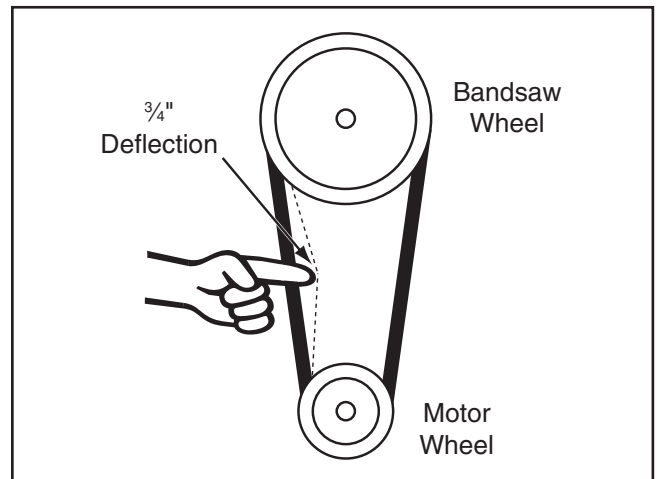


Figure 78. V-belt deflection.



Ripping

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

To make a rip cut:

1. Adjust fence to match width of cut on your workpiece, then lock fence in place.
2. Adjust blade guide assembly to proper height above workpiece.
3. After all safety precautions have been met, turn bandsaw **ON** and wait for it to come to full speed. Slowly feed workpiece into blade until blade is completely through workpiece. **Figure 79** shows an example of a ripping operation.

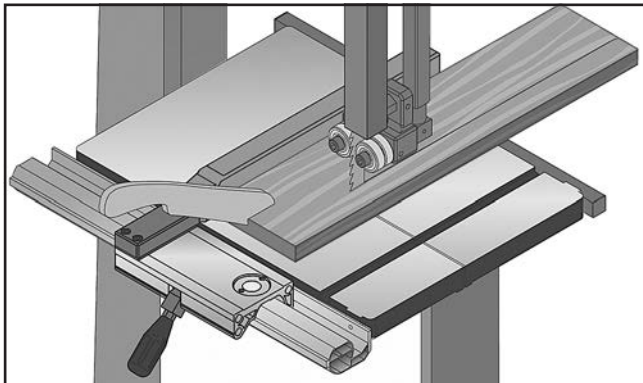


Figure 79. Example of a ripping operation.

!WARNING

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

!WARNING

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

Crosscutting

Crosscutting is the process of cutting across the grain of wood. For plywood and other processed wood, crosscutting simply means cutting across the width of the material. Crosscuts can be 90° or angled using the miter gauge. Compound crosscuts are those where the miter is angled and the table tilted.

To make a crosscut:

1. Mark workpiece on edge where you want to begin cut.
2. Adjust blade guide assembly to proper height above workpiece.
3. Adjust miter gauge to correct angle needed for cut.
4. Move fence out of the way. Place workpiece evenly against miter gauge, then line up mark with blade.
5. After all safety precautions have been met, turn bandsaw **ON** and wait for it to come to full speed. Slowly feed workpiece into blade until blade is all the way through workpiece. **Figure 80** shows an example of a crosscutting operation.

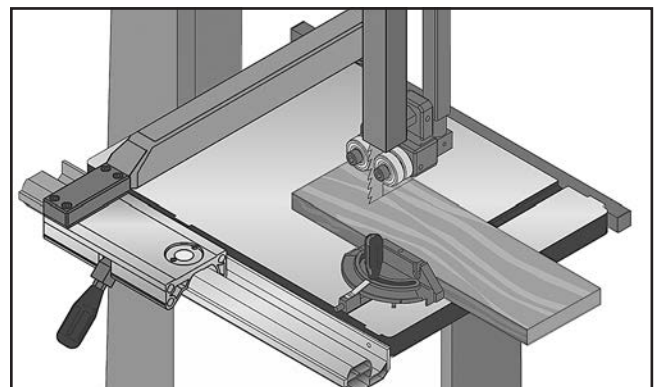


Figure 80. Example of a crosscutting operation with the miter gauge.



Resawing

"Resawing" means cutting the thickness of a board into two or more thinner boards (see **Figure 81** for an example). The maximum height of a board that can be resawn is limited by the maximum cutting height of the bandsaw.

One of the most important considerations for resawing is blade selection—a wide blade cuts straighter and is less prone to blade lead (see **Blade Lead** on **Page 67** for more details).

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

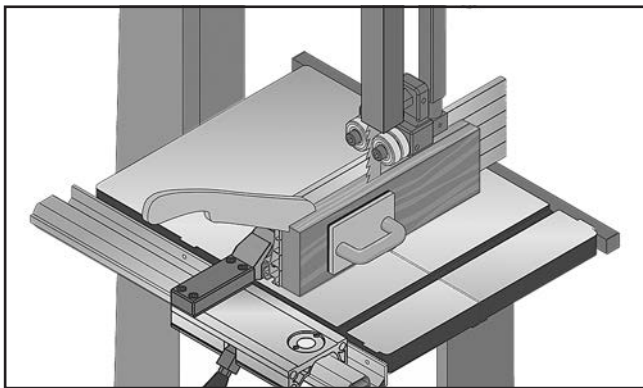


Figure 81. Example of a resawing operation.

!WARNING

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

Using Resaw Fence

Models G0513A40, G0513X2, and G0513X2BF include a resaw fence.

To use resaw fence:

1. Verify bandsaw is set up properly, and table is perpendicular to blade.

2. Use widest blade the bandsaw will accept.
3. Install resaw fence (see **Figure 82**), set it to desired width of cut, and lock it in place.

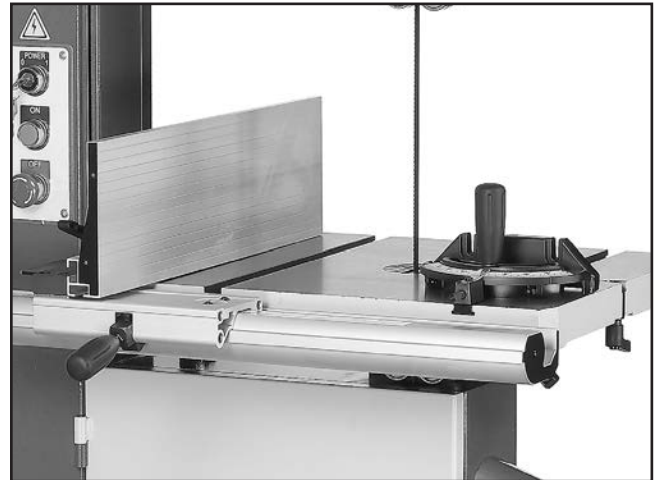


Figure 82. Resaw fence mounted in vertical position.

Note: When resawing thin workpieces, set up resaw fence in horizontal position, as shown in **Figure 83**.

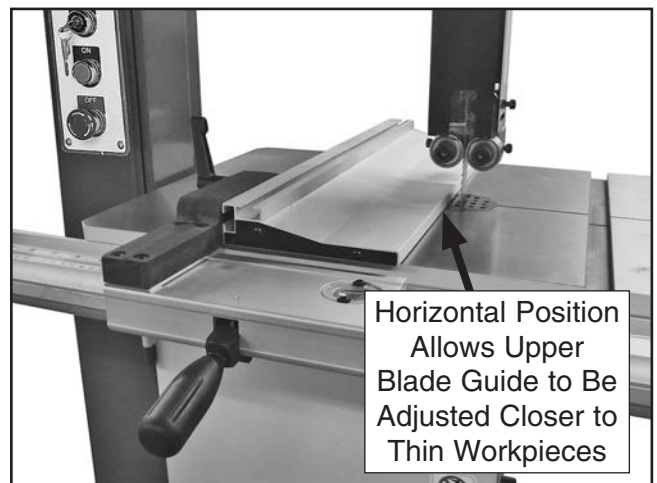


Figure 83. Fence mounted in horizontal position.

4. Support ends of board as necessary.
5. Turn machine **ON**.
6. Using push paddles and a push stick, keep pressure against fence and table, and slowly feed workpiece into moving blade until blade is completely through workpiece.



Using Drift Bar

Model G0513A40 includes a drift bar that installs on the resaw fence and is designed to help reduce blade lead by creating a pivot point that provides more control during resaw operations.

To use drift bar:

1. Secure drift bar on resaw fence with adjustable handle. Make sure drift bar is flat against fence face and is straight up and down.
2. Slide resaw fence over moving plate on fence assembly and tighten lock handle.
3. Move resaw fence up to blade so center of drift bar is set approximately $\frac{1}{4}$ " forward of blade teeth (see **Figure 84**).

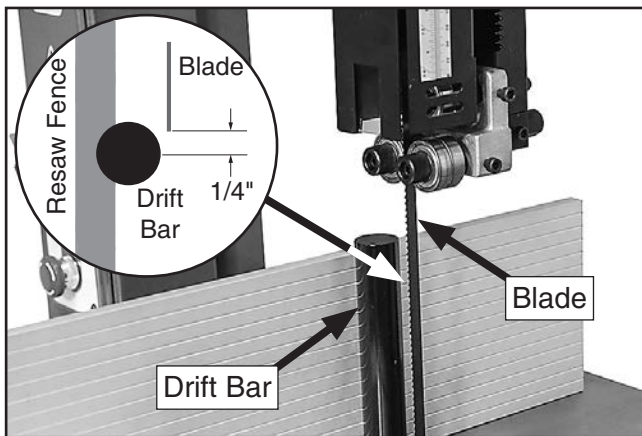


Figure 84. Resaw fence with drift bar installed.

4. Mark reference cut line along top of workpiece (see **Figure 85**).
5. Lower bandsaw blade guides as close to workpiece as possible (see **Figure 85**).
6. Adjust resaw fence so blade aligns with mark made in **Step 4** and center of drift bar is set $\frac{1}{4}$ " forward of blade teeth (see **Figure 85**).

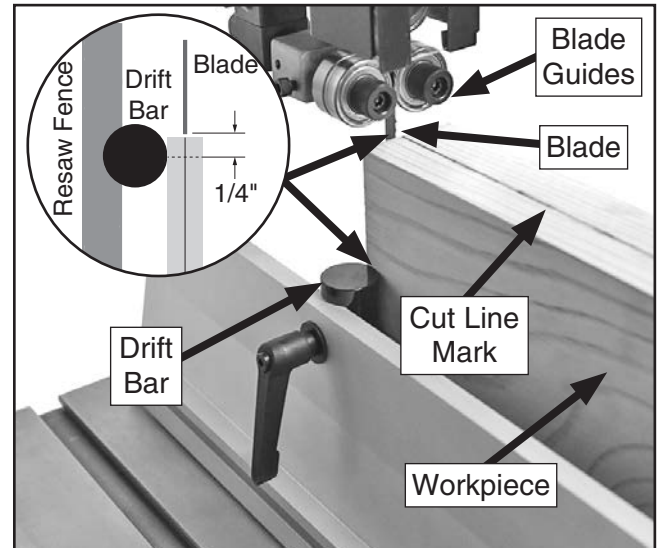


Figure 85. Workpiece positioned to cut using resaw fence with drift bar.

7. Lock rip fence and resaw fence in position.
8. If necessary for cutting operation, support ends of board with saw stand or roller stand.
9. Turn bandsaw **ON**.
10. Slowly feed workpiece completely through blade. Use drift bar as a pivot point to control cut, as shown in **Figure 86**.

Note: The drift bar allows you to steer your workpiece while cutting to quickly correct blade lead and keep blade aligned with cut line.

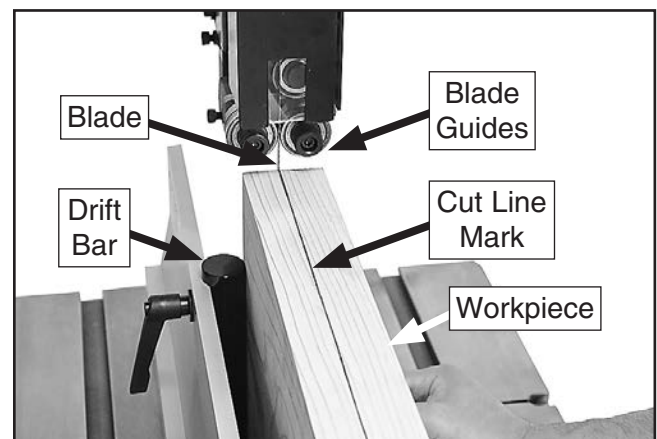


Figure 86. Resawing with drift bar.



Cutting Curves

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

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

NOTICE

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

| Width | Min. Radius |
|-------|-------------|
| 1/8" | 1/8" |
| 3/16" | 3/8" |
| 1/4" | 5/8" |
| 3/8" | 1 1/4" |
| 1/2" | 2 1/2" |
| 5/8" | 3 3/4" |
| 3/4" | 5 1/2" |

Stacked Cuts

One of the benefits of a bandsaw is its ability to cut multiple copies of a particular shape by stacking a number of workpieces together. However, before making stacked cuts, ensure that the table is perpendicular (90°) to the blade—otherwise, any error in this setting will be compounded in the workpieces.

To complete a stacked cut:

1. Align workpieces from top to bottom.
2. Secure all pieces together in a manner that will not interfere with cutting. Hot gluing along edges works well, as does brad nailing through waste portion. (Be careful not to cut into brads or you may break blade!)
3. Lay out shape you intend to cut on face of top piece.
4. Make relief cuts perpendicular to outline of your intended shape in areas where changes in blade direction could strain woodgrain or cause blade to bind.
5. Cut stack of pieces along your layout line as though you were cutting a single piece (see **Figure 87** for an example of a stacked cut setup).

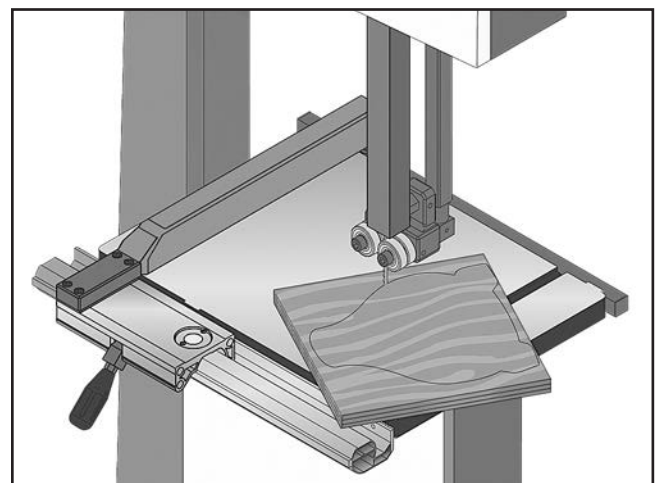


Figure 87. Example of a stacked cut setup.



SECTION 5: ACCESSORIES

!WARNING

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

NOTICE

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

131½" Carbon Steel Replacement Blades

| Model | Width | TPI | Type | Gauge |
|-------|-------|-----|-------|-------|
| H4803 | 1/8" | 14 | Raker | 0.025 |
| H4804 | 1/4" | 6 | Hook | 0.025 |
| H4805 | 1/4" | 18 | Raker | 0.025 |
| H4806 | 3/8" | 10 | Raker | 0.025 |
| H4807 | 1/2" | 6 | Hook | 0.025 |
| H4808 | 1/2" | 10 | Raker | 0.025 |
| H4809 | 3/4" | 3 | Hook | 0.032 |
| H4810 | 1" | 6 | Hook | 0.035 |
| H4811 | 1" | 2 | Hook | 0.035 |

131½" Timber Wolf Carbon Steel Blades

| Model | Width | TPI | Type | Gauge |
|-------|-------|-----|-----------|-------|
| H8591 | 1/8" | 14 | HP | 0.025 |
| H8592 | 1/4" | 4 | Pos. Claw | 0.025 |
| H8593 | 1/4" | 10 | Raker | 0.025 |
| H8594 | 3/8" | 4 | Pos. Claw | 0.025 |
| H8595 | 3/8" | 10 | Raker | 0.025 |
| H8596 | 1/2" | 3 | Pos. Claw | 0.025 |
| H8597 | 1/2" | 10 | Raker | 0.025 |
| H8598 | 3/4" | 3 | Thin | 0.025 |
| H8599 | 1" | 3 | Pos. Claw | 0.035 |

T1194—Resaw Fence with Drift Bar

Designed to help reduce blade lead (cut drift) by creating a pivot point that provides more control during resaw operations. The Model T1194 fits the following Grizzly bandsaws:

- G0457
- G0513X
- G0513X2
- G0513X2F
- G0513X2B
- G0513X2BF
- G0514X
- G0514X2
- G0514X2B
- G0514X3
- G0514XF
- G0531B
- G0555X
- G0566B
- G0569
- G0636X
- G0636XB
- G0640X
- G0701
- G0778
- G0817

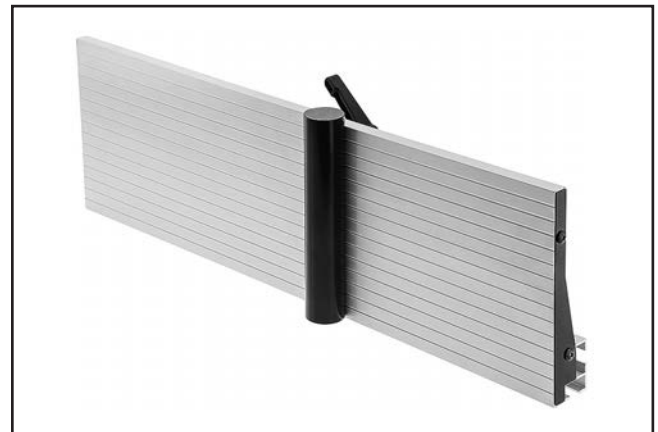


Figure 88. Model T1194 Resaw Fence w/Drift Bar.

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



T26403—The Missing Shop Manual: Bandsaw

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

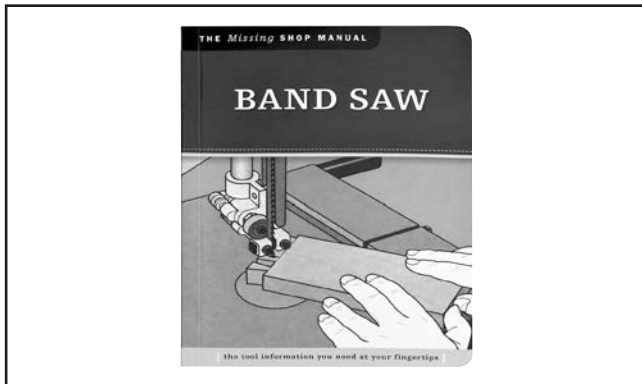


Figure 89. The Missing Shop Manual: Bandsaw.

Recommended Metal Protectants

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



Figure 90. Recommended products for protecting unpainted cast iron/steel part on machinery.

Basic Eye Protection

- T20501—Face Shield Crown Protector 4"
- T20502—Face Shield Crown Protector 7"
- T20503—Face Shield Window
- T20451—"Kirova" Clear Safety Glasses
- T20456—DAKURA Safety Glasses, Black/Clear
- T28175—S3960HS Stealth Safety Glasses



Figure 91. Assortment of basic eye protection.

D2057A—Heavy-Duty SHOP FOX® Mobile Base

This patented base is the most stable on the market with outrigger type supports. Adjusts from 20" x 20½" to 29½" x 29½". 1000 lb. capacity. Weighs 34 lbs.

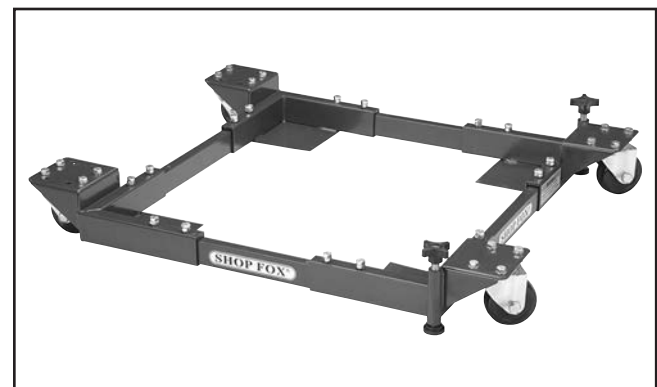


Figure 92. D2057A SHOP FOX® Mobile Base.

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



T26544—LED Light w/Mag Base & Flex Arm

This high intensity LED flashlight is ultra-bright and zoomable, allowing you to focus or disperse the light. Has three modes: high beam, low beam, and an emergency flash. Fish eye lens is 1x2000 zoom. Also features a powerful 40 lb. magnetic base, so you can attach this wherever you need light. Base has a 9" flexible clamp arm for additional mobility. Includes the LED light, base, plate, and 3 AAA batteries.



Figure 93. T26544 LED Light with Base and Flexible Arm.

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

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



Figure 94. T26419 Syn-O-Gen Synthetic Grease.

D2272—Tilting Roller Stand

Adjusts from 26" to 44", 0°-45°. 150 lb. capacity.

D2273—Single Roller Stand

Adjusts from 26½" to 45". 250 lb. capacity.

D2274—5 Roller Stand

Adjusts from 26" to 44⅝". 250 lb. capacity.

These super heavy-duty roller stands feature convenient hand knobs for fast height adjustment.



Figure 95. SHOP FOX® roller stands.

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

This Heavy-Duty Anti-Fatigue Mat features beveled edges and no-slip tread for safety and comfort. Open-hole design allows liquid to drain through, so it's perfect for wet or oily conditions. Measures 3' wide x 5' long x ⅜" thick.

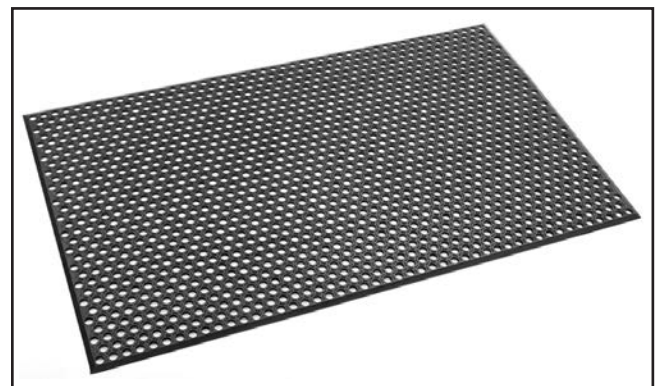


Figure 96. Model T10456 Anti-Fatigue Mat.



SB1094—5 HP Cyclone Dust Collector

The Model SB1094 features a 5 HP motor, a whopping 2399 CFM of airflow capacity, and a 60-gallon collection capacity. It's packed with features like a built-in sound muffler, an automatic filter paddle brush for easy cleaning, a remote-controlled magnetic switch, and a quick-release lift handle for easy sawdust disposal.



Figure 97. SB1094 5 HP Cyclone Dust Collector.

D4206—Clear Flexible Hose 4" x 10'

D4256—45° Elbow 4"

D4216—Black Flexible Hose 4" x 10'

W1034—Heavy-Duty Clear Flex Hose 4" x 10'

D2107—Hose Hanger 4¹/₄"

W1015—Y-Fitting 4" x 4" x 4"

W1017—90° Elbow 4"

W1019—Hose Coupler (Splice) 4"

W1317—Wire Hose Clamp 4"

W1007—Plastic Blast Gate 4"

W1053—Anti-Static Grounding Kit

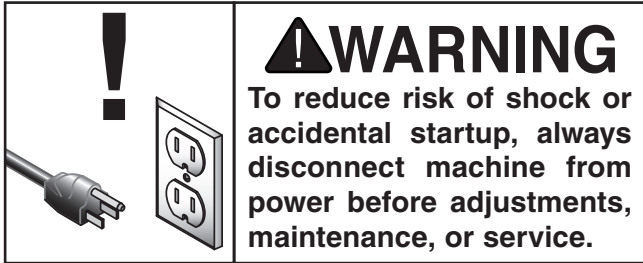
We've hand picked a selection of commonly used dust collection components for machines with 4" dust ports.



Figure 98. Dust collection accessories.



SECTION 6: MAINTENANCE



Schedule

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

Ongoing

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

- Loose mounting bolts.
- Worn or damaged saw blade.
- Worn or damaged wires.
- Check/clean wheel brush.
- Clean/protect table surface.
- Check lubrication points.
- Any other unsafe condition.

Monthly Check

- V-belt tension, damage, or wear.
- Clean/vacuum dust buildup from inside cabinet and off motor.

Wheel Brush

The bandsaw is equipped with a lower wheel brush to keep saw dust from building up on the tire. The brush should be checked daily and cleaned when it becomes dirty.

There is an adjustment bracket that allows the brush to be adjusted for bristle wear (refer to **Adjusting Wheel Brush** on **Page 68** for detailed instructions).

Cleaning & Protecting

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

Protect the unpainted cast iron surfaces on the table by wiping it clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces. Keep the table rust-free with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9 (see **Page 58** for more details).

Lubrication

An essential part of lubrication is cleaning the components before lubricating them. This step is critical because dust and chips build up on lubricated components, which makes them hard to move. Simply adding more grease to built-up grime will not result in smooth moving parts. Clean the components in this section with an oil/grease solvent cleaner or mineral spirits before applying lubrication.

All bearings are sealed and permanently lubricated. Leave them alone until they need to be replaced.

Blade Post Rack & Pinion

Lubrication Type ... T26419 or NLGI#2 Equivalent
Amount Thin Coat
Frequency As Needed

To lubricate the blade post rack and pinion:

1. DISCONNECT MACHINE FROM POWER!
2. Lower blade guides until they reach the table.



- Using a rag and mineral spirits, wipe off any existing grease and sawdust build-up on the rack (see **Figure 99**).

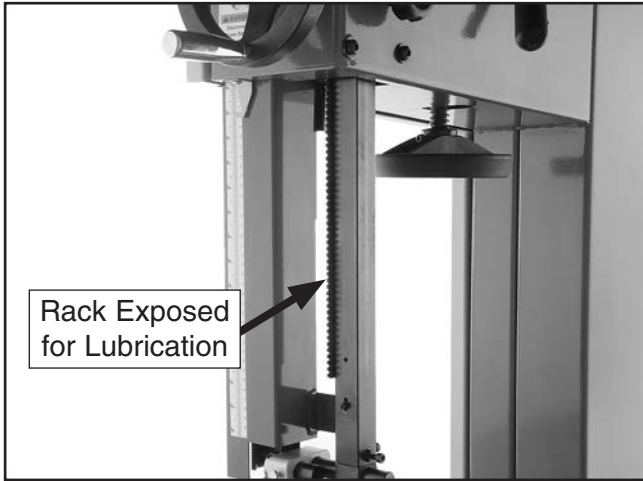


Figure 99. Example of rack lubrication location.

- Apply a thin coat of lubricant to the rack.
- Move the blade post up and down several times to distribute the lubricant, then remove any excess grease to help reduce potential sawdust build-up.

Tension Adjustment Assembly

Lubrication Type ... T26419 or NLGI#2 Equivalent
 Amount Thin Coat
 Frequency As Needed

To lubricate tension adjustment assembly:

- DISCONNECT MACHINE FROM POWER!
- Open the top wheel cover and look through the top of the wheel.
- Using a rag and mineral spirits, wipe off any existing grease and sawdust build-up on the blade tension adjustment assembly and tension lever cam.

- Apply a thin coat of lubricant to the tension adjustment assembly and tension lever cam (see **Figure 100**).

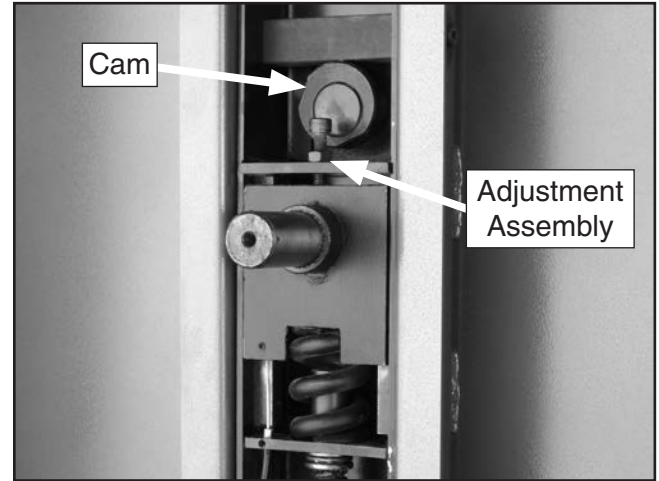


Figure 100. Example of tension adjustment assembly locations (top wheel removed for clarity).

Trunnions

Models G0513 and G0513A40 have steel trunnions that can be cleaned and lubricated with NLGI#2 grease or equivalent along the sliding surfaces (see **Figure 101**) when necessary.

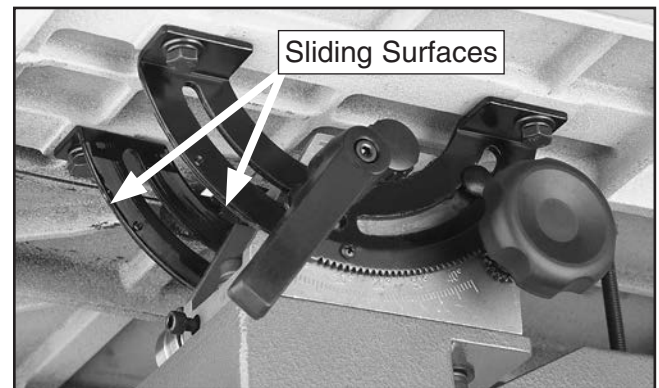


Figure 101. Trunnion lubrication location (G0513 & G0513A40 only).

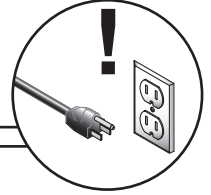
Models G0513X2 and G0513X2BF have cast iron trunnions that produce a fine graphite powder over time that acts as a lubricant. We recommend not adding lubricant to the trunnions which could make a sticky substance that would prevent smooth movement.



SECTION 7: SERVICE

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

Troubleshooting



Motor & Electrical

| Symptom | Possible Cause | Possible Solution |
|--|--|---|
| Machine does not start, or power supply breaker immediately trips after startup. | <ol style="list-style-type: none"> 1. Master power key switch in OFF position. 2. Switch disabling pin installed. 3. OFF button depressed/at fault. 4. Incorrect power supply voltage or circuit size. 5. Plug/receptacle at fault/wired incorrectly. 6. Power supply circuit breaker tripped or fuse blown. 7. Motor wires connected incorrectly. 8. Thermal overload relay has tripped/at fault. 9. Start capacitor at fault. 10. Centrifugal switch adjustment/contact points at fault. 11. Contactor not energized/at fault. 12. Wiring broken, disconnected, or corroded. 13. START/STOP switch or ON button at fault. 14. Motor or motor bearings at fault. | <ol style="list-style-type: none"> 1. Turn master key switch to ON position (Page 3). 2. Remove switch disabling pin. 3. Rotate OFF button head to reset. Replace if at fault. 4. Ensure correct power supply voltage and circuit size. 5. Test for good contacts; correct the wiring (Pages 75–76). 6. Ensure circuit is free of shorts. Reset circuit breaker or replace fuse. 7. Correct motor wiring connections (Pages 75–76). 8. Reset. Adjust or replace if at fault. 9. Test/replace if at fault. 10. Adjust centrifugal switch/clean contact points. Replace either if at fault. 11. Test all legs for power; replace if necessary. 12. Fix broken wires or disconnected/corroded connections. 13. Replace switch/button. 14. Replace motor. |
| Machine stalls or is underpowered. | <ol style="list-style-type: none"> 1. Dull blade. 2. Workpiece material unsuitable for machine. 3. Feed rate/cutting speed too fast. 4. Workpiece crooked; fence loose or misadjusted. 5. Machine undersized for task. 6. Blade slipping on wheels or not properly tensioned. 7. Belt slipping/pulleys misaligned. 8. Motor wires connected incorrectly. 9. Plug/receptacle at fault/wired incorrectly. 10. Pulley slipping on shaft. 11. Motor overheated. 12. Run capacitor at fault. 13. Extension cord too long. 14. Contactor not energized/at fault. 15. Centrifugal switch/contact points at fault. 16. Motor or motor bearings at fault. | <ol style="list-style-type: none"> 1. Sharpen/replace blade (Page 51). 2. Only cut wood/ensure moisture is below 20% (Page 44). 3. Decrease feed rate/cutting speed. 4. Straighten or replace workpiece/adjust fence. 5. Use correct blade/reduce feed rate or depth of cut. 6. Adjust blade tracking and tension (Pages 32–33). 7. Clean/tension/replace belt (Page 66); ensure pulleys are aligned. 8. Correct motor wiring connections (Pages 75–76). 9. Test for good contacts/correct wiring. 10. Tighten/replace loose pulley/shaft. 11. Clean motor, let cool, and reduce workload. 12. Test/repair/replace. 13. Move machine closer to power supply; use shorter extension cord. 14. Test all legs for power; repair/replace if at fault. 15. Adjust centrifugal switch/clean contact points. Replace either if at fault. 16. Replace motor. |



| Symptom | Possible Cause | Possible Solution |
|---|---|---|
| Machine has vibration or noisy operation. | <ol style="list-style-type: none"> 1. Motor or component loose. 2. Blade weld at fault/teeth broken. 3. Blade at fault. 4. V-belt worn, loose, pulleys misaligned or belt slapping cover. 5. Pulley loose. 6. Motor mount loose/broken. 7. Motor fan rubbing on fan cover. 8. Centrifugal switch needs adjustment/at fault. 9. Motor bearings at fault. | <ol style="list-style-type: none"> 1. Replace damaged/missing bolts/nuts; tighten if loose. 2. Replace blade (Page 51). 3. Replace warped/bent blade (Page 51); resharpen dull blade. 4. Inspect/replace belt (Page 66). Re-align pulleys if necessary. 5. Secure pulley on shaft. 6. Tighten/replace. 7. Fix/replace fan cover; replace loose/damaged fan. 8. Adjust/replace if at fault. 9. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. |
| Blade or teeth break/crack. | <ol style="list-style-type: none"> 1. Blade tension incorrect. 2. Blade incorrect for application. 3. Excessive feed rate/pressure. 4. Cutting corners too sharply. 5. Blade dull/weld at fault. 6. Blade tracking incorrectly. 7. Blade guides/support bearings not adjusted properly, allowing guides to hit blade teeth. 8. Blade guide height in wrong position. 9. Wheel tires worn or incorrectly installed. 10. Fence or miter slot out of alignment with blade. 11. Bad blade guide bearings/bearings on wheels. | <ol style="list-style-type: none"> 1. Adjust blade tension (Page 32). 2. Use correct blade for application (Page 46). 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 51). 6. Adjust blade tracking (Page 33). 7. Adjust blade guides/support bearings properly, so guides cannot hit teeth during operation (Pages 34–35). 8. Adjust upper blade guide so blade is as close to workpiece as possible (Page 35). 9. Replace or re-install tire. 10. Align table and fence with blade (Pages 38–39). 11. Replace blade guides/bearings. |
| Blade slows, smokes, shows overheating or wear on one side. | <ol style="list-style-type: none"> 1. Too much side pressure when feeding workpiece. 2. Blade contacting table insert. 3. Blade guides worn or misadjusted. 4. Blade installed backwards or inside out. 5. Wheels out of alignment. 6. Dull, bell-mouthed, or incorrect blade. 7. Fence not parallel with blade. 8. Table surface not parallel or square to blade. 9. V-belt loose or slipping. | <ol style="list-style-type: none"> 1. Feed workpiece straight into blade. 2. Adjust blade guides to eliminate excess side pressure (Page 35); properly align table (Page 38). 3. Adjust upper blade guides as close to workpiece as possible (Page 35). 4. Check blade installation; make sure teeth face front of machine and point down in table throat. Re-install blade if necessary (Page 51). 5. Adjust wheels so they are coplanar (Page 71). 6. Replace blade (Page 51). 7. Adjust fence/miter slot with blade (Pages 38–39). 8. Adjust/shim table/trunnion position until blade and table are parallel and square (Page 38). 9. Tighten V-belt (Page 66). Replace if worn or oily. |
| Finished workpieces are rough or show scoring. | <ol style="list-style-type: none"> 1. Blade overloaded and twists while cutting. 2. Blade TPI too coarse. 3. Blade loose and fluttering. 4. Blade tracking incorrect. 5. Blade has missing/bent teeth or faulty weld. | <ol style="list-style-type: none"> 1. Decrease feed rate (Page 46). 2. Use correct blade for material and type of cut (Page 46). 3. Increase blade tension as required (Page 32). 4. Adjust blade tracking (Page 33). 5. Replace blade (Page 51). |
| Table is hard to tilt. | <ol style="list-style-type: none"> 1. Table tilt lock lever tightened. 2. Sawdust or pitch trapped between trunnion and base. 3. Metal burrs on trunnion. | <ol style="list-style-type: none"> 1. Loosen table tilt lock lever (Page 45). 2. Remove table and clean trunnion sliding surfaces of sawdust or pitch. 3. Remove burrs. |



| Symptom | Possible Cause | Possible Solution |
|---|--|--|
| Miter bar binds in miter slot. | <ol style="list-style-type: none"> 1. Miter slot dirty or gummed up. 2. Miter bar bent. | <ol style="list-style-type: none"> 1. Carefully clean miter slot. 2. Replace. |
| Blade tracks incorrectly or comes off wheels. | <ol style="list-style-type: none"> 1. Tracking is not adjusted properly. 2. Wheels are not coplanar. 3. Blade tension too loose. 4. Blade guides/support bearings improperly adjusted. 5. Feeding workpiece too fast. 6. Incorrect blade for operation. 7. Blade is bell-mouthed, worn, or dull. 8. Wheel tire damaged or worn. | <ol style="list-style-type: none"> 1. Adjust tracking (Page 33). 2. Adjust wheel coplanarity (Page 71). 3. Increase blade tension (Page 32). 4. Properly adjust blade guides/support bearings (Pages 34–35). 5. Feed workpiece slower. 6. Install correct blade (Page 46). 7. Install new blade (Page 51) and remove tension from blade when not in use (Page 32). 8. Redress or replace wheel tires. |
| Cut is crooked or blade wanders (blade lead). | <ol style="list-style-type: none"> 1. Excessive feed rate/pressure. 2. Blade tension too loose. 3. Blade is too narrow or tooth type/TPI is incorrect for the cut. 4. Inadequate blade support. 5. Blade dull or has damaged tooth set from improper blade guide/support bearing adjustment. 6. Blade tracking incorrect. 7. Table loose. 8. Fence or miter slot out of alignment with blade. 9. Blade guides/support bearings improperly adjusted. 10. Tooth set uneven or teeth sharper on one side than the other. 11. Blade is following grain of wood. | <ol style="list-style-type: none"> 1. Reduce feed rate/pressure. 2. Increase blade tension (Page 32). 3. Use wider blade. Ensure tooth type and TPI are correct (Page 46). 4. Position upper blade guides as close to workpiece as possible. Properly adjust blade guides/support bearings (Pages 34–35). 5. Replace blade (Page 51). 6. Adjust blade tracking (Page 33). 7. Tighten table trunnion bolts or tilt lock lever (Page 45). 8. Align table and fence with blade (Pages 38–39). 9. Properly adjust blade guides/support bearings (Pages 34–35). 10. Replace blade (Page 51). 11. Increase blade tension (Page 32). |
| Blade dulls prematurely. | <ol style="list-style-type: none"> 1. Wrong blade tooth type or TPI. 2. Excessive feed pressure. 3. Blade is twisted. 4. Blade is slipping on wheel. 5. Blade guides hitting teeth and ruining tooth set. | <ol style="list-style-type: none"> 1. Use blade with correct tooth type and TPI (Page 46). 2. Reduce feed rate/pressure. 3. Re-install/replace blade (Page 51). 4. Adjust blade tension (Page 32); clean wheel tire. 5. Properly adjust blade guides/support bearings (Pages 34–35). |
| Backside of blade deformation/cracking. | <ol style="list-style-type: none"> 1. Excessive feed rate/pressure. 2. Blade tension too high. 3. Incorrect blade guide alignment. 4. Blade guides are worn. 5. Blade tracking too far back; hitting lip of wheels. | <ol style="list-style-type: none"> 1. Reduce feed rate/pressure. 2. Adjust blade tension (Page 32). 3. Correct blade guide alignment (Pages 34–35). 4. Replace blades guides. 5. Adjust tracking (Page 33). |
| Sawdust buildup inside cabinet. | <ol style="list-style-type: none"> 1. Blade brushes under table are worn or misadjusted. 2. Clogged dust port. 3. Low CFM (airflow) from dust collection system. | <ol style="list-style-type: none"> 1. Properly adjust brushes; replace if necessary (Page 61). 2. Clean dust port. 3. Inspect ducting for leaks/clogs and repair as necessary; move dust collector closer to machine; install a stronger dust collection. |
| Gullets loaded with chips. | <ol style="list-style-type: none"> 1. Excessive feed rate/pressure. 2. Blade TPI is too fine. | <ol style="list-style-type: none"> 1. Reduce feed rate/pressure. 2. Install correct blade (Page 46). |



V-Belt Service

Checking V-Belt

To ensure optimum power transmission from the motor to the blade, the V-belt must be in good condition and properly tensioned. The belt should be free of cracks, fraying, and wear. Belt tension and condition should be checked at least every 3 months—more often if the bandsaw is used daily.

To check V-belt tension:

1. DISCONNECT MACHINE FROM POWER!
2. Open the lower wheel cover.
3. Check the condition of the V-belt. If the V-belt is cracked, frayed, or glazed, replace it.
4. Check V-belt tension by applying moderate pressure between the pulleys (see **Figure 102**). If deflection is not approximately $\frac{3}{4}$ ", re-tension the V-belt following the same steps you used when changing blade speeds (refer to **Changing Blade Speed** on **Page 52** if necessary).

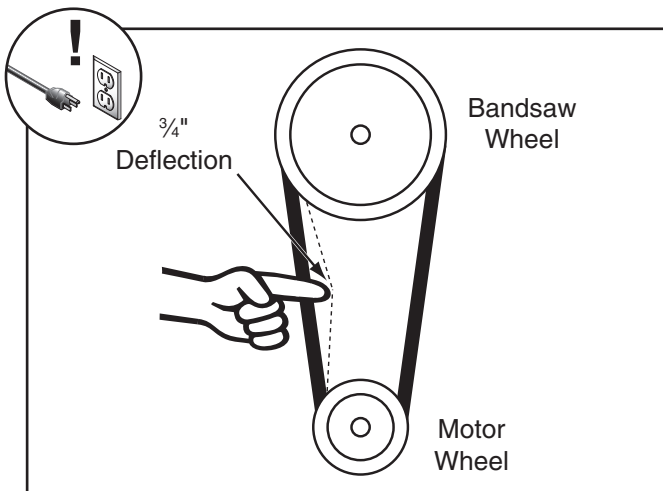


Figure 102. V-belt deflection.

Replacing V-Belt

To replace the V-belt, you must remove the blade and the lower wheel. After re-installation, you must properly tension the V-belt.

| | |
|--------------------------|------------|
| Tools Needed: | Qty |
| Hex Wrenches 6, 8mm..... | 1 |

To replace the V-belt:

1. DISCONNECT BANDSAW FROM POWER!
2. Open both wheel covers, and remove the blade (refer to **Changing Blade** on **Page 51**).
3. Unthread the lower wheel mount bolt shown in **Figure 103**, and slide the lower wheel off the bearing shaft.

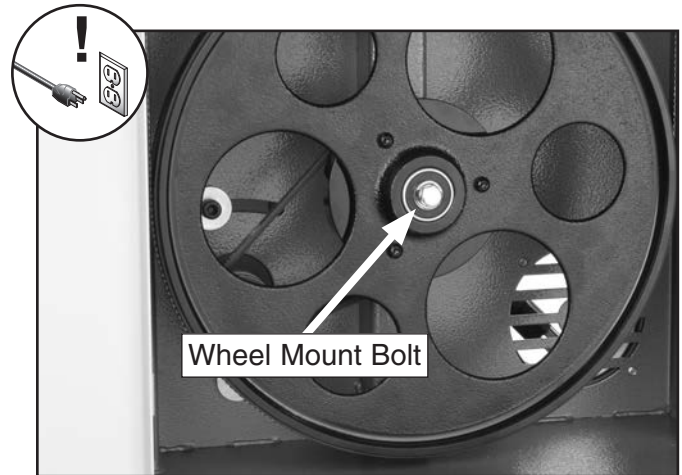


Figure 103. Example of wheel mount bolt.

4. Loosen the motor mount cap screws shown in **Figure 104**.



Figure 104. Motor mount cap screws.

5. Slip the old V-belt off of the wheel pulley and install the new V-belt in its place.
6. Properly tension the V-belt and tighten the motor mount cap screws.
7. Install the lower wheel and secure it with the wheel mount bolt.
8. Install the blade and close the wheel covers.



Blade Lead

"Blade Lead" means that the blade does not cut straight when using the fence or miter gauge (see **Figure 105**). This is a common condition with all bandsaws. Worn or damaged blades may cause lead, and replacing them will fix the problem. Still, if your bandsaw is set up correctly and blade lead occurs, compensate for it by skewing the fence.

Another solution is to install a drift bar on the resaw fence to create a pivot point that will provide more control during resaw operations (see **Pages 55 & 57** for more details).

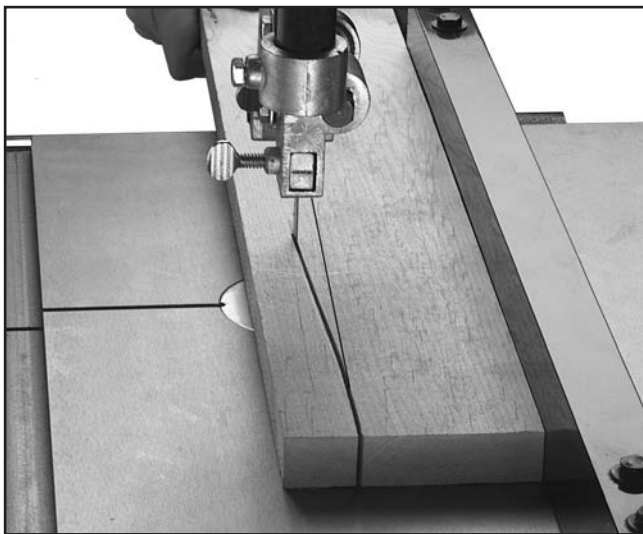


Figure 105. Example of blade leading away from line of cut.

Correcting Blade Lead

1. Ensure blade is properly tensioned (see **Tensioning Blade** on **Page 32**).
2. Ensure blade guides are adjusted correctly (see **Adjusting Blade Guides** on **Page 35**).
3. Ensure miter slot and fence are parallel to blade (see **Aligning Table** on **Page 38** and **Aligning Fence** on **Page 39**).
4. Perform test cut with bandsaw, using less pressure when feeding workpiece through cut.

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

Skewing Fence

1. Cut a straight and parallel wood board approximately $\frac{3}{4}$ " thick x 3" wide x 16" long.

Tip: Cut your board out of a new piece of $\frac{3}{4}$ " plywood, using a tablesaw. The straight "factory edge" of the plywood will ensure accuracy during the following steps. Alternatively, you can use a jointer and table-saw to straighten a piece of scrap wood.

2. On wide face of board, draw a straight line parallel to long edge, similar to layout line shown in **Figure 105**.
3. Slide fence out of the way and cut along layout halfway through board. Turn bandsaw **OFF** and wait for blade to stop. Do not move board.
4. Clamp board to bandsaw table, then slide fence over to board so it barely touches one edge of board.
5. Loosen the four fence adjustment cap screws to left of fence face (see **Figure 106**), skew fence so it is parallel with wood board, contacting it evenly along its length, then tighten cap screws.

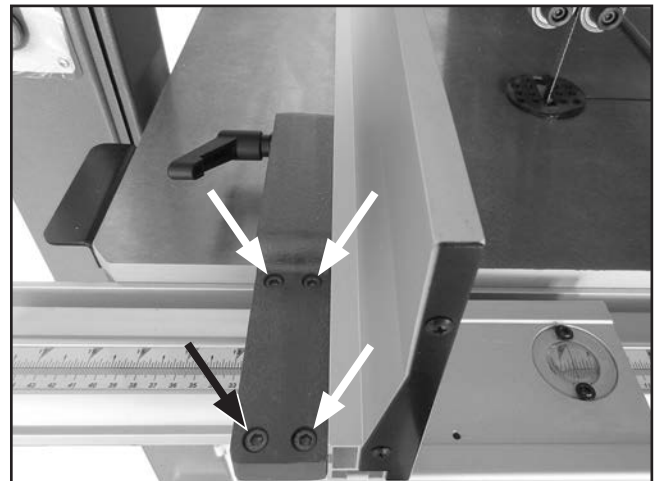


Figure 106. Location of fence adjustment cap screws (G0513X2 shown).

6. Finish cut using fence.

— If blade lead is still present, repeat **Steps 1–5** until cutting results are satisfactory.



Adjusting Wheel Brush

The lower wheel has a brush, as shown in **Figure 107**, that is designed to sweep sawdust off the wheel tire as the wheel rotates. In order to work properly, the brush must make firm contact with the wheel.

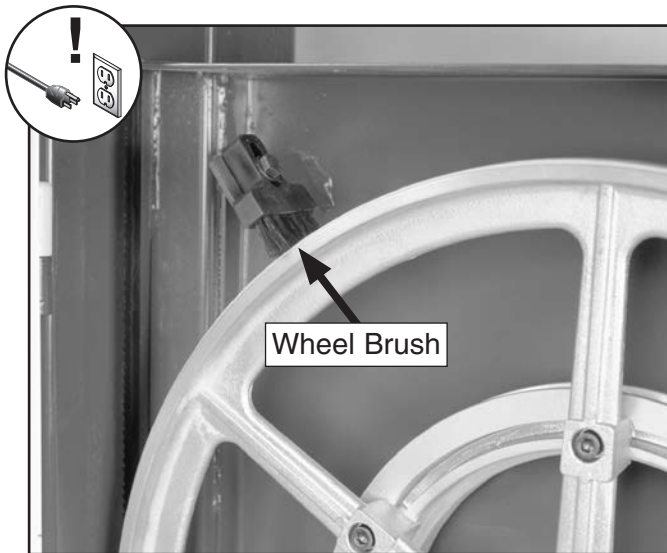


Figure 107. A wheel brush.

Tools Needed: Qty
Wrenches or Sockets 10mm2

To adjust the brush:

1. DISCONNECT MACHINE FROM POWER!
2. Open the lower wheel cover.
3. Loosen the bolt and nut that secures the brush in place.
4. Adjust the brush so it makes firm, even contact with the wheel—without bending the bristles.
5. Tighten the bolt and nut to secure the brush in place.

Adjusting Quick-Release Tension Lever

The quick-release tension lever was set up at the factory for use with the pre-installed 131½" blade. However, if you install a different length blade, you will need to adjust the quick-release adjustment screw so that the quick-release lever works correctly.

Keep in mind that actual blade lengths may vary slightly by manufacture.

Tools Needed: Qty
Hex Wrench 5mm..... 1
Open-End Wrench 10mm..... 1

To adjust the quick-release tension lever:

1. DISCONNECT MACHINE FROM POWER!
2. Open the wheel covers and install a new blade.
3. Loosen the jam nut on the tension adjustment screw 7-10 turns (see **Figure 108**).

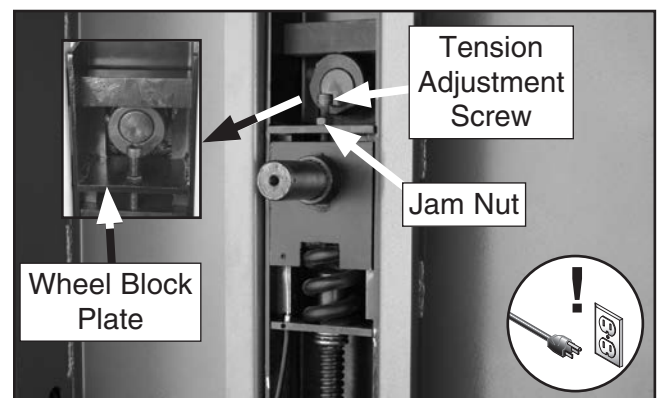


Figure 108. Example of quick-release tension lever adjustment screw.

4. Engage the quick-release tension lever, then turn the blade tension handwheel until the blade tension matches the mark on the blade tension scale for the appropriate blade width.
5. Thread the tension adjustment screw (see **Figure 108**) down until it contacts the wheel block plate, then back it off 1-2 turns.
6. Tighten the jam nut.



Adjusting Guide Post Travel

The guide post assembly should remain parallel with the blade front-to-back and side-to-side along its length of travel. If it does not, follow these instructions to adjust it.

Important: Make sure the table is aligned with the blade from side-to-side and front-to-back before beginning these procedures (refer to **Aligning Table** on **Page 38** for detailed instructions).

Tools Needed:

- Machinist's Square 1
- Small Ruler..... 1
- Hex Wrenches 4, 5mm..... 1 Ea
- Metal Shims..... (As Needed)

Checking/Adjusting Guide Post Parallel with Blade Side-to-Side

1. DISCONNECT MACHINE FROM POWER!
2. Loosen the guide post lock knob, lower the guide post to within 1" of the table top, then tighten the knob.
3. Place a machinist's square on the table next to the right hand side of the guide post, as shown in **Figure 109**.

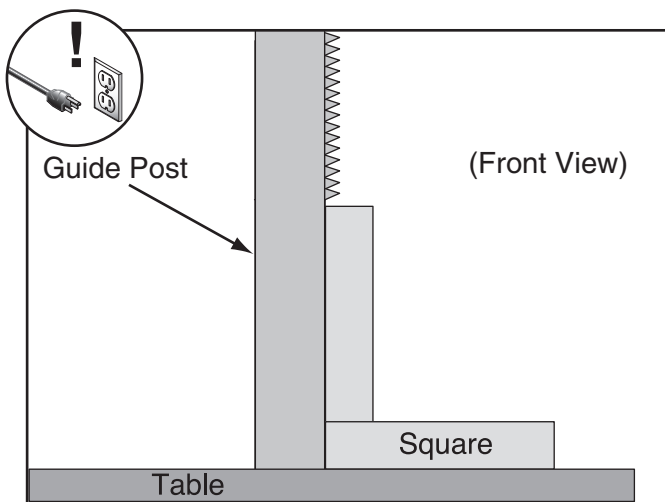


Figure 109. Example of checking guide post squareness.

— If there is no gap between the square and the guide post along its full length, no adjustments need to be made. Proceed to the next procedure.

— If there is a gap between the square and the guide post, the guide post is not parallel to the blade. Go to **Step 4**.

4. Loosen each of the four screws shown in **Figure 110** ¼ turn.

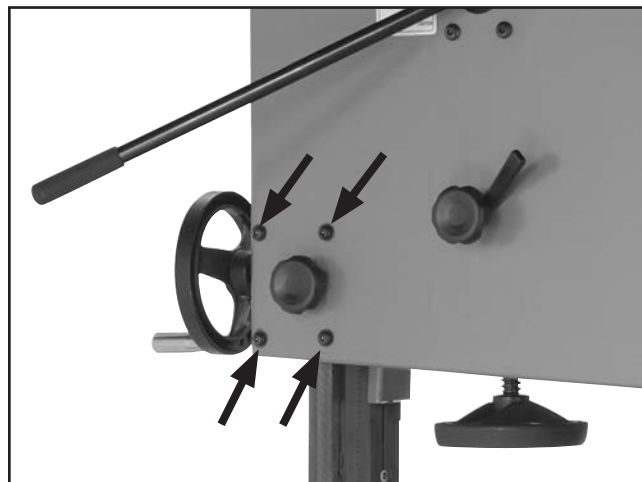


Figure 110. Guide post adjustment screws.

5. Gently tap the lower part of the guide post in the appropriate direction until there is no gap between the square and the guide post.
6. Tighten the screws shown in **Figure 110**.



Checking/Adjusting Guide Post Parallel with Blade Front-to-Back

1. DISCONNECT MACHINE FROM POWER!
2. Loosen the guide post lock knob, lower the blade guide assembly to within 1" of the table top, then tighten the lock knob.
3. Remove the screws that secure the guide post guard and move it up and out of the way.
4. Measure the distance "A" between the upper front face of the guide post rack and the back of the blade (see **Figure 111**).

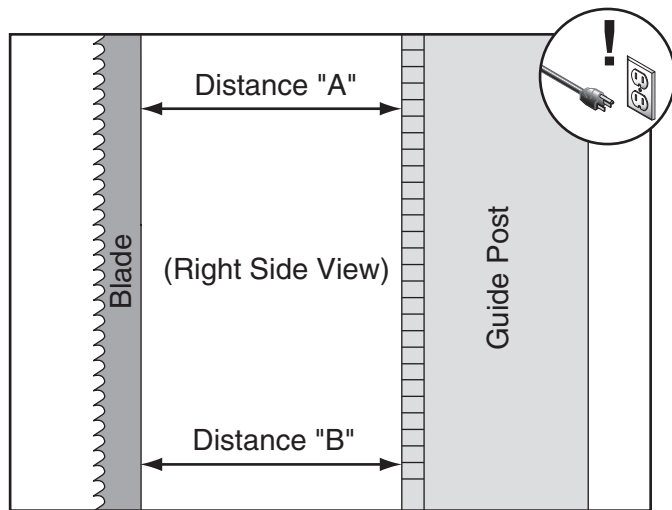


Figure 111. Example of measuring distance between rack and blade at top of guide post.

5. Measure the distance "B" between the bottom front face of the guide post rack and the back of the blade (see **Figure 111**).
 - If the measurements taken in **Steps 4–5** are equal, no adjustments need to be made. Proceed to **Step 9**.
 - If the measurements taken in **Steps 4–5** are not equal, proceed to **Step 6**.
6. Place the guide post guard on top of the guide post assembly so you can access the guide post bracket.

7. Loosen the four screws shown in **Figure 110** on the previous page enough to fit metal shims between the frame and the guide post bracket (see **Figure 112**).

- If the guide post to blade distance is *greater* at the bottom than at the top, place a shim between the bottom of the bracket and the frame (Shim "A"). This will tilt the bottom of the guide post toward the blade.
- If the guide post to blade distance is *less* at the bottom than at the top, place a shim between the top of the bracket and the frame (Shim "B"). This will tilt the bottom of the guide post away from the blade.

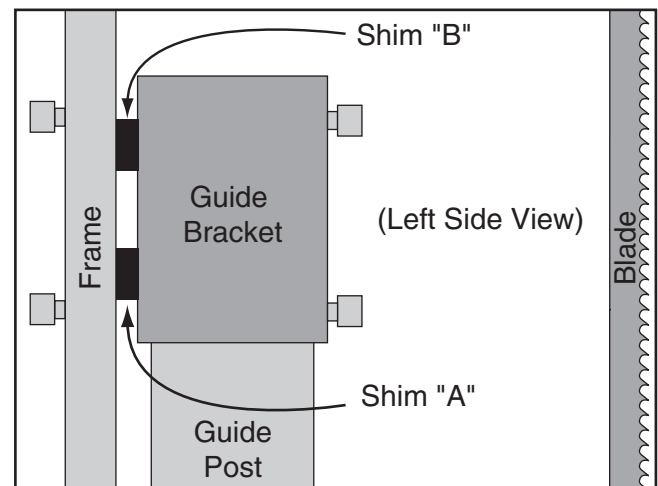


Figure 112. Location for placing shims.

8. Tighten the four screws shown in **Figure 110** on the previous page, then repeat **Steps 4–5**.
 - If the measurements are equal, go to **Step 9**.
 - If the measurements are not equal, continue adding shims as needed until guide post rack to blade distance is the same at the top and bottom.
9. Install the guide post guard with the screws removed in **Step 3**.



Aligning Wheels

Components and Hardware Needed: Qty
 56" Long 2x4 1

Tools Needed:

Hex Wrenches 4, 6mm..... 1 Ea
 Wrench 13mm 1
 Tape Measure..... 1
 Coplanarity Gauge (see **Figure 113**)..... 1
 Straightedge 1
 Fine Ruler..... 1

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

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

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

Checking Coplanarity

1. Make the "Coplanarity Gauge" shown in **Figure 113**.

Note: For best results, straighten the 2x4 with a jointer before cutting.

2. DISCONNECT MACHINE FROM POWER!
3. Remove the fence and open both wheel covers.
4. Adjust the blade guides away from the blade, loosen blade tension, remove the table insert and pin, then remove the blade.
5. Remove the table.
6. Re-install the blade, making sure the blade guides and support bearings are away from the blade, then tighten the blade to the tension that will be used during operation.
7. Place your coplanarity gauge up against both wheels in the positions shown in **Figure 114**.

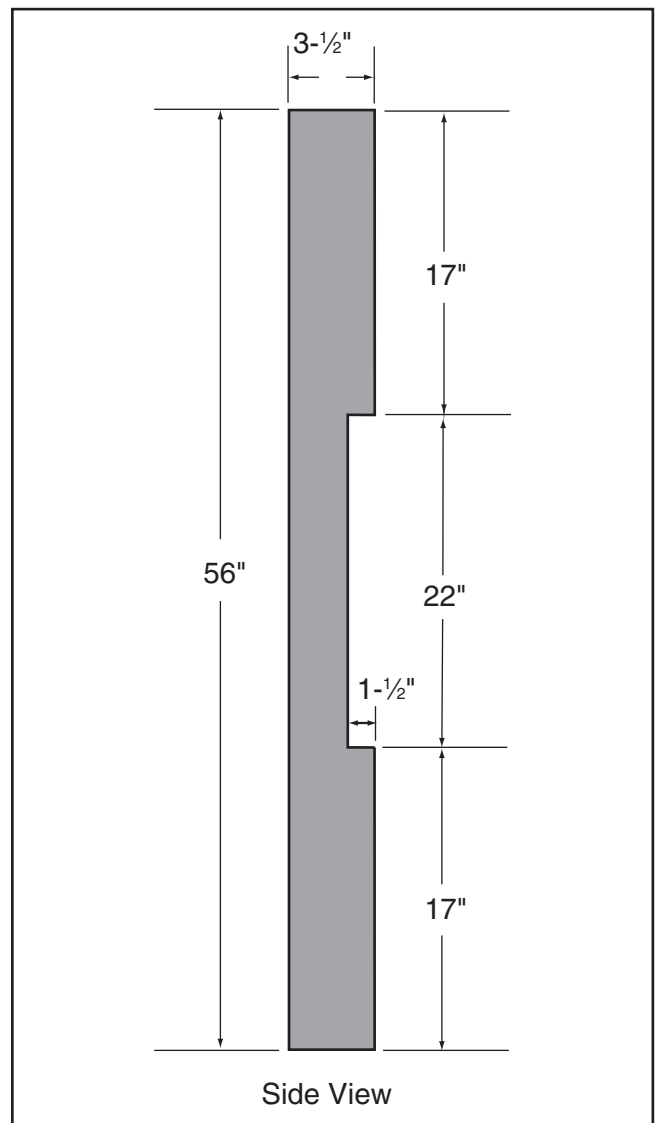


Figure 113. Dimensions of coplanarity gauge.

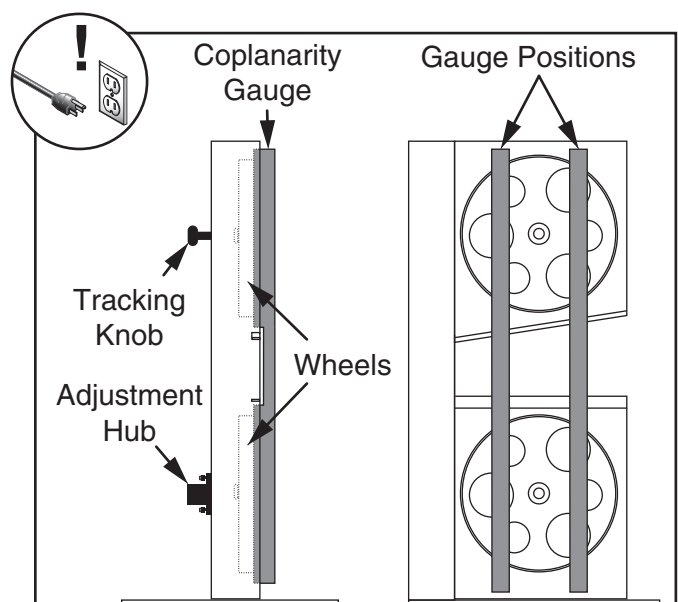


Figure 114. Checking for coplanarity.



- If the wheels *are* coplanar (**Figure 116, A**), the straightedge will evenly touch the top and bottom of both wheels.
- If the wheels *are not* coplanar (**Figure 116, B**), place the straightedge on the lower wheel first (ensuring that it touches both the top and bottom rim), then adjust the upper wheel tracking knob to make the upper wheel coplanar and parallel with the lower wheel.
- If the straightedge *does not* touch both wheels evenly, the upper wheel needs to be shimmed (**Figure 116, D**) or the lower wheel needs to be adjusted (**Figure 116, C**).

Shimming Upper Wheel

1. DISCONNECT MACHINE FROM POWER!
2. Make sure the top wheel is adjusted parallel with the bottom wheel.
3. With a straightedge touching both points of the wheel that does not need to be adjusted, measure the distance away from the wheel that is out of adjustment (see **Figure 115**).

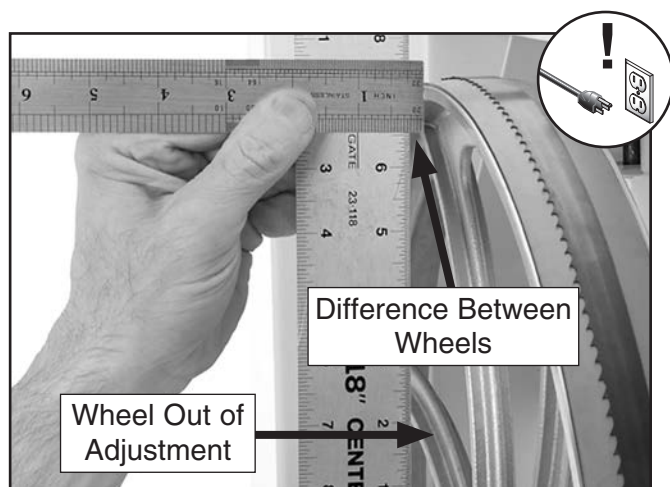


Figure 115 Determining distance needed to shim upper wheel.

4. Remove the blade from the saw, then remove the wheel that needs to be shimmed.
5. Determine how many shim washers you need to compensate for the distance measured in **Step 3** and place them on the wheel shaft.

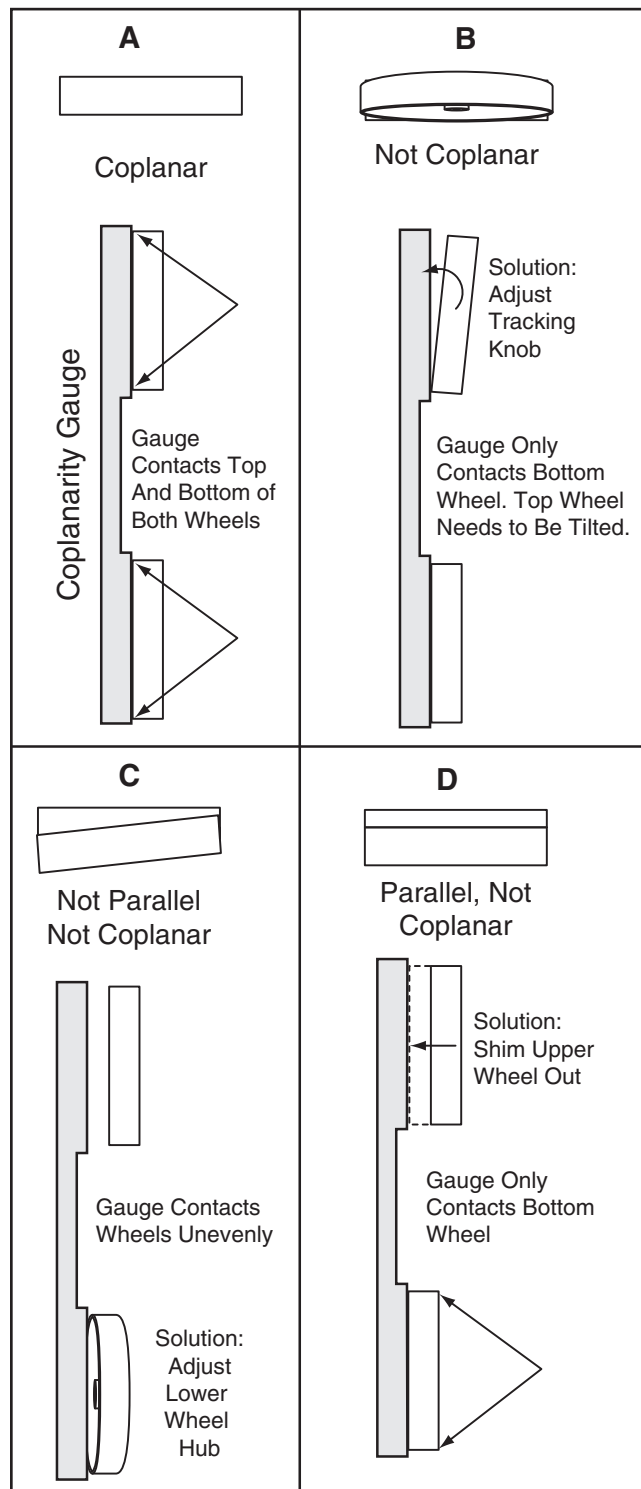


Figure 116. Coplanar diagram.

6. Install the wheel, the original washers, the securing screw, and the blade.
7. Tension the blade, then check the wheels with the coplanarity gauge. Wheel coplanarity changes as the blade is tightened, so it is best to check the wheel alignment when the blade is tensioned as it would be for normal operations.



- When the wheels are coplanar, place a mark on each wheel where you held the straight-edge. This assures repeated accuracy every time you adjust your wheels.

Note: When wheels are properly coplanar, the blade may not be centered on the crown of the wheel, but it will be balanced.

Adjusting Lower Wheel

Only do this procedure if you cannot make the wheels coplanar with the tracking knob or by shimming the upper wheel. Make sure the upper wheel is adjusted as close as possible to being coplanar with the lower wheel before beginning. Do this procedure with the blade fully tensioned.

To adjust the lower wheel:

- DISCONNECT MACHINE FROM POWER!
- Loosen the jam nuts on the lower wheel adjustment hub (see **Figure 117**).

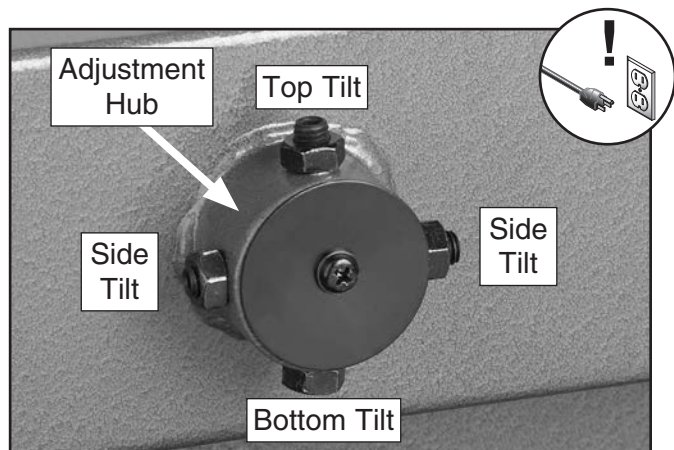


Figure 117. Lower wheel adjustment control.

- Loosen one tilt adjustment set screw, then tighten the opposing set screw an equal amount.
- Check the wheels with the coplanarity gauge, then adjust the lower wheel at the hub as needed until it is parallel and coplanar with the top wheel.
- Tighten the jam nuts to lock the tilt adjustment set screws in position.

Magnetic Brake Adjustment (G0513X2BF)

The space between the magnetic motor brake and brake shoe is preset by the factory at 0.008" (0.2mm). To compensate for this wear, you should adjust this space every two to three years, or if the brake takes over five seconds to stop the motor.

Tools Needed

- Phillips Head Screwdriver #2 1
- Feeler Gauges 0.008" 2
- Hex Wrenches 3, 4mm 1 Ea

To adjust the magnetic brake:

- DISCONNECT MACHINE FROM POWER!
- Remove the motor fan cover, then loosen the cap screws securing the motor fan and brake shoe (see **Figure 118**).

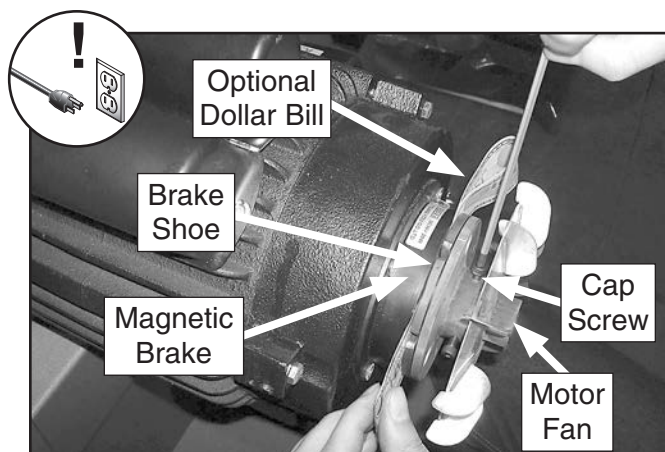


Figure 118. Adjusting distance between magnetic brake and brake shoe.

- Place the feeler gauge between the brake shoe and magnetic brake on either side.
- Tighten the cap screws on the brake shoe and motor fan, remove the feeler gauge, then install the motor fan cover.



SECTION 8: WIRING

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

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

WARNING

Wiring Safety Instructions

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

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

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

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

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

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
















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

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

NOTICE

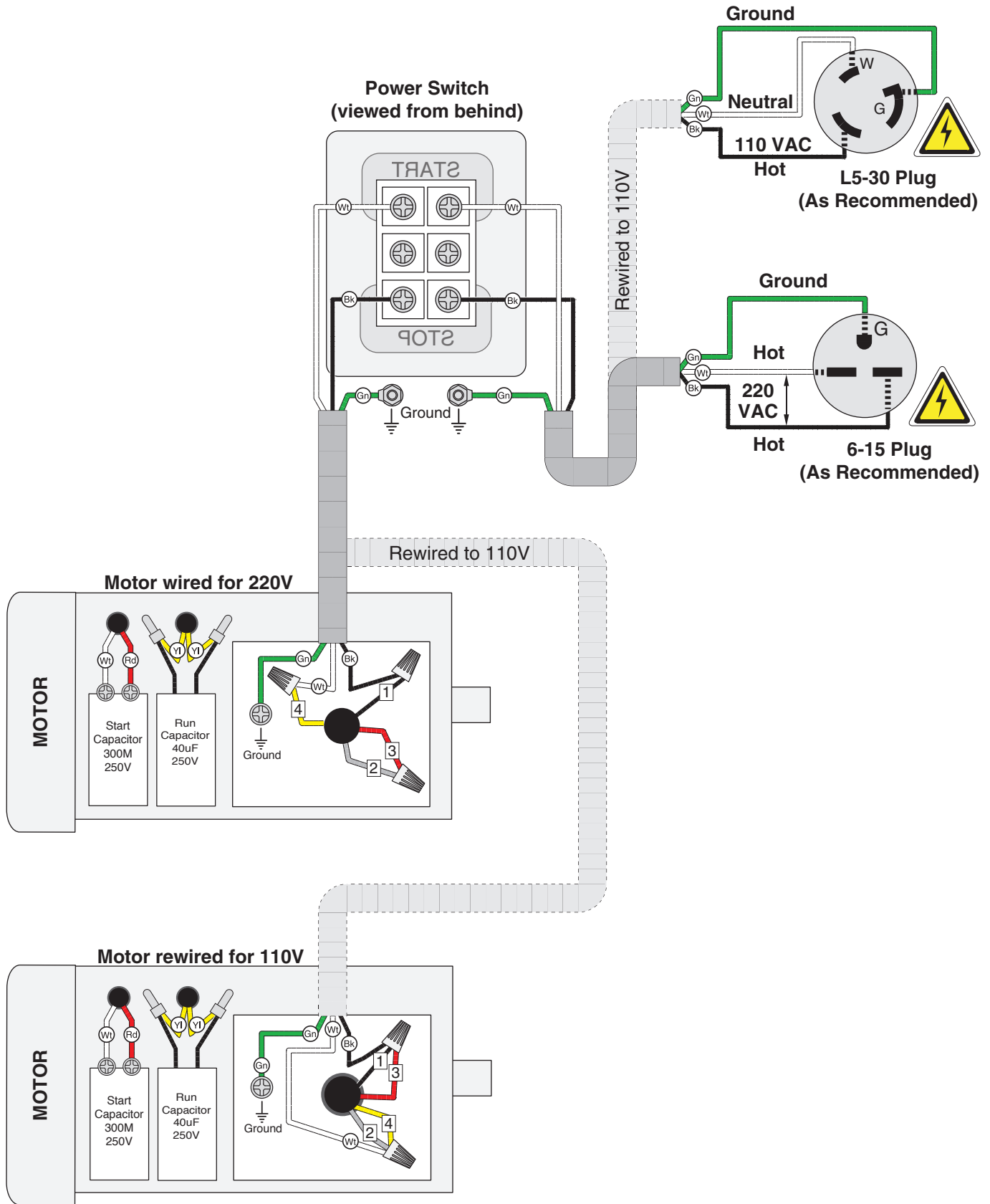
The photos and diagrams included in this section are best viewed in color. You can view these pages in color at www.grizzly.com.

COLOR KEY

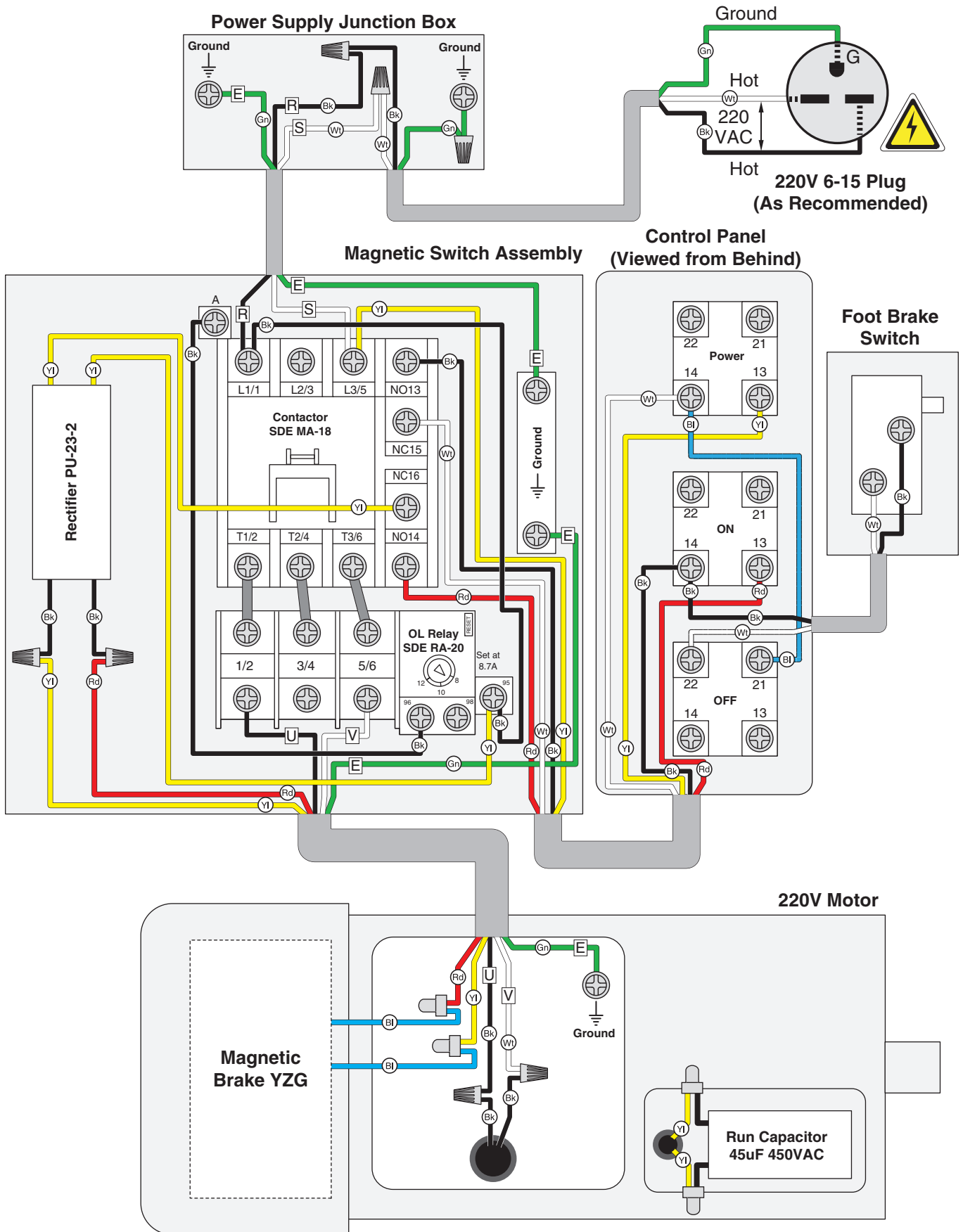
| | | | |
|---|--|--|--|
| BLACK  | BLUE  | YELLOW  | LIGHT BLUE  |
| WHITE  | BROWN  | YELLOW GREEN  | BLUE WHITE  |
| GREEN  | GRAY  | PURPLE  | TURQUOISE  |
| RED  | ORANGE  | PINK  | |



G0513, G0513A40 & G0513X2 Wiring Diagram



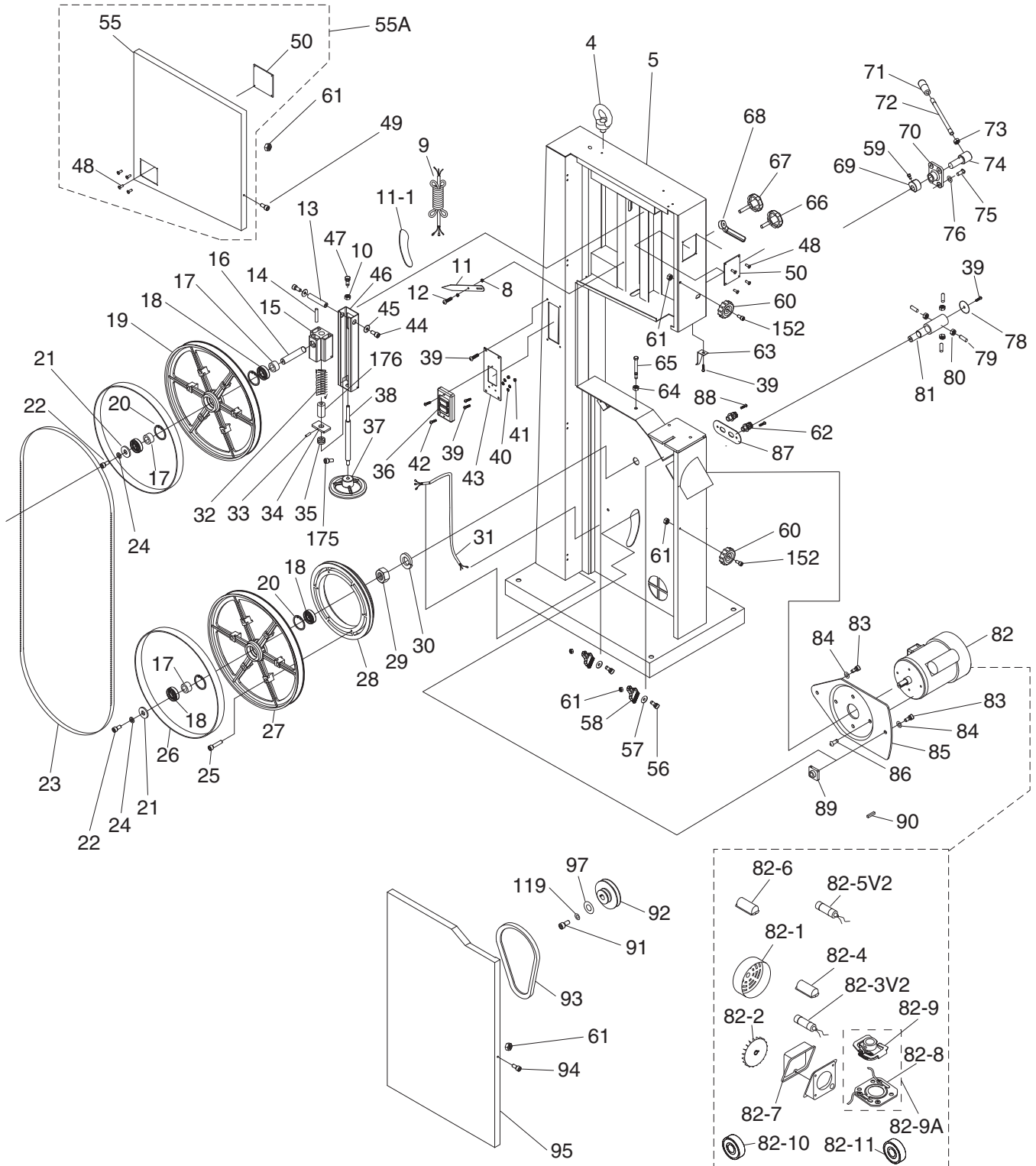
G0513X2BF Wiring Diagram



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.

G0513 & G0513A40 Main



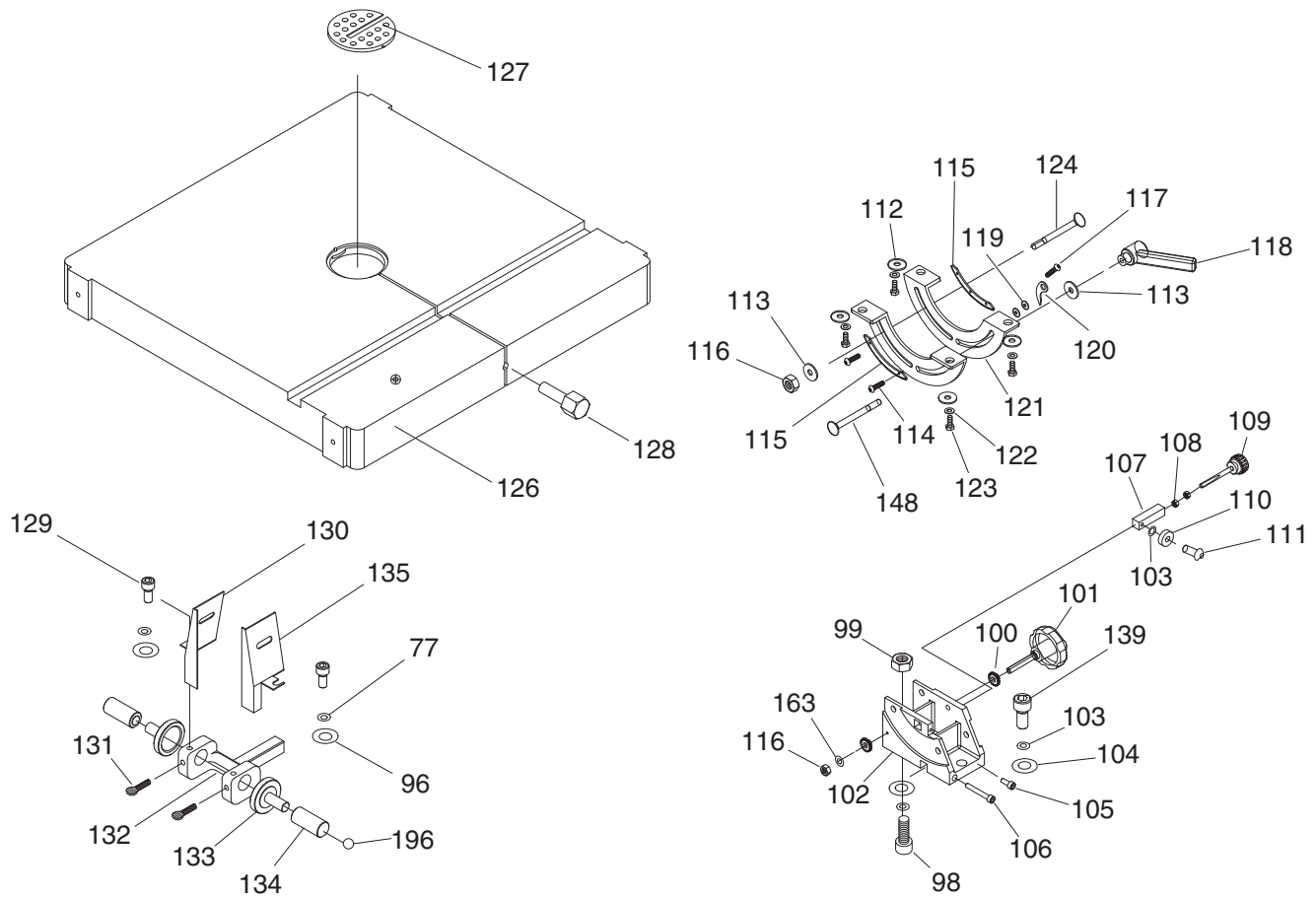
G0513 & G0513A40 Main Parts List

| REF PART # | DESCRIPTION |
|------------|--|
| 4 | P0513004 LIFTING EYE BOLT M10-1.5 |
| 5 | P0513005 MACHINE BODY |
| 8 | P0513008 FLAT WASHER 6MM |
| 9 | P0513009 POWER CORD 14G 3W 72" |
| 10 | P0513010 HEX NUT M6-1 |
| 11 | P0513011 POINTER |
| 11-1 | P0513011-1 TENSION SCALE LABEL |
| 12 | P0513012 STEP SCREW M4-.7 X 5 |
| 13 | P0513013 HINGE SHAFT |
| 14 | P0513014 ROLL PIN 5 X 36 |
| 15 | P0513015 UPPER WHEEL SHAFT HINGE |
| 16 | P0513016 UPPER WHEEL SHAFT |
| 17 | P0513017 BUSHING |
| 18 | P0513018 BALL BEARING 6204-2RS |
| 19 | P0513019 UPPER WHEEL 17" |
| 20 | P0513020 INT RETAINING RING 47MM |
| 21 | P0513021 WHEEL FLAT WASHER 8MM |
| 22 | P0513022 CAP SCREW M8-1.25 X 16 |
| 23 | P0513023 SAW BLADE 131.5" X 1/2" 6TPI HOOK |
| 24 | P0513024 LOCK WASHER 8MM |
| 25 | P0513025 HEX BOLT M6-1 X 30 |
| 26 | P0513026 URETHANE TIRE 17" 1-PAIR |
| 27 | P0513027 LOWER WHEEL 17" |
| 28 | P0513028 LOWER WHEEL PULLEY |
| 29 | P0513029 HEX NUT 1-14 |
| 30 | P0513030 LOCK WASHER 1" |
| 31 | P0513031 MOTOR CORD 14G 3W |
| 32 | P0513032 COMPRESSION SPRING 7 X 8 X 90 |
| 33 | P0513033 ROLL PIN 3 X 16 |
| 34 | P0513034 ALIGNMENT PLATE |
| 35 | P0513035 THRUST BEARING 51201 |
| 36 | P0513036 2-BUTTON POWER SWITCH |
| 37 | P0513037 HANDWHEEL TYPE-17 137D X 10B-S |
| 38 | P0513038 TENSION ADJUSTING ROD |
| 39 | P0513039 FLANGE SCREW M5-.8 X 10 |
| 40 | P0513040 EXT TOOTH WASHER 5MM |
| 41 | P0513041 HEX NUT M5-.8 |
| 42 | P0513042 FLANGE SCREW M5-.8 X 16 |
| 43 | P0513043 SWITCH BACK PLATE |
| 44 | P0513044 HEX BOLT M8-1.25 X 16 |
| 45 | P0513045 FLAT WASHER 8MM |
| 46 | P0513046 UPPER WHEEL SLIDING BRACKET |
| 47 | P0513047 HEX BOLT M6-1 X 25 |
| 48 | P0513048 RIVET 3 X 13MM BLIND, STEEL |
| 49 | P0513049 HEX BOLT M6-1 X 10 |
| 50 | P0513050 CLEAR WINDOW |
| 55 | P0513055 UPPER WHEEL COVER (G0513) |
| 55 | P0513A40055 UPPER WHEEL COVER (G0513A40) |
| 55A | P0513055A UPPER WHEEL COVER ASSY (G0513) |
| 55A | P0513A40055A UPPER WHEEL COVER ASSY (G0513A40) |
| 56 | P0513056 HEX BOLT M6-1 X 10 |
| 57 | P0513057 FLAT WASHER 6MM |
| 58 | P0513058 WHEEL BRUSH |
| 59 | P0513059 HEX BOLT M6-1 X 25 |

| REF PART # | DESCRIPTION |
|------------|---|
| 60 | P0513060 STAR KNOB |
| 61 | P0513061 LOCK NUT M6-1 |
| 62 | P0513062 STRAIN RELIEF TYPE-1 5/8 |
| 63 | P0513063 HEIGHT POINTER |
| 64 | P0513064 HEX NUT M8-1.25 |
| 65 | P0513065 HEX BOLT M8-1.25 X 100 |
| 66 | P0513066 STAR KNOB BOLT M10-1.5 X 20 |
| 67 | P0513067 STAR KNOB BOLT M10-1.5 X 55 |
| 68 | P0513068 THREADED HANDLE M10-1.5 |
| 69 | P0513069 CAM |
| 70 | P0513070 PILLOW BLOCK |
| 71 | P0513071 HANDLE M12-1.75 |
| 72 | P0513072 LEVER |
| 73 | P0513073 HEX NUT M12-1.75 |
| 74 | P0513074 LEVER HUB |
| 75 | P0513075 CAP SCREW M8-1.25 X 20 |
| 76 | P0513076 LOCK WASHER 8MM |
| 78 | P0513078 SHAFT COVER |
| 79 | P0513079 SET SCREW M8-1.25 X 20 |
| 80 | P0513080 HEX NUT M8-1.25 |
| 81 | P0513081 LOWER WHEEL SHAFT |
| 82 | P0513082 MOTOR 2HP 110V/220V 1-PH |
| 82-1 | P0513082-1 MOTOR FAN COVER |
| 82-2 | P0513082-2 MOTOR FAN |
| 82-3V2 | P0513082-3V2 S CAP 300M 250V 1-1/2 X 2-3/8 V2.01.10 |
| 82-4 | P0513082-4 S CAPACITOR COVER |
| 82-5V2 | P0513082-5V2 R CAP 40M 250V 1-1/2 X 2-3/4 V2.01.10 |
| 82-6 | P0513082-6 R CAPACITOR COVER |
| 82-7 | P0513082-7 MOTOR JUNCTION BOX |
| 82-8 | P0513082-8 CONTACT PLT-TUNGSTEN 5HP OR LESS |
| 82-9 | P0513082-9 CENTRIFUGAL SWITCH 5/8-1725 |
| 82-9A | P0513082-9A CENTRIFUGAL SWITCH W/CONT PLATE |
| 82-10 | P0513082-10 BALL BEARING 6203ZZ (FRONT) |
| 82-11 | P0513082-11 BALL BEARING 6205ZZ (REAR) |
| 83 | P0513083 HEX BOLT M5-.8 X 16 |
| 84 | P0513084 LOCK WASHER 5MM |
| 85 | P0513085 MOTOR MOUNT BRACKET |
| 86 | P0513086 CAP SCREW M8-1.25 X 20 |
| 87 | P0513087 STRAIN RELIEF PLATE 2-HOLE |
| 88 | P0513088 FLANGE SCREW M5-.8 X 10 |
| 89 | P0513089 PILLOW BLOCK |
| 90 | P0513090 KEY 5 X 5 X 35 |
| 91 | P0513091 HEX BOLT M8-1.25 X 20 LH |
| 92 | P0513092 MOTOR PULLEY TYPE-A 3.5" |
| 93 | P0513093 V-BELT A42 |
| 94 | P0513094 HEX BOLT M6-1 X 10 |
| 95 | P0513095 LOWER WHEEL COVER (G0513) |
| 95 | P0513A40095 LOWER WHEEL COVER (G0513A40) |
| 97 | P0513097 FLAT WASHER 8MM |
| 119 | P0513119 FLAT WASHER 8MM |
| 152 | P0513152 HEX BOLT M6-1 X 20 |
| 175 | P0513175 HEX BOLT M6-1 X 20 |
| 176 | P0513176 BUSHING |



G0513 & G0513A40 Table, Trunnion & Lower Blade Guides

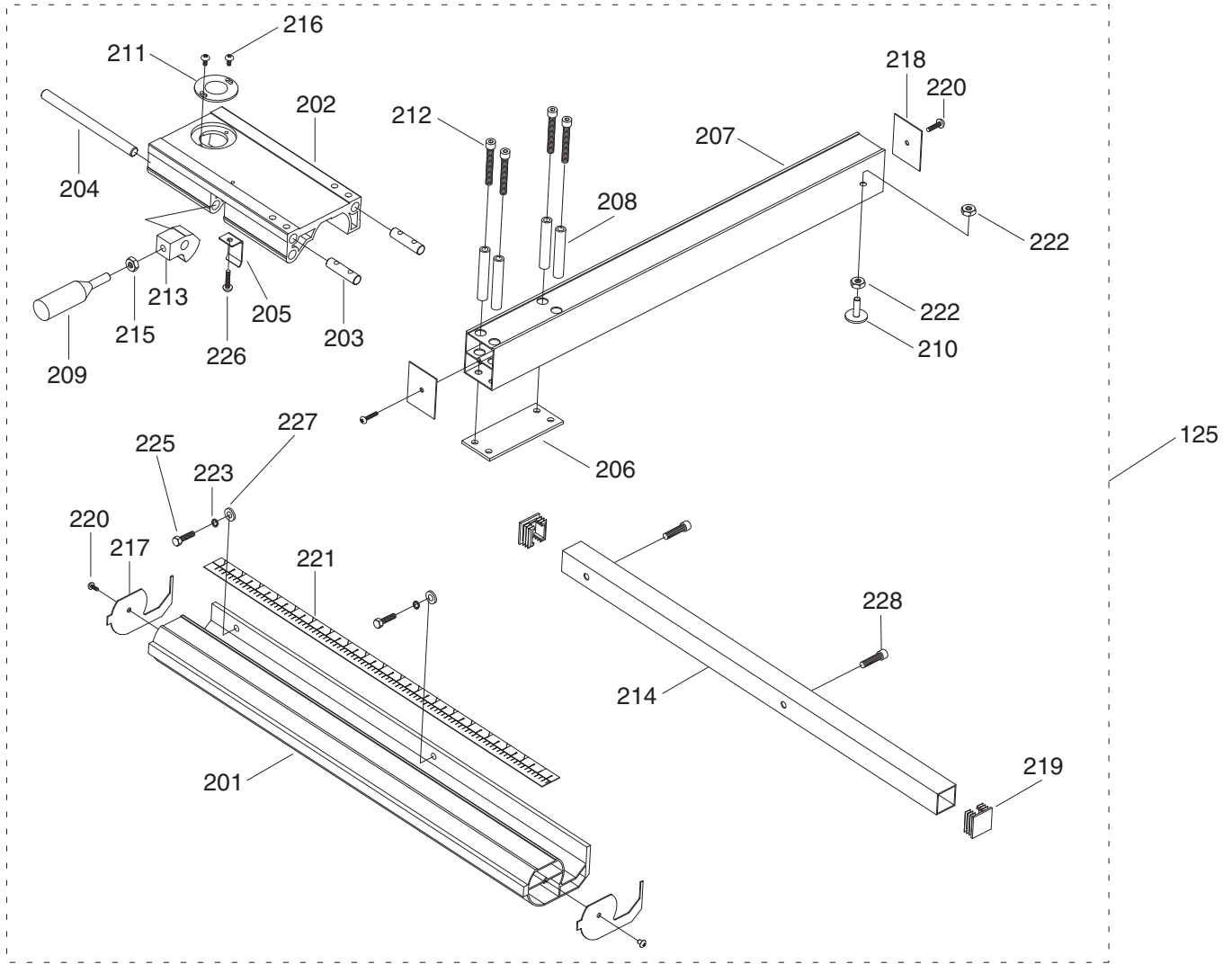


| REF | PART # | DESCRIPTION |
|-----|----------|--------------------------------|
| 77 | P0513077 | LOCK WASHER 8MM |
| 96 | P0513096 | FLAT WASHER 8MM |
| 98 | P0513098 | CAP SCREW M10-1.5 X 35 |
| 99 | P0513099 | HEX NUT M10-1.5 |
| 100 | P0513100 | TRUNNION GEAR |
| 101 | P0513101 | STAR KNOB BOLT |
| 102 | P0513102 | TRUNNION SUPPORT BRACKET |
| 103 | P0513103 | LOCK WASHER 10MM |
| 104 | P0513104 | FLAT WASHER 10MM |
| 105 | P0513105 | CAP SCREW M6-1 X 15 |
| 106 | P0513106 | CAP SCREW M6-1 X 50 |
| 107 | P0513107 | ALIGNMENT ROD |
| 108 | P0513108 | HEX NUT M6-1 |
| 109 | P0513109 | ADJUSTMENT KNOB BOLT M6-1 |
| 110 | P0513110 | BALL BEARING 6000ZZ |
| 111 | P0513111 | BUTTON HD CAP SCR M10-1.5 X 20 |
| 112 | P0513112 | FLAT WASHER 8MM |
| 113 | P0513113 | FLAT WASHER 8MM |
| 114 | P0513114 | PHLP HD SCR M4-.7 X 6 |
| 115 | P0513115 | GEAR PLATE |
| 116 | P0513116 | LOCK NUT M8-1.25 |
| 117 | P0513117 | PHLP HD SCR M4-.7 x 6 |

| REF | PART # | DESCRIPTION |
|-----|-------------|----------------------------|
| 118 | P0513118 | LOCK HANDLE M8-1.25 |
| 119 | P0513119 | FLAT WASHER 8MM |
| 120 | P0513120 | POINTER |
| 121 | P0513121 | TRUNNION PLATE |
| 122 | P0513122 | LOCK WASHER 8MM |
| 123 | P0513123 | CAP SCREW M8-1.25 X 16 |
| 124 | P0513124 | CARRIAGE BOLT M8-1.25 X 80 |
| 126 | P0513126 | TABLE 17" X 17" (G0513) |
| 126 | P0513A40126 | TABLE 17" X 17" (G0513A40) |
| 127 | P0513127 | TABLE INSERT |
| 128 | P0513128 | TABLE PIN |
| 129 | P0513129 | HEX BOLT M8-1.25 X 20 LH |
| 130 | P0513130 | LEFT GUARD |
| 131 | P0513131 | THUMB SCREW M6-1 X 16 |
| 132 | P0513132 | LOWER BLADE GUIDE SUPPORT |
| 133 | P0513133 | BLADE GUIDE |
| 134 | P0513134 | GUIDE ADJUSTMENT SHAFT |
| 135 | P0513135 | RIGHT GUARD |
| 139 | P0513139 | CAP SCREW M10-1.5 X 30 |
| 148 | P0513148 | CARRIAGE BOLT M8-1.25 X 85 |
| 163 | P0513163 | LOCK WASHER 8MM |
| 196 | P0513196 | STEEL BALL 5MM |



G0513 Fence

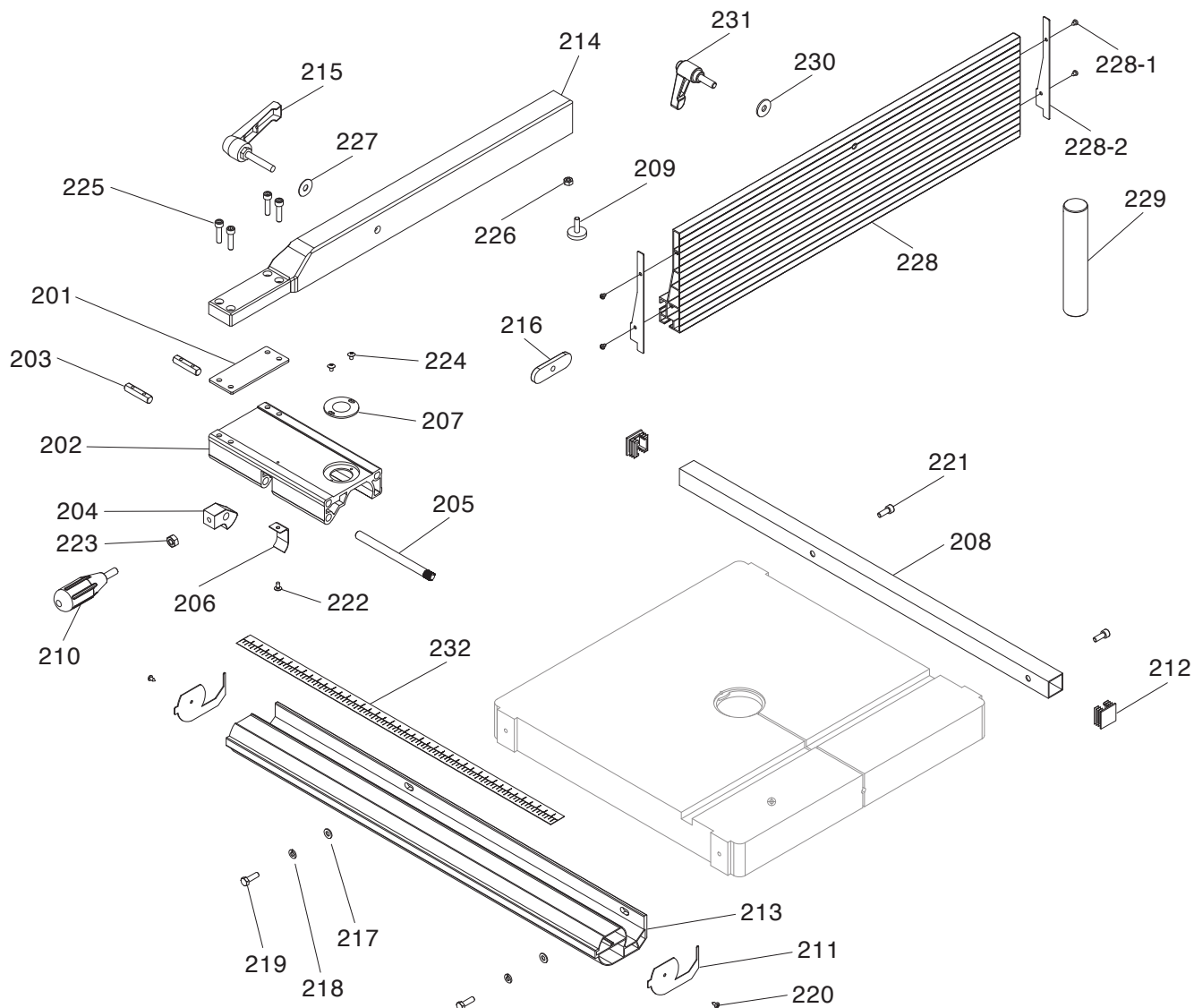


| REF | PART # | DESCRIPTION |
|-----|----------|------------------------|
| 125 | P0513125 | FENCE ASSEMBLY W/RAILS |
| 201 | P0513201 | FRONT FENCE RAIL |
| 202 | P0513202 | FENCE BASE |
| 203 | P0513203 | ALIGNMENT SHAFT |
| 204 | P0513204 | LOCK BLOCK SHAFT |
| 205 | P0513205 | SPRING PLATE |
| 206 | P0513206 | SPACER PLATE |
| 207 | P0513207 | FENCE |
| 208 | P0513208 | SLEEVE |
| 209 | P0513209 | FENCE LOCK HANDLE |
| 210 | P0513210 | RAIL PAD |
| 211 | P0513211 | CONVEX WINDOW |
| 212 | P0513212 | CAP SCREW M6-1 X 55 |
| 213 | P0513213 | LOCK CAM |

| REF | PART # | DESCRIPTION |
|-----|----------|-------------------------|
| 214 | P0513214 | REAR FENCE RAIL |
| 215 | P0513215 | HEX NUT M6-1 |
| 216 | P0513216 | HEX NUT M18-1.5 |
| 217 | P0513217 | FRONT RAIL END CAP |
| 218 | P0513218 | FENCE END CAP |
| 219 | P0513219 | REAR RAIL END CAP |
| 220 | P0513220 | TAP SCREW M3.5 X 8 |
| 221 | P0513221 | FENCE SCALE |
| 222 | P0513222 | HEX NUT M6-1 |
| 223 | P0513223 | LOCK WASHER 6MM |
| 225 | P0513225 | HEX BOLT M6-1 X 20 |
| 226 | P0513226 | FLANGE SCREW M4-.7 X 10 |
| 227 | P0513227 | FLAT WASHER 6MM |
| 228 | P0513228 | CAP SCREW M6-1 X 16 |



G0513A40 Fence

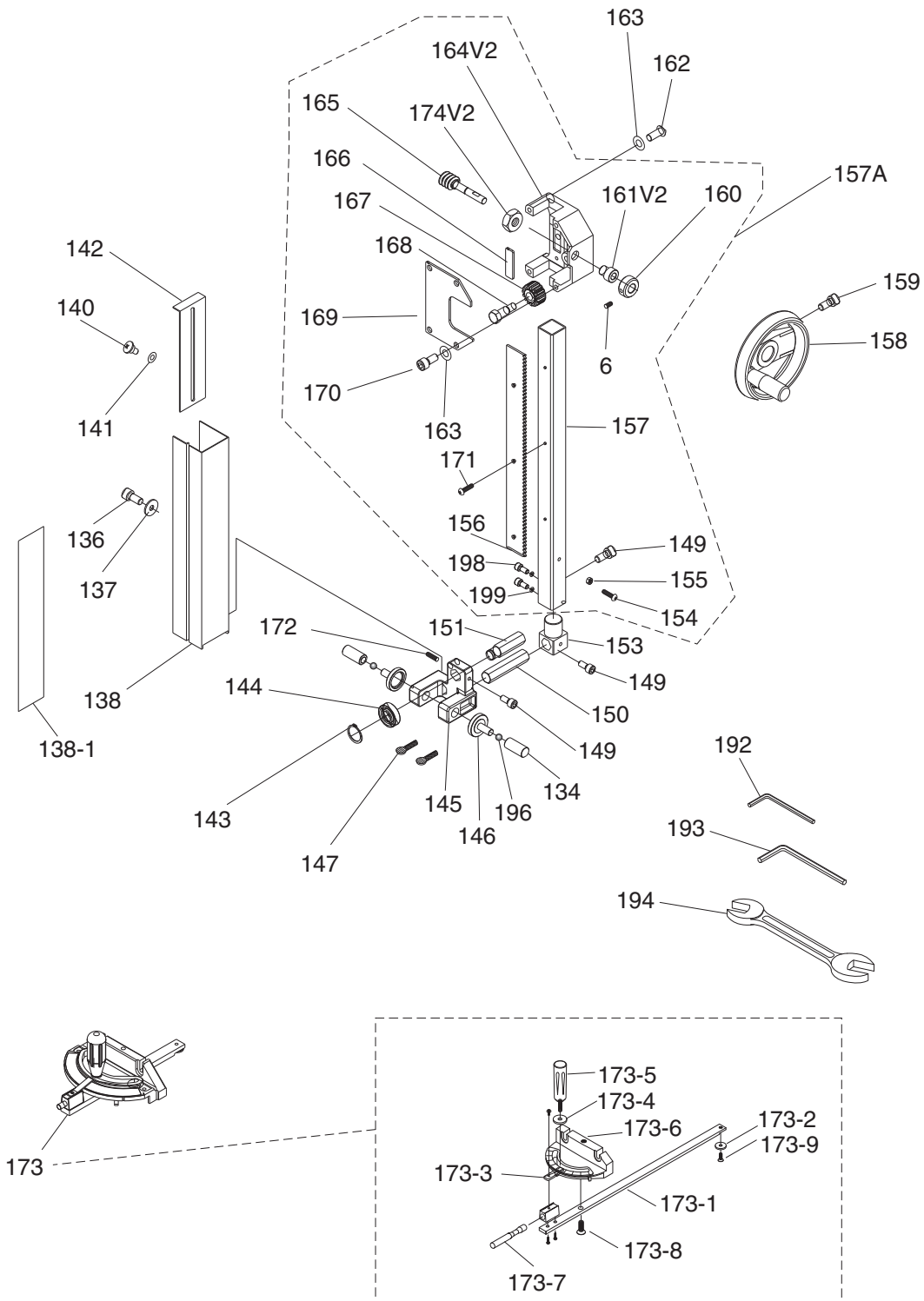


| REF | PART # | DESCRIPTION |
|-----|-------------|-----------------------------|
| 201 | P0513A40201 | SPACER PLATE |
| 202 | P0513A40202 | ADJUST BASE |
| 203 | P0513A40203 | FENCE MOUNT ROD |
| 204 | P0513A40204 | LOCK BLOCK |
| 205 | P0513A40205 | SHAFT |
| 206 | P0513A40206 | SPRING PIECE |
| 207 | P0513A40207 | CONVEX WINDOW |
| 208 | P0513A40208 | REAR RAIL 640MM |
| 209 | P0513A40209 | RAIL PAD M6-1 X 20 |
| 210 | P0513A40210 | FENCE HANDLE M8-1.25 X 22 |
| 211 | P0513A40211 | GUARD PIECE |
| 212 | P0513A40212 | PLUG |
| 213 | P0513A40213 | FRONT RAIL 640MM |
| 214 | P0513A40214 | CAST IRON FENCE 590MM |
| 215 | P0513A40215 | LOCKING HANDLE M8-1.25 X 44 |
| 216 | P0513A40216 | MOVING PLATE |
| 217 | P0513A40217 | FLAT WASHER 6MM |

| REF | PART # | DESCRIPTION |
|-------|---------------|---------------------------------|
| 218 | P0513A40218 | LOCK WASHER 6MM |
| 219 | P0513A40219 | HEX BOLT M6-1 X 20 |
| 220 | P0513A40220 | TAP SCREW M3.5 X 8 |
| 221 | P0513A40221 | CAP SCREW M6-1 X 16 |
| 222 | P0513A40222 | FLANGE BOLT M4-.7 X 8 |
| 223 | P0513A40223 | HEX NUT M8-1.25 |
| 224 | P0513A40224 | FLANGE SCREW M4-.7 X 6 |
| 225 | P0513A40225 | CAP SCREW M6-1 X 25 |
| 226 | P0513A40226 | HEX NUT M6-1 |
| 227 | P0513A40227 | FLAT WASHER 8MM |
| 228 | P0513A40228 | ALUMINUM RESAW FENCE 590MM |
| 228-1 | P0513A40228-1 | TAP SCREW M3.5 X 12 |
| 228-2 | P0513A40228-2 | FENCE END CAP |
| 229 | P0513A40229 | RESAW DRIFT BAR 6-1/4" X 1-1/4" |
| 230 | P0513A40230 | FENDER WASHER 8MM |
| 231 | P0513A40231 | ADJ HANDLE 65L, M8-1.25 X 25 |
| 232 | P0513A40232 | FENCE SCALE 18-1/2" |



G0513 & G0513A40 Upper Blade Guides & Miter Gauge



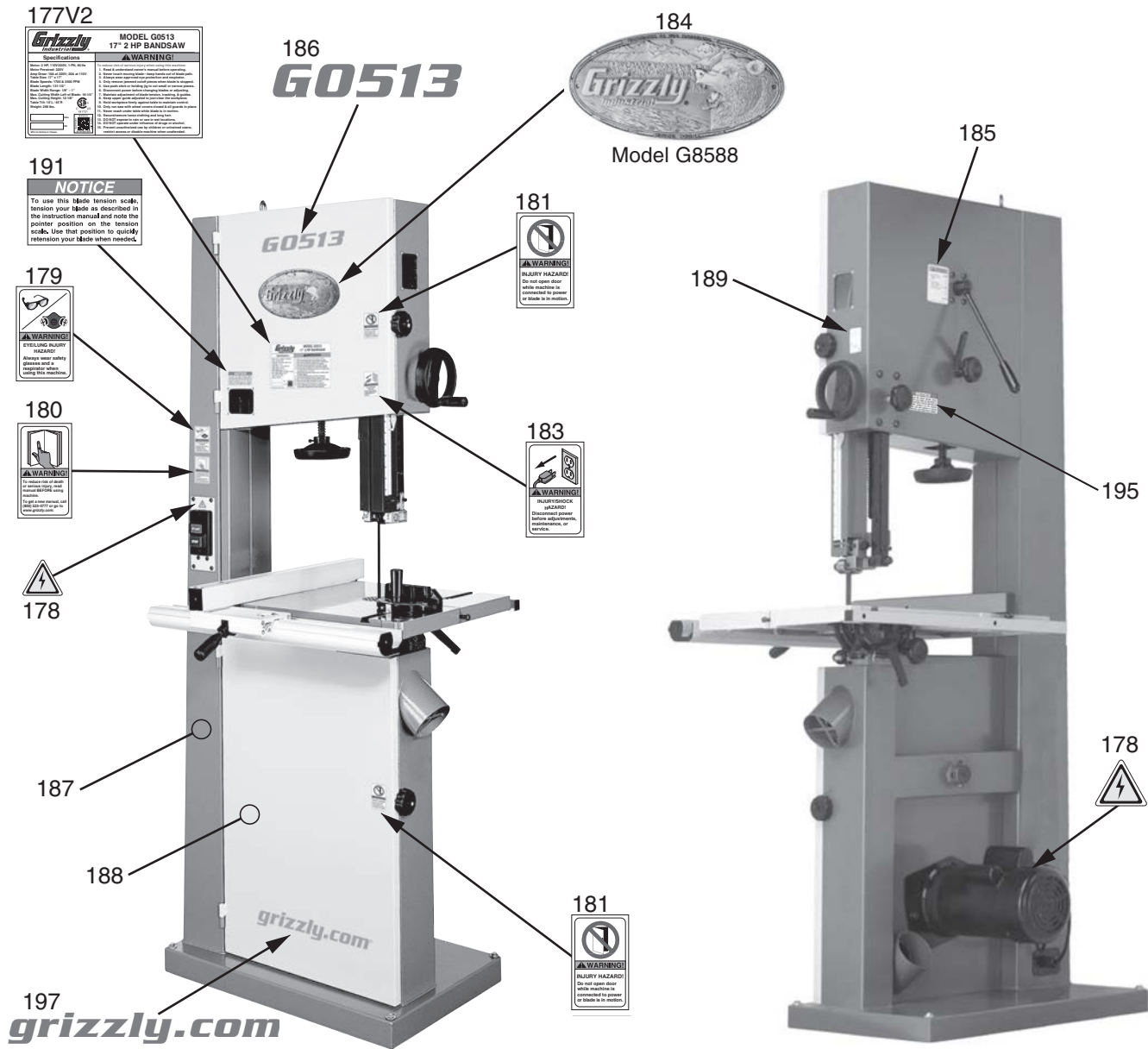
G0513 & G0513A40 Upper Blade Guides & Miter Gauge Parts List

| REF | PART # | DESCRIPTION |
|-------|------------|--|
| 6 | P0513006 | SET SCREW M5-.8 X 5 |
| 134 | P0513134 | GUIDE ADJUSTMENT SHAFT |
| 136 | P0513136 | CAP SCREW M8-1.25 X 80 |
| 137 | P0513137 | FLAT WASHER 8MM |
| 138 | P0513138 | UPPER BLADE GUARD |
| 138-1 | P0513138-1 | BLADE GUARD SCALE |
| 140 | P0513140 | STEP SCREW M4-.7 X 5 |
| 141 | P0513141 | FIBER WASHER 5MM |
| 142 | P0513142 | SLIDING PLATE |
| 143 | P0513143 | EXT RETAINING RING 15MM |
| 144 | P0513144 | BALL BEARING 6202ZZ |
| 145 | P0513145 | UPPER BLADE GUIDE SUPPORT |
| 146 | P0513146 | BLADE GUIDE |
| 147 | P0513147 | THUMB SCREW M6-1 X 16 |
| 149 | P0513149 | CAP SCREW M6-1 X 15 |
| 150 | P0513150 | ADJUSTMENT SHAFT |
| 151 | P0513151 | UPPER SPACING SLEEVE |
| 153 | P0513153 | UPPER GUIDE SUPPORT BLOCK |
| 154 | P0513154 | PHLP HD SCR M4-.7 X 10 |
| 155 | P0513155 | HEX NUT M4-.7 |
| 156 | P0513156 | RACK |
| 157A | P0513157A | GUIDE POST ASSEMBLY |
| 157 | P0513157 | GUIDE POST |
| 158 | P0513158 | HANDWHEEL TYPE-17 137D X 10B-S X M10-1.5 |
| 159 | P0513159 | HEX BOLT M6-1 X 20 |
| 160 | P0513160 | LOCK COLLAR |
| 161V2 | P0513161V2 | THREADED BUSHING V2.06.09 |
| 162 | P0513162 | CAP SCREW M8-1.25 X 20 |

| REF | PART # | DESCRIPTION |
|-------|------------|-----------------------------|
| 163 | P0513163 | LOCK WASHER 8MM |
| 164V2 | P0513164V2 | GUIDE BRACKET 14MM V2.06.09 |
| 165 | P0513165 | WORM CYLINDER |
| 166 | P0513166 | FIXED PLATE |
| 167 | P0513167 | PINION GEAR 15T |
| 168 | P0513168 | PINION GEAR STEP BOLT |
| 169 | P0513169 | BRACKET COVER |
| 170 | P0513170 | CAP SCREW M8-1.25 X 16 |
| 171 | P0513171 | PHLP HD SCR M4-.7 X 8 |
| 172 | P0513172 | SET SCREW M6-1 X 16 |
| 173 | P0513173 | MITER GAUGE ASSY |
| 173-1 | P0513173-1 | GUIDE BAR |
| 173-2 | P0513173-2 | T-SLOT WASHER 8MM BLACK |
| 173-3 | P0513173-3 | INDICATOR |
| 173-4 | P0513173-4 | NYLON WASHER 1/4" |
| 173-5 | P0513173-5 | MITER GAUGE HANDLE 1/4"-20 |
| 173-6 | P0513173-6 | MITER GAUGE BODY |
| 173-7 | P0513173-7 | INDEXING PIN |
| 173-8 | P0513173-8 | PHLP HD SCR M6-1 X 6 |
| 173-9 | P0513173-9 | FLANGE SCREW M5-.8 X 8 |
| 174V2 | P0513174V2 | BUSHING W/HEX NUT V2.04.19 |
| 192 | P0513192 | HEX WRENCH 5MM |
| 193 | P0513193 | HEX WRENCH 8MM |
| 194 | P0513194 | WRENCH 10 X 13MM OPEN-ENDS |
| 196 | P0513196 | STEEL BALL 5MM |
| 198 | P0513198 | CAP SCREW M5-.8 X 12 |
| 199 | P0513199 | FLAT WASHER 5MM |



G0513 Labels



| REF | PART # | DESCRIPTION |
|-------|------------|---------------------------|
| 177V2 | P0513177V2 | MACHINE ID LABEL V2.07.18 |
| 178 | P0513178 | ELECTRICITY LABEL |
| 179 | P0513179 | GLASSES/RESPIRATOR LABEL |
| 180 | P0513180 | READ MANUAL LABEL |
| 181 | P0513181 | DOOR WARNING LABEL |
| 183 | P0513183 | DISCONNECT POWER LABEL |
| 184 | P0513184 | GRIZZLY NAMEPLATE-SMALL |
| 185 | P0513185 | SAW TENSION LABEL |

| REF | PART # | DESCRIPTION |
|-----|----------|-------------------------------|
| 186 | P0513186 | MODEL NUMBER LABEL |
| 187 | P0513187 | TOUCH-UP PAINT, GRIZZLY GREEN |
| 188 | P0513188 | TOUCH-UP PAINT, LIGHT GRAY |
| 189 | P0513189 | GUIDE POST ADJUST LABEL |
| 191 | P0513191 | BLADE TENSION SCALE LABEL |
| 195 | P0513195 | GUIDE POST LOCK LABEL |
| 197 | P0513197 | GRIZZLY.COM LABEL |

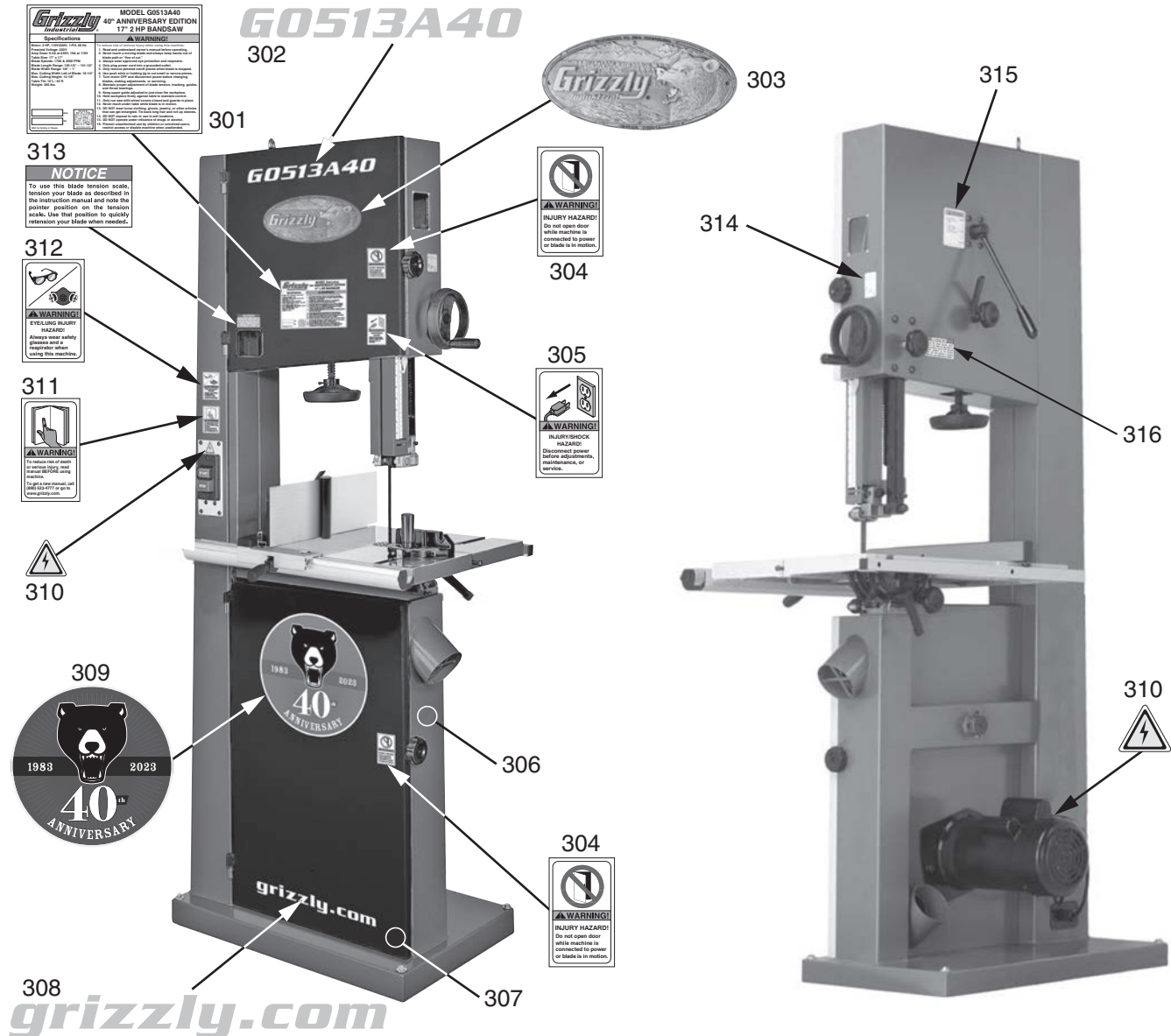
⚠ WARNING

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.

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G0513A40 Labels



| REF PART # | DESCRIPTION |
|------------|---|
| 301 | P0513A40301 MACHINE ID LABEL |
| 302 | P0513A40302 MODEL NUMBER LABEL |
| 303 | P0513A40303 GRIZZLY NAMEPLATE |
| 304 | P0513A40304 DO NOT OPEN DOOR LABEL |
| 305 | P0513A40305 DISCONNECT POWER LABEL |
| 306 | P0513A40306 TOUCH-UP PAINT, GRIZZLY GREEN |
| 307 | P0513A40307 TOUCH-UP PAINT, GRIZZLY BLACK |
| 308 | P0513A40308 GRIZZLY.COM LABEL |

| REF PART # | DESCRIPTION |
|------------|---------------------------------------|
| 309 | P0513A40309 40TH ANNIVERSARY LABEL |
| 310 | P0513A40310 ELECTRICITY LABEL |
| 311 | P0513A40311 READ MANUAL LABEL |
| 312 | P0513A40312 EYE LUNG HAZARD LABEL |
| 313 | P0513A40313 BLADE TENSION SCALE LABEL |
| 314 | P0513A40314 GUIDE POST ADJUST LABEL |
| 315 | P0513A40315 SAW TENSION LABEL |
| 316 | P0513A40316 GUIDE POST LOCK LABEL |

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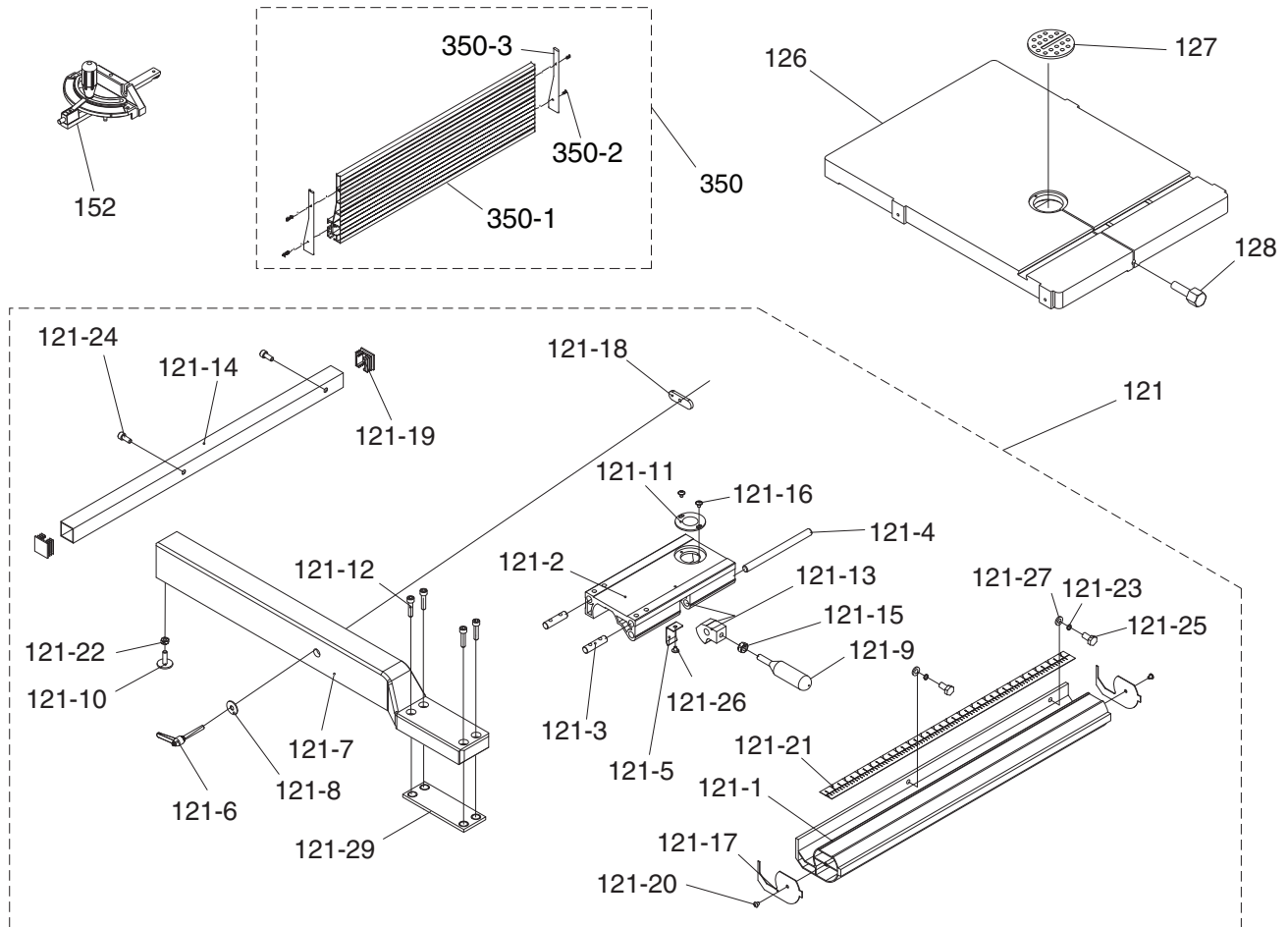
G0513X2 Main Parts List

| REF | PART # | DESCRIPTION |
|------|--------------|-----------------------------------|
| 2 | P0513X2002 | SET SCREW M6-1 X 10 |
| 3 | P0513X2003 | BUSHING |
| 4 | P0513X2004 | LIFTING EYE BOLT M10-1.5 |
| 5 | P0513X2005 | MACHINE BODY |
| 7 | P0513X2007 | BUSHING |
| 8 | P0513X2008 | FLAT WASHER 6MM |
| 9 | P0513X2009 | POWER CORD 14G 3W 72" |
| 10 | P0513X2010 | HEX NUT M6-1 |
| 11 | P0513X2011 | POINTER |
| 12 | P0513X2012 | STEP SCREW M4-.7 X 5 |
| 13 | P0513X2013 | HINGE SHAFT |
| 14 | P0513X2014 | ROLL PIN 5 X 36 |
| 15 | P0513X2015 | UPPER WHEEL SHAFT HINGE |
| 16 | P0513X2016 | UPPER WHEEL SHAFT |
| 17 | P0513X2017 | UPPER WHEEL ASSEMBLY |
| 17-1 | P0513X2017-1 | BUSHING |
| 17-2 | P0513X2017-2 | BALL BEARING 6204-2RS |
| 17-3 | P0513X2017-3 | INT RETAINING RING 47MM |
| 17-4 | P0513X2017-4 | UPPER WHEEL 17" |
| 17-5 | P0513X2017-5 | URETHANE TIRE 17" 1-PAIR |
| 18 | P0513X2018 | LOWER WHEEL ASSEMBLY |
| 18-1 | P0513X2018-1 | BUSHING |
| 18-2 | P0513X2018-2 | BALL BEARING 6204-2RS |
| 18-3 | P0513X2018-3 | INT RETAINING RING 47MM |
| 18-4 | P0513X2018-4 | LOWER WHEEL 17" |
| 18-5 | P0513X2018-5 | URETHANE TIRE 17" 1-PAIR |
| 21 | P0513X2021 | WHEEL FLAT WASHER 8MM |
| 22 | P0513X2022 | CAP SCREW M8-1.25 X 16 |
| 23 | P0513X2023 | SAW BLADE 131.5" X 1/2" 6TPI HOOK |
| 24 | P0513X2024 | LOCK WASHER 8MM |
| 25 | P0513X2025 | CAP SCREW M8-1.25 X 20 |
| 28 | P0513X2028 | LOWER WHEEL ASSEMBLY |
| 29 | P0513X2029 | HEX NUT 1-14 |
| 30 | P0513X2030 | LOCK WASHER 1" |
| 31 | P0513X2031 | MOTOR CORD 14G 3W |
| 32 | P0513X2032 | COMPRESSION SPRING 7 X 8 X 90 |
| 33 | P0513X2033 | ROLL PIN 3 X 16 |
| 34 | P0513X2034 | ALIGNMENT PLATE |
| 35 | P0513X2035 | THRUST BEARING 51201 |
| 36 | P0513X2036 | 2-BUTTON START/STOP SWITCH |
| 37 | P0513X2037 | TENSION HANDWHEEL |
| 38 | P0513X2038 | TENSION ADJUSTING ROD |
| 39 | P0513X2039 | FLANGE SCREW M5-.8 X 10 |
| 40 | P0513X2040 | EXT TOOTH WASHER 5MM |
| 41 | P0513X2041 | HEX NUT M5-.8 |
| 42 | P0513X2042 | FLANGE SCREW M5-.8 X 16 |
| 43 | P0513X2043 | SWITCH BACK PLATE |
| 44 | P0513X2044 | CAP SCREW M8-1.25 X 16 |
| 45 | P0513X2045 | FENDER WASHER 8MM |
| 46 | P0513X2046 | UPPER WHEEL SLIDING BRACKET |
| 47 | P0513X2047 | CAP SCREW M8-1.25 X 50 |
| 48 | P0513X2048 | STEEL BLIND RIVET 3 X 13MM |
| 49 | P0513X2049 | CAP SCREW M6-1 X 10 |
| 50 | P0513X2050 | CLEAR WINDOW |
| 55A | P0513X2055A | UPPER WHEEL COVER ASSY |

| REF | PART # | DESCRIPTION |
|--------|----------------|--|
| 55 | P0513X2055 | UPPER WHEEL COVER |
| 56 | P0513X2056 | HEX BOLT M6-1 X 25 |
| 57 | P0513X2057 | FLAT WASHER 6MM |
| 58 | P0513X2058 | WHEEL BRUSH |
| 59 | P0513X2059 | CAP SCREW M6-1 X 25 |
| 60 | P0513X2060 | STAR KNOB |
| 61 | P0513X2061 | LOCK NUT M6-1 |
| 62 | P0513X2062 | STRAIN RELIEF 16MM STRAIGHT LT |
| 63 | P0513X2063 | HEIGHT POINTER |
| 64 | P0513X2064 | HEX NUT M8-1.25 |
| 65 | P0513X2065 | HEX BOLT M8-1.25 X 90 |
| 66 | P0513X2066 | STAR KNOB BOLT M10-1.5 X 20 |
| 67 | P0513X2067 | STAR KNOB BOLT M10-1.5 X 55 |
| 68 | P0513X2068 | THREADED HANDLE M10-1.5 |
| 69 | P0513X2069 | CAM |
| 70 | P0513X2070 | PILLOW BLOCK |
| 71 | P0513X2071 | HANDLE M12-1.75 |
| 72 | P0513X2072 | LEVER |
| 73 | P0513X2073 | HEX NUT M12-1.75 |
| 74 | P0513X2074 | LEVER HUB |
| 75 | P0513X2075 | BUTTON HD CAP SCR M8-1.25 X 20 |
| 76 | P0513X2076 | LOCK WASHER 8MM |
| 78 | P0513X2078 | SHAFT COVER |
| 79 | P0513X2079 | SET SCREW M8-1.25 X 20 |
| 80 | P0513X2080 | HEX NUT M8-1.25 |
| 81 | P0513X2081 | LOWER WHEEL SHAFT |
| 82V2 | P0513X2082V2 | MOTOR 2HP 110V/220V 1-PH V2.01.10 |
| 82-1V2 | P0513X2082-1V2 | MOTOR FAN COVER V2.01.10 |
| 82-2V2 | P0513X2082-2V2 | MOTOR FAN V2.01.10 |
| 82-3V2 | P0513X2082-3V2 | S CAPACITOR 300M 250V 1-1/2 X 2-3/8 V2.01.10 |
| 82-4V2 | P0513X2082-4V2 | S CAPACITOR COVER V2.01.10 |
| 82-5V2 | P0513X2082-5V2 | R CAPACITOR 40M 250V 1-3/8 X 2-5/8 V2.01.10 |
| 82-6V2 | P0513X2082-6V2 | R CAPACITOR COVER V2.01.10 |
| 82-7V2 | P0513X2082-7V2 | MOTOR JUNCTION BOX V2.01.10 |
| 82-8 | P0513X2082-8 | CONTACT PLATE 5/8 |
| 82-9 | P0513X2082-9 | CENTRIFUGAL SWITCH 5/8-1725 |
| 82-10 | P0513X2082-10 | BALL BEARING 6203ZZ |
| 82-11 | P0513X2082-11 | BALL BEARING 6205ZZ |
| 83 | P0513X2083 | HEX BOLT M10-1.5 X 25 |
| 84 | P0513X2084 | LOCK WASHER 10MM |
| 85 | P0513X2085 | MOTOR MOUNT BRACKET |
| 86 | P0513X2086 | BUTTON HD CAP SCR M8-1.25 X 20 |
| 87 | P0513X2087 | STRAIN RELIEF PLATE 2-HOLE |
| 88 | P0513X2088 | FLANGE SCREW M5-.8 X 10 |
| 89 | P0513X2089 | PILLOW BLOCK |
| 90 | P0513X2090 | KEY 5 X 5 X 35 |
| 91 | P0513X2091 | HEX BOLT M8-1.25 X 20 LH |
| 92 | P0513X2092 | MOTOR PULLEY TYPE-A 3.5" |
| 93 | P0513X2093 | V-BELT A42 |
| 94 | P0513X2094 | CAP SCREW M6-1 X 10 |
| 95A | P0513X2095A | LOWER WHEEL COVER |
| 97 | P0513X2097 | FENDER WASHER 8MM |
| 111 | P0513X2111 | CAP SCREW M6-1 X 20 |
| 119 | P0513X2119 | LOCK WASHER 4MM |



G0513X2 Fence Assembly & Table

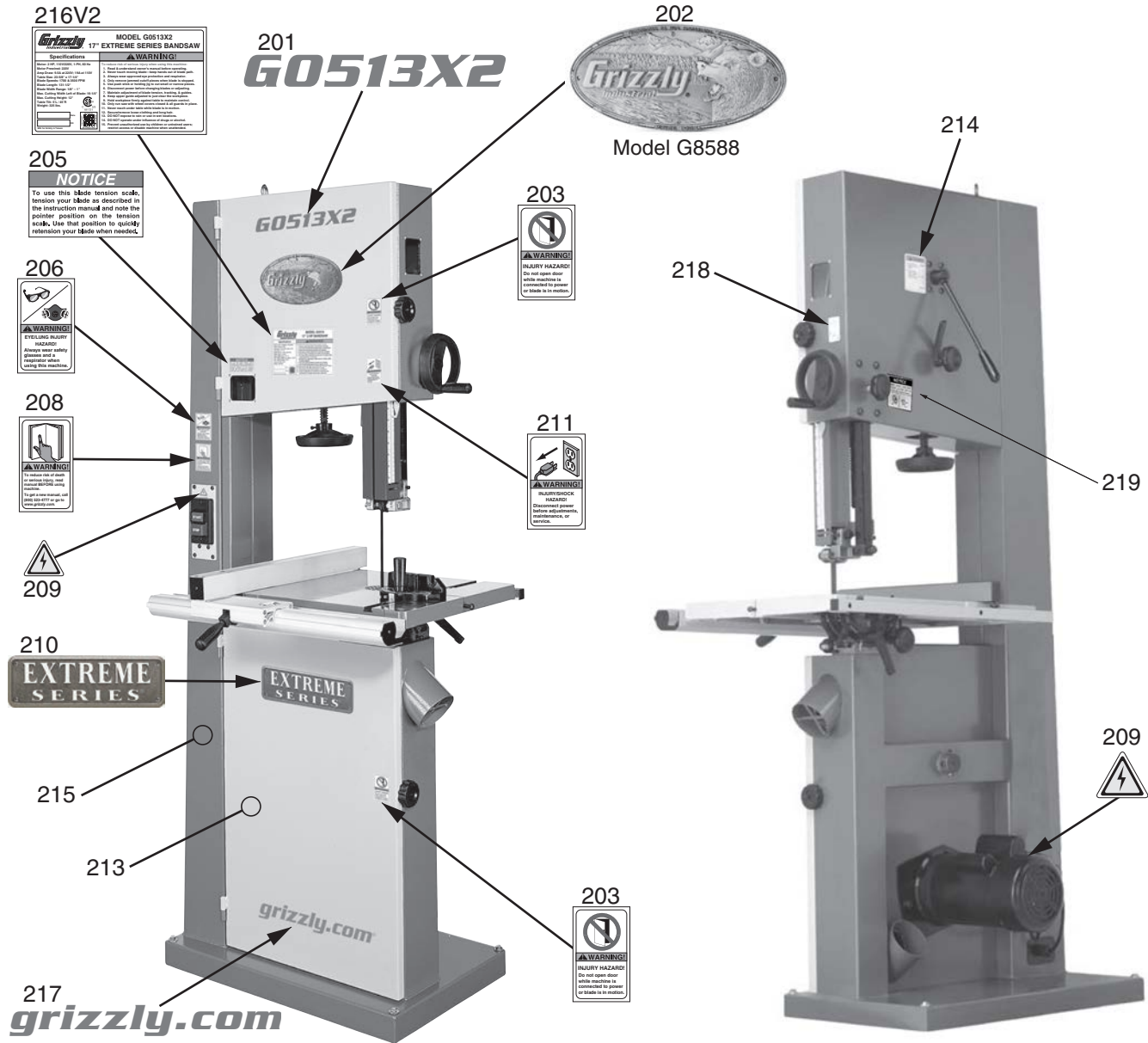


| REF | PART # | DESCRIPTION |
|--------|---------------|-----------------------------|
| 121 | P0513X2121 | FENCE ASSEMBLY |
| 121-1 | P0513X2121-1 | FRONT RAIL 640MM |
| 121-2 | P0513X2121-2 | ADJUST BASE |
| 121-3 | P0513X2121-3 | FIXED SHAFT |
| 121-4 | P0513X2121-4 | SHAFT |
| 121-5 | P0513X2121-5 | SPRING PIECE |
| 121-6 | P0513X2121-6 | LOCKING HANDLE M8-1.25 X 44 |
| 121-7 | P0513X2121-7 | CAST IRON FENCE 590MM |
| 121-8 | P0513X2121-8 | FLAT WASHER 8MM |
| 121-9 | P0513X2121-9 | FENCE HANDLE M8-1.25 X 22 |
| 121-10 | P0513X2121-10 | RAIL PAD |
| 121-11 | P0513X2121-11 | CONVEX WINDOW |
| 121-12 | P0513X2121-12 | CAP SCREW M6-1 X 24 |
| 121-13 | P0513X2121-13 | LOCK BLOCK |
| 121-14 | P0513X2121-14 | REAR RAIL 640MM |
| 121-15 | P0513X2121-15 | HEX NUT M8-1.25 |
| 121-16 | P0513X2121-16 | FLANGE SCREW M4-.7 X 6 |
| 121-17 | P0513X2121-17 | GUARD PIECE |
| 121-18 | P0513X2121-18 | MOVING PLATE |

| REF | PART # | DESCRIPTION |
|--------|---------------|------------------------------|
| 121-19 | P0513X2121-19 | PLUG |
| 121-20 | P0513X2121-20 | TAP SCREW M3.5 X 8 |
| 121-21 | P0513X2121-21 | FENCE SCALE 18-1/2" |
| 121-22 | P0513X2121-22 | HEX NUT M6-1 |
| 121-23 | P0513X2121-23 | LOCK WASHER 6MM |
| 121-24 | P0513X2121-24 | CAP SCREW M6-1 X 16 |
| 121-25 | P0513X2121-25 | HEX BOLT M6-1 X 20 |
| 121-26 | P0513X2121-26 | FLANGE BOLT M4-.7 X 8 |
| 121-27 | P0513X2121-27 | FLAT WASHER 6MM |
| 121-29 | P0513X2121-29 | SPACER PLATE |
| 126 | P0513X2126 | TABLE 17" X 24" |
| 127 | P0513X2127 | TABLE INSERT |
| 128 | P0513X2128 | TABLE PIN |
| 152 | P0513X2152 | MITER GAUGE ASSY |
| 350 | P0513X2350 | RESAW FENCE ASSEMBLY |
| 350-1 | P0513X2350-1 | ALUMINUM RESAW FENCE 590MM |
| 350-2 | P0513X2350-2 | TAP SCREW 3.5 X 8 |
| 350-3 | P0513X2350-3 | FENCE END PLATE 148 X 22 X 1 |



G0513X2 Labels



| REF | PART # | DESCRIPTION |
|-----|------------|------------------------|
| 201 | P0513X2201 | MODEL NUMBER LABEL |
| 202 | P0513X2202 | GRIZZLY LOGO PLATE |
| 203 | P0513X2203 | OPEN DOOR LABEL |
| 205 | P0513X2205 | SCALE DIRECTIONS LABEL |
| 206 | P0513X2206 | SAFETY GLASSES LABEL |
| 208 | P0513X2208 | READ MANUAL LABEL |
| 209 | P0513X2209 | ELECTRICITY LABEL |
| 210 | P0513X2210 | EXTREME SERIES PLATE |

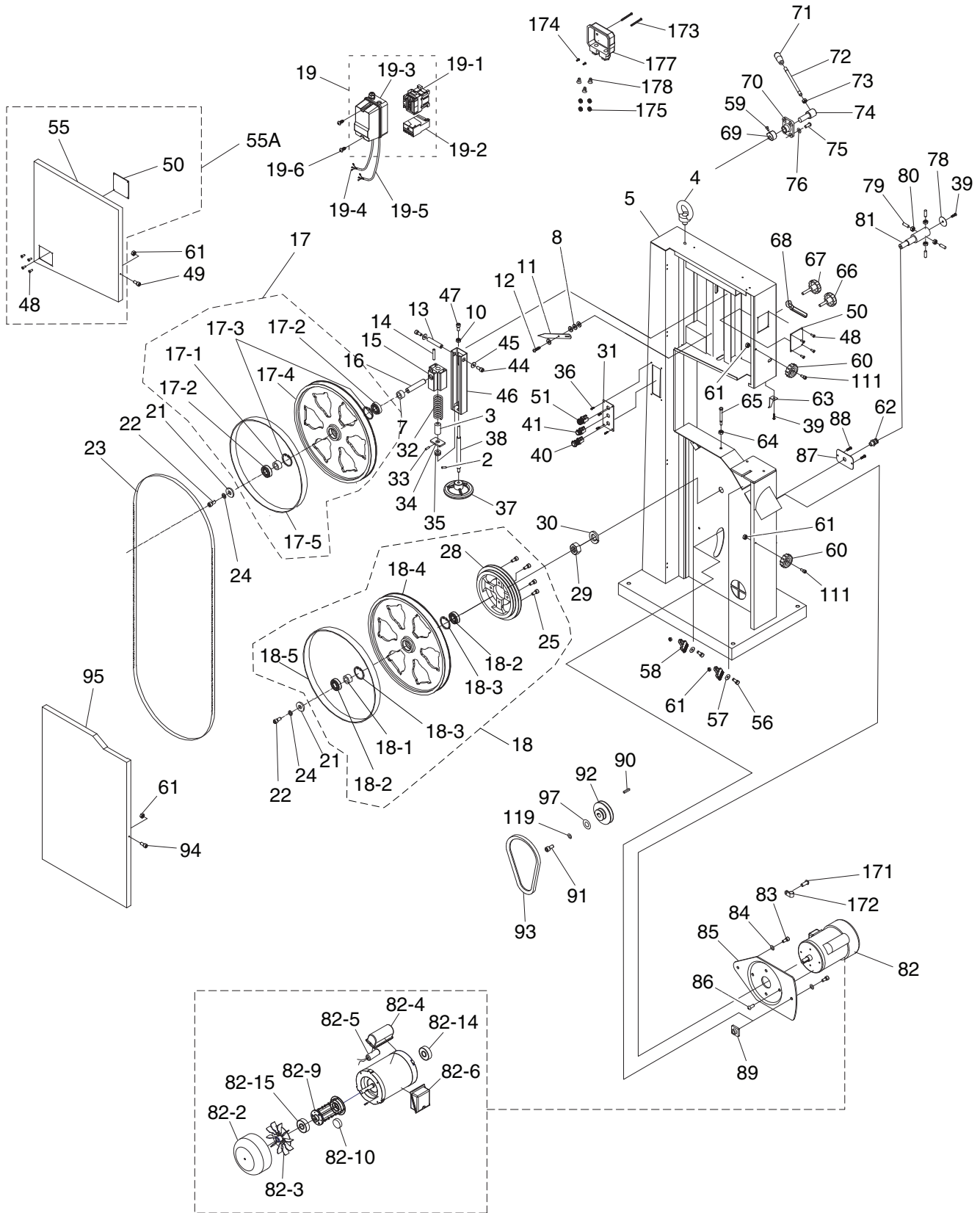
| REF | PART # | DESCRIPTION |
|-------|--------------|-------------------------------|
| 211 | P0513X2211 | DISCONNECT POWER LABEL |
| 213 | P0513X2213 | TOUCH-UP PAINT, GRIZZLY PUTTY |
| 214 | P0513X2214 | TENSION ADJ LABEL |
| 215 | P0513X2215 | TOUCH-UP PAINT, GRIZZLY GREEN |
| 216V2 | P0513X2216V2 | MACHINE ID LABEL V2.09.18 |
| 217 | P0513X2217 | GRIZZLY.COM LABEL |
| 218 | P0513X2218 | GUIDE POST ADJUST LABEL |
| 219 | P0513X2219 | GUIDE POST LOCK 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.



G0513X2BF Main



G0513X2BF Main Parts List

| REF PART # | DESCRIPTION |
|------------|--|
| 2 | P0513X2BF002 SET SCREW M6-1 X 10 |
| 3 | P0513X2BF003 BUSHING |
| 4 | P0513X2BF004 LIFTING EYE BOLT M10-1.5 |
| 5 | P0513X2BF005 MACHINE BODY |
| 7 | P0513X2BF007 BUSHING |
| 8 | P0513X2BF008 FLAT WASHER 6MM |
| 10 | P0513X2BF010 HEX NUT M6-1 |
| 11 | P0513X2BF011 POINTER |
| 12 | P0513X2BF012 STEP SCREW M4-.7 X 5 |
| 13 | P0513X2BF013 HINGE SHAFT |
| 14 | P0513X2BF014 ROLL PIN 5 X 35 |
| 15 | P0513X2BF015 UPPER WHEEL SHAFT HINGE |
| 16 | P0513X2BF016 UPPER WHEEL SHAFT |
| 17 | P0513X2BF017 UPPER WHEEL ASSEMBLY |
| 17-1 | P0513X2BF017-1 BUSHING |
| 17-2 | P0513X2BF017-2 BALL BEARING 6204-2RS |
| 17-3 | P0513X2BF017-3 INT RETAINING RING 47MM |
| 17-4 | P0513X2BF017-4 UPPER WHEEL 17" |
| 17-5 | P0513X2BF017-5 URETHANE TIRE 17" 1-PAIR |
| 18 | P0513X2BF018 LOWER WHEEL ASSEMBLY |
| 18-1 | P0513X2BF018-1 BUSHING |
| 18-2 | P0513X2BF018-2 BALL BEARING 6204-2RS |
| 18-3 | P0513X2BF018-3 INT RETAINING RING 47MM |
| 18-4 | P0513X2BF018-4 LOWER WHEEL 17" |
| 18-5 | P0513X2BF018-5 URETHANE TIRE 17" 1-PAIR |
| 19 | P0513X2BF019 MAG SWITCH ASSY SDE MPE-18 220V |
| 19-1 | P0513X2BF019-1 CONTACTOR SDE MA-18 220V |
| 19-2 | P0513X2BF019-2 OL RELAY SDE RA-20 8-12A |
| 19-3 | P0513X2BF019-3 MAG SWITCH COVER ASSEMBLY |
| 19-4 | P0513X2BF019-4 CONTROL CORD 16G 5W V2.05.11 |
| 19-5 | P0513X2BF019-5 MOTOR CORD 14G 5W |
| 19-6 | P0513X2BF019-6 PHLP HD SCR M5-.8 X 10 |
| 21 | P0513X2BF021 WHEEL FLAT WASHER 8MM |
| 22 | P0513X2BF022 CAP SCREW M8-1.25 X 16 |
| 23 | P0513X2BF023 SAW BLADE 131.5" X 1/2" 6TPI HOOK |
| 24 | P0513X2BF024 LOCK WASHER 8MM |
| 25 | P0513X2BF025 CAP SCREW M8-1.25 X 20 |
| 28 | P0513X2BF028 WHEEL PULLEY/BRAKE DRUM |
| 29 | P0513X2BF029 HEX NUT 1-14 |
| 30 | P0513X2BF030 LOCK WASHER 1" |
| 31 | P0513X2BF031 CONTROL PANEL PLATE |
| 32 | P0513X2BF032 COMPRESSION SPRING 7 X 8 X 90 |
| 33 | P0513X2BF033 ROLL PIN 3 X 16 |
| 34 | P0513X2BF034 ALIGNMENT PLATE |
| 35 | P0513X2BF035 THRUST BEARING 51201 |
| 36 | P0513X2BF036 TAP SCREW M4 X 10 |
| 37 | P0513X2BF037 TENSION HANDWHEEL |
| 38 | P0513X2BF038 TENSION ADJUSTING ROD |
| 39 | P0513X2BF039 FLANGE SCREW M5-.8 X 10 |
| 40 | P0513X2BF040 STOP BUTTON |
| 41 | P0513X2BF041 START BUTTON |
| 44 | P0513X2BF044 CAP SCREW M8-1.25 X 16 |
| 45 | P0513X2BF045 FENDER WASHER 8MM |

| REF PART # | DESCRIPTION |
|------------|---|
| 46 | P0513X2BF046 UPPER WHEEL SLIDING BRACKET |
| 47 | P0513X2BF047 CAP SCREW M6-1 X 25 |
| 48 | P0513X2BF048 STEEL BLIND RIVET 3 X 13MM |
| 49 | P0513X2BF049 CAP SCREW M6-1 X 10 |
| 50 | P0513X2BF050 CLEAR WINDOW |
| 51 | P0513X2BF051 KEY SWITCH |
| 55A | P0513X2BF055A UPPER WHEEL COVER ASSY |
| 55 | P0513X2BF055 UPPER WHEEL COVER |
| 56 | P0513X2BF056 HEX BOLT M6-1 X 25 |
| 57 | P0513X2BF057 FLAT WASHER 6MM |
| 58 | P0513X2BF058 WHEEL BRUSH |
| 59 | P0513X2BF059 CAP SCREW M6-1 X 25 |
| 60 | P0513X2BF060 STAR KNOB |
| 61 | P0513X2BF061 LOCK NUT M6-1 |
| 62 | P0513X2BF062 STRAIN RELIEF 16MM STRAIGHT LT |
| 63 | P0513X2BF063 HEIGHT POINTER |
| 64 | P0513X2BF064 HEX NUT M8-1.25 |
| 65 | P0513X2BF065 HEX BOLT M8-1.25 X 90 |
| 66 | P0513X2BF066 STAR KNOB BOLT M10-1.5 X 20 |
| 67 | P0513X2BF067 STAR KNOB BOLT M10-1.5 X 53 |
| 68 | P0513X2BF068 THREADED HANDLE M10-1.5 |
| 69 | P0513X2BF069 CAM |
| 70 | P0513X2BF070 PILLOW BLOCK |
| 71 | P0513X2BF071 HANDLE M12-1.75 |
| 72 | P0513X2BF072 LEVER |
| 73 | P0513X2BF073 HEX NUT M12-1.75 |
| 74 | P0513X2BF074 LEVER HUB |
| 75 | P0513X2BF075 BUTTON HD CAP SCR M8-1.25 X 20 |
| 76 | P0513X2BF076 LOCK WASHER 8MM |
| 78 | P0513X2BF078 SHAFT COVER |
| 79 | P0513X2BF079 SET SCREW M8-1.25 X 20 |
| 80 | P0513X2BF080 HEX NUT M8-1.25 |
| 81 | P0513X2BF081 LOWER WHEEL SHAFT |
| 82 | P0513X2BF082 MOTOR 2HP 220V 1-PH W/BRAKE |
| 82-2 | P0513X2BF082-2 MOTOR FAN COVER |
| 82-3 | P0513X2BF082-3 MOTOR FAN |
| 82-4 | P0513X2BF082-4 CAPACITOR COVER |
| 82-5 | P0513X2BF082-5 R CAPACITOR 45M 450V 2 X 2-1/2 |
| 82-6 | P0513X2BF082-6 MOTOR JUNCTION BOX |
| 82-9 | P0513X2BF082-9 MAGNETIC BRAKE YZG |
| 82-10 | P0513X2BF082-10 BRAKE SHOE |
| 82-14 | P0513X2BF082-14 BALL BEARING 6205ZZ |
| 82-15 | P0513X2BF082-15 BALL BEARING 6203ZZ |
| 83 | P0513X2BF083 HEX BOLT M10-1.5 X 25 |
| 84 | P0513X2BF084 LOCK WASHER 10MM |
| 85 | P0513X2BF085 MOTOR MOUNT BRACKET |
| 86 | P0513X2BF086 BUTTON HD CAP SCR M8-1.25 X 20 |
| 87 | P0513X2BF087 STRAIN RELIEF PLATE 1-HOLE |
| 88 | P0513X2BF088 TAP SCREW M4 X 10 |
| 89 | P0513X2BF089 PILLOW BLOCK |
| 90 | P0513X2BF090 KEY 5 X 5 X 35 |
| 91 | P0513X2BF091 HEX BOLT M8-1.25 X 20 LH |
| 92 | P0513X2BF092 MOTOR PULLEY TYPE-A 3.5" |

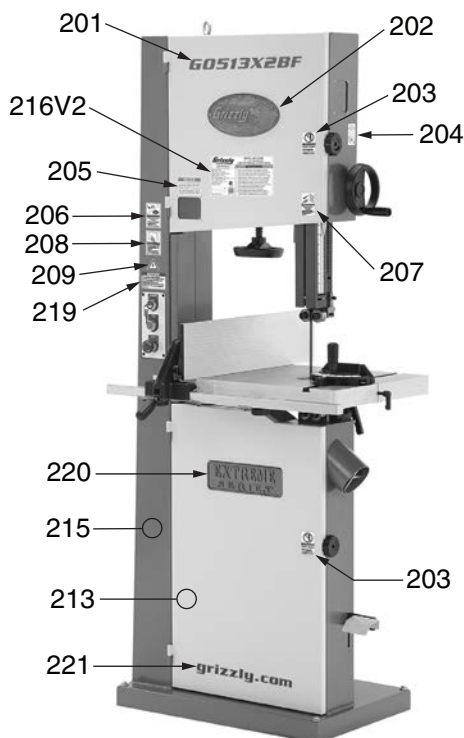


G0513X2BF Main Parts List

| REF | PART # | DESCRIPTION |
|-----|--------------|-------------------------|
| 93 | P0513X2BF093 | V-BELT A42 |
| 94 | P0513X2BF094 | CAP SCREW M6-1 X 10 |
| 95 | P0513X2BF095 | LOWER WHEEL COVER |
| 97 | P0513X2BF097 | FENDER WASHER 8MM |
| 111 | P0513X2BF111 | CAP SCREW M6-1 X 20 |
| 119 | P0513X2BF119 | LOCK WASHER 8MM |
| 171 | P0513X2BF171 | FLANGE SCREW M5-.8 X 10 |

| REF | PART # | DESCRIPTION |
|-----|--------------|-------------------------|
| 172 | P0513X2BF172 | CORD CLIP 5/16" |
| 173 | P0513X2BF173 | FLANGE SCREW M5-.8 X 50 |
| 174 | P0513X2BF174 | PHLP HD SCR M4-.7 X 10 |
| 175 | P0513X2BF175 | EXT TOOTH WASHER 5MM |
| 177 | P0513X2BF177 | JUNCTION BOX |
| 178 | P0513X2BF178 | WIRE NUT 14-22G |

G0513X2BF Labels



| REF | PART # | DESCRIPTION |
|-----|--------------|--------------------------|
| 201 | P0513X2BF201 | MODEL NUMBER LABEL |
| 202 | P0513X2BF202 | NAMEPLATE-LARGE |
| 203 | P0513X2BF203 | DON'T OPEN DOOR LABEL |
| 204 | P0513X2BF204 | GUARD ADJUSTMENT LABEL |
| 205 | P0513X2BF205 | SCALE DIRECTIONS LABEL |
| 206 | P0513X2BF206 | GLASSES/RESPIRATOR LABEL |
| 207 | P0513X2BF207 | DISCONNECT POWER LABEL |
| 208 | P0513X2BF208 | READ MANUAL LABEL |
| 209 | P0513X2BF209 | ELECTRICITY LABEL |

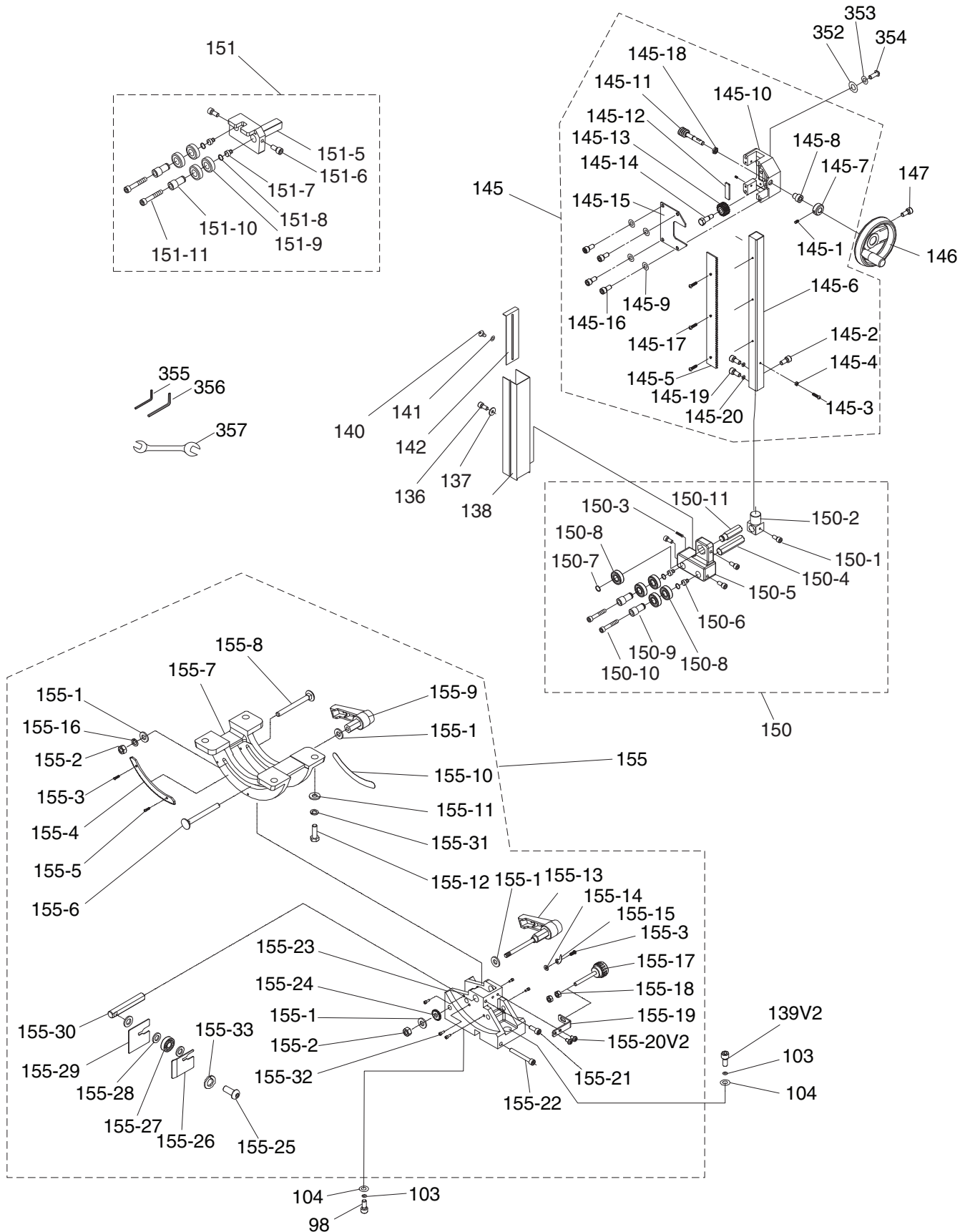
| REF | PART # | DESCRIPTION |
|-------|----------------|-------------------------------|
| 213 | P0513X2BF213 | TOUCH-UP PAINT, GRIZZLY PUTTY |
| 214 | P0513X2BF214 | TENSION ADJ LABEL |
| 215 | P0513X2BF215 | TOUCH-UP PAINT, GRIZZLY GREEN |
| 216V2 | P0513X2BF216V2 | MACHINE ID LABEL V2.10.18 |
| 219 | P0513X2BF219 | MAGNETIC BRAKE LABEL |
| 220 | P0513X2BF220 | EXTREME SERIES PLATE |
| 221 | P0513X2BF221 | GRIZZLY.COM LABEL |
| 222 | P0513X2BF222 | GUIDE POST LOCK LABEL |

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G0513X2 & G0513X2BF Guides & Trunnions



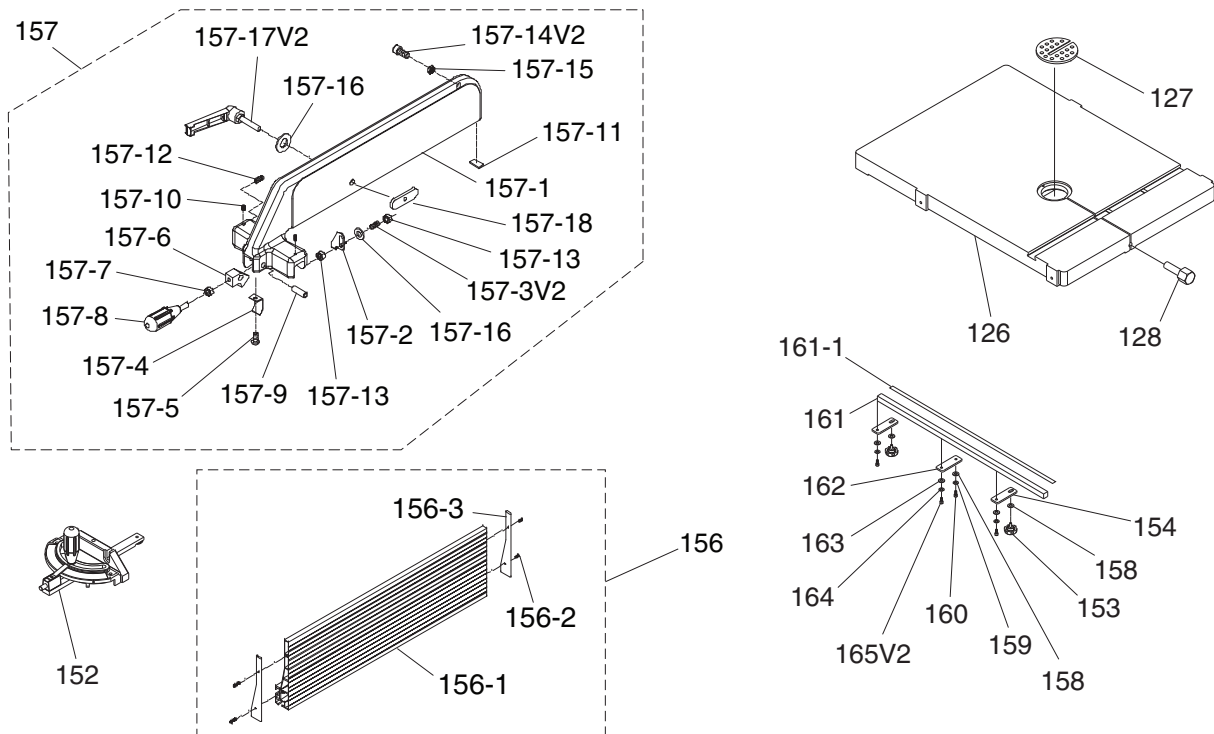
G0513X2 & G0513X2BF Guides & Trunnions Parts List

| REF | PART # | DESCRIPTION |
|--------|---------------|--------------------------------------|
| 98 | P0513X2098 | CAP SCREW M10-1.5 X 35 |
| 103 | P0513X2103 | LOCK WASHER 10MM |
| 104 | P0513X2104 | FLAT WASHER 10MM |
| 136 | P0513X2136 | CAP SCREW M5-.8 X 10 |
| 137 | P0513X2137 | FLAT WASHER 5MM |
| 138 | P0513X2138 | UPPER BLADE GUARD |
| 139V2 | P0513X2139V2 | CAP SCREW M10-1.5 X 35 |
| 140 | P0513X2140 | STEP SCREW M4-.7 X 5 |
| 141 | P0513X2141 | FIBER WASHER 5MM |
| 142 | P0513X2142 | SLIDING PLATE |
| 145 | P0513X2145 | GUIDE POST ASSEMBLY |
| 145-1 | P0513X2145-1 | SET SCREW M5-.8 X 5 |
| 145-2 | P0513X2145-2 | CAP SCREW M6-1 X 16 |
| 145-3 | P0513X2145-3 | PHLP HD SCR M4-.7 X 10 |
| 145-4 | P0513X2145-4 | HEX NUT M4-.7 |
| 145-5 | P0513X2145-5 | RACK |
| 145-6 | P0513X2145-6 | GUIDE POST |
| 145-7 | P0513X2145-7 | LOCK COLLAR |
| 145-8 | P0513X2145-8 | THREADED BUSHING V2.06.09 |
| 145-9 | P0513X2145-9 | LOCK WASHER 8MM |
| 145-10 | P0513X2145-10 | THREADED GUIDE BRACKET 14MM V2.06.09 |
| 145-11 | P0513X2145-11 | WORM CYLINDER |
| 145-12 | P0513X2145-12 | FIXED PLATE |
| 145-13 | P0513X2145-13 | PINION GEAR 15T |
| 145-14 | P0513X2145-14 | PINION GEAR STEP BOLT |
| 145-15 | P0513X2145-15 | BRACKET COVER |
| 145-16 | P0513X2145-16 | CAP SCREW M8-1.25 X 16 |
| 145-17 | P0513X2145-17 | FLAT HD SCR M4-.7 X 8 |
| 145-18 | P0513X2145-18 | BUSHING |
| 145-19 | P0513X2145-19 | CAP SCREW M5-.8 X 12 |
| 145-20 | P0513X2145-20 | FLAT WASHER 5MM |
| 146 | P0513X2146 | GUIDE POST HANDWHEEL |
| 147 | P0513X2147 | CAP SCREW M6-1 X 20 |
| 150 | P0513X2150 | UPPER BLADE GUIDE ASSEMBLY |
| 150-1 | P0513X2150-1 | CAP SCREW M6-1 X 16 |
| 150-2 | P0513X2150-2 | UPPER GUIDE SUPPORT BLOCK |
| 150-3 | P0513X2150-3 | SET SCREW M6-1 X 10 |
| 150-4 | P0513X2150-4 | ADJUSTMENT BAR |
| 150-5 | P0513X2150-5 | UPPER BLADE GUIDE SUPPORT |
| 150-6 | P0513X2150-6 | ECCENTRIC SHAFT |
| 150-7 | P0513X2150-7 | EXT RETAINING RING 15MM |
| 150-8 | P0513X2150-8 | BALL BEARING 6202ZZ |
| 150-9 | P0513X2150-9 | HANDLE BUSHING |
| 150-10 | P0513X2150-10 | CAP SCREW M6-1 X 35 |
| 150-11 | P0513X2150-11 | UPPER SPACING SHAFT |
| 151 | P0513X2151 | LOWER BLADE GUIDE ASSEMBLY |
| 151-5 | P0513X2151-5 | LOWER BLADE GUIDE SUPPORT |

| REF | PART # | DESCRIPTION |
|----------|-----------------|--------------------------------|
| 151-6 | P0513X2151-6 | CAP SCREW M6-1 X 16 |
| 151-7 | P0513X2151-7 | ECCENTRIC SHAFT |
| 151-8 | P0513X2151-8 | EXT RETAINING RING 15MM |
| 151-9 | P0513X2151-9 | BALL BEARING 6202ZZ |
| 151-10 | P0513X2151-10 | HANDLE BUSHING |
| 151-11 | P0513X2151-11 | CAP SCREW M6-1 X 35 |
| 155 | P0513X2155 | CAST IRON TRUNNION ASSEMBLY |
| 155-1 | P0513X2155-1 | FLAT WASHER 8MM |
| 155-2 | P0513X2155-2 | LOCK NUT M8-1.25 |
| 155-3 | P0513X2155-3 | PHLP HD SCR M4-.7 x 6 |
| 155-4 | P0513X2155-4 | GEAR PLATE |
| 155-5 | P0513X2155-5 | FLAT HD SCR M4-.7 X 6 |
| 155-6 | P0513X2155-6 | CARRIAGE BOLT M8-1.25 X 85 |
| 155-7 | P0513X2155-7 | CAST IRON TRUNNION |
| 155-8 | P0513X2155-8 | CARRIAGE BOLT M8-1.25 X 80 |
| 155-9 | P0513X2155-9 | LOCK HANDLE M8-1.25 |
| 155-10 | P0513X2155-10 | TABLE TILT SCALE |
| 155-11 | P0513X2155-11 | FLAT WASHER 8MM |
| 155-12 | P0513X2155-12 | HEX BOLT M8-1.25 X 25 |
| 155-13 | P0513X2155-13 | LOCK HANDLE M8-1.25 |
| 155-14 | P0513X2155-14 | FLAT WASHER 4MM |
| 155-15 | P0513X2155-15 | POINTER |
| 155-16 | P0513X2155-16 | LOCK WASHER 8MM |
| 155-17 | P0513X2155-17 | ADJUSTMENT KNOB BOLT M6-1 |
| 155-18 | P0513X2155-18 | HEX NUT M6-1 |
| 155-19 | P0513X2155-19 | L-BRACKET |
| 155-20V2 | P0513X2155-20V2 | FLAT HD SCR M5-.8 X 8 |
| 155-21 | P0513X2155-21 | CAP SCREW M6-1 X 16 |
| 155-22 | P0513X2155-22 | CAP SCREW M6-1 X 50 |
| 155-23 | P0513X2155-23 | TRUNNION SUPPORT BRACKET |
| 155-24 | P0513X2155-24 | TRUNNION GEAR |
| 155-25 | P0513X2155-25 | BUTTON HD CAP SCR M10-1.5 X 30 |
| 155-26 | P0513X2155-26 | RIGHT GUARD |
| 155-27 | P0513X2155-27 | BALL BEARING 6000ZZ |
| 155-28 | P0513X2155-28 | FLAT WASHER 10MM |
| 155-29 | P0513X2155-29 | LEFT GUARD |
| 155-30 | P0513X2155-30 | ADJUSTMENT ROD |
| 155-31 | P0513X2155-31 | LOCK WASHER 8MM |
| 155-32 | P0513X2155-32 | CAP SCREW M5-.8 X 6 |
| 155-33 | P0513X2155-33 | LOCK WASHER 10MM |
| 352 | P0513X2352 | FLAT WASHER 8MM |
| 353 | P0513X2353 | LOCK WASHER 8MM |
| 354 | P0513X2354 | BUTTON HD CAP SCR M8-1.25 X 20 |
| 355 | P0513X2355 | HEX WRENCH 5MM |
| 356 | P0513X2356 | HEX WRENCH 8MM |
| 357 | P0513X2357 | WRENCH 10 X 13 OPEN-END |



G0513X2BF Fence Assembly & Table

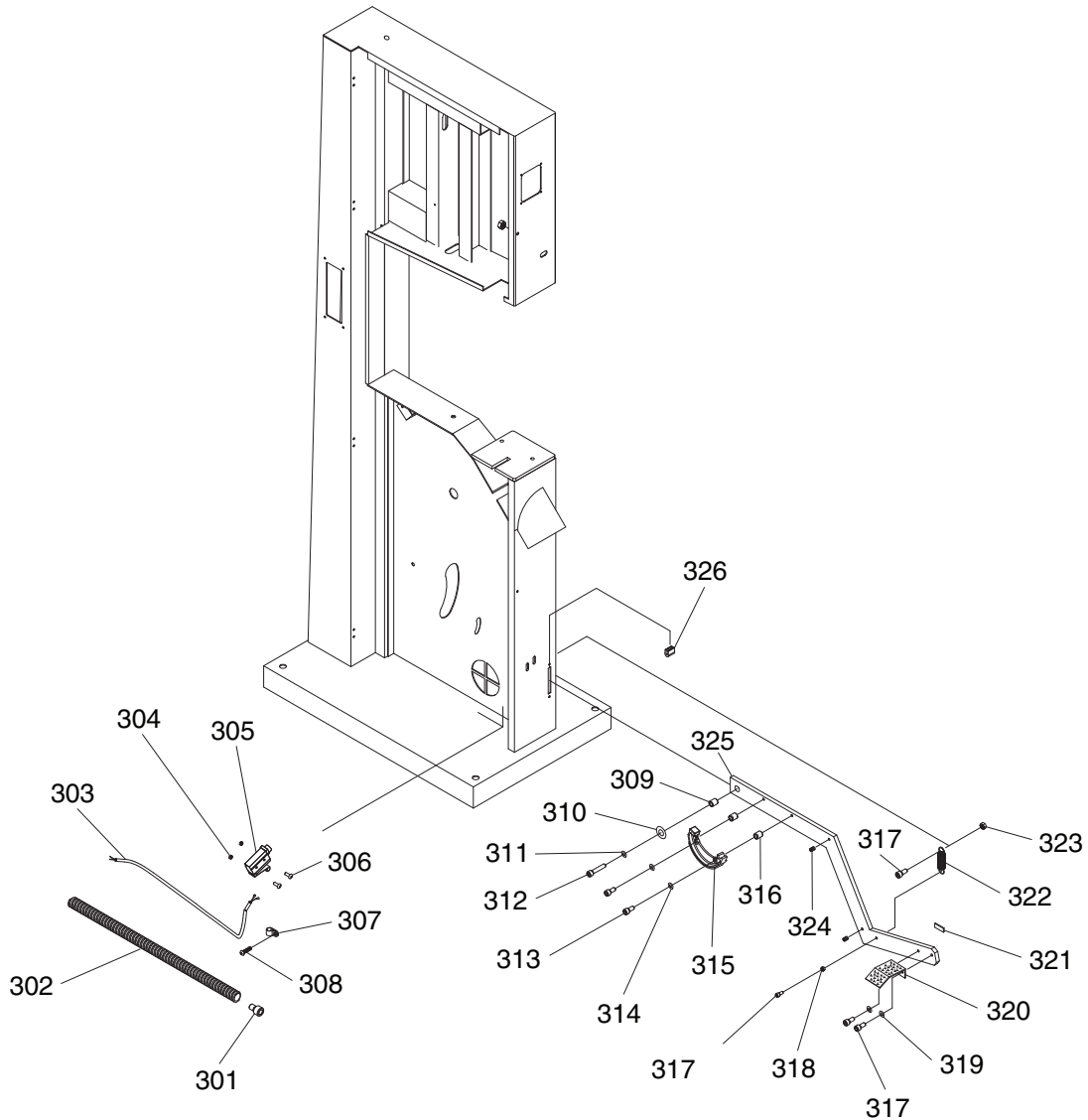


| REF | PART # | DESCRIPTION |
|---------|------------------|------------------------------|
| 126 | P0513X2BF126 | TABLE 17" X 24" |
| 127 | P0513X2BF127 | TABLE INSERT |
| 128 | P0513X2BF128 | TABLE PIN |
| 152 | P0513X2BF152 | MITER GAUGE ASSY |
| 153 | P0513X2BF153 | KNOB SCREW M8-1.25 X 20 |
| 154 | P0513X2BF154 | OUTER RAIL PLATE |
| 156 | P0513X2BF156 | RESAW FENCE ASSEMBLY |
| 156-1 | P0513X2BF156-1 | ALUM RESAW FENCE 508MM |
| 156-2 | P0513X2BF156-2 | TAP SCREW 3.5 X 8 |
| 156-3 | P0513X2BF156-3 | FENCE END PLATE 148 X 22 X 1 |
| 157 | P0513X2BF157 | FENCE ASSEMBLY |
| 157-1 | P0513X2BF157-1 | FENCE |
| 157-2 | P0513X2BF157-2 | POINTER |
| 157-3V2 | P0513X2BF157-3V2 | SET SCREW M8-1.25 X 25 |
| 157-4 | P0513X2BF157-4 | SPRING PIECE |
| 157-5 | P0513X2BF157-5 | FLANGE SCREW M4-.7 X 8 |
| 157-6 | P0513X2BF157-6 | PIVOT BLOCK |
| 157-7 | P0513X2BF157-7 | HEX NUT M8-1.25 |
| 157-8 | P0513X2BF157-8 | FENCE LOCK HANDLE |

| REF | PART # | DESCRIPTION |
|----------|-------------------|------------------------------|
| 157-9 | P0513X2BF157-9 | SHAFT |
| 157-10 | P0513X2BF157-10 | PLASTIC SET SCREW M7-1 X 10 |
| 157-11 | P0513X2BF157-11 | NYLON PAD |
| 157-12 | P0513X2BF157-12 | SET SCREW M8-1.25 X 12 |
| 157-13 | P0513X2BF157-13 | HEX NUT M8-1.25 |
| 157-14V2 | P0513X2BF157-14V2 | HEX BOLT M8-1.25 X 20 |
| 157-15 | P0513X2BF157-15 | HEX NUT M8-1.25 |
| 157-16 | P0513X2BF157-16 | FLAT WASHER 8MM |
| 157-17V2 | P0513X2BF157-17V2 | HANDLE M8-1.25 X 45 V2.05.11 |
| 157-18 | P0513X2BF157-18 | MOVING PLATE |
| 158 | P0513X2BF158 | FLAT WASHER 8MM |
| 159 | P0513X2BF159 | LOCK WASHER 8MM |
| 160 | P0513X2BF160 | CAP SCREW M8-1.25 X 20 |
| 161 | P0513X2BF161 | FRONT RAIL |
| 161-1 | P0513X2BF161-1 | FENCE SCALE |
| 162 | P0513X2BF162 | INNER RAIL PLATE |
| 163 | P0513X2BF163 | FLAT WASHER 6MM |
| 164 | P0513X2BF164 | LOCK WASHER 6MM |
| 165V2 | P0513X2BF165 | CAP SCREW M6-1 X 20 |



G0513X2BF Foot Brake



| REF PART # | DESCRIPTION |
|------------|--|
| 301 | P0513X2BF301 CONDUIT GROMMET |
| 302 | P0513X2BF302 FLEXIBLE CONDUIT 1/2" X 42" |
| 303 | P0513X2BF303 SWITCH CORD 16G 2W |
| 304 | P0513X2BF304 HEX NUT 4MM |
| 305 | P0513X2BF305 BRAKE SWITCH SHINOZAKI AZ7141 |
| 306 | P0513X2BF306 PHLP HD SCR M4-.7 X 30 |
| 307 | P0513X2BF307 CORD CLIP 5/8" |
| 308 | P0513X2BF308 TAP SCREW M4 X 8 |
| 309 | P0513X2BF309 BUSHING |
| 310 | P0513X2BF310 FLAT WASHER 8MM |
| 311 | P0513X2BF311 LOCK WASHER 8MM |
| 312 | P0513X2BF312 CAP SCREW M8-1.25 X 25 |
| 313 | P0513X2BF313 CAP SCREW M6-1 X 25 |

| REF PART # | DESCRIPTION |
|------------|--|
| 314 | P0513X2BF314 LOCK WASHER 6MM |
| 315 | P0513X2BF315 BRAKE SHOE |
| 316 | P0513X2BF316 BUSHING |
| 317 | P0513X2BF317 CAP SCREW M6-1 X 16 |
| 318 | P0513X2BF318 HEX NUT M6-1 |
| 319 | P0513X2BF319 LOCK WASHER 6MM |
| 320 | P0513X2BF320 BRAKE PEDDLE |
| 321 | P0513X2BF321 NYLON PAD |
| 322 | P0513X2BF322 BRAKE EXTENSION SPRING |
| 323 | P0513X2BF323 HEX NUT M6-1 |
| 324 | P0513X2BF324 STEP BOLT M7-1 X 10 W/BUSHING |
| 325 | P0513X2BF325 BRAKE LEVER |
| 326 | P0513X2BF326 RUBBER CLIP |



WARRANTY & RETURNS

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

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

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

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

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

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

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



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