WOODSTOCK

SHOP FOX®

INTERNATIONAL

MODEL W1849

14" RESAW BANDSAW



OWNER'S MANUAL

(FOR MODELS MANUFACTURED SINCE 11/16)

Phone: (360) 734-3482 • Online Technical Support: techsupport@woodstockint.com

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

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⚠ WARNING!

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

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

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

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

⚠ WARNING!

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

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

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

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USE THE QUICK GUIDE PAGE LABELS TO SEARCH OUT INFORMATION FAST!

INTRODUCTION

Contact Info

We are committed to customer satisfaction. If you have any questions or need help, use the information below to contact us.

IMPORTANT: Before contacting, please get the original purchase receipt, serial number, and manufacture date of your machine. This information is required for all Technical Support calls and it will help us help you faster.

Woodstock International Technical Support
Phone: (360) 734-3482
Email: techsupport@woodstockint.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.

Technical Documentation Manager
P.O. Box 2309
Bellingham, WA 98227
Email: manuals@woodstockint.com

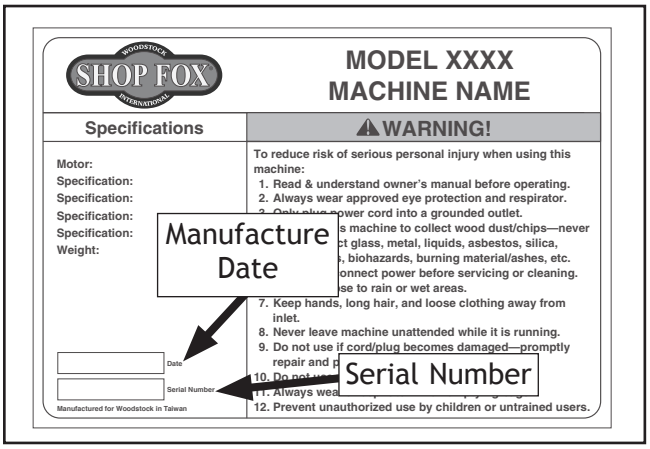
Manual Accuracy

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

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

If you find this to be the case, and the difference between the manual and machine leaves you confused about a procedure, check our website for an updated version. We post current manuals and manual updates for free on our website at **www.woodstockint.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). Also, if available, have a copy of your **original purchase receipt** on hand. This information is required for all Tech Support calls.



USE THE QUICK GUIDE PAGE LABELS TO SEARCH OUT INFORMATION FAST!

MACHINE SPECIFICATIONS

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MODEL W1849
14" RESAW BANDSAW

Product Dimensions

Weight	261 lbs.
Width (side-to-side) x Depth (front-to-back) x Height	27-1/2 x 32 x 76 in.
Footprint (Length x Width)	23 x 18 in.

Shipping Dimensions

Type	Wood Crate
Content	Machine
Weight	332 lbs.
Length x Width x Height	30 x 24 x 79 in.
Must Ship Upright	Yes

Electrical

Power Requirement	110V or 220V, Single-Phase, 60 Hz
Prewired Voltage	110V
Full-Load Current Rating	15A at 110V, 7.5A at 220V
Minimum Circuit Size	20A at 110V, 15A at 220V
Connection Type	Cord & Plug
Power Cord Included	Yes
Power Cord Length	6 ft.
Power Cord Gauge	14 AWG
Plug Included	Yes
Included Plug Type	5-15
Recommended Plug Type	6-15 for 220V
Switch Type	ON/OFF Push Button Switch w/Emergency Stop Paddle

Motors

Main

Type	TEFC Capacitor-Start Induction
Horsepower	2 HP
Phase	Single-Phase
Amps	15A/7.5A
Speed	1720 RPM
Power Transfer	Belt Drive
Bearings	Shielded & Permanently Lubricated

Main Specifications

Main Specifications

Bandsaw Size	14 in.
Max Cutting Width (Left of Blade)	13-1/2 in.
Max Cutting Width (Left of Blade) w/Fence	12 in.
Max Cutting Height (Resaw Height)	14 in.
Blade Speeds	2820 FPM

Blade Information

Standard Blade Length..... 120 in.
Blade Width Range..... 1/8 – 3/4 in.
Type of Blade Guides..... "Euro Style" Roller-Disc Guides
Guide Post Adjustment Type..... Rack-and-Pinion
Has Quick-Release..... Yes

Table Information

Table Length..... 21-3/4 in.
Table Width..... 16-1/8 in.
Table Thickness..... 1-1/2 in.
Table Tilt..... Left 5, Right 45 Deg.
Table Tilt Adjustment Type..... Rack-and-Pinion
Floor-to-Table Height..... 37 in.
Fence Locking Position..... Front
Fence is Adjustable for Blade Lead..... Yes
Resaw Fence Attachment Included..... Yes
Miter Gauge Included..... No

Construction Materials

Table..... Cast Iron
Trunnion..... Steel
Fence..... Extruded Aluminum
Base/Stand..... Steel
Frame/Body..... Steel
Wheels..... Cast Iron
Tire..... Polyurethane
Wheel Cover ..... Steel
Paint Type/Finish..... Powder Coated

Other Related Information

Wheel Diameter..... 14 in.
Wheel Width..... 1-1/8 in.
Number of Dust Ports..... 2
Dust Port Size..... 4 in.
Compatible Mobile Base..... D2057A

Other

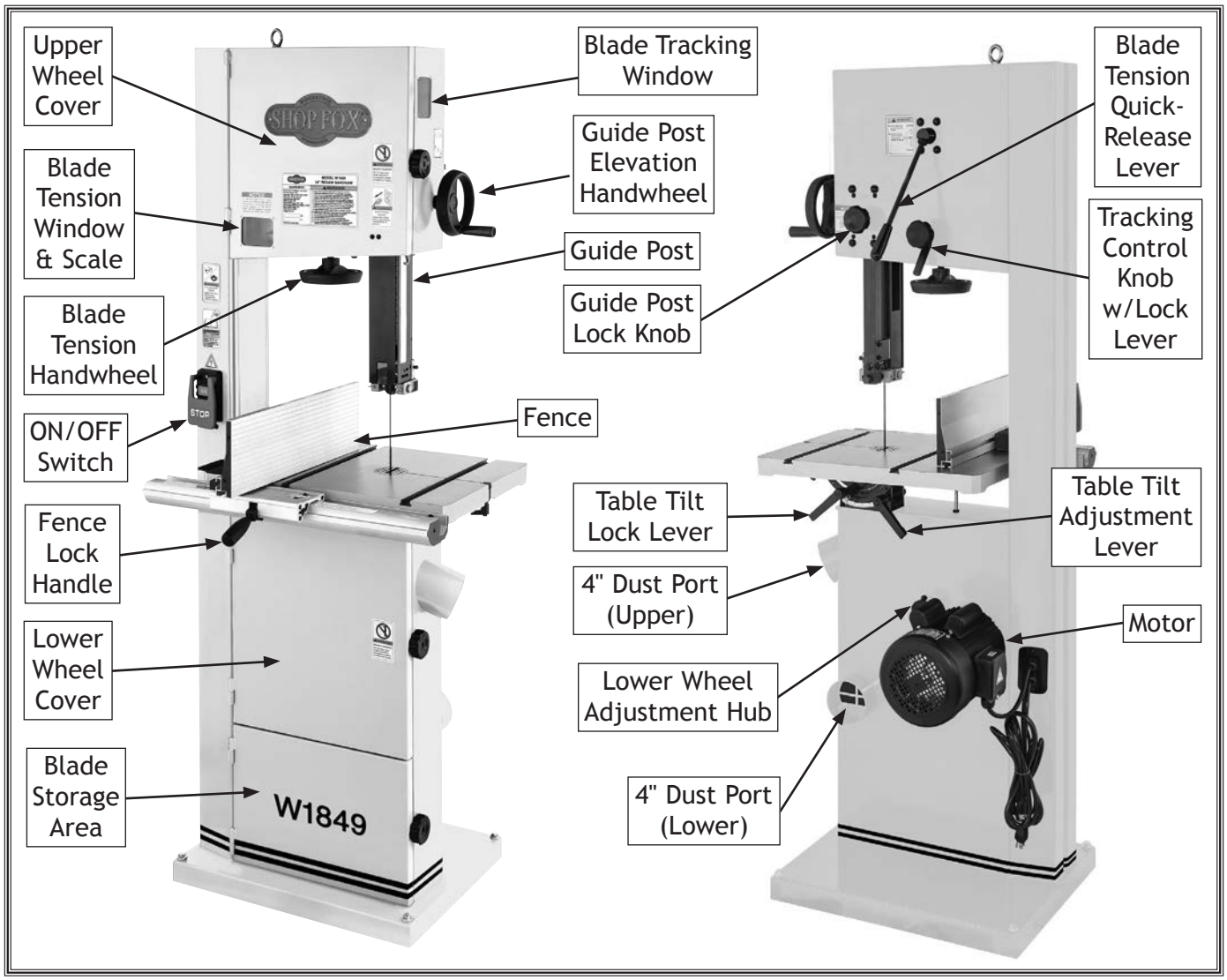
Country of Origin ..... Taiwan
Warranty ..... 2 Years
Approximate Assembly & Setup Time ..... 1 Hour
Serial Number Location ..... Machine ID Label
ISO 9001 Factory ..... Yes

Features

14" Resaw Capacity
Equipped with Roller-Disc ("Euro Style") Blade Guides
Optional Ball-Bearing Blade Guides Available
Modular Blade Guide Design for Easy Changeovers Between Styles
Rack-and-Pinion Table Tilt Adjustments
Cast-Iron Fence Base with 2-Position Extruded-Aluminum Fence
Storage Area for Extra Blades, Miter Gauge, and Blade Guide Assemblies When Not In Use
Cast-Iron Wheels and Steel Table Trunnion
Blade Tension Indicator with Window in Wheel Cover

Identification

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



⚠CAUTION

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

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

Controls & Components

Refer to **Figures 1-8** and the following descriptions to become familiar with the basic controls and components of this machine. Understanding these items and how they work will help you understand the rest of the manual and stay safe when operating this machine.

⚠WARNING



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

ON/OFF Switch & Fence

A. ON Button: Turns motor ***ON*** when pressed.

B. Stop Paddle: Turns motor ***OFF*** when pressed.

C. Fence: Used for ripping or resawing. Distance from blade determines width of cut. Can be used in horizontal position (as shown in **Figure 1**) for thin workpieces or in vertical position (as shown in **Figure 2**) for normal workpieces.

D. Fence Lock Lever: Secures fence to fence base when mounted horizontally or vertically.

E. Fence Base: Mounts fence to rail, and allows fence to be switched between horizontal or vertical positions.

F. Fence Lock Handle: Secures fence position along fence rail.

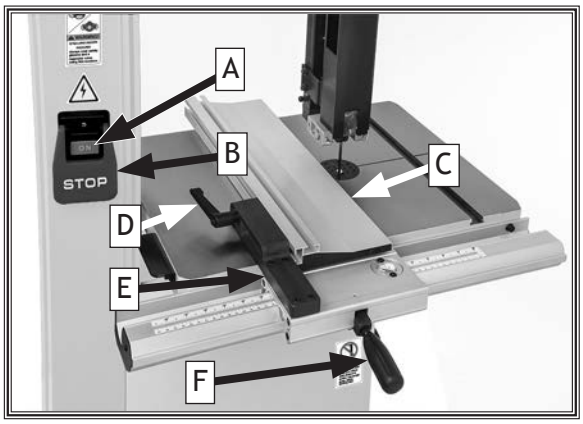


Figure 1. ON/OFF switch and fence mounted in horizontal position.

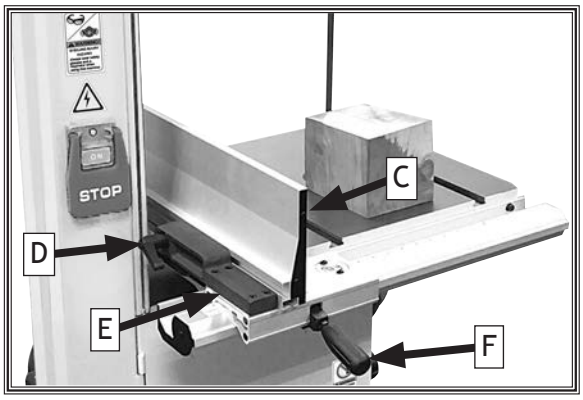


Figure 2. Fence mounted vertically.

Guide Post

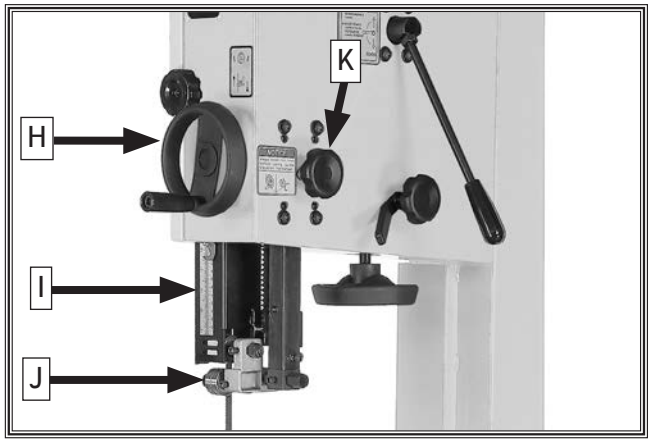


Figure 3. Guide post controls.

H. Guide Post Handwheel: Adjusts height of guide post above workpiece, using a rack-and-pinion system.

I. Guide Post w/Scale: Houses upper blade guides and support bearing, and shields operator from upper portion of blade. Adjusts up or down as necessary to position upper blade guides/support bearing as close as possible to workpiece for maximum cutting accuracy and minimum blade exposure to operator. Scale on side of guide post indicates height of upper blade guide above table.

J. "Euro-Style" Upper Blade Guides & Support Bearing: Supports blade above workpiece during operations.

K. Guide Post Lock Knob: Secures guide post in position after adjustment.



Figure 4. Hinge-open blade cover.

L. Hinge-Open Blade Cover: Opens for blade changes and upper blade guide adjustments (refer to **Page 50**).

Blade Tension & Tracking



Figure 5. Blade tension scale, blade tension handwheel, and tracking window.

M. Blade Tension Scale: Displays blade tension using numbers 1–8. For reference purposes only—after you have found the proper tension for the particular blade installed.

N. Blade Tension Handwheel: Increases/decreases blade tension (refer to **Page 30** for more information).

O. Blade Tracking Window: Allows monitoring/adjustment of blade tracking without requiring w heel cover to be open (refer to **Page 27** for more information).

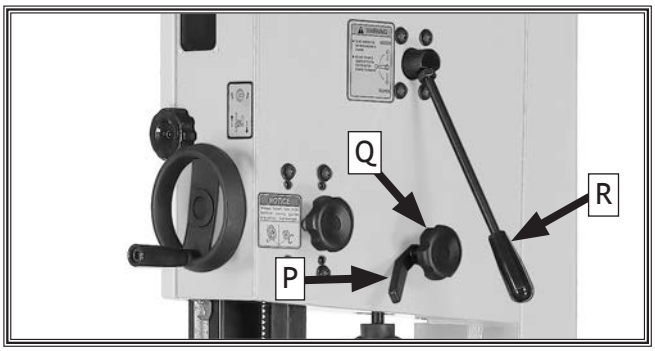


Figure 6. Blade tracking controls and blade tension quick-release lever.

P. Tracking Control Lock Lever: Secures position of blade tracking control knob.

Q. Tracking Control Knob: Sets tilt position of upper wheel to set/control blade tracking (refer to **Page 27** for more information).

R. Blade Tension Quick-Release Lever: Quickly releases blade tension to speed up blade changes and prevent unnecessary wear on blade and saw components when not in use. Move UP to release blade tension. Move DOWN to re-tension blade.

Table Tilt

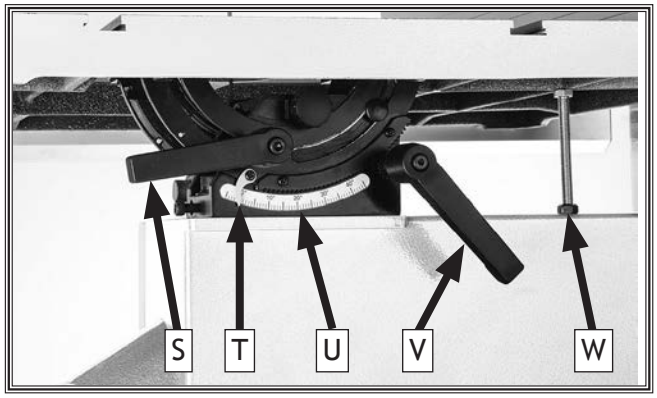


Figure 7. Table tilt controls.

S. Table Tilt Lock Lever: Secures table tilt position on trunnion. Must be loosened before table tilt can be adjusted.

T. Table Angle Indicator: Shows table tilt angle.

U. Trunnion w/Table Tilt Scale: Functions as a tilting base for table. Graduated in degrees from 5° left—45° right for setting bevel angle.

V. Table Tilt Adjustment Lever: Adjusts angle of table tilt using a rack-and-pinion system.

W. Positive Stop: Allows for quickly returning table to a calibrated 0° setting after it has been tilted to the right (refer to **Page 51** for more information).

Lower Wheel Adjustment

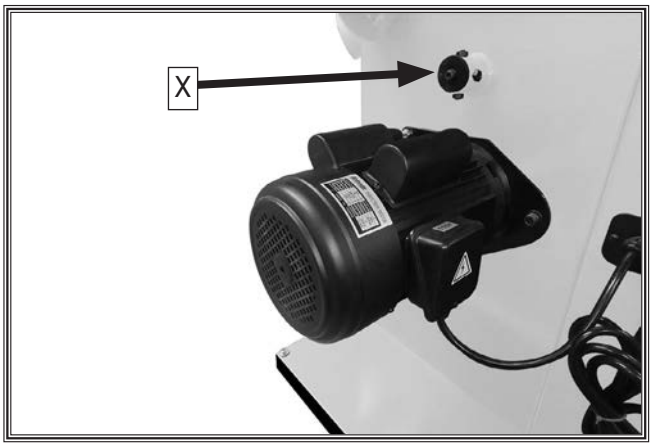


Figure 8. Lower wheel adjustment controls.

X. Lower Wheel Adjustment Hub: Adjusts position of lower wheel to upper wheel if coplanar adjustments become necessary (refer to **Page 73** for more information).

Note: *The wheels are factory-set to be coplanar, so we strongly recommend that you avoid making adjustments here unless it becomes absolutely necessary.*



⚠WARNING

READ and understand this entire manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. DO NOT risk your safety by not reading!

SETUP

SAFETY

For Your Own Safety, Read Manual Before Operating 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—this responsibility is ultimately up to the operator!

⚠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.**

NOTICE **This symbol is used to alert the user to useful information about proper operation of the equipment or a situation that may cause damage to the machinery.**

Standard Machinery Safety Instructions

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 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 an electrician or 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 eliminates the risk of injury 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.

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 avoid accidental slips, which could cause loss of workpiece control.

HAZARDOUS DUST. Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material, and 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!

INTENDED USAGE. Only use machine for its intended purpose—never make modifications without prior approval from Woodstock International. Modifying machine or using it differently than intended will void the warranty and may result in malfunction or mechanical failure that leads to serious 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.

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 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.

CHECK DAMAGED PARTS. Regularly inspect machine for any condition that may affect safe operation. Immediately repair or replace damaged or mis-adjusted parts before operating machine.

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, resulting in a short. 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 Technical Support at (360) 734-3482.

Additional Safety for Bandsaws

Serious cuts, amputation, or death can occur from contact with the moving saw blade during operation or if blade breakage occurs. 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, or some type of 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 the moving bandsaw blade. The wheel covers protect operator from getting entangled with rotating wheels or other moving parts. ONLY operate this 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 work-holding 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.

ELECTRICAL

Circuit Requirements

This machine must be connected to the correct size and type of power supply circuit, or fire or electrical damage may occur. Read through this section to determine if an adequate power supply circuit is available. If a correct circuit is not available, a qualified electrician MUST install one before you can connect the machine to power.

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.)

Full-Load Current Rating

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

Full-Load Current Rating at 110V ..... 15 Amps
Full-Load Current Rating at 220V ..... 7.5 Amps

Circuit Requirements for 110V (Prewired)

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

Circuit Type ..... 110V/120V, 60 Hz, Single-Phase
Circuit Size ..... 20 Amps
Plug/Receptacle ..... NEMA 5-15

Circuit Requirements for 220V

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

Circuit Type .....220V/240V, 60 Hz, Single-Phase
Circuit Size ..... 15 Amps
Plug/Receptacle ..... NEMA 6-15

⚠WARNING

The machine must be properly set up before it is safe to operate. DO NOT connect this machine to the power source until instructed to do so later in this manual.

⚠WARNING



Incorrectly wiring or grounding this machine can cause electrocution, fire, or machine damage. To reduce this risk, only an electrician or qualified service personnel should do any required electrical work on this machine.

NOTICE

The circuit requirements listed in this manual apply to a dedicated circuit—where only one machine will be running at a time. If this machine will be connected to a shared circuit where multiple machines will be running at the same time, consult with an electrician to ensure that the circuit is properly sized for safe operation.

Grounding Requirements

This machine MUST be grounded. In the event of certain types of malfunctions or breakdowns, grounding provides a path of least resistance for electric current to travel—in order to reduce the risk of electric shock.

Improper connection of the equipment-grounding wire will increase the risk of electric shock. The wire with green insulation (with/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.

For 110V Connection (Prewired)

This machine is equipped with a power cord with an equipment-grounding wire and NEMA 5-15 grounding plug (see figure). The plug must only be inserted into a matching receptacle that is properly installed and grounded in accordance with local codes and ordinances.

For 220V Connection

A NEMA 6-15 plug (see figure) has a grounding prong that must be attached to the equipment-grounding wire inside the included power cord. The plug must only be inserted into a matching receptacle that is properly installed and grounded in accordance with all local codes and ordinances.

Extension Cords

We do not recommend using an extension cord with this machine. Extension cords cause voltage drop, which may damage electrical components and shorten motor life. Voltage drop increases with longer extension cords and smaller gauge sizes (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must contain a ground wire, match the required plug and receptacle, and meet the following requirements:

Minimum Gauge Size ..... 12 AWG
Maximum Length (Shorter is Better).....50 ft.

⚠WARNING

The machine must be properly set up before it is safe to operate. DO NOT connect this machine to the power source until instructed to do so later in this manual.

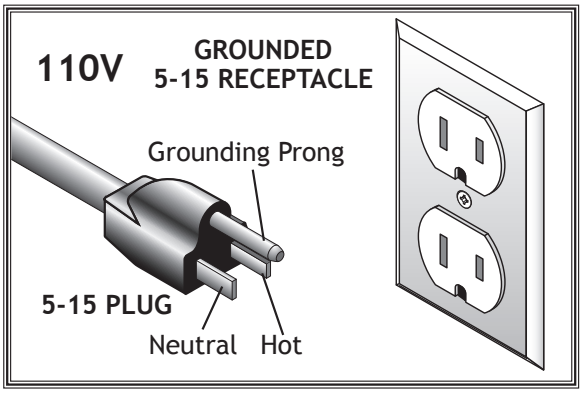
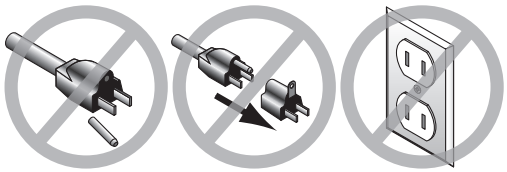


Figure 9. NEMA 5-15 plug & receptacle.

⚠CAUTION



DO NOT modify the provided plug or use an adapter if the plug will not fit the receptacle. Instead, have an electrician install the proper receptacle on a power supply circuit that meets the requirements for this machine.

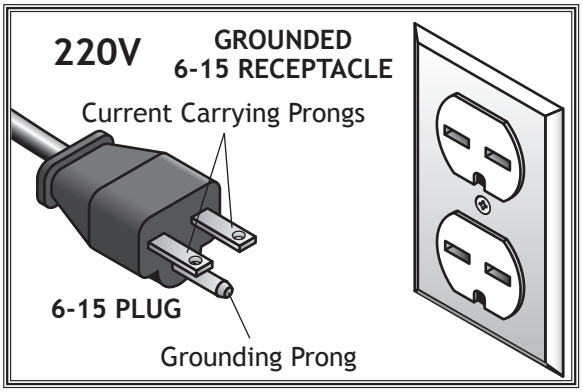


Figure 10. NEMA 6-15 plug & receptacle.

Converting Voltage to 220V

⚠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.

The voltage conversion MUST be performed by an electrician or qualified service personnel. The voltage conversion procedure requires rewiring the motor and installing the correct plug. The necessary wiring diagrams are provided in the **Wiring** section, beginning on **Page 75** for your reference.

IMPORTANT: If the diagram on the motor conflicts with the diagrams in the Wiring section, the motor may have changed since the manual was printed. Use the diagram on the motor instead.

Items Needed **Qty**
- Phillips Head Screwdriver #2 1
- Electrical Tape ..... As Needed
- Wire Nut (14 AWG x 3).....1
- Plug 6-15.....1
- Wire Cutters/Stripper.....1

To convert Model W1849 to 220V, do these steps:

1. DISCONNECT MACHINE FROM POWER!
2. Cut off existing 5-15 plug.
3. Open motor junction box, then remove two wire nuts indicated in **Figure 11**.
4. Connect wires as indicated in **Figure 12**. Secure wire connections with wire nuts, and wrap them with electrical tape so they will not vibrate loose during operation.
5. Close and secure motor junction box.
6. Install a 6-15 plug on power cord, according to plug manufacturer's instructions. If plug manufacturer's instructions are not available, NEMA standard 6-15 plug wiring is provided on **Page 76**.

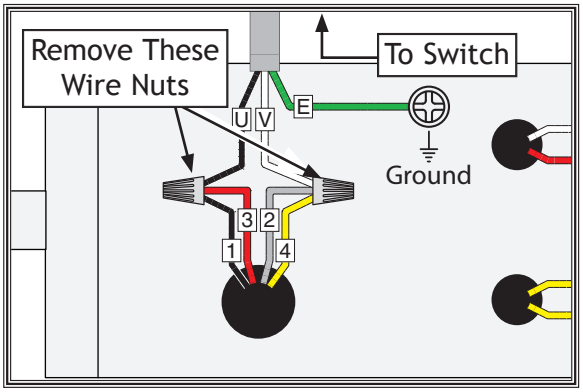


Figure 11. Inside motor junction box.

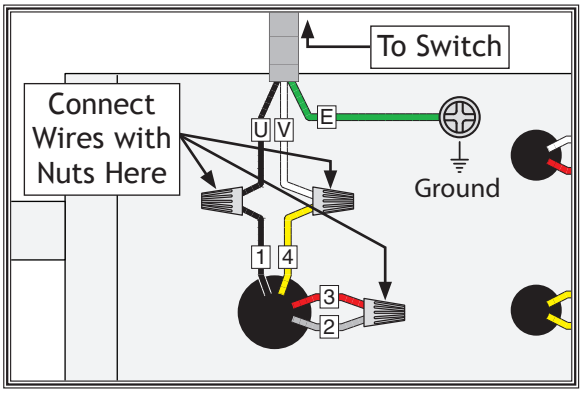


Figure 12. Motor rewired to 220V.

SETUP

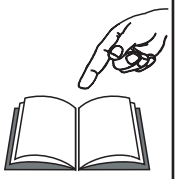
Unpacking

This machine has been carefully packaged for safe transportation. If you notice the machine has been damaged during shipping, please contact your authorized Shop Fox dealer immediately.

Items Needed for Setup

The following items are needed, but not included, to set up your machine.

Description	Qty
• Safety Glasses for Each Person	1
• Degreaser or Solvent for Cleaning	Varies
• Disposable Rags for Cleaning	Varies
• Lifting Strap/Chain (rated for at least 400 lbs.)	1
• Lifting Equipment (rated for at least 400 lbs.)	1
• Dust Collection System	1
• 4" Dust Hose	1
• 4" Hose Clamp	1
• Assistant for Lifting	1
• 1 X 4 Block 12"	1
• 2 x 4 Block 12"	1



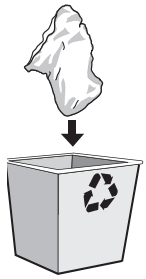
⚠WARNING

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

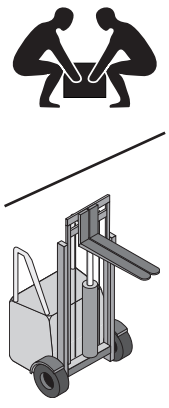
Wear safety glasses during entire setup process!



⚠WARNING

SUFFOCATION HAZARD!

Immediately discard all plastic bags and packing materials to eliminate choking/suffocation hazards for children and animals.



⚠WARNING

HEAVY LIFT!

Straining or crushing injury may occur from improperly lifting the 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.

SETUP

Inventory

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

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

Inventory (Figures 13-14)	Qty
A. Main Bandsaw Body (not shown)	1
B. Table	1
C. Table Insert	1
D. Fence Face	1
E. Fence Base Guide Assembly	1
F. Fence Rail	1
G. Gap Screw Lock Lever M8-1.25 x 35	1
H. Fence Support Bracket	1
I. Cap Screws M6-1 x 12 (Fence Support)	2
J. Hex Bolts M8-1.25 x 16 (Table/Trunnion)	4
K. Flat Washer 8 x 20 (Table/Gap Screw)	1
L. Flat Washers 6mm (Fence Support)	2
M. Flat Washers 8mm (Table/Trunnion)	4
N. Hex Bolt M8-1.25 x 110 (Positive Stop/Saw Body)	1
O. Hex Nut M8-1.25 Thin (Table/Trunnion)	1
P. Hex Nut M8-1.25 (Positive Stop/Saw Body)	1
Q. Lock Washers 8mm (Table/Trunnion)	4
R. Fence Base Lock Lever	1
S. Fence Face Lock Lever M8-1.25 x 50	1
T. Fence Guide Plate	1
U. Flat Washer 8mm (Fence Base)	1
V. Hex Nut M8-1.25 (Fence Base)	1
W. Hex Bolts M6-1 x 20 (Fence Rail)	2
X. Flat Washers 6mm (Fence Rail)	2
Y. Lock Washers 6mm (Fence Rail)	2
Z. Hex Wrench 5mm	1
AA. Hex Wrench 6mm	1
AB. Open-End Wrench 10/13mm	1

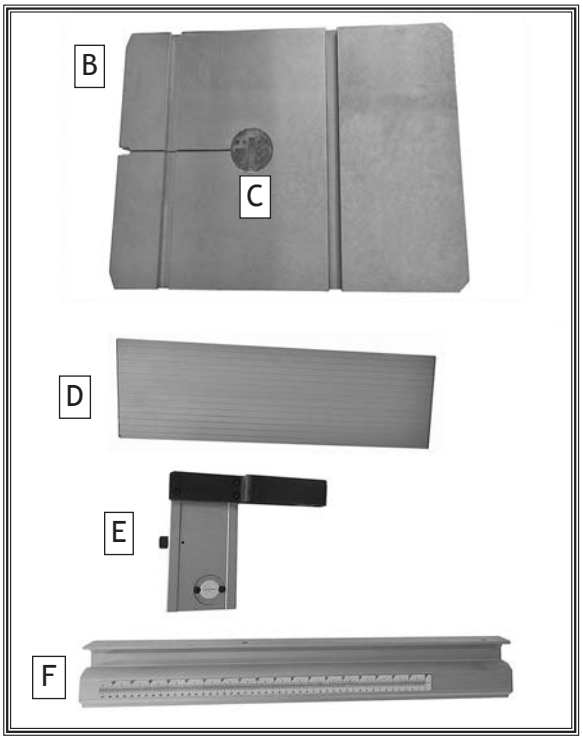


Figure 13. Box 1 inventory.

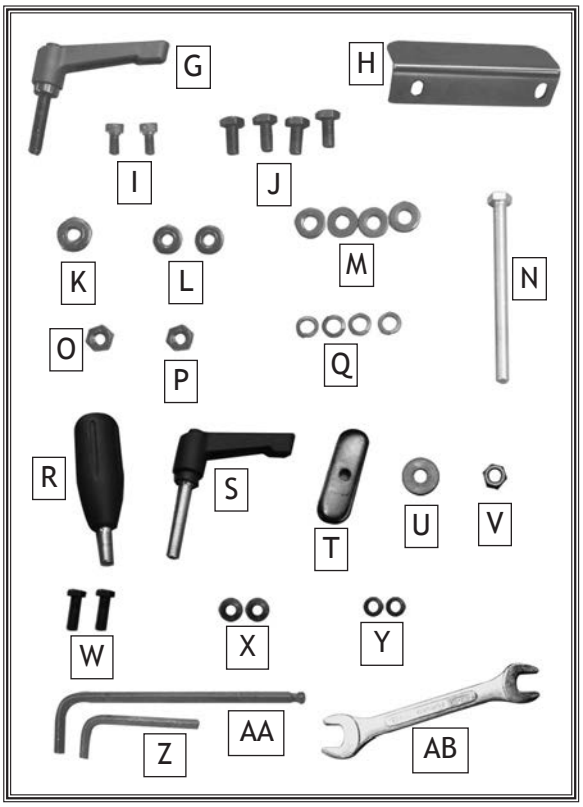
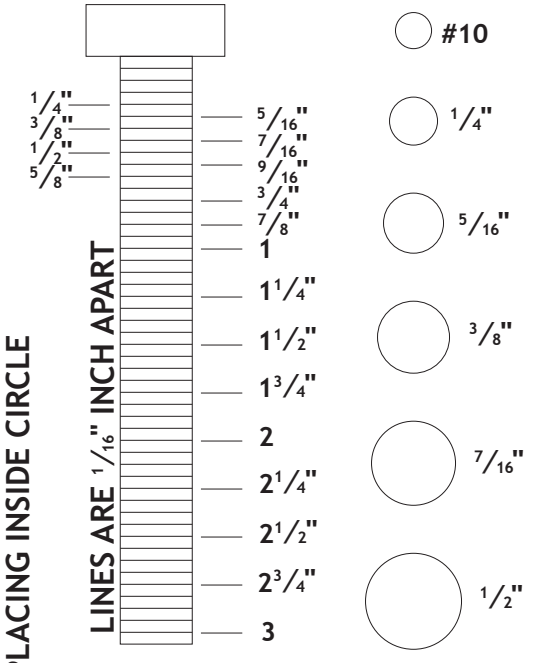
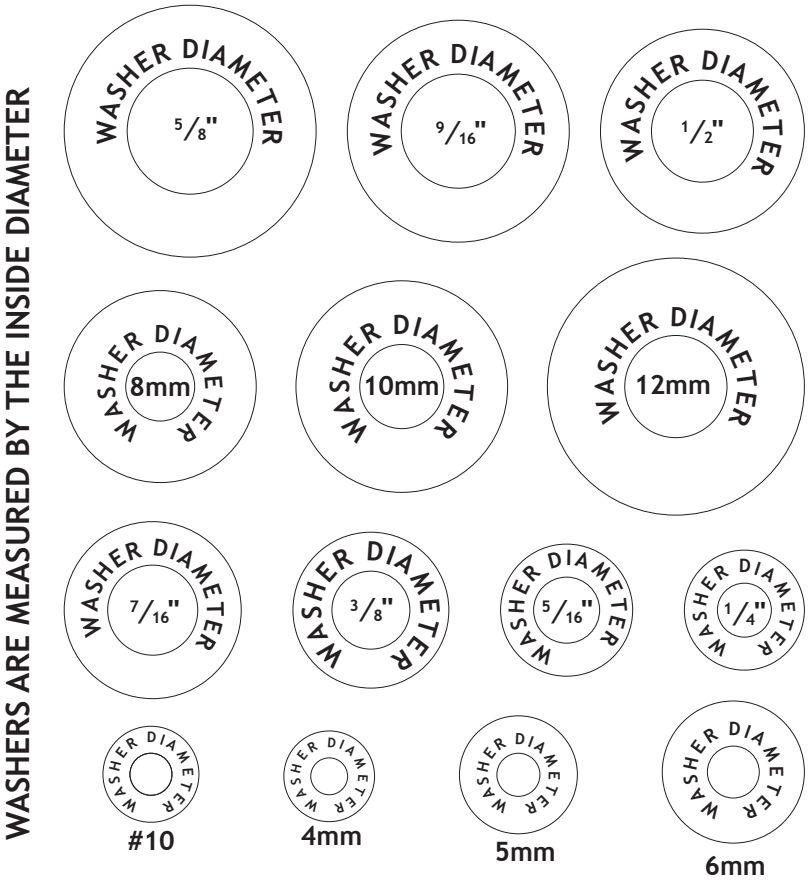


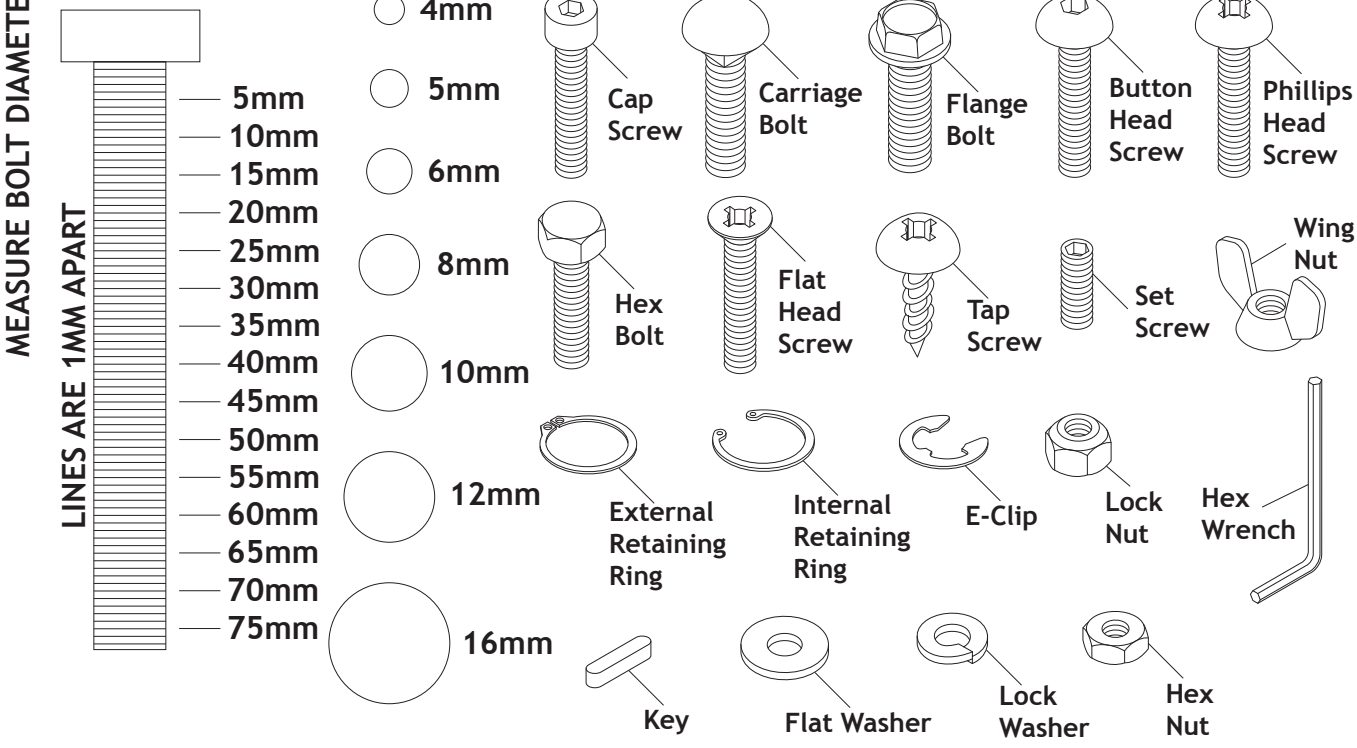
Figure 14. Box 2 hardware inventory.

Hardware Recognition Chart

USE THIS CHART TO IDENTIFY HARDWARE DURING THE INVENTORY/ASSEMBLY PROCESS.







Cleaning Machine

To prevent corrosion during shipment and storage of your machine, the factory has coated the bare metal surfaces of your machine with a heavy-duty rust prevention compound.

If you are unprepared or impatient, this compound can be difficult to remove. To ensure that the removal of this coating is as easy as possible, please gather the correct cleaner, lubricant, and tools listed below:

- Cleaner/degreaser designed to remove storage wax and grease
- Safety glasses & disposable gloves
- Solvent brush or paint brush
- Disposable Rags

To remove rust preventative coating, do these steps:

1. DISCONNECT MACHINE FROM POWER!

2. Put on safety glasses and disposable gloves.

3. Coat the rust preventative with a liberal amount of cleaner/degreaser, then let it soak for 5–10 minutes.

4. Wipe off surfaces. If your cleaner/degreaser is effective, the coating will wipe off easily.

   Tip: An easier way to clean off thick coats of rust preventative from flat surfaces is to use a PLASTIC paint scraper to scrape off the majority of the coating before wiping it off with your rag. (Do not use a metal scraper or you may scratch your machine.)

5. Repeat cleaning steps as necessary until all of the compound is removed.

6. To prevent rust on freshly cleaned surfaces, immediately coat with a quality metal protectant.

⚠WARNING



Gasoline and petroleum products have low flash points and can explode or cause fire if used to clean machinery. Avoid using these products to clean machinery. Many cleaning solvents are toxic if inhaled. Minimize your risk by only using these products in a well ventilated area.

NOTICE

In a pinch, automotive degreasers, mineral spirits or WD•40 can be used to remove rust preventative coating. Before using these products, though, test them on an inconspicuous area of your paint to make sure they will not damage it.

Machine Placement

Weight Load

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

Space Allocation

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

⚠CAUTION

Children or untrained people may be seriously injured by this machine. Only install in an access restricted location.

Physical Environment

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

Electrical Installation

Place this machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure to leave access to a means of disconnecting the power source or engaging a lockout/tagout device.

Lighting

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

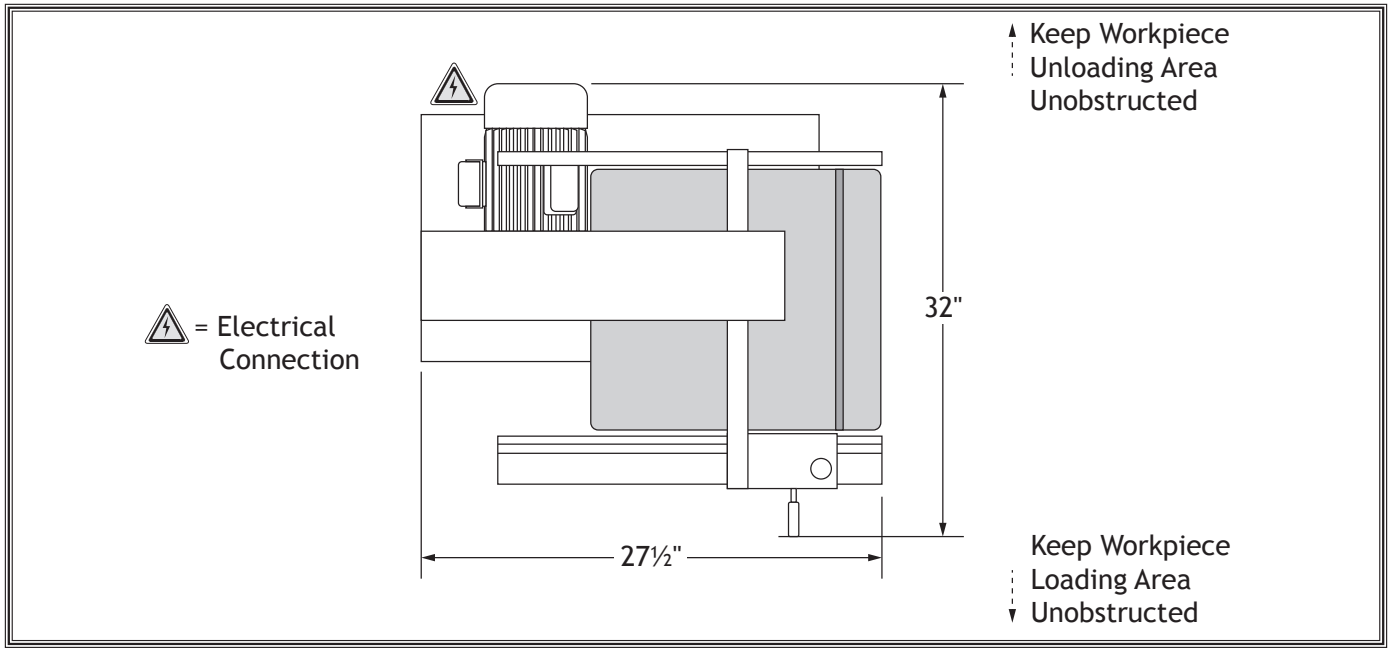
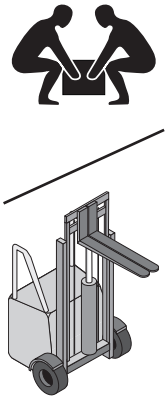


Figure 15. W1849 working clearances.

Lifting & Moving

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 this bandsaw.



⚠WARNING

HEAVY LIFT!

Straining or crushing injury may occur from improperly lifting the 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.

Using Forklift & Eye Bolt

1. Use forklift to move crate to prepared location, then remove crate from shipping pallet.
2. Unbolt bandsaw from pallet.
3. Make sure eye bolt is securely threaded, then place lifting hook through eye bolt (see **Figure 16**) and lift bandsaw slowly with forklift enough to clear pallet.
4. Remove pallet and slowly set bandsaw into position.

Using Forklift & Wood Blocks

1. Use forklift to move crate to prepared location, then remove crate from shipping pallet.
2. Unbolt bandsaw from pallet.
3. Carefully place forklift forks under bandsaw head. Insert a 1x4 block between head and left fork, and a 2x4 block between head and right fork so bandsaw is level, as shown in **Figure 17**.
4. Lift bandsaw off of pallet, remove pallet, then slowly lower bandsaw into position.

   Note: *If you are concerned about your forklift forks hitting the tension handwheel, remove handwheel before positioning forks, then re-install it after placing bandsaw in final location.*

Using Pallet Jack & Furniture Dolly

1. Use pallet jack to move crate to prepared location, then remove crate from shipping pallet.
2. Unbolt bandsaw from pallet.
3. With help of another person, carefully "walk" bandsaw (or use furniture dolly to move bandsaw) off of pallet and into position.

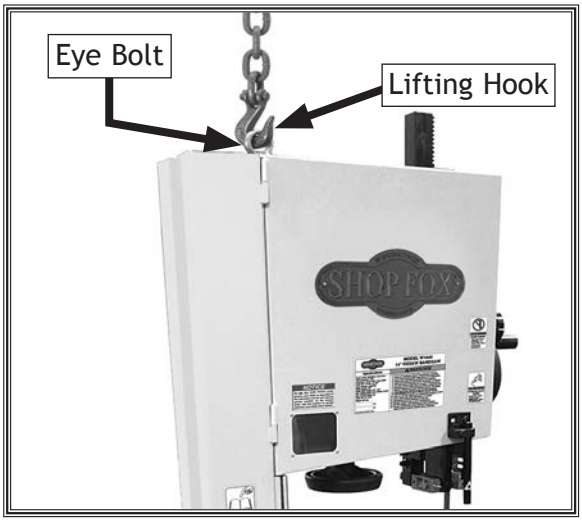


Figure 16. Lifting bandsaw with eye bolt and chain.

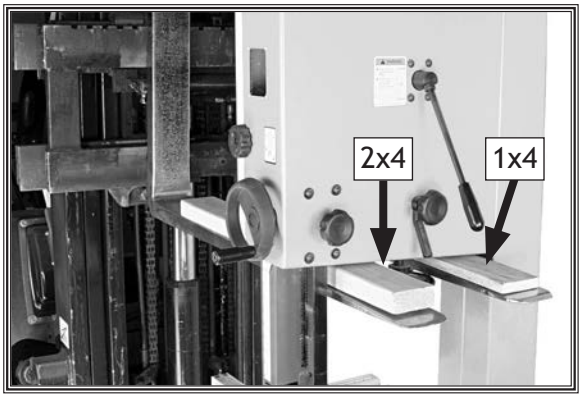


Figure 17. Example of lifting bandsaw with forklift using wood shims.

Anchoring to Floor

Number of Mounting Holes 4
Diameter of Mounting Hardware ..... 3/8"

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.

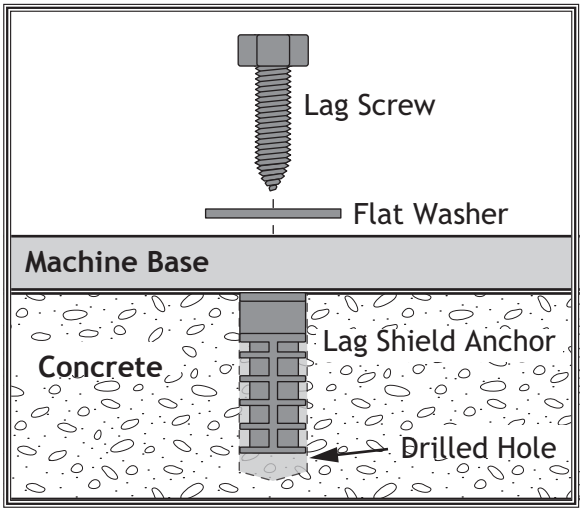


Figure 18. Popular method for anchoring machinery to a concrete floor.

Anchoring to Concrete Floors

Lag shield anchors with lag screws (see **Figure 18**) 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.

Assembly

Before beginning the assembly process, refer to **Items Needed for Setup** and gather everything you need. Ensure all parts have been properly cleaned of the heavy-duty rust-preventative applied at the factory, if applicable. Be sure to complete all steps in the assembly procedure prior to performing the **Test Run**.

To assemble bandsaw, do these steps:

1. Thread (1) M8-1.25 hex nut partially onto M8-1.25 x 110 hex bolt, as shown in **Figure 19**, then thread bolt into panel above lower wheel until top of bolt is approximately 3 1/2" above panel. Finger-tighten hex nut for now. (Refer to **Adjusting Positive Stop** on **Page 40.**)

2. Remove protective shipping cover from blade, then remove table insert and shipping screw from table (see **Figure 20**).

3. Place table on saw, sliding table gap around blade (see **Figure 20**).

4. Carefully position table so gap faces to right (see **Figure 21**).

5. Secure table to trunnion using (4) M8-1.25 x 16 hex bolts, (4) 8mm lock washers, and (4) 8mm flat washers (see **Figure 22**).

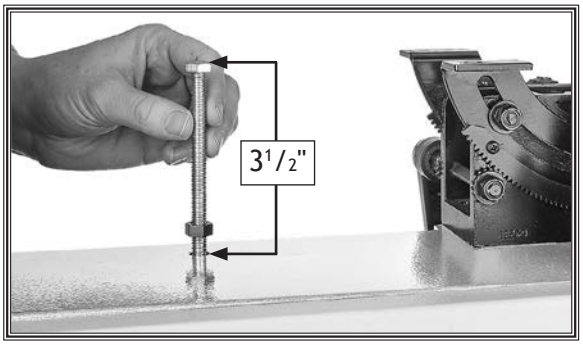


Figure 19. Installing hex bolt to set positive stop.

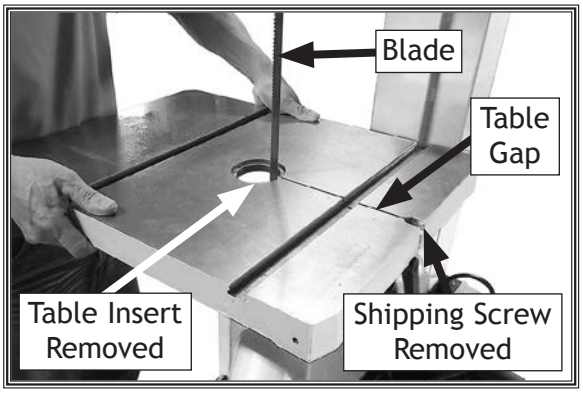


Figure 20. Placing table on saw with gap positioned around blade.

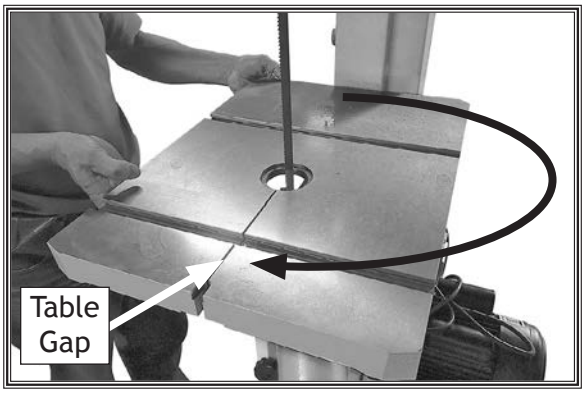


Figure 21. Table rotated with gap facing to the right.

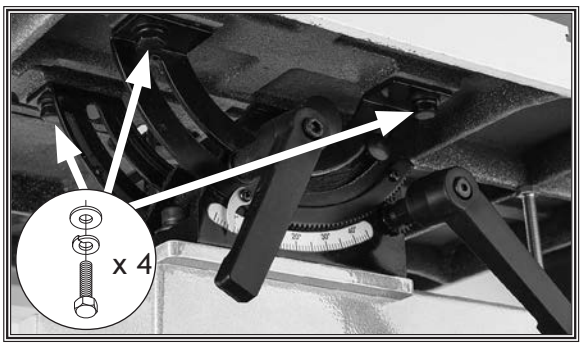


Figure 22. Table-to-trunnion mounting hardware installed.

6. Install table insert (see **Figure 23**).

7. Install table gap screw lock lever, secure with (1) M8-1.25 thin hex nut and (1) 8 x 20mm flat washer (see **Figure 23**), then tighten gap screw to ensure table surface is flush across gap.

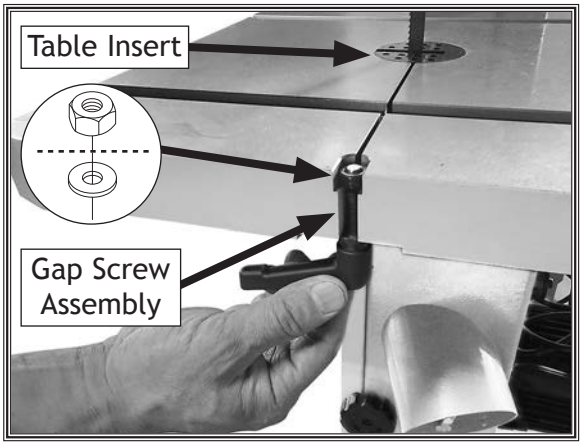


Figure 23. Table insert and gap screw installed.

8. Install fence support using (2) M6-1 x 12 cap screws and (2) 6mm flat washers (see **Figure 24**).

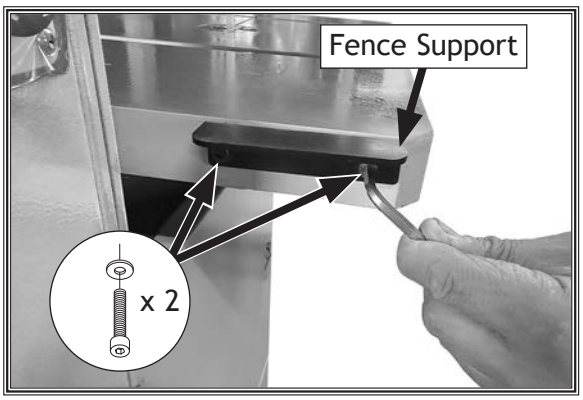


Figure 24. Installing fence support.

9. Install fence rail using (2) M6-1 x 20 hex bolts, (2) 6mm flat washers, and (2) 6mm lock washers (see **Figure 25**).

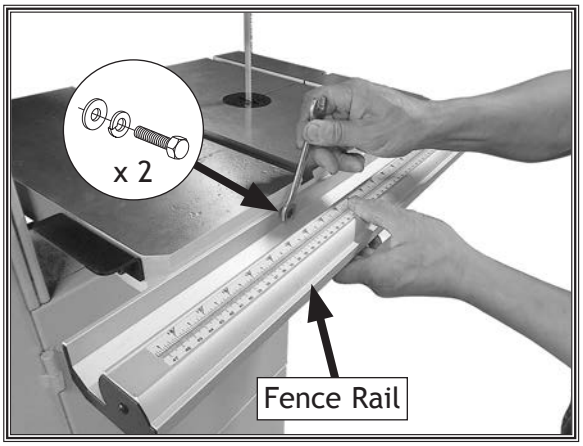


Figure 25. Installing fence rail.

10. Thread (1) M8-1.25 hex nut onto lock lever, install lock lever onto fence base, then tighten hex nut to secure (see **Figure 26**).

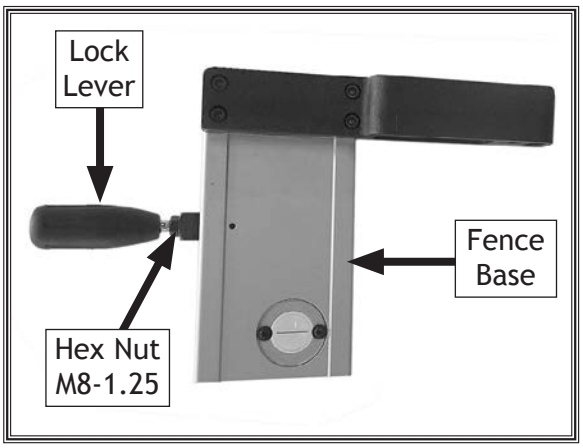


Figure 26. Fence base lock lever installed.

11. Install adjustable handle onto fence base with (1) 8mm flat washer, and thread into fence base guide plate (see **Figure 27**).

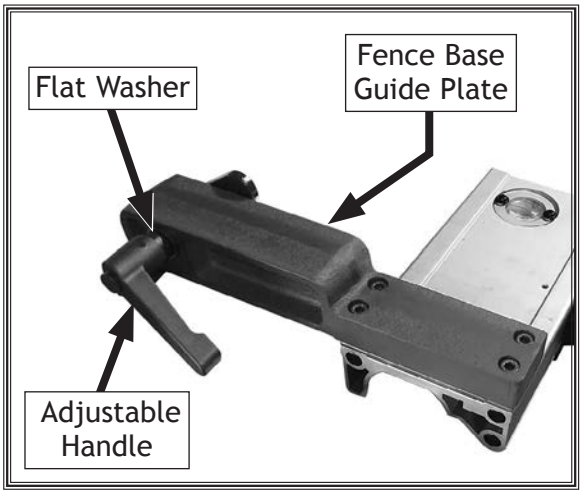


Figure 27. Fence base adjustable handle and guide plate installed.

12. Place fence base guide on fence rail with lock lever raised up. Push lock lever down to secure fence in place (see **Figure 28**).

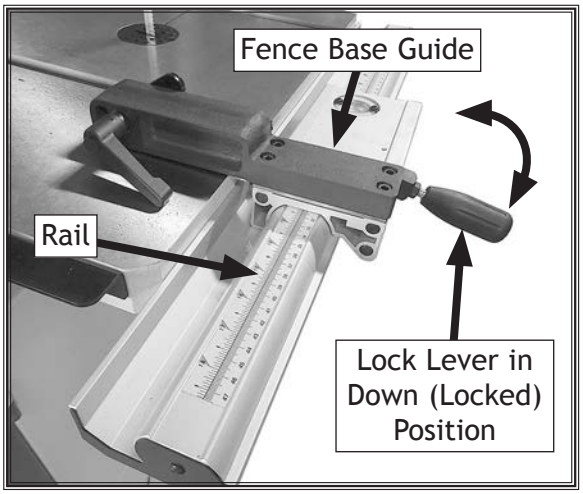


Figure 28. Fence base installed on fence rail.

13. Mount fence to fence base guide, sliding T-channel around fence base guide plate (see **Figure 29**).

— For *normal* workpieces or resawing, mount fence in vertical position, as shown in **Figure 29**, then rotate fence base lock lever to secure.

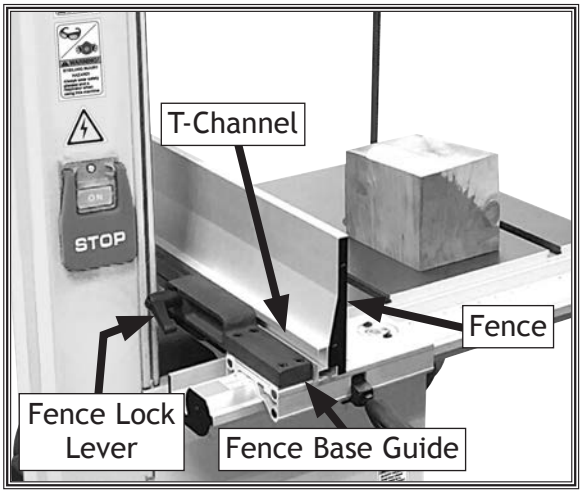


Figure 29. Installing fence in vertical position.

— For *thin* workpieces, mount fence in horizontal position, as shown in **Figure 30**, then rotate fence base lock lever to secure.

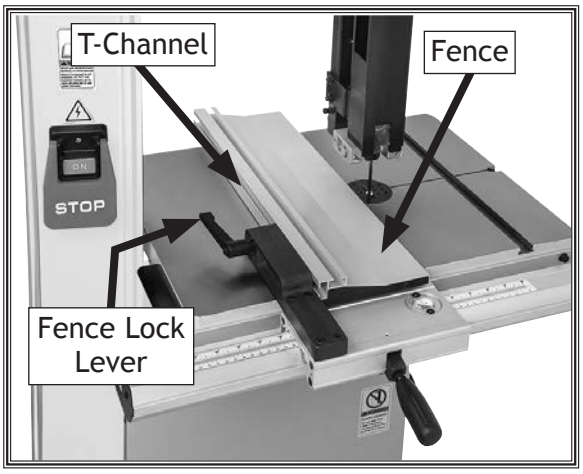


Figure 30. Fence installed in horizontal position.

Dust Collection

Recommended CFM at Each 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.

⚠CAUTION

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

Tools Needed	Qty
Dust Collection System	1
Dust Hose 4"	2
Hose Clamps 4"	2

To connect a dust collection hose, do these steps:

1. Fit 4" dust hose over each dust port, as shown in **Figure 31**, and secure it in place with hose clamp.

   Note: *For best results, connect free ends of hoses to a 4" Y fitting and secure with hose clamps, then connect fitting to your dust collection system. See **Accessories**, beginning on **Page 55**, for more information.*

2. Tug hose to make sure it does not come off.

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



Figure 31. Example of dust hoses attached to upper and lower dust ports.

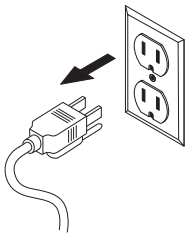
Adjustment Overview

The bandsaw is one of the most versatile woodworking 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 **(This Page)**
2. Test Run (**Page 29)**
3. Tension Blade **(Page 30)**
4. Adjusting Blade Support Bearings **(Page 33)**
5. Adjusting Euro-Style Roller Disc Guides **(Page 34)**
6. Table Tilt Calibration **(Page 51)**
7. Aligning Table **(Page 39)**
8. Aligning Fence **(Page 41)**

⚠WARNING



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

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 32**).

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 70** for more details).

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

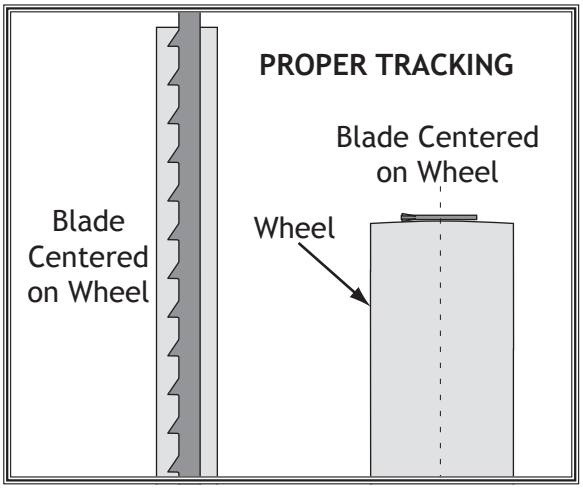


Figure 32. Blade centered on crown of wheel.

To adjust blade tracking, do these steps:

1. DISCONNECT MACHINE FROM POWER!

2. Adjust upper and lower blade guides away from blade, and raise upper guides approximately $^{2}/_{3}$ of the way up (refer to **Adjusting "Euro-Style" Roller Disc 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 (see **Figure 33**).

4. Open upper wheel cover (see **Figure 34**).

5. Rotate blade tension handwheel until tension scale (see **Figure 34**) is between 4 and 6. Rotate handwheel clockwise to increase blade tension. Rotate handwheel counterclockwise to decrease blade tension.

   Note: *If using a narrower blade than the one included with the saw, use less tension to avoid breakage.*

6. Loosen tracking control lock lever on back of bandsaw (see **Figure 35**).

7. Rotate upper wheel by hand several times and watch how blade rides on wheel (see inset **Figure 35**).

   — If the blade *does* 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 35**) in small amounts and continue to rotate upper wheel by hand at the same time until blade consistently rides in center of bandsaw tire.

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



Figure 33. Quick-release blade tension lever in down position, applying tension to blade.

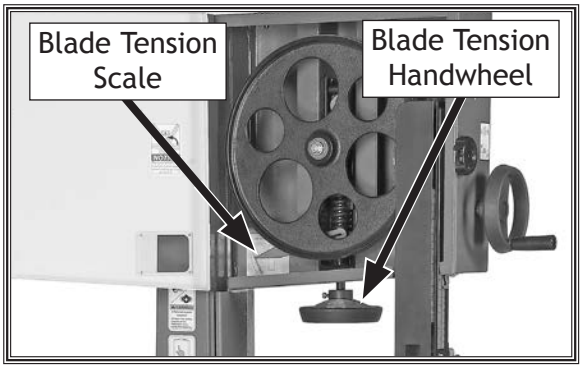


Figure 34. Blade tensioning controls.

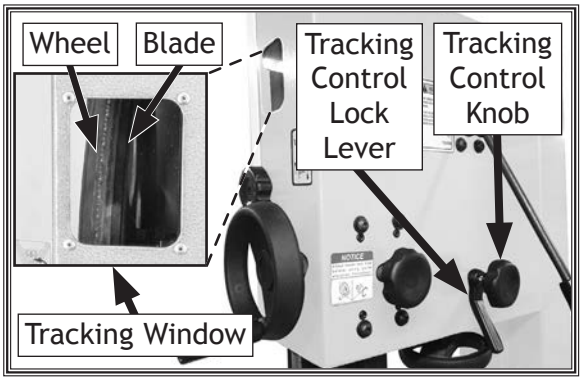


Figure 35. Blade tracking controls.

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 32** for more information.*

Test Run

Once assembly is complete, test run the machine to ensure it is properly connected to power and safety components are functioning properly.

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.

To test run machine, do these steps:

1. Clear all setup tools away from machine.
2. Connect machine to power supply.
3. Turn machine ***ON*** (see **Figure 36**) and verify motor operation. Motor should run smoothly and without unusual noises.
4. Turn machine ***OFF*** by pressing in STOP paddle. Motor should turn off immediately.

   — If machine *does* stop, the STOP paddle is working as designed.

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

⚠WARNING

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

⚠WARNING

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

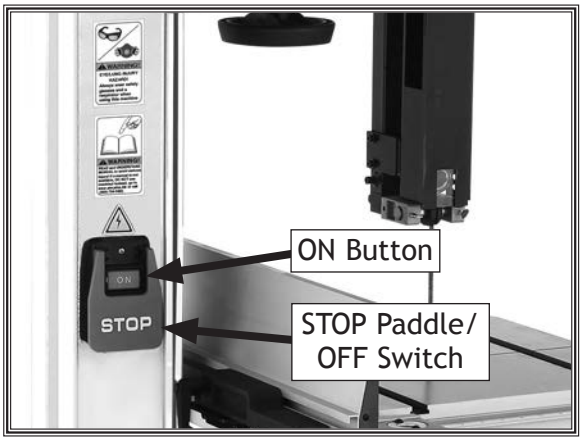


Figure 36. Location of ON/OFF switch.

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, do these steps:

1. DISCONNECT MACHINE FROM POWER!

2. Make sure blade is properly tracking as instructed in **Initial Blade Tracking** subsection on **Page 27**.

3. Use handwheel to fully raise guide post (see **Figure 37**), and move upper and lower support bearings and roller discs (see **Figure 38**) away from blade. Refer to **Pages 33**–**34** for more information.

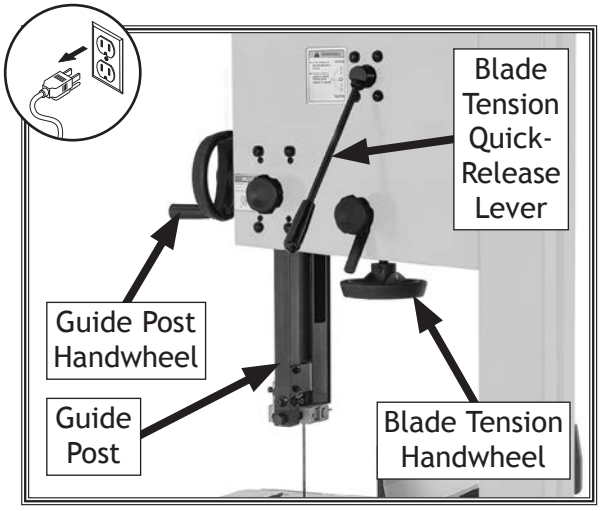


Figure 37. Blade tensioning controls.

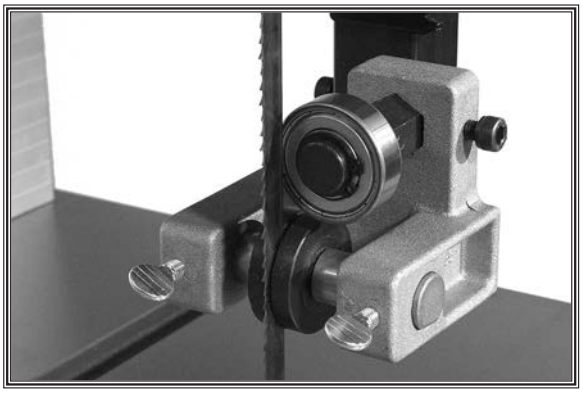


Figure 38. Upper guide roller discs.

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 $^{1}/_{8}$- to $^{1}/_{4}$-turn.

8. DISCONNECT MACHINE FROM POWER!

9. Adjust blade guides as described in **Adjusting Blade Support Bearings** and **Adjusting "Euro-Style" Roller Disc Guides** on **Pages 33**–**34**.

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, do these steps:

1. DISCONNECT MACHINE FROM POWER!

2. Make sure blade is properly tracking as instructed in **Initial Blade Tracking** subsection on **Page 27**.

3. Use handwheel to fully raise guide post (see **Figure 39**), and move upper and lower roller-disc guides and support bearings away from blade (see **Figure 40**). Refer to **Page 33** 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 1/4", it is properly tensioned. Proceed to **Step 6**.

   — If blade deflects less than 1/4", it is over-tensioned. Rotate blade tension handwheel counterclockwise two full turns and repeat **Step 5**.

   — If blade deflects 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 "Euro-Style" Roller Disc Guides** on **Pages 33-34**.

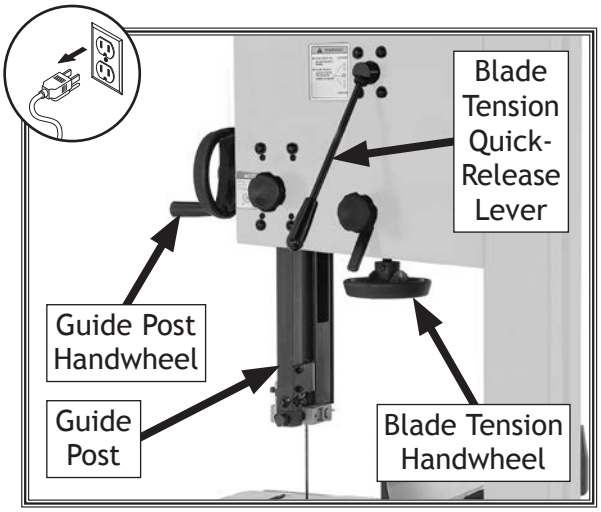


Figure 39. Blade tensioning controls.

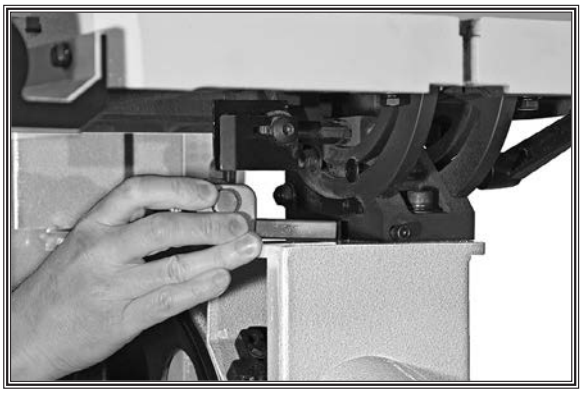


Figure 40. Location of lower roller discs.

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, do these steps:

1. Close wheel covers and turn bandsaw ***ON***.
2. Observe blade tracking path through clear tracking window on right edge of bandsaw (see **Figure 41**).
3. If necessary, loosen tracking control lock lever and use tracking control knob (see **Figure 42**) to adjust the blade so it tracks on the center of the wheel.
4. Tighten tracking control lock lever (see **Figure 42**) to secure setting, then turn machine ***OFF***.

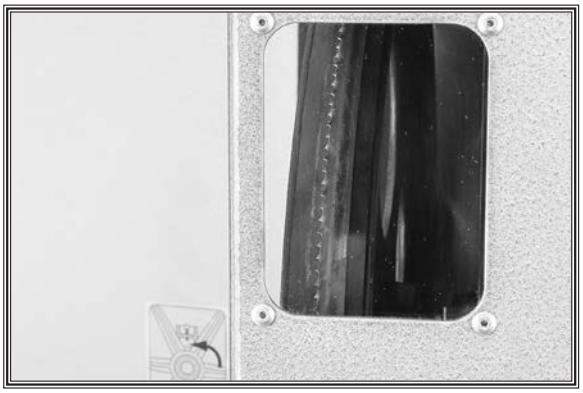


Figure 41. View of blade through tracking window.



Figure 42. Blade 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" (see **Figure 43**) 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.*

Tool Needed	**Qty**
Hex Wrench 5mm	1

To adjust support bearing, do these steps:

1. DISCONNECT MACHINE FROM POWER!

2. Loosen support bearing adjustment cap screw (see **Figure 44**).

3. Position support bearing approximately 0.016" away from back of blade, as illustrated in **Figure 45**.

   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.*

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

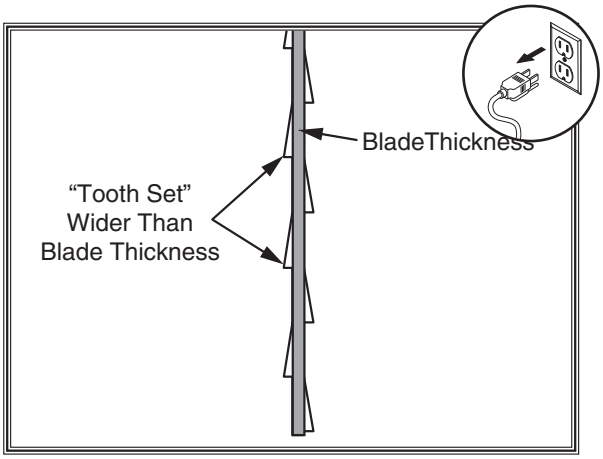


Figure 43. Illustration of blade "tooth set."

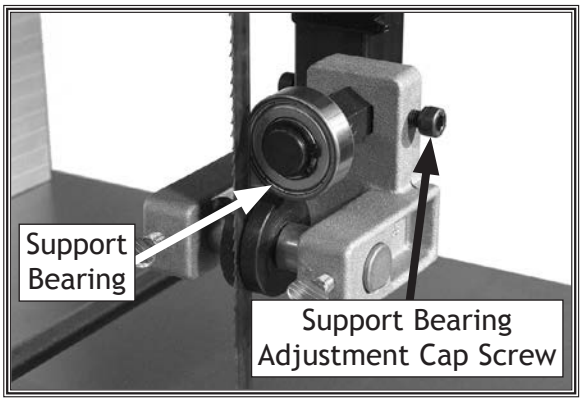


Figure 44. Upper support bearing assembly and controls (guide post cover removed for clarity).

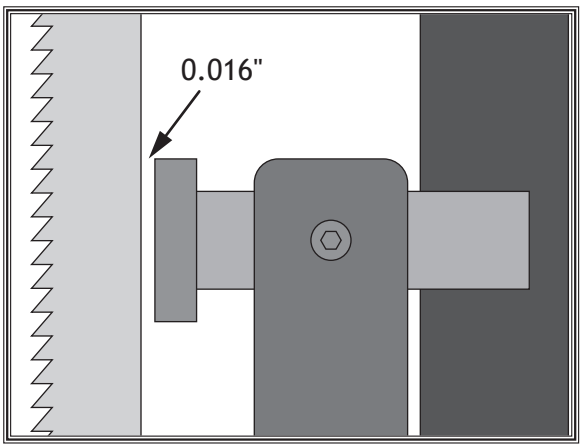


Figure 45. Bearing positioned approximately 0.016" away from back of blade.

Adjusting "Euro-Style" Roller-Disc Guides

The "Euro-style" roller discs (see **Figure 46**) can be adjusted left to right, as well as front to back, relative to the blade. Properly adjusted roller discs provide side-to-side support, from just behind the gullets to the back of the blade, to help keep the blade straight while cutting. There are roller discs on the upper and lower "Euro-style" roller-disc guide assemblies. Both adjust in the same manner.

IMPORTANT: *Make sure the blade is tracking and tensioned correctly before adjusting roller disc guides (see **Tensioning Blade** on **Page 30**).*

The "Euro-style" roller-disc guide support bearing (see **Figure 46**) is positioned behind the blade near the roller-discs and prevents the blade from pushing backward during cutting operations. To adjust the support bearings, refer to **Page 33** for more detailed instructions.

Important: *Always adjust roller discs before adjusting roller-disc guide support bearing.*

Tool Needed	**Qty**
Hex Wrench 5mm	1

To adjust "Euro-style" roller discs, do these steps:

1. DISCONNECT MACHINE FROM POWER!

2. Loosen guide block adjustment cap screw shown in **Figure 47**, then position roller discs just behind blade gullets, as illustrated in **Figure 48**. Retighten cap screw to secure setting.

   Note: *The roller discs should be positioned behind the gullets at a distance equal to that of the support bearing behind the blade (see **Figure 45** on **Page 34**).*

   Note: *With wider blades, it may not be possible to bring the roller discs just behind the blade gullets. Position them as far forward as possible without allowing the roller-disc housing to touch the back of the blade.*

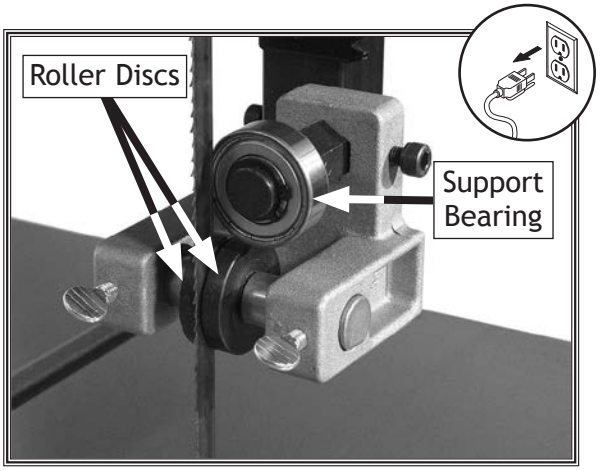


Figure 46. Upper "Euro-style" roller-disc guide assembly.

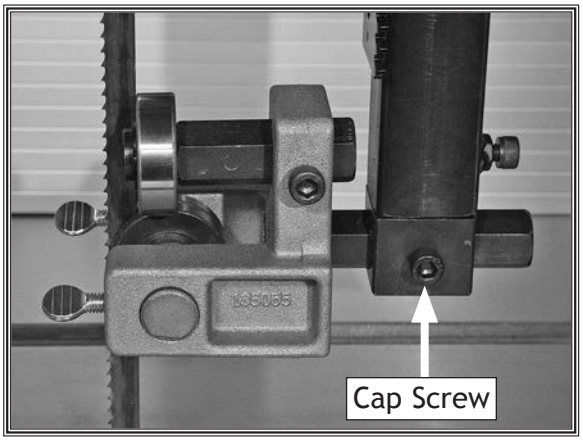


Figure 47. Location of guide block adjustment cap screw (guide post cover removed for clarity).

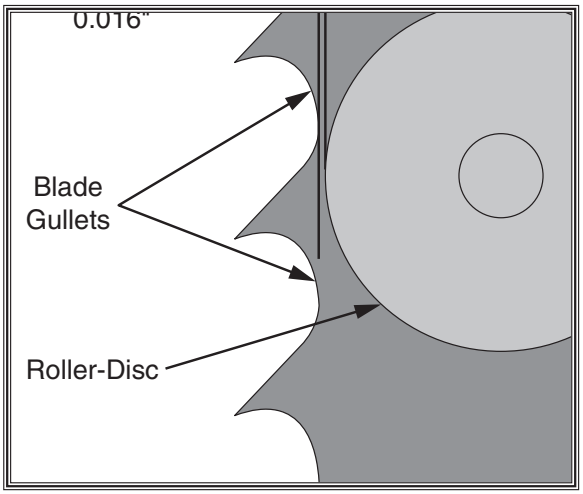


Figure 48. Roller disc positioned just behind blade gullets.

3. Loosen both roller-disc adjustment thumb screws (see **Figure 49**), then position roller discs so they are close to—but not quite touching—sides of blade.

   Note: *When the roller discs are properly adjusted, they should only contact the blade during cutting operations, or when the blade is deflected to the left or right. The discs may or may not rotate during operations.*

4. Retighten thumb screws to secure settings. Rotate blade by hand to check setting, and if necessary, repeat **Steps 3-4**.

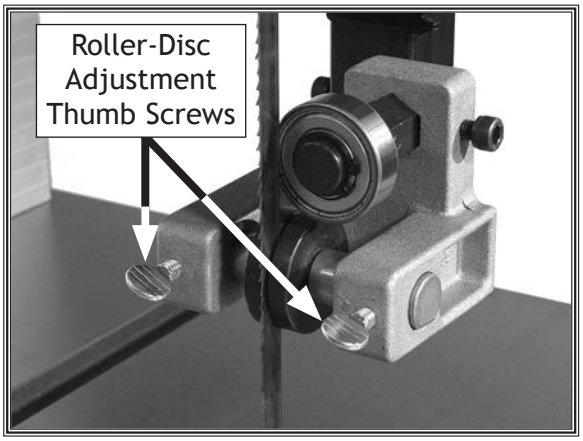


Figure 49. Location of upper roller-disc adjustment thumb screws (guide post cover removed for clarity).

NOTICE

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

Installing Blade Guide Roller Bearings

As an option to replace the standard "Euro-Style" roller-disc guides, Woodstock offers optional D4688 Blade Guide Roller Bearings specially designed to fit Model W1849 (see **Accessories** on **Page 55**). Installing these blade guides is relatively easy, though it requires first removing the blade and existing blade guide assemblies.

Tool Needed	**Qty**
Hex Wrench 5mm	1

To install blade guide roller bearings, do these steps:

1. DISCONNECT MACHINE FROM POWER!
2. Remove blade (refer to **Page 50**).
3. Loosen two cap screws on guide post that secure upper blade guide assembly, as shown in **Figure 50,** and remove upper "Euro-Style" roller-disc guide assembly.
4. Install upper blade guide bearing assembly on guide post (see **Figure 51**). Finger-tighten cap screws.

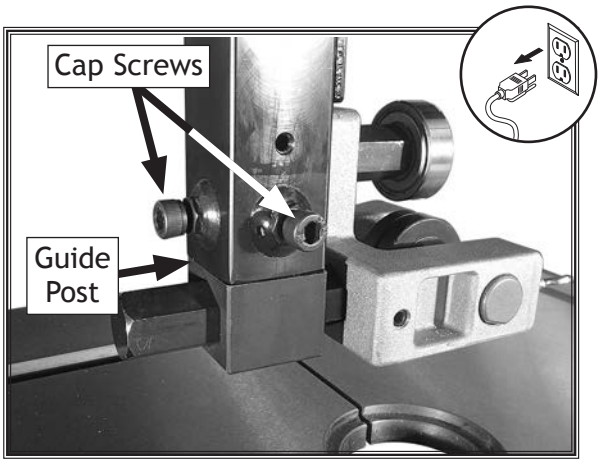


Figure 50. Location of cap screws for removing "Euro-style" roller discs.

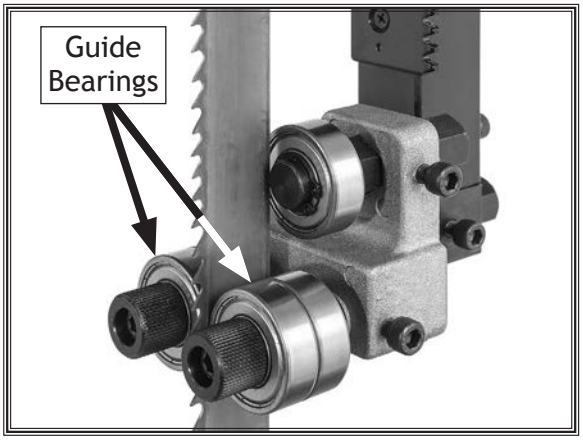


Figure 51. Upper blade guide roller bearing assembly installed (guide post cover removed for clarity).

5. Loosen cap screw shown in **Figure 52**, remove lower "Euro-Style" roller-disc guide assembly, and replace it with lower blade guide bearing assembly.
6. Re-install blade (refer to **Page 50**).
7. Proceed to **Adjusting Blade Guide Roller Bearings** in next section.

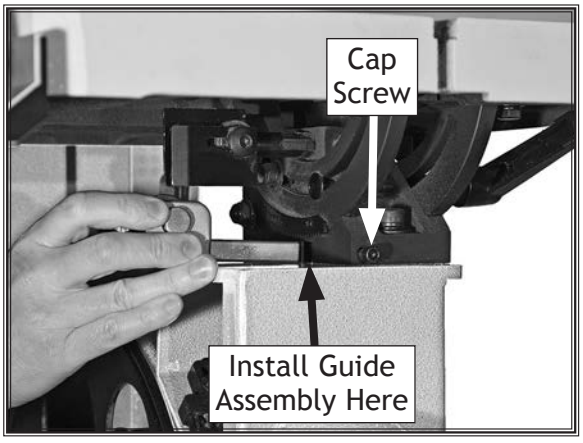


Figure 52. Installing lower roller bearing guide bearing assembly.

Adjusting Blade Guide Roller Bearings

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

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

Important: *Make sure the blade is tracking and tensioned correctly before performing this procedure (see* ***Tensioning Blade*** *on* ***Page 30****).*

Tool Needed	**Qty**
Hex Wrench 5mm	1

To adjust blade guides do these steps:

1. DISCONNECT MACHINE FROM POWER!

2. Loosen guide block adjustment cap screw shown in **Figure 53**, then position guide bearings just behind blade gullets, as illustrated in **Figure 54**. Retighten cap screw to secure setting.

   Note: *The guide bearings should be positioned behind the blade gullets a distance equal to that of the support bearing behind the blade (see* ***Figure 46*** *on* ***Page 33****).*

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

NOTICE

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

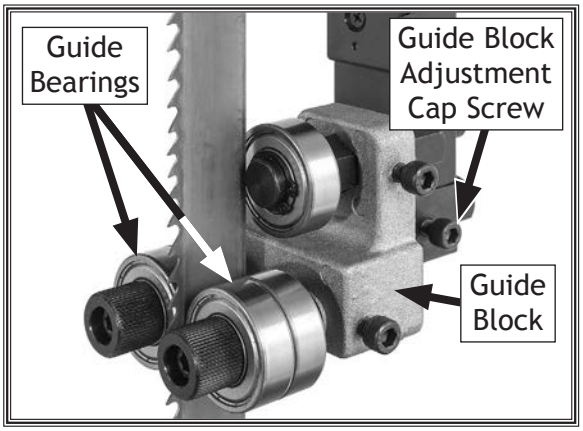


Figure 53. Upper guide bearing components (guide post cover removed for clarity).

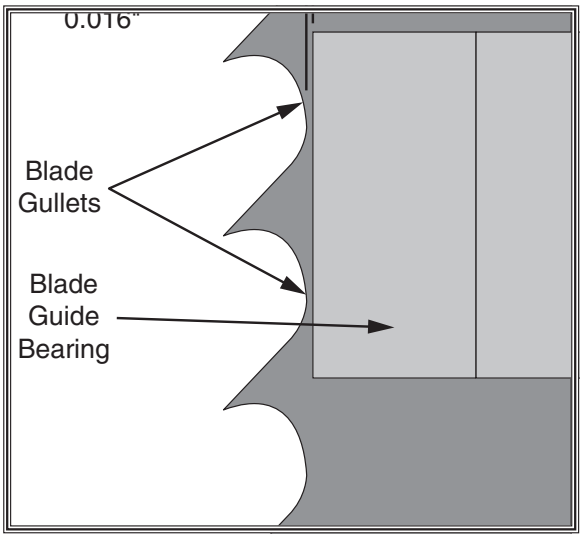


Figure 54. Blade guide bearing positioned just behind blade gullets.

3. Loosen both guide bearing adjustment cap screws (see **Figure 55**), then position guide bearings so they are close to—but not quite touching—sides of blade.

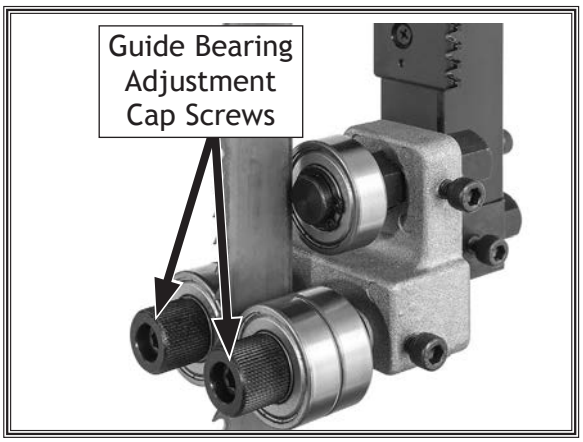


Figure 55. Location of upper guide bearing adjustment cap screws (guide post cover removed for clarity).

Note: *When the blade guide bearings are properly adjusted, they should only rotate during cutting operations, or when the blade is deflected to the left or right (see* ***Figure*** **56***).*

4. Retighten cap screws to secure settings. Rotate blade by hand to check the setting, and, if necessary, repeat **Steps 3-4**.

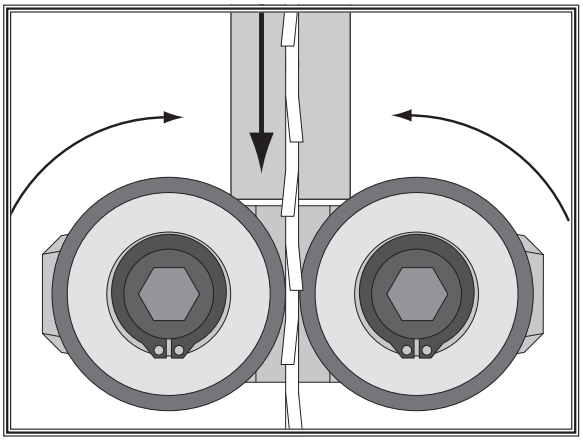


Figure 56. Blade guide bearings rotating during cutting operation.

NOTICE

Blade teeth are angled out slightly, protruding wider than the blade thickness; this is known as blade "tooth set" (see Figure 57). If angled out parts of the teeth contact guide bearings during operation, they will get bent inward, ruining the tooth set. Therefore, the support bearing must be set to prevent teeth from contacting guide bearings during operation (refer to Page 37 for details).

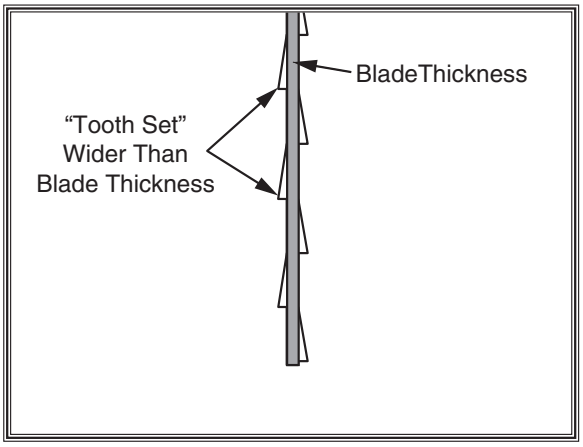


Figure 57. Illustration of blade "tooth set."

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 (¾") blade installed.

Tools Needed	Qty
Straightedge	1
Fine Ruler	1
Square	1
Open-End Wrench or Socket 13mm	1

Adjusting Miter Slot Parallelism

1. Make sure blade is tracking properly and that it is correctly tensioned (refer to **Pages 27-28**).

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 58**).

4. Use a fine ruler to measure distance between straightedge and miter slot (see **Figure 58**). Distance should be the same at front and back of 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 40**.

   — If the distance is not the same at the front and back of the table, it must be adjusted; proceed to **Step 5**.

5. Loosen trunnion bolts that secure table (see **Figure 59**).

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.

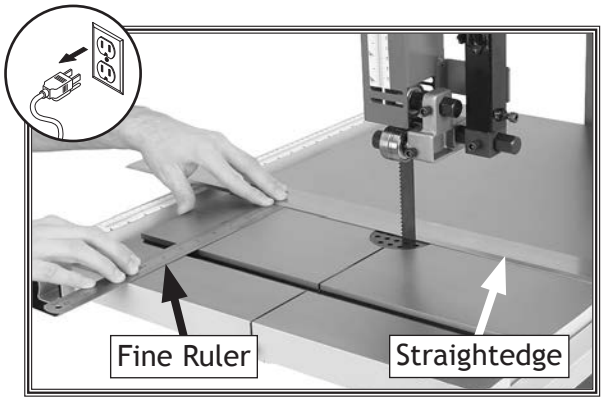


Figure 58. Checking miter slot parallelism.

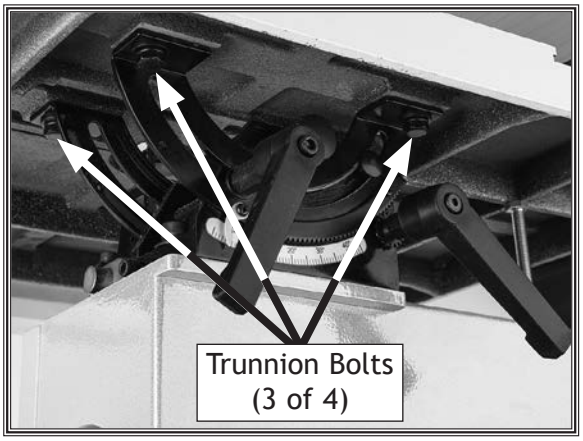


Figure 59. Location of trunnion bolts.

Adjusting Table Perpendicular to Blade

1. DISCONNECT MACHINE FROM POWER!

2. Place a square on table and against back of blade, as illustrated in **Figure 60**. Table should be perpendicular to back of blade.

   — If the table *is* perpendicular to the back of the blade, no adjustment is necessary; proceed to **Aligning Fence** on **Page41**.

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

3. Determine which trunnion is on low side of table, then remove two trunnion bolts (see **Figure 59**) from low trunnion.

4. Insert a shim, such as a thin washer, between table and low trunnion at each mounting location.

5. Re-install and tighten trunnion bolts, then repeat **Step 2** to verify adjustment.

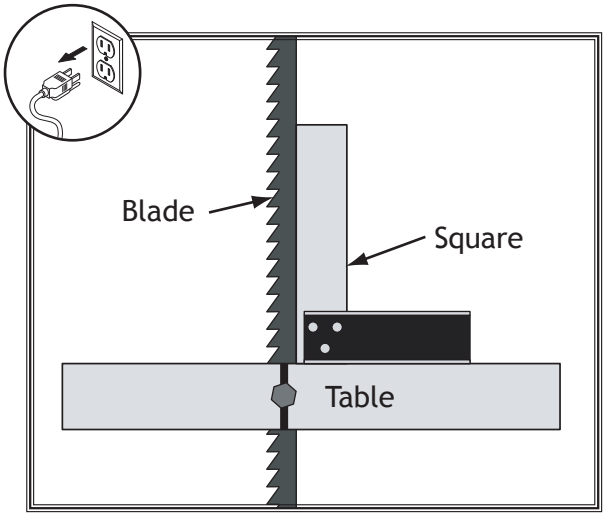


Figure 60. Squaring back of blade and table.

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.

To position positive stop, do these steps:

1. DISCONNECT MACHINE FROM POWER!

2. Adjust blade tension appropriate to blade size.

3. Loosen hex nut (see **Figure 61**) that locks the positive stop bolt in place.

4. Raise guide post and place a machinist's square on table next to side of blade, as illustrated in Figure **61**. Adjust table square with blade, then secure it with table tilt lock lever.

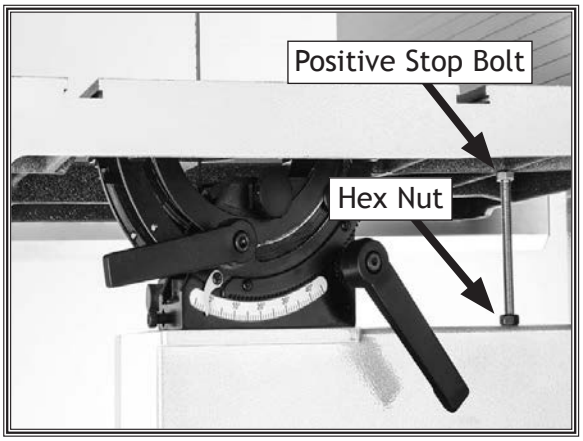


Figure 61. Location of positive stop bolt and hex nut.

5. Adjust positive stop bolt against bottom of table and secure it by tightening hex nut against trunnion bracket.

6. Check adjustment for accuracy once you have tightened hex nut.

7. Loosen screw on pointer, but do not remove it.

8. Align tip of pointer with 0° mark on table tilt scale, then re-tighten screw to secure setting.

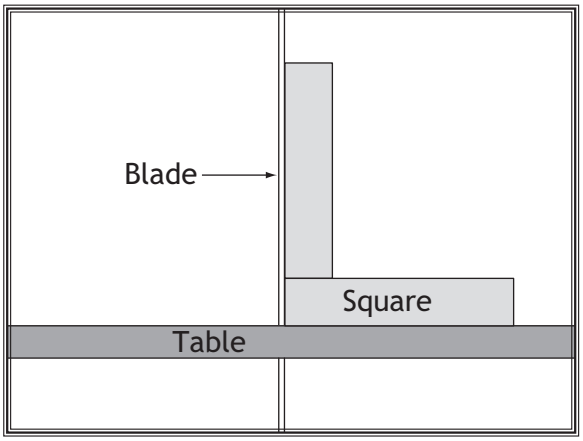


Figure 62. Squaring side of blade and table.

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 39.**

Note: *Occasionally, even after aligning the fence, a symptom known as "blade lead" will develop, requiring the fence to be skewed slightly to compensate for the blade lead problem. Refer to* ***Blade Lead****, beginning on* ***Page 65*** *for more information on blade lead and skewing the fence.*

Tool Needed **Qty**
Hex Wrench 5mm 1

To align fence, do these steps:

1. DISCONNECT MACHINE FROM POWER!

2. Make sure table is aligned with blade (see **Adjusting Miter Slot Parallelism** on **Page 39** for detailed instructions).

3. Install fence next to miter slot (see **Figure 63**).

4. Loosen four cap screws located to the left of fence face (see **Figure 63**).

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

6. Re-check fence alignment and, if necessary, repeat **Steps 4-5**.

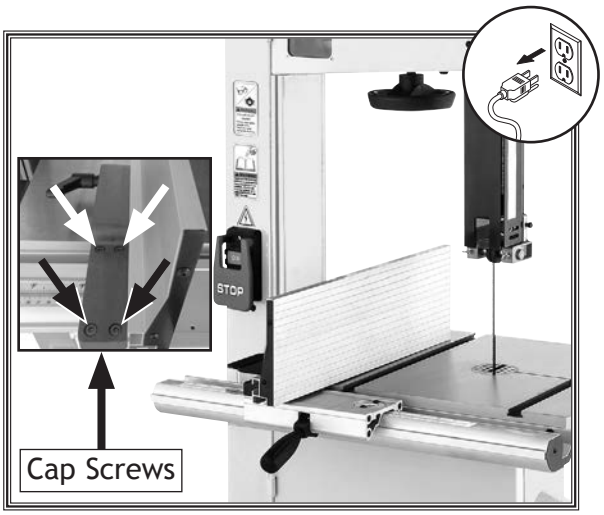


Figure 63. Fence installed next to miter slot for alignment adjustment.

OPERATIONS

General

This machine will perform many types of operations that are beyond the scope of this manual. Many of these operations can be dangerous or deadly if performed incorrectly.

The instructions in this section are written with the understanding that the operator has the necessary knowledge and skills to operate this machine. If at any time you are experiencing difficulties performing any operation, stop using the machine!

The overview below provides 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 its generic nature, this overview is **NOT** intended to be an instructional guide.

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 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 and turns machine ***ON***.

8. Holds workpiece firmly and flat against both table and fence (or miter gauge), and then pushes workpiece into blade at a steady and controlled rate until cut is complete.

WARNING



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

WARNING





To reduce the risk of eye injury and long-term respiratory damage, always wear safety glasses and a respirator while operating this machine.

NOTICE

If you are an inexperienced operator, we strongly recommend that you read books or trade articles, or seek training from an experienced operator of this type of machinery before performing unfamiliar operations. **Above all, safety must come first!**

9. Is very careful to keep fingers away from blade and uses a push stick to feed narrow workpieces.

10. Turns machine ***OFF***.

Basic Functions of a Bandsaw

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

Straight Cuts

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

Irregular Cuts

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

Basic Cutting Tips

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

- Replace, sharpen, and clean blades often for best performance. Check guides, tension, and alignment settings periodically and adjust when necessary to keep the saw running in top condition.

- Use light and even pressure while cutting. Light feeding pressure makes it easier to cut straight and prevents undue friction or strain on the bandsaw components and the blade.

- Avoid twisting the blade when cutting around tight corners. Allow the blade to saw its way around the corners. Always use relief cuts when possible.

- Misusing the saw or using incorrect techniques (e.g. twisting the blade with the workpiece, incorrect feed rate, etc.) is unsafe and results in poor cuts.

Workpiece Inspection

Some workpieces are not safe to cut or may require modification before they can be made safe to cut. **Before cutting, 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, laminate covered wood products, and some plastics. Cutting drywall or cementitious backer board creates extremely fine dust and may reduce the life of the bearings. This machine is NOT designed to cut metal, glass, stone, tile, etc.; cutting these materials with a bandsaw may lead to injury.

- ***Foreign Objects:*** Nails, staples, dirt, rocks and other foreign objects are often embedded in wood. While cutting, these objects can become dislodged and hit the operator, cause kickback, or break the blade, which might then fly apart. Always visually inspect your workpiece for these items. If they can't be removed, DO NOT cut the workpiece.

- ***Large/Loose Knots:*** Loose knots can become dislodged during the cutting operation. Large knots can cause kickback and machine damage. Choose workpieces that do not have large/loose knots or plan ahead to avoid cutting through them.

- ***Wet or "Green" Stock:*** Cutting wood with a moisture content over 20% causes unnecessary wear on the blades, increases the risk of kickback, yields poor results.

- ***Excessive Warping:*** Workpieces with excessive cupping, bowing, or twisting are dangerous to cut because they are unstable and often unpredictable when being cut. DO NOT use workpieces with these characteristics!

- ***Minor Warping:*** Workpieces with slight cupping can be safely supported if the cupped side faces the table or the fence. On the contrary, a workpiece supported on the bowed side will rock during a cut and could cause kickback or severe injury.

Setting Upper Blade Guide Height

When cutting, the blade guides must always be positioned so they just clear (no more than 1/4") the workpiece. The guide post, shown in **Figure 64**, allows the upper blade guide assembly to be quickly adjusted for height.

To adjust height of upper blade guides, do these steps:

1. DISCONNECT MACHINE FROM POWER!
2. Loosen guide post lock knob.
3. Use guide post handwheel to adjust height of guide post so that blade guide assembly just clears (no more than 1/4") workpiece.
4. Retighten lock knob to secure setting.

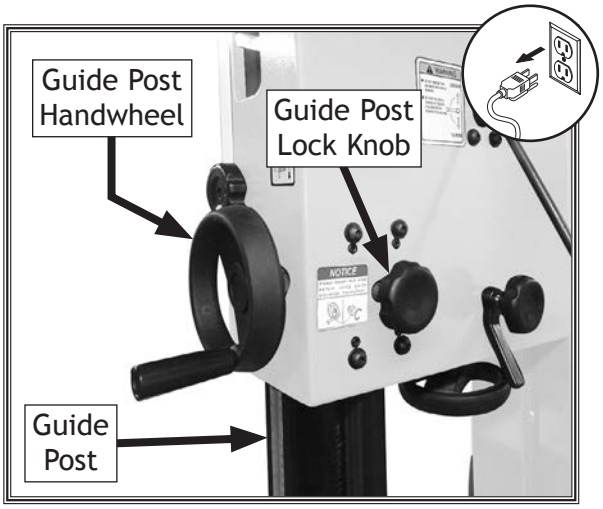


Figure 64. Location of guide post, elevation handwheel, and lock knob.

Blade Selection

Selecting the right blade requires a knowledge of the various blade characteristics to match the blade with the particular cutting operation, as shown in **Figure 65**.

Blade Terminology

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

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

C. Gauge: The thickness of the blade.

D. Blade Width: The widest point of the blade between 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.

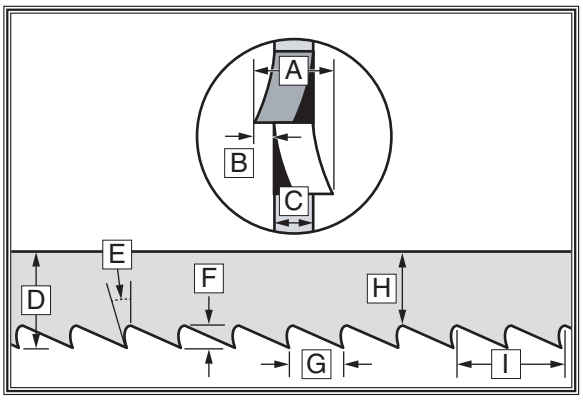


Figure 65. Bandsaw blade components.

Blade Dimensions

Length Range ..... 120"–120½"
Width Range ..... ⅛"–¾"

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 Woodstock.

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 66** 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 53** for more information).

- **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 65** for more information on blade lead).

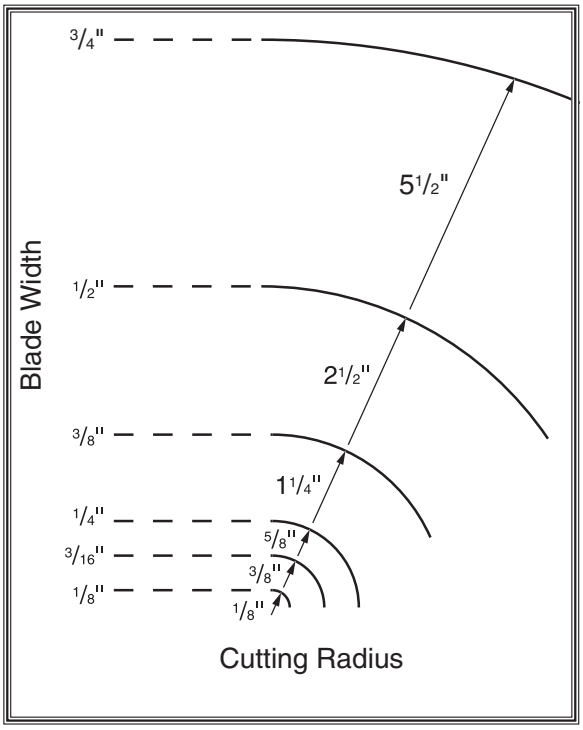


Figure 66. Recommended cutting radius per blade width.

Tooth Style

Figure 67 illustrates the three 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.

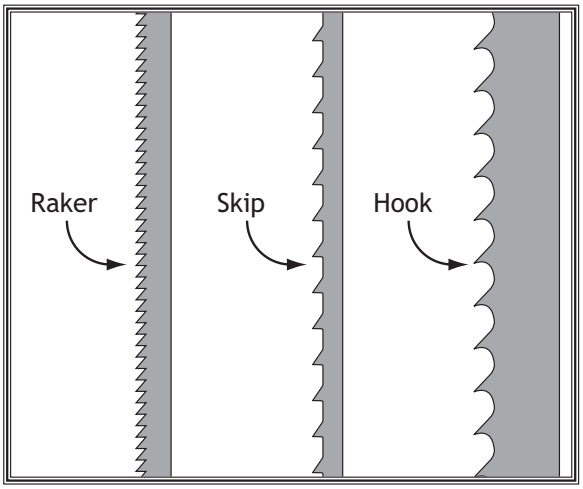


Figure 67. Main blade tooth styles.

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 68**).

- **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.

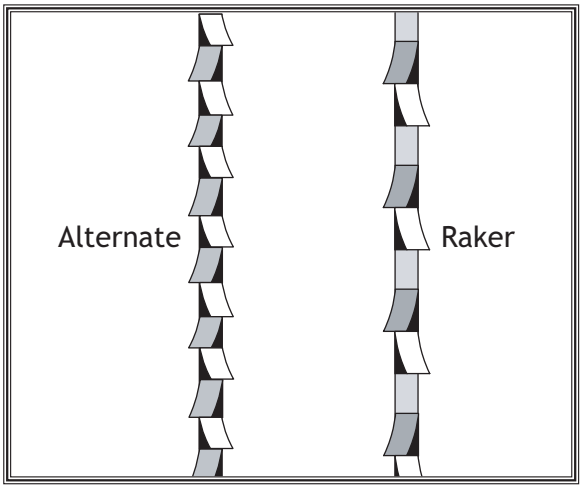


Figure 68. Common woodcutting bandsaw blade tooth sets.

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 69**).

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 70**).

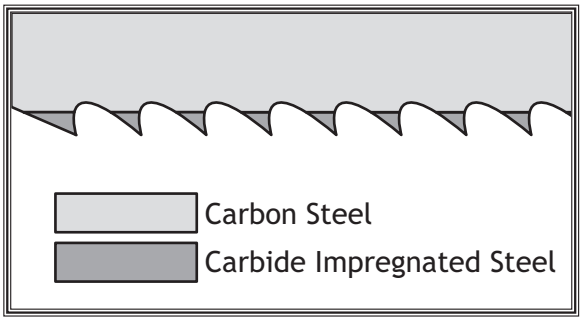


Figure 69. Carbide-tooth blade composition.

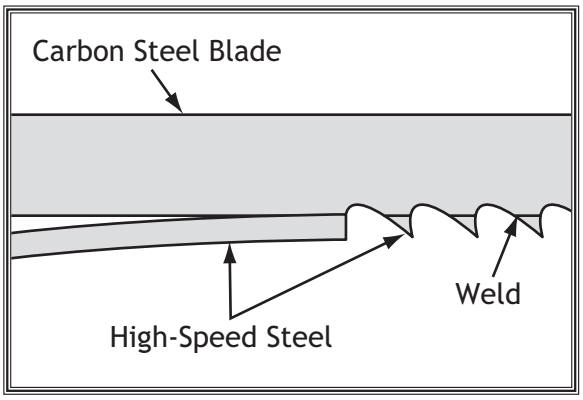


Figure 70. Bi-metal blade composition.

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 (1/8"—1/4")	Medium (3/16"—1/2")	Wide (1/2"—3/4")
Resawing			H C
Ripping Thin Stock			H M
Ripping Thick Stock			H C
Ripping Round Stock		R M	R M
Crosscutting Thin Stock			R F
Crosscutting Thick Stock			R M
Crosscutting Round Stock		R F M	R F M
Miter Cut			R F M
Tenons		R M	R M
Sharp Curves	R F		
Gradual Curves		S F M	

Key					
Tooth Type			Tooth Pitch (Teeth Per Inch or TPI)		
H	R	S	F	M	C
Hook	Raker	Skip	Fine (14—32 TPI)	Medium (4—12 TPI)	Coarse (2—4 TPI)

Blade Care & Break-In

Blade Care

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

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

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

Blade Break-In

The tooth tips and edges of a new blade are extremely sharp, and cutting at too fast of a feed rate fractures the beveled edges of the teeth and causes premature blade wear.

To properly break in a new blade, do these steps:

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

Blade Breakage

Many conditions may cause a bandsaw blade to break. Blade breakage is unavoidable in some cases, since it is the natural result of the peculiar stresses that bandsaw blades are subjected to.

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

The most common causes of blade breakage are:

- Faulty alignment or adjustment of the blade guides.
- Forcing or twisting a wide blade around a short radius.
- Feeding the workpiece too fast.
- Dull or damaged teeth.
- Over-tensioned blade.
- Upper blade guide assembly set too high above the workpiece. Adjust the top blade guide assembly so that there is approximately 1/8"—1/4" between the bottom of the assembly and the workpiece.
- Using a blade with a lumpy or improperly finished braze or weld.
- Leaving the blade tensioned when not in use.
- Using the wrong pitch (TPI) for the workpiece thickness. The general rule of thumb is to have no less than two teeth in contact with the workpiece at all times during cutting.
- Using an improperly sized blade for the machine. See Machine Data Sheet on **Page 3**.

Changing Blade

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

WARNING

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

CAUTION

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

Removing Blade

1. DISCONNECT MACHINE FROM POWER!
2. Release blade tension by rotating blade tension quick-release lever (see **Figure 71**) clockwise to up position.
3. Remove table insert and table pin. Adjust upper and lower guide bearings as far away as possible from blade (see **Figure 71**).
4. Open upper and lower wheel covers and blade cover on guide post, then with gloved hands, slide blade off of both wheels.
5. Rotate blade 90° and slide it through slot in table to remove it.

Installing Blade

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

   Note: *If the teeth will not point downward in any orientation, the blade is inside-out. Remove the blade, and twist it right-side-out.*
3. Slip blade through blade guides, and mount it on upper and lower wheels (see **Figure 72**).
4. Rotate blade tension quick-release lever counterclockwise to down position.
5. Adjust blade tension (refer to **Page 30**) and blade tracking (refer to **Page 28**).
6. Adjust upper/lower guide bearings and support bearings (refer to instructions beginning on **Page 34**).
7. Close and secure wheel covers and guide post blade cover, and re-install table insert and table pin.
8. If necessary, adjust blade tension quick-release lever (refer to **Page 66** for more information).

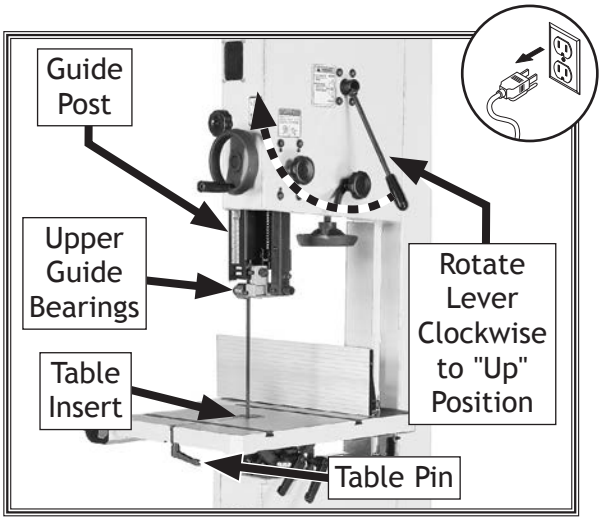


Figure 71. Blade changing controls.

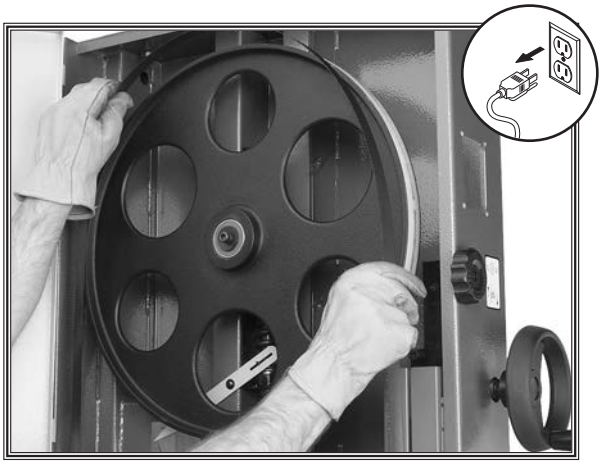


Figure 72. Example of placing blade on upper wheel.

Tilting Table

The table can be tilted from 5° left–45° right to make beveled cuts. A table tilt scale with pointer is provided on the trunnion, and a hex bolt serves as a positive stop for quickly returning the table back to 0° from a right-tilt setting (see **Figure 73**).

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

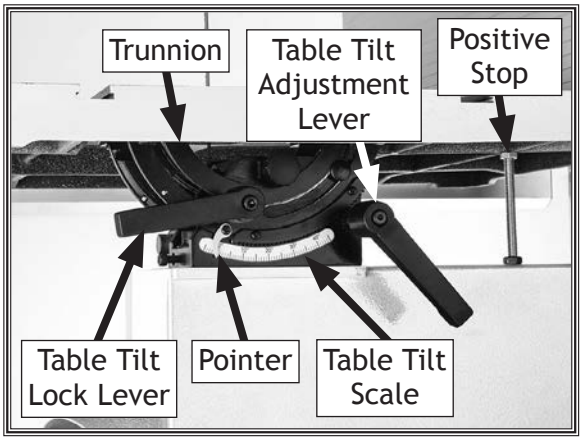


Figure 73. Table tilt controls.

Tilting Table

1. DISCONNECT MACHINE FROM POWER!

2. Loosen table tilt lock lever (see **Figure 73**).

3. Rotate table tilt adjustment lever until table reaches desired angle, then tighten lock lever.

Positive Stop

The positive stop (see **Figure 74**) allows you to quickly return the table to 0° from a right-tilt setting. The hex bolt height can be adjusted for table calibration, or it can be lowered to allow a left-tilt setting of up to 5°.

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

Tool Needed	**Qty**
Open-End Wrench 13mm	1

To check/calibrate positive stop, do these steps:

1. Test positive stop setting by tilting table fully left.

   — If table stops at 0°, no further adjustments are necessary.

   — If table does not stop at 0°, proceed to **Step 2**.

2. Loosen hex nut, then rotate adjustment bolt until table contacts bolt when at 0° (see **Figure 74**).

3. Repeat **Step 2** to test adjustment. If necessary, repeat **Step 3.**

   Note: *If you wish to set the positive stop to an angle other than 0°, follow **Steps 1-3** for the desired angle.*

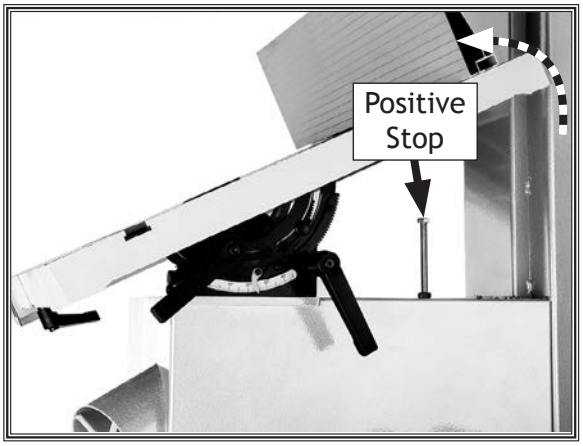


Figure 74. Table tilted to approximately 10° right to adjust positive stop.

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, do these steps:

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 75** shows an 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!

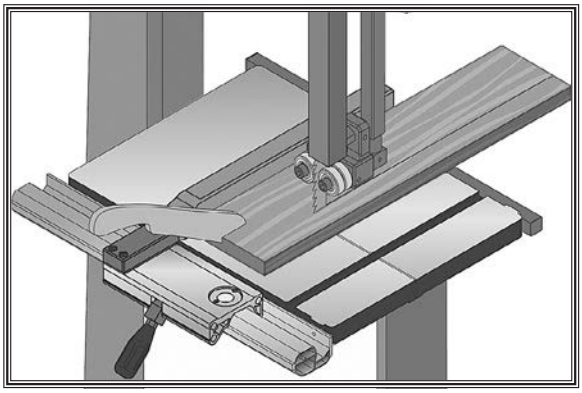


Figure 75. Example of a ripping operation.

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 (not included). Compound crosscuts are those where the miter is angled and the table tilted.

Note: *See Accessories on **Page 55** to order a miter gauge.*

To make a crosscut, do these steps:

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 76** shows an example of a crosscutting operation.

⚠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.

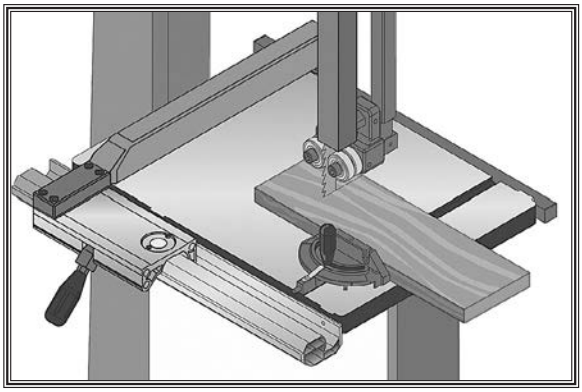


Figure 76. Example of a crosscutting operation with optional miter gauge.

Resawing

"Resawing" means cutting the thickness of a board into two or more thinner boards (see **Figure 77** 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 the **Blade Lead** subsection later in this manual for more information).

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

WARNING

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

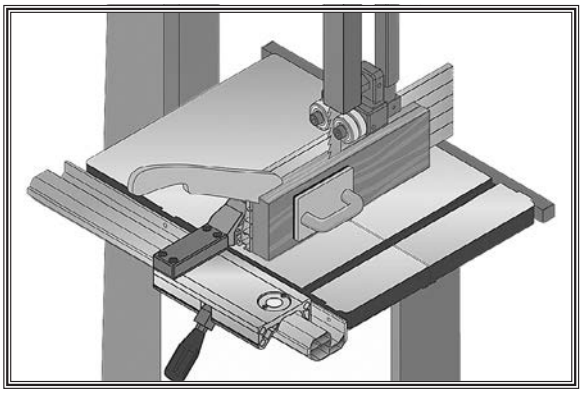


Figure 77. Example of a resawing operation.

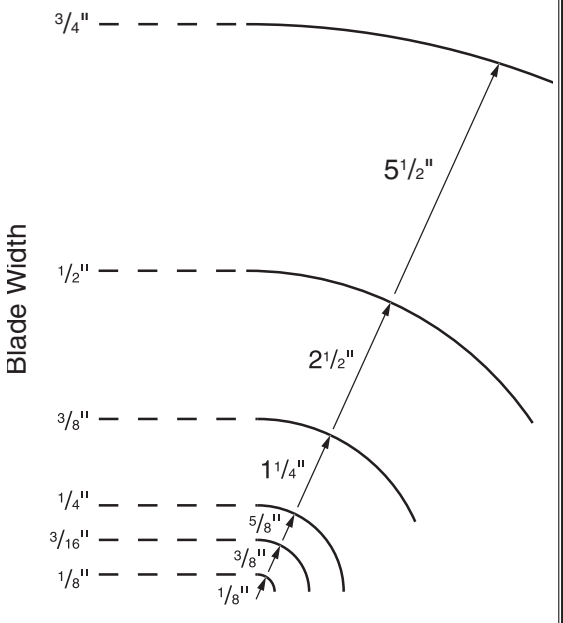
Cutting Curves

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



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, do these steps:

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 wood grain or cause blade to bind.

5. Cut stack of pieces along your layout line as though you were cutting a single piece (see **Figure 78** for an example of a stacked cut setup).

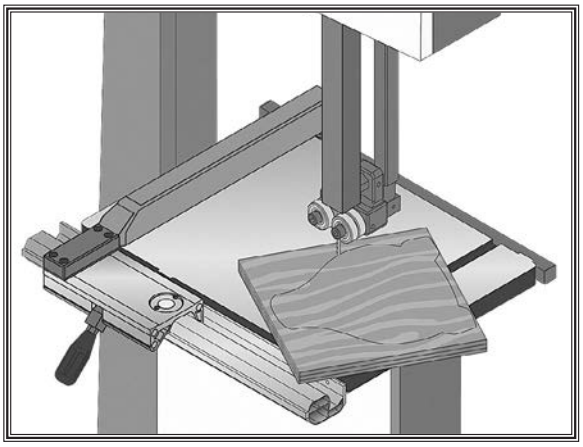


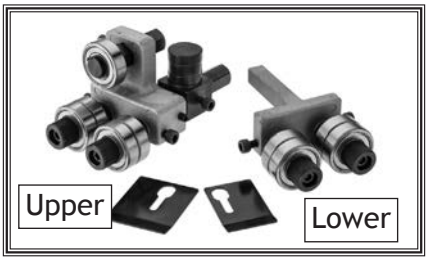
Figure 78. Example of a stacked cut setup.

ACCESSORIES

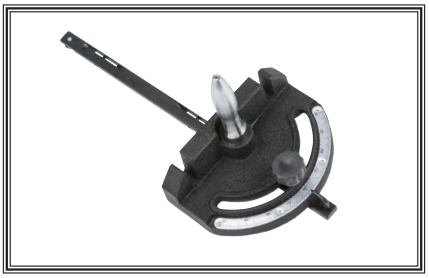
Bandsaw Accessories

The following bandsaw accessories may be available through your local Woodstock International Inc. Dealer. If you do not have a dealer in your area, these products are also available through online dealers. Please call or e-mail Woodstock International Inc. Customer Service to get a current listing of dealers at: **1-800-840-8420** or at **sales@woodstockint.com**.

The **D4688 Bandsaw Ball Bearing Guides** allow you to convert your Euro-style roller disc guides to these Ball Bearing Guides. Set includes both upper and lower guides. Just loosen the screws that hold the old assemblies in place and swap them out with these replacements.



This **D3123 Heavy-Duty Miter Gauge** is made of cast-iron, weighs 7-lb. miter gauge, and includes a 5" tall chromed handle. With a 2-3/8" x 8" miter face, it is the largest and strongest miter gauge on the market. The easy-to-read scale allows cutting up to 60° left and right, and the 3/8" x 3/4" miter bar adjusts to remove any side play for the ultimate in accuracy.



The **W1666 2 HP Dust Collector** is a great combination of price and performance, making it one of the most popular dust collectors we sell. Perfect for use as a central dust collector in a small shop, or as a "dedicated" dust collector next to an industrial machine. Features 220V single-phase power, 1550 CFM, 2.5 micron filtration, and a 6" main inlet w/included 4" x 4" x 2 "Y" fitting.

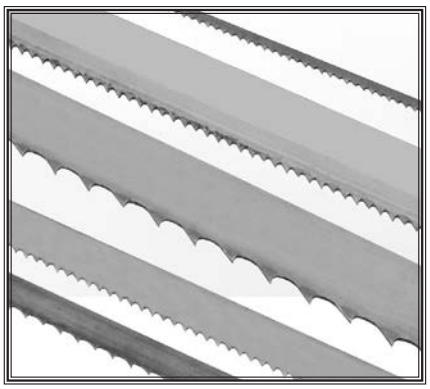


The **W1015 4" Y Fitting** is used to attach branch lines to service more than one dust port. This design provides increased lateral air flow and efficiency over other types of fittings. These popular fittings are made with an anti-static additive. Size: 4" x 4" x 4" OD.



120" Replacement Blades

Model	Width	TPI	Type	Gauge
D4689	1/8"	14	Raker	0.025
D4690	1/8"	18	Raker	0.025
D4691	3/16"	4	Skip	0.025
D4692	3/16"	10	Raker	0.025
D4693	3/16"	14	Raker	0.025
D4694	1/4"	4	Hook	0.025
D4695	1/4"	6	Hook	0.025
D4696	1/4"	10	Raker	0.025
D4697	1/4"	14	Raker	0.025



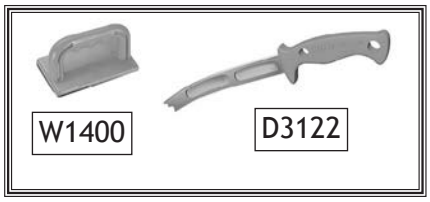
The **D2057A Super Heavy-Duty Mobile Base** supports your bandsaw so you can move it easily and lock it in place. Designed for long term and frequent moving of heavy machinery. All Shop Fox Adjustable Mobile Bases are strong enough to move heavy machines up to 700 lbs. on a continual basis. The stands are adjustable to fit a variety of machines and can be leveled without the use of shims or tools.



The **Heavy-Duty Roller Stands and Roller Tables** make your bandsaw safer and easier to use. All models feature convenient hand knobs for fast height adjustment and offer rigid steel construction. These stands are invaluable for supporting work on bandsaws to help reduce blade bend and pinch on long boards due to infeed and outfeed alignment issues. Go to **http://www.woodstockint.com** to view all of the available roller tables and stands.



The **D3122 Push Stick** keeps hands away from blades while still maintaining control of the workpiece against machine fence. The W1400 Push Block is made from high-impact molded plastic with a natural rubber friction pad that grips the workpiece firmly. Work with confidence knowing that this block is between your fingers and the blade.



MAINTENANCE

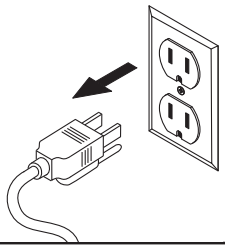
Schedule

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

Daily
- Tighten loose mounting bolts.
- Check/replace worn or damaged saw blade.
- Check/replace worn or damaged wires.
- Check/clean wheel brush.
- Clean/protect table surface.
- Check lubrication points and lube if necessary.
- Fix/resolve any other unsafe condition.

Monthly Check
- V-belt tension, damage, or wear.
- Clean/vacuum dust build-up from inside cabinet and off motor.
- Remove blade and clean tires of all built-up dust/ pitch.

⚠WARNING



MAKE SURE that your machine is unplugged during all maintenance procedures! If this warning is ignored, serious personal injury may occur.

Wheel Brushes

The bandsaw is equipped with lower wheel brushes to keep saw dust from building up on the wheel and rubber tire. The brushes should be checked daily and cleaned when they become dirty (see **Figure 79**).

There are adjustment brackets that allow the brushes to be adjusted for bristle wear (refer to **Adjusting Wheel Brushes** on **Page 66** for detailed instructions).

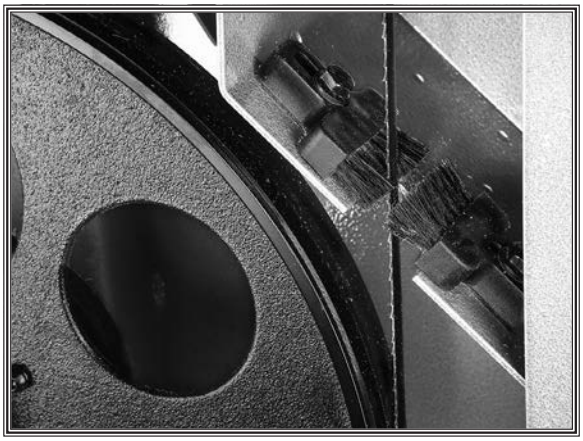


Figure 79. Lower wheel brushes.

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 quality lubricants.

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.

Guide Post Rack

Lubrication Type ..... GL2 Grease or Equivalent
Amount ..... Thin Coat
Frequency ..... As Needed

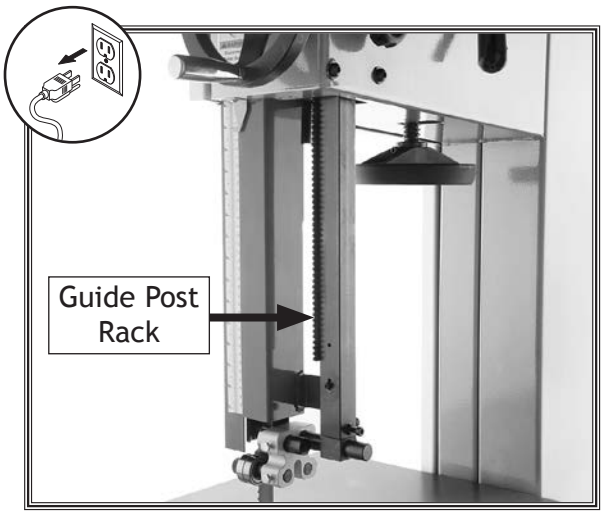


Figure 80. Guide post rack exposed for lubrication (roller bearing guides shown).

To lubricate guide post rack and pinion, do these steps:

1. DISCONNECT MACHINE FROM POWER!
2. Lower guide post all the way.
3. Use a rag and mineral spirits to wipe off any grease and sawdust build-up on rack (see **Figure 80**).
4. Apply a thin coat of lubricant to rack.
5. Move guide post up and down several times to distribute lubricant, then remove any excess grease to help reduce potential sawdust build-up.

Blade Tension Adjustment Assembly

Lubrication Type ..... GL2 Grease or Equivalent
Amount ..... Thin Coat
Frequency ..... As Needed

To lubricate tension adjustment assembly, do these steps:

1. DISCONNECT MACHINE FROM POWER!

2. Open upper wheel cover and look through top of wheel (see **Figure 81**).

3. Use a rag and mineral spirits to wipe off any grease and sawdust build-up on blade tension adjustment assembly and tension lever cam (see **Figure 82**), then apply thin coat of lubricant to these areas.

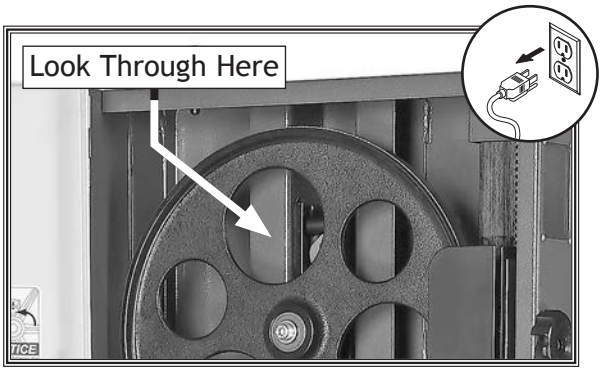


Figure 81. Location of blade tension adjustment assembly.

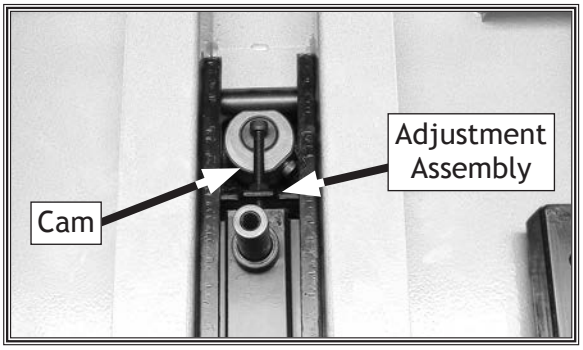


Figure 82. Lubrication locations for tension adjustment assembly (wheel removed for clarity).

Trunnions

The steel trunnions (see **Figure 83**) should be regularly wiped clean with mineral spirits and lubricated with a thin coat of GL2 grease on the sliding surfaces.

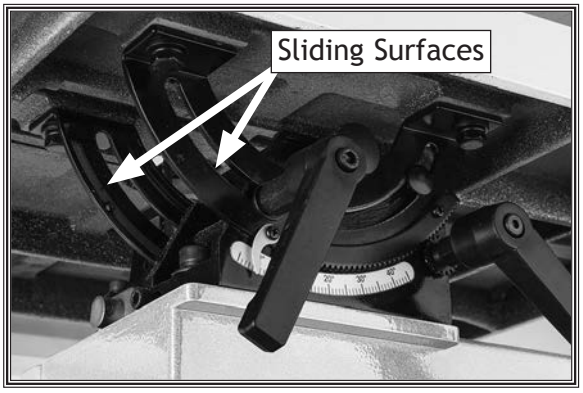


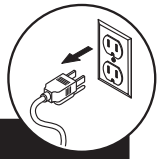
Figure 83. Lubrication areas on the trunnion.

SERVICE

Troubleshooting

The following troubleshooting tables cover common problems that may occur with this machine. If you need replacement parts or additional troubleshooting help, contact our Technical Support.

Note: *Before contacting Tech Support, find the machine serial number and manufacture date, and if available, your original purchase receipt. This information is required to properly assist you.*



Motor and Electrical

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Machine does not start or a breaker trips immediately upon startup.	1. Incorrect power supply voltage or circuit size. 2. Power supply circuit breaker tripped or fuse blown. 3. Motor wires connected incorrectly. 4. Wiring open/has high resistance. 5. ON/OFF switch at fault. 6. Start capacitor at fault. 7. Thermal overload relay has tripped. 8. Contactor not energized/has poor contacts. 9. Centrifugal switch at fault. 10. Motor at fault.	1. Ensure correct power supply voltage and circuit size. 2. Ensure circuit is sized correctly and free of shorts. Reset circuit breaker or replace fuse. 3. Correct motor wiring connections **(Page 75)**. 4. Check/fix broken, disconnected, or corroded wires. 5. Replace switch. 6. Test/replace. 7. Reset; contact tech support if relay frequently trips. 8. Test all legs for power/replace. 9. Adjust/replace centrifugal switch if available. 10. Test/repair/replace.
Machine stalls or is underpowered.	1. Dull blade. 2. Workpiece material not suitable for machine, or machine undersized. 3. Belt slipping; oil/grease on belt. 4. Feed rate/cutting speed too fast. 5. Blade slipping on wheels. 6. Motor overheated. 7. Motor wired incorrectly. 8. Plug/receptacle at fault. 9. Run capacitor at fault. 10. Pulley/sprocket slipping on shaft. 11. Contactor not energized/has poor contacts. 12. Centrifugal switch at fault. 13. Motor bearings at fault.	1. Sharpen/replace blade **(Page 50)**. 2. Only cut wood—ensure moisture is below 20%. Use correct blade/reduce feed rate or depth of cut. 3. Clean/tension/replace belt (**Page 63**). 4. Decrease feed rate/cutting speed. 5. Increase blade tension **(Page 30)**; ensure proper blade size. 6. Allow motor to cool and reduce depth of cut. 7. Wire motor correctly **(Page 75)**. 8. Test for good contacts/correct wiring. 9. Test/repair/replace. 10. Replace loose pulley/shaft. 11. Test all legs for power/replace. 12. Replace. 13. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.
Machine has vibration or noisy operation.	1. Motor or component loose. 2. Blade at fault. 3. V-belt worn or loose. 4. Motor fan rubbing on fan cover. 5. Motor mount loose/broken. 6. Pulley loose. 7. Machine incorrectly mounted. 8. Motor bearings at fault. 9. Centrifugal switch is at fault.	1. Inspect/replace damaged bolts/nuts, and retighten with thread-locking fluid. 2. Replace warped/bent/broken blade; replace/resharpen dull blade **(Page 50)**. 3. Inspect/replace belt **(Page 63)**. 4. Fix/replace fan cover; replace loose/damaged fan. 5. Tighten/replace. 6. Re-align/replace shaft, pulley set screw, and key. 7. Tighten mounting bolts; relocate/shim machine. 8. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. 9. Replace.

Operating Machine

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Blade or teeth break/crack.	1. Blade tension is incorrect. 2. Blade is incorrect for application. 3. Excessive feed rate/pressure. 4. Cutting corners too sharply. 5. Blade is dull/weld at fault. 6. Blade is tracking incorrectly. 7. Blade guides/support bearings not adjusted properly, allowing guides to hit blade teeth. 8. Wheel tires worn or incorrectly installed. 9. Fence or miter slot out of alignment with blade. 10. Bad blade-guide bearings.	1. Adjust blade tension **(Page 30)**. 2. Use correct blade for application **(Page 44)**. 3. Reduce feed rate/pressure. 4. Use a wider arc on outside cuts, or use relief cuts to make tight inside cuts **(Page 53)**. 5. Replace blade **(Page 50)**. 6. Adjust blade tracking **(Page 32)**. 7. Adjust support bearings/blade guide discs properly, so guides cannot contact teeth during operation **(Pages 33 & 34)**. 8. Replace or re-install tire. 9. Align table miter slot and fence with blade **(Page 39)**. 10. Replace blade-guide bearings.
Blade slows, smokes, shows overheating or wears on one side.	1. Blade contacting table insert. 2. Blade guides are worn or misadjusted. 3. Blade installed backwards. 4. Too much side pressure when feeding workpiece. 5. Wheels are out of alignment. 6. Dull, bell-mouthed, or incorrect blade. 7. Fence not parallel with blade. 8. Table top surface is not parallel or square to blade. 9. V-belt loose or slipping.	1. Adjust blade roller disc guides **(Page 34)**. Properly align table **(Page 40)**. 2. Adjust upper blade guides as close to workpiece as possible. 3. Check blade rotation. Re-install blade if necessary **(Page 50)**. 4. Feed workpiece straight into blade. 5. Adjust wheels to be coplanar **(Page 70)**. 6. Replace blade **(Page 50)**. 7. Adjust fence parallelism with blade **(Page 41)**. 8. Adjust/shim table/trunnion position until blade and table are parallel and square **(Page 40)**. 9. Tighten V-belt. Replace if worn or oily **(Page 64)**.
Finished workpieces are rough or show scoring.	1. Blade is overloaded and twists. 2. Blade TPI is too coarse. 3. Blade is loose and fluttering. 4. Blade tracking is incorrect. 5. Blade has missing/bent teeth, or faulty weld.	1. Decrease feed rate; ensure proper TPI **(Page 48)**. 2. Use correct blade for material and speed of cut **(Page 44)**. 3. Adjust blade tension as required **(Page 30)**. 4. Adjust blade tracking **(Page 27)**. 5. Replace blade **(Page 50)**.
Table is hard to tilt.	1. Table tilt lock lever is engaged. 2. Sawdust or pitch trapped between trunnion and base. 3. Metal burrs on trunnion.	1. Disengage table tilt lock lever **(Page 51)**. 2. Remove table and clean trunnion sliding surfaces free of sawdust or pitch. 3. Remove burrs.
Table does not tilt to 45 or 0 degrees.	1. Table tilt scale pointer not calibrated. 2. Positive stop not set correctly.	1. Calibrate table tilt scale pointer **(Page 74)**. 2. Adjust positive stop **(Page 51)**.
Miter bar binds in miter slot.	1. Miter slot dirty or gummed up. 2. Miter bar is bent.	1. Carefully clean miter slot. 2. Replace.
Blade tracks incorrectly, or comes off wheels.	1. Tracking is not adjusted properly. 2. Wheels are not coplanar. 3. Blade tension too loose. 4. Blade guides/support bearings improperly adjusted. 5. Feeding workpiece too fast. 6. Incorrect blade for operation. 7. Blade is bell-mouthed, worn, or dull. 8. Rubber tire or wheel is damaged or worn.	1. Adjust tracking **(Page 27)**. 2. Adjust wheels to be coplanar **(Page 70)**. 3. Increase blade tension **(Page 30)**. 4. Properly adjust support bearings/blade disc guides **(Pages 33-34)**. 5. Feed workpiece slower. 6. Install correct blade **(Page 44)**. 7. Install new blade and remove tension from blade when not in use. 8. Replace rubber tires or wheel.

Operating Machine (Continued)

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Cut is crooked or blade wanders (blade lead).	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 guides/support bearing adjustment. 6. Blade tracking is incorrect. 7. Table is loose. 8. Fence or miter slot out of alignment with blade. 9. Blade guides/support bearings improperly adjusted. 10. Tooth set is uneven or teeth are more sharp on one side than the other.	1. Reduce feed rate/pressure. 2. Increase blade tension **(Page 30)**. 3. Use wider blade. Ensure tooth type & TPI is correct **(Page 44)**. 4. Position upper blade guides to just clear workpiece. Properly adjust support bearings/ blade disc guides **(Pages 33-34)**. 5. Replace blade **(Page 50)**. 6. Adjust blade tracking **(Page 27)**. 7. Tighten table trunnion mounting bolts or tilt lock lever. 8. Align table miter slot and fence with blade **(Pages 39)**. 9. Properly adjust blade guides/support bearings **(Pages 37)**. 10. Replace blade **(Page 50)**.
Blade dulls prematurely.	1. Excessive feed rate/pressure. 2. Wrong blade tooth type or TPI. 3. Blade is twisted. 4. Blade is slipping on wheel. 5. Blade guides hitting teeth and ruining tooth set.	1. Reduce feed rate/pressure. 2. Use blade with correct tooth type and TPI **(Page 44)**. 3. Re-install blade; replace **(Page 50)**. 4. Adjust blade tension **(Page 30)**. 5. Properly adjust blade disc guides **(Page 34)** or optional roller bearing guides **(Page 37)**.
Gullets loaded with chips.	1. Excessive feed rate/pressure. 2. Blade TPI is too fine.	1. Reduce feed rate/pressure. 2. Install correct blade **(Page 44)**.
Backside of blade deformation/ cracking.	1. Excessive feed rate/pressure. 2. Blade tension too high. 3. Blade support bearing improperly adjusted.	1. Reduce feed rate/pressure. 2. Adjust blade tension **(Page 30)**. 3. Properly adjust blade support bearing **(Page 33)**.
Sawdust buildup inside cabinet.	1. Blade brushes under table are worn or misadjusted. 2. Clogged dust port. 3. Low CFM (airflow) from dust collection system.	1. Properly adjust brushes; replace if necessary **(Page 666).** 2. Clean dust port. 3. Inspect ducting for leaks/clogs and repair as necessary; move dust collector closer to machine; install a stronger dust collector.

Tensioning/Replacing V-Belt

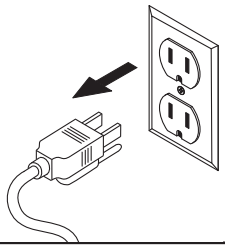
To ensure optimum power transmission from the motor to the blade, the V-belt must be properly tensioned, and free of cracks, fraying, and wear. Belt tension and condition should be checked at least every 3 months—more often if the bandsaw is used daily.

Tool Needed **Qty**
Hex Wrench 8mm 1

To check/adjust V-belt tension, do these steps:

1. DISCONNECT MACHINE FROM POWER!
2. Open lower wheel cover.
3. Inspect V-belt; if it is cracked, frayed, or glazed, replace it (refer to **Replacing V-Belt** on **Page 64**).
4. Check V-belt tension by applying moderate pressure between pulleys (see **Figure 84**).
   - If V-belt deflection *is* approximately 1/4", belt is correctly tensioned and no adjustment is necessary.
   - If deflection is *not* approximately 1/4", V-belt is not correctly tensioned. Proceed to **Step 5**.
5. Loosen both motor mount cap screws (see **Figure 85**).
6. Apply pressure against motor to tension belt.
7. While applying pressure, retighten motor cap screws to secure adjustment.
8. Re-check belt tension.

WARNING



MAKE SURE that your machine is unplugged during all maintenance procedures! If this warning is ignored, serious personal injury may occur.

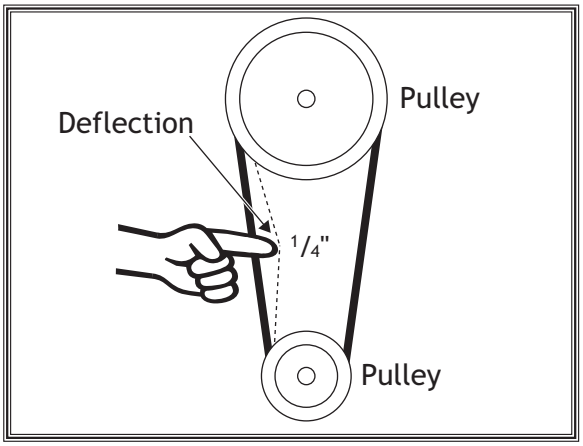


Figure 84. Measuring V-belt deflection between lower wheel pulley (top) and motor pulley (bottom).

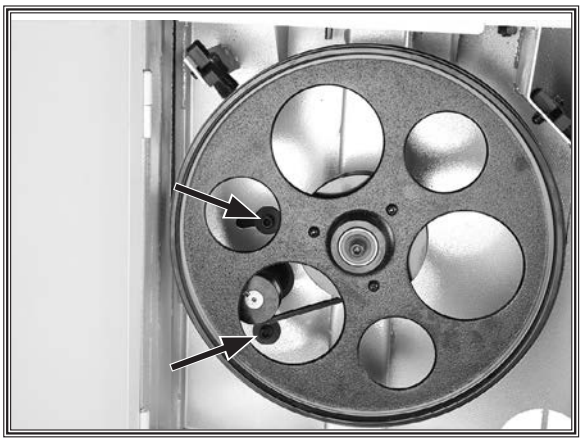


Figure 85. Motor mount cap screws and V-belt tension controls (behind wheel).

SERVICE

Replacing V-Belt

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

Tools Needed: **Qty**
Hex Wrench 6mm 1
Hex Wrench 8mm 1

To replace V-belt, do these steps:

1. DISCONNECT MACHINE FROM POWER!

2. Open both wheel covers, and remove blade (refer to **Changing Blade** on **Page 50**).

3. Remove lower wheel mount cap screw and washer shown in **Figure 86**, then slide lower wheel with bearing off of shaft.

4. Loosen both motor mount cap screws (see **Figure 87**).

5. Lower motor all the way to completely de-tension V-belt, then retighten one cap screw to temporarily secure motor.

6. Slip old V-belt off of lower wheel and motor pulleys, then install new V-belt in its place.

7. Properly tension V-belt (refer to **Tensioning/ Replacing V-belt** on **Page 63** for detailed instructions).

8. Re-install lower wheel with bearing and secure it with wheel mount cap screw and washer removed in **Step 3**.

9. Re-install blade, and close and secure wheel covers.

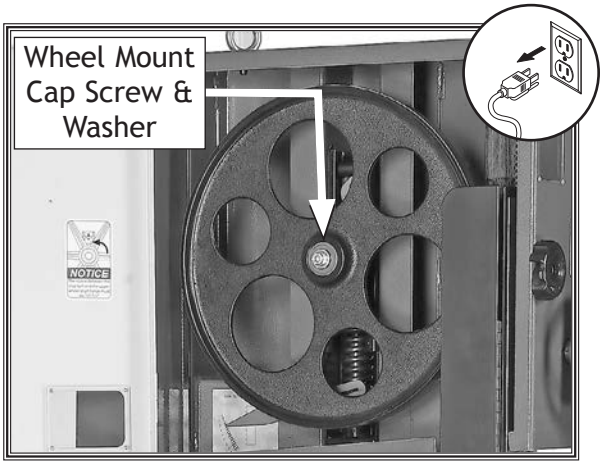


Figure 86. Location of wheel mount cap screw and washer.

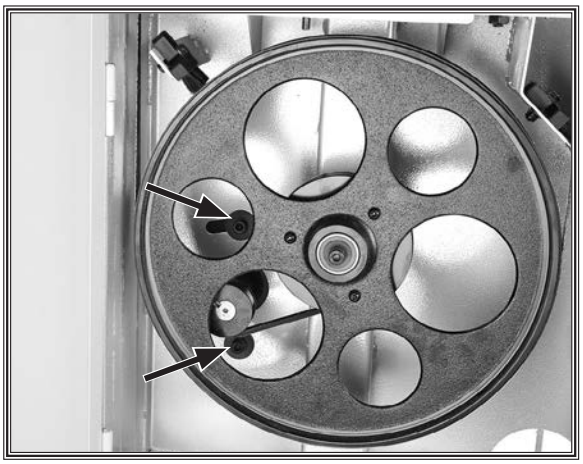


Figure 87. Location of motor mount cap screws.

SERVICE

Blade Lead

Bandsaw blades may wander off of the layout line when sawing, as shown in **Figure 88**. This is called blade lead.

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

Items Needed	**Qty**
Wood Board 3/4" x 3" x 16"	1
Hex Wrench 5mm	1

To correct blade lead, do these steps:

1. Make sure blade is properly tensioned and blade guides are adjusted correctly.

2. Make sure miter slot and fence are parallel to blade line (see **Aligning Table** and **Aligning Fence** procedures for detailed information).

3. 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.

To skew fence, do these steps:

1. Cut a straight and parallel wood board approximately 3/4" thick x 3" wide x 16" long.

   Tip: *Cut your board out of a new piece of 3/4" plywood, using a table saw. 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 solid scrap wood.*

2. On wide face of board, draw a straight line parallel to long edge, similar to layout line shown in **Figure 88**.

3. Slide fence out of the way and cut along layout line 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.

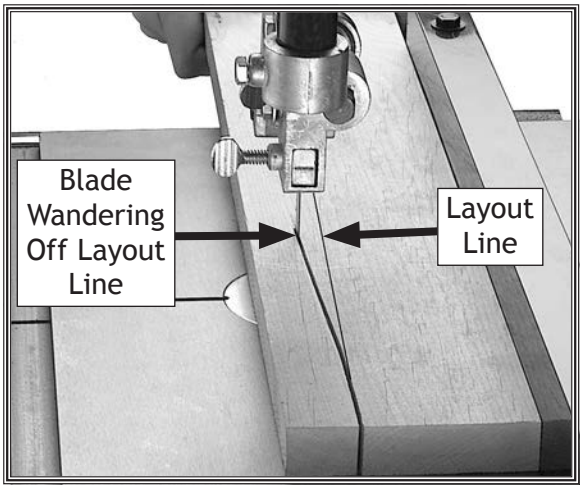


Figure 88. Example of blade lead.

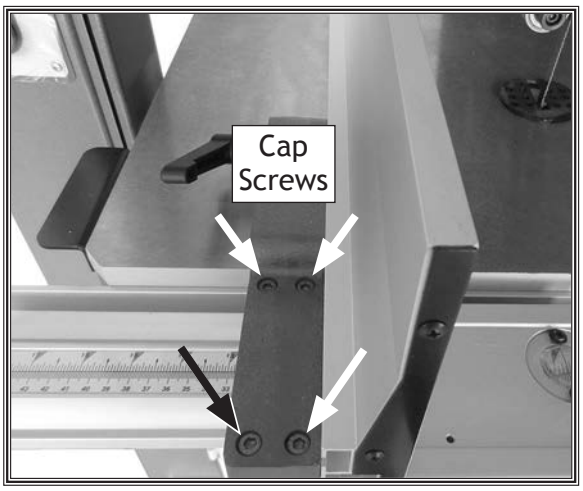


Figure 89. Location of fence adjustment cap screws.

5. Loosen the four fence adjustment cap screws to the left of fence face (see **Figure 89**), skew fence so that it is parallel with wood board, contacting it evenly along its length, then retighten cap screws.

6. Finish cut using fence.

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

Adjusting Wheel Brushes

The lower wheel has brushes (see **Figure 90**) that are designed to sweep sawdust off the wheel and blade during operation. In order to work properly, the brushes must make firm contact with the wheel.

Tools Needed: **Qty**
Open-End Wrench/Socket 10mm 2

To adjust wheel brushes, do these steps

1. DISCONNECT MACHINE FROM POWER!
2. Open lower wheel cover.
3. Loosen hex bolts and lock nuts that secure wheel brushes in place (see **Figure 90**).
4. Adjust wheel brushes so they make firm, even contact with the wheel without bending the bristles, then retighten hex bolts and cap screws to secure wheel brushes in place.

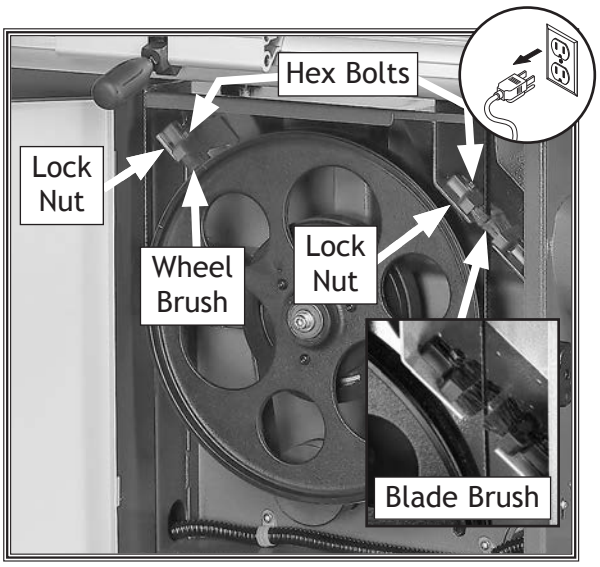


Figure 90. Location of wheel and blade brushes.

Adjusting Quick-Release Lever

The blade tension quick-release lever was adjusted at the factory for use with the pre-installed blade. However, because actual blade lengths may vary slightly by manufacturer, whenever you install a new blade, you may need to adjust the quick-release adjustment screw so that the blade tension quick-release lever works correctly.

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

To adjust quick-release lever, do these steps:

1. Tension blade (refer to **Tensioning Blade**, beginning on **Page 30** for more information).
2. DISCONNECT MACHINE FROM POWER!
3. Rotate blade tension quick-release lever clockwise to up position to release blade tension.
4. Loosen jam nut on tension adjustment screw, then loosen screw 7-10 turns (see **Figure 91**).

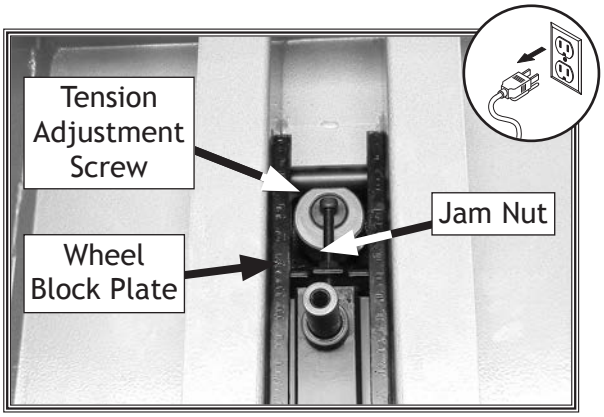


Figure 91. Location of tension adjustment screw, jam nut, and wheel block plate.

5. Rotate blade tension quick-release lever counterclockwise to down position to apply tension to blade.
6. Tighten tension adjustment screw (see **Figure 91**) until it contacts wheel block plate, then back it off 1-2 turns.
7. Retighten jam nut.

Adjusting Guide Post Parallelism

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 39** for detailed instructions).

Tools Needed:

Machinist's Square 1
Small Ruler.....1
Hex Wrench 4mm 1
Hex Wrench 5mm 1
Hex Wrench 8mm 1

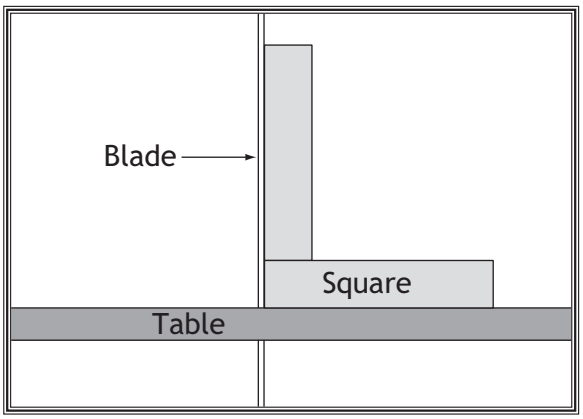


Figure 92. Example of checking guide post squareness.

Checking/Adjusting Guide Post Parallel with Blade Side to Side

1. DISCONNECT MACHINE FROM POWER!

2. Loosen guide post lock knob, lower guide post to within 1" of table top, then tighten knob.

3. Place machinist's square on table next to right-hand side of guide post, as shown in **Figure 92**.

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

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

4. Loosen each of the four guide post adjustment cap screws shown in **Figure 93** by 1/4 turn.

5. Gently tap lower part of guide post in appropriate direction until there is no gap between square and guide post.

6. Tighten cap screws shown in **Figure 93**.



Figure 93. Guide post adjustment cap screws.

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

1. DISCONNECT MACHINE FROM POWER!

2. Loosen guide post lock knob, lower blade guide assembly all the way, then tighten lock knob.

3. Remove (2) M5-.8 x 10 cap screws and 5mm flat washers that secure guide post guard, then carefully remove guard (see **Figures 94**–**95**).

   Note: *It helps to rotate guard counterclockwise while removing it*.

4. Measure distance "A" between upper front face of guide post rack and back of blade (see **Figure 96**).

5. Measure distance "B" between bottom front face of guide post rack and back of blade (see **Figure 96**).

   — If measurements taken in **Steps 4–5** are equal, no adjustments need to be made. Go to **Step 9**.

   — If measurements taken in **Steps 4–5** are *not* equal, proceed to **Step 6**.

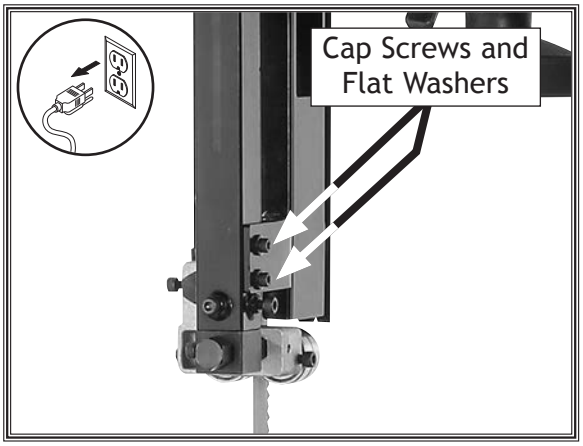


Figure 94. Location of cap screws and flat washers that secure guide post guard.

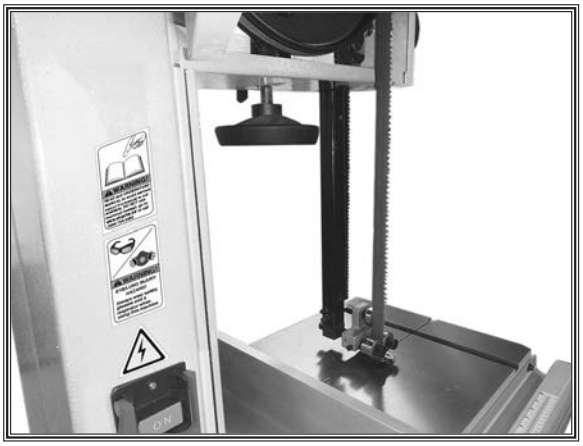


Figure 95. Guide post guard removed.

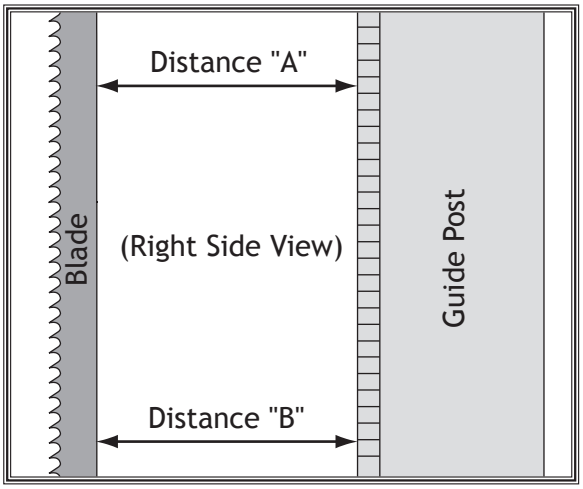


Figure 96. Example of measuring distance between guide post rack and blade.

SERVICE

6. Loosen four cap screws shown in **Figure 97**.

   — If guide post to blade distance is greater at *bottom* than at *top*, tighten two *upper* set screws shown in **Figure 97** an equal amount until guide post is parallel with blade.

   — If guide post to blade distance is greater at *top* than at *bottom*, tighten two *lower* set screws shown in **Figure 97** an equal amount until guide post is parallel with blade.

7. Tighten four cap screws shown in **Figure 97**, then repeat **Steps 4–5**.

   — If measurements *are* equal, proceed to **Step 9**.

   — If measurements are *not* equal, repeat **Steps 6–7** until guide post is parallel with blade.

8. Re-install guide post guard using screws removed in **Step 3**.

9. Rotate upper wheel by hand and make sure blade does not contact guide post guard. If it does, loosen cap screws from **Step 3**, adjust guard so that blade will not make contact with it, then retighten screws.

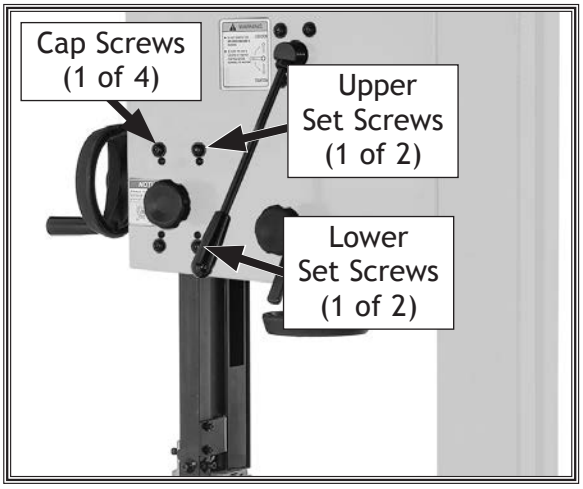


Figure 97. Guide post parallelism adjustment screws.

SERVICE

Aligning Wheels

The following adjustment was performed at the factory and should not need to be performed again unless there is a wheel alignment problem, or one or more wheels are replaced.

When wheels are coplanar (see **Figure 98**), the bandsaw is more likely to cut straight without wandering; and vibration, heat, and blade wear are considerably decreased because the blade is automatically balanced on the wheel.

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

Items Needed	**Qty**
53" Long 2x4	1
Hex Wrenches 4 & 6 mm	1 Ea
Wrench 13mm	1
Tape Measure	1
Fine Ruler	1

Checking Wheel Alignment

1. Make "Coplanarity Gauge" shown in **Figures 98-99**.

Note: *For best results, straighten the 2x4 with a jointer before cutting. Alternatively, you can cut the gauge out of a new sheet of 1/2"–3/4" plywood using a table saw. The "factory edge" of the plywood will ensure a straight and parallel gauge.*

2. DISCONNECT MACHINE FROM POWER!

3. Remove blade (refer to **Changing Blade** on **Page 50**), remove table, then re-install and properly tension blade (refer to **Tensioning Blade** on **Page 30**).

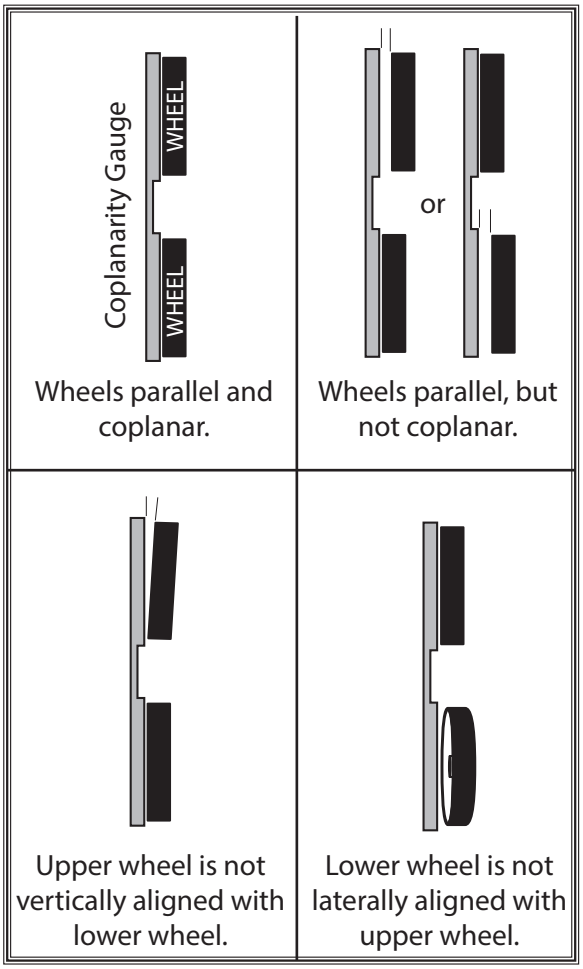


Figure 98. Wheel alignment illustration.

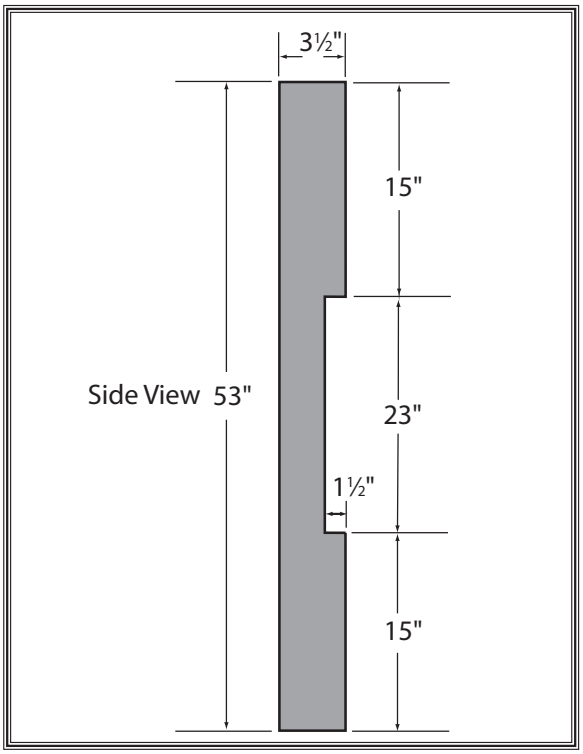


Figure 99. Dimensions of coplanarity gauge.

SERVICE

4. Place coplanarity gauge up against both wheels in positions shown in **Figure 100**. Make sure gauge fully extends across rims of both wheels.

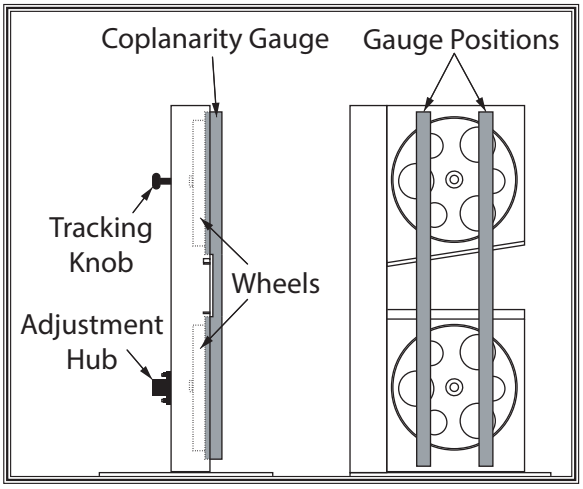


Figure 100. Illustration of using coplanarity gauge to check wheel alignment.

5. Check wheel alignment and adjust tracking knob to bring both wheels into alignment as much as possible. If wheels cannot be adjusted coplanar, use **Figure 101** to determine how to proceed with alignment adjustments.

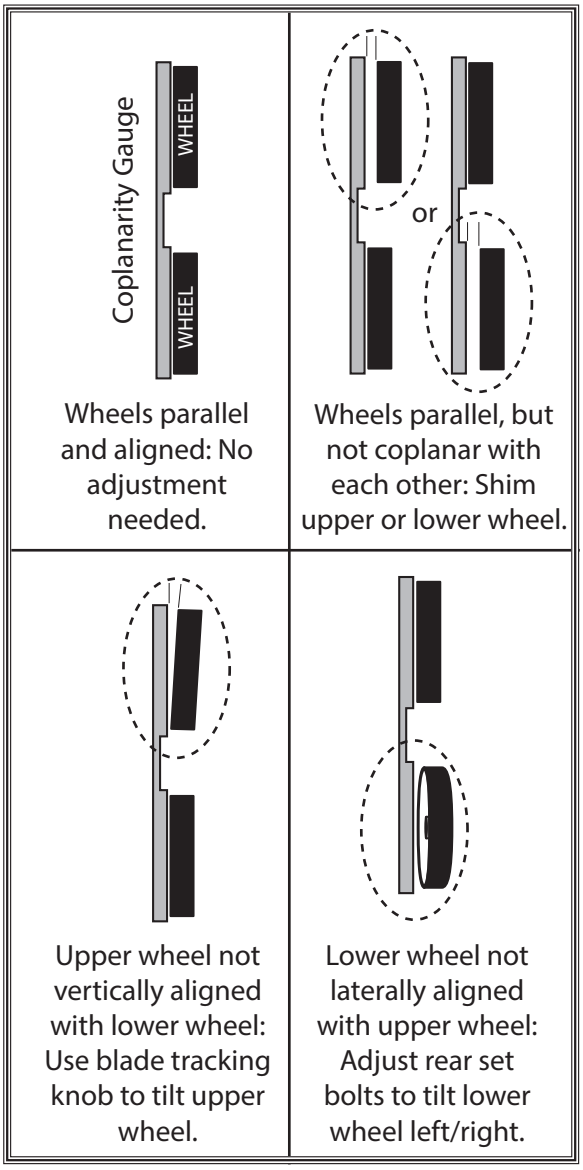


Figure 101. Wheel alignment illustration with solutions to misalignment problems.

SERVICE

Shimming a Wheel

When the wheels are parallel but not coplanar, one of the wheels must be shimmed out to bring it into the same plane as the other wheel.

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

To shim a wheel, do these steps:

1. DISCONNECT MACHINE FROM POWER!

2. Adjust upper wheel tracking so that it is parallel with lower wheel.

3. With coplanarity gauge touching both rims of wheel that does not need to be shimmed out, measure distance away from other wheel with a fine ruler (see **Figure 102**). The distance measured with ruler is distance this wheel must be shimmed.

4. Remove blade.

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

6. Re-install and secure wheel.

7. Re-install and properly tension blade.

8. Perform previous **Checking Wheel Alignment** procedure, beginning on **Page 70**, and adjust wheels as necessary make them parallel and coplanar.

   Tip: *The first time you get the wheels coplanar, place a mark on each wheel where you held the coplanarity gauge, then use this position again in the future if you need to repeat the procedure. This assures repeated accuracy every time you adjust the wheels.*

   — If no further adjustments are necessary, remove blade, re-install table, and then re-install blade.

   — If the lower wheel is tilted in relation to the upper wheel, proceed to **Adjusting Lower Wheel Shaft Position** on **Page 73**.

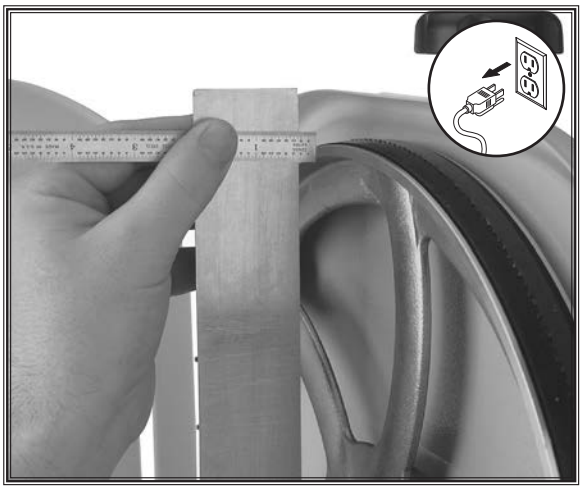


Figure 102. Example of measuring the distance to shim the wheel to be coplanar.

Adjusting Lower Wheel Shaft Position

If the lower wheel is tilted in relation to the upper wheel, perform the following procedure to make it coplanar with the upper wheel.

There are four adjustment bolts with hex nuts in the lower wheel adjustment hub, shown in **Figure 103**. These adjust the wheel tilt from side to side and up and down.

Note: *If you make a mistake during the following procedure, it can be very difficult to correct. Therefore, it is important to double-check wheel alignment (see **Page 70**), and troubleshoot all other possible solutions (see **Troubleshooting** on **Page 60**) prior to adjusting the lower wheel shaft position.*

To adjust lower wheel shaft position, do these steps:

1. DISCONNECT MACHINE FROM POWER!
2. Loosen jam nuts on lower wheel adjustment hub (see **Figure 104**).
3. Loosen one tilt adjustment set screw, then tighten opposing set screw approximately an equal amount.
4. Check wheels with coplanarity gauge, and repeat **Step 3** as needed until lower wheel is parallel and coplanar with upper wheel.
5. Tighten jam nuts to lock tilt adjustment set screws in position.
6. Perform previous **Checking Wheel Alignment** procedure, beginning on **Page 70,** and adjust wheels as necessary to make them parallel and coplanar.
7. When wheels are parallel and coplanar, remove blade, re-install table, and then re-install blade.

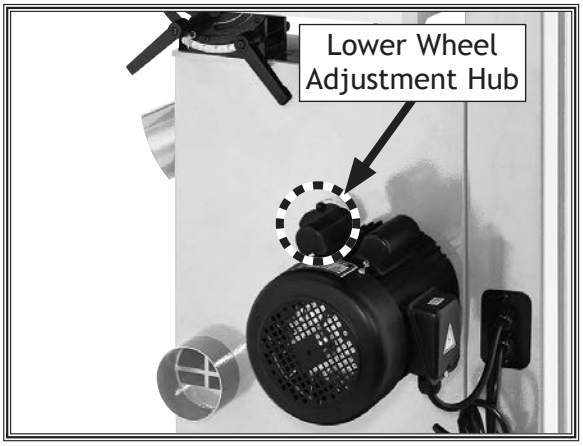


Figure 103. Location of rear lateral adjustment components.

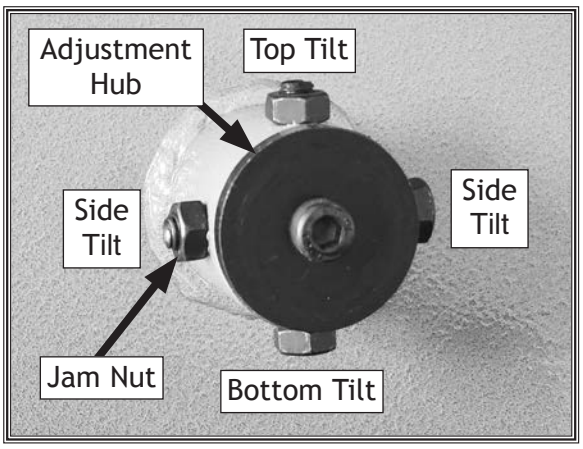


Figure 104. Lower wheel adjustment controls.

SERVICE

Calibrating Table Tilt Scale Pointer

The table tilt scale pointer (see **Figure 105**) was calibrated at the factory. However, after prolonged use the pointer may shift, requiring adjustment.

Note: *The table tilt scale functions as a basic guide only. For high-precision cuts, use a protractor or bevel gauge to set the angle of table tilt.*

Tools Needed	**Qty**
Machinist's Square	1
Phillips Screwdriver #2	1

To calibrate table tilt scale pointer, do these steps:

1. DISCONNECT MACHINE FROM POWER!

2. Place one edge of square on table and other edge of square against blade side, as shown in **Figure 106**.

3. Adjust table tilt (refer to **Tilting Table**, beginning on **Page 51** for more information) until square rests flush and evenly against *both* table *and* blade side.

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

4. Loosen Phillips head screw that secures table tilt pointer (see **Figure 107**), adjust pointer to "0" on scale, then retighten screw.

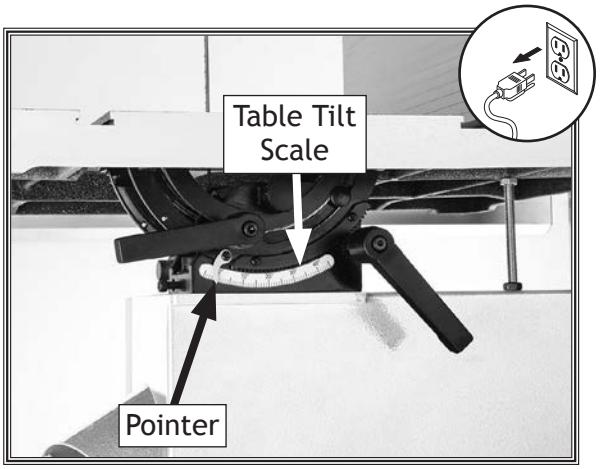


Figure 105. Location of table tilt scale and angle indicator.

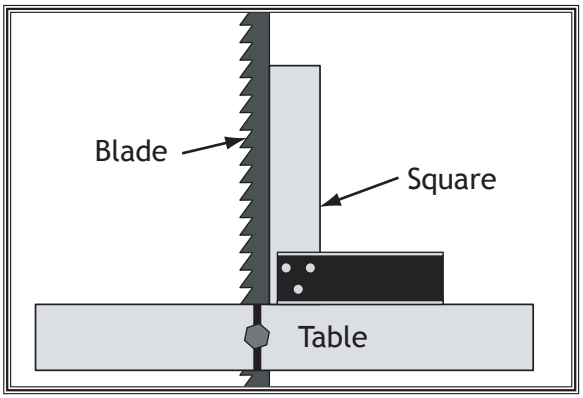


Figure 106. Adjusting table perpendicular to blade (side to side).

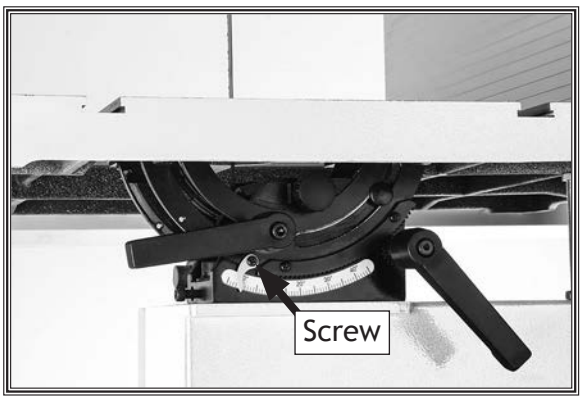


Figure 107. Location of screw that secures table tilt pointer.

SERVICE

Electrical Safety Instructions

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 (360) 734-3482 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

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!

QUALIFIED ELECTRICIAN. Due to the inherent hazards of electricity, only a qualified electrician should perform wiring tasks on this machine. If you are not a qualified electrician, get help from one before attempting any kind of wiring job.

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.

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 before completing the task.

MODIFICATIONS. Using aftermarket parts or modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire.

MOTOR WIRING. The motor wiring shown in these diagrams is current at the time of printing, but it may not match your machine. Always 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.

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

EXPERIENCING DIFFICULTIES. If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (360) 734-3482.

NOTICE

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

WIRING DIAGRAM COLOR KEY

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

SERVICE

Wiring Diagram

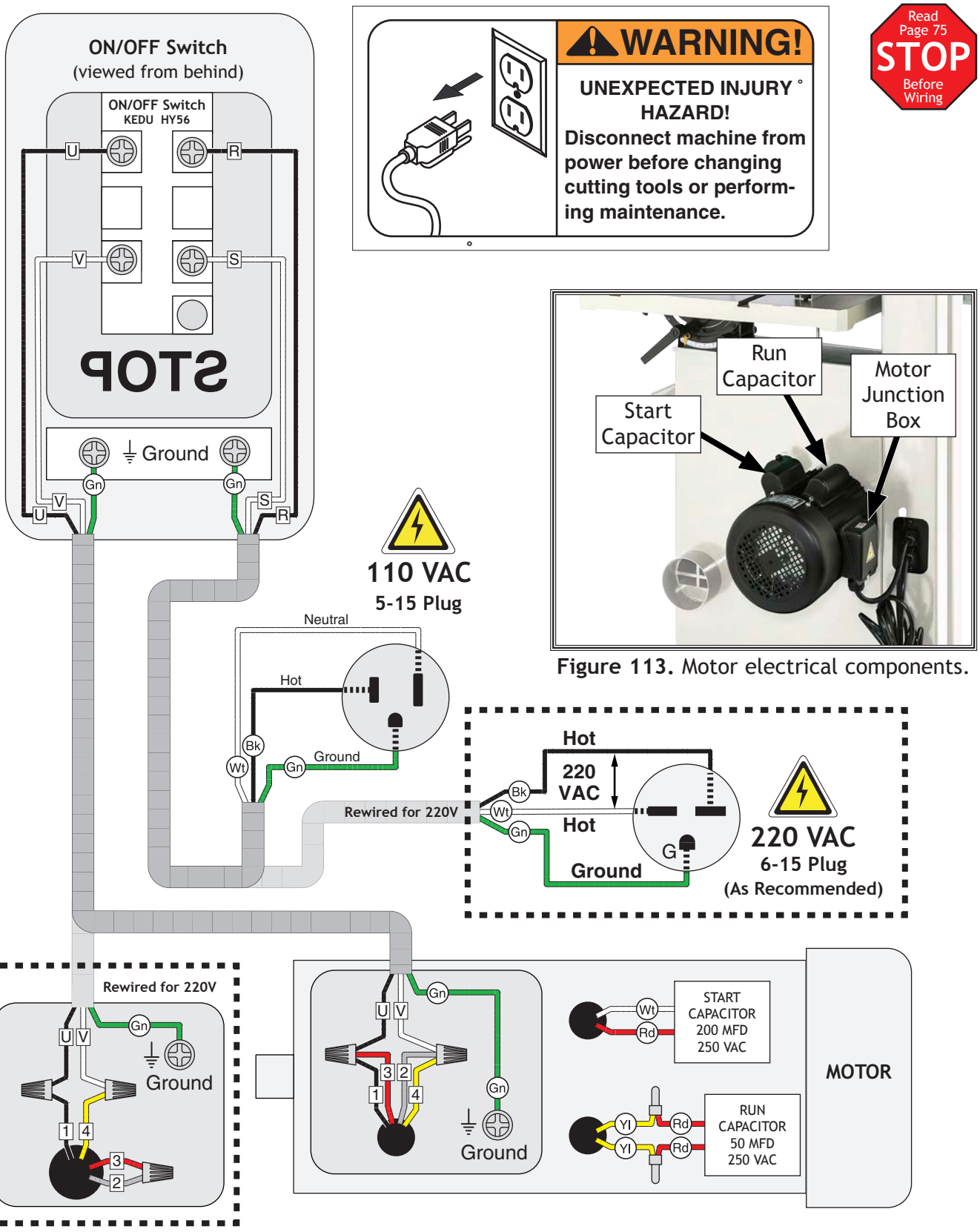
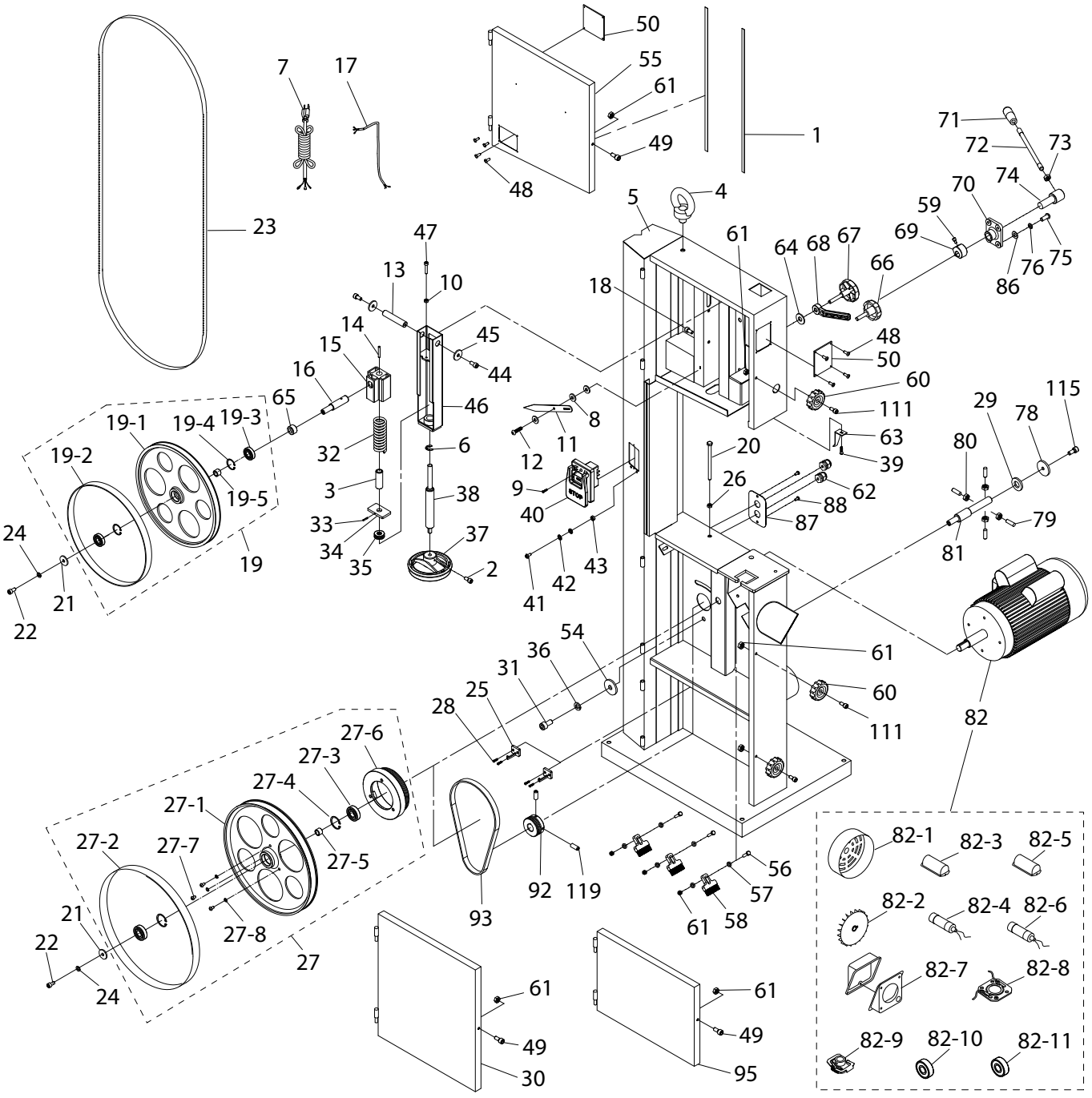


Figure 113. Motor electrical components.

SERVICE

PARTS

Main

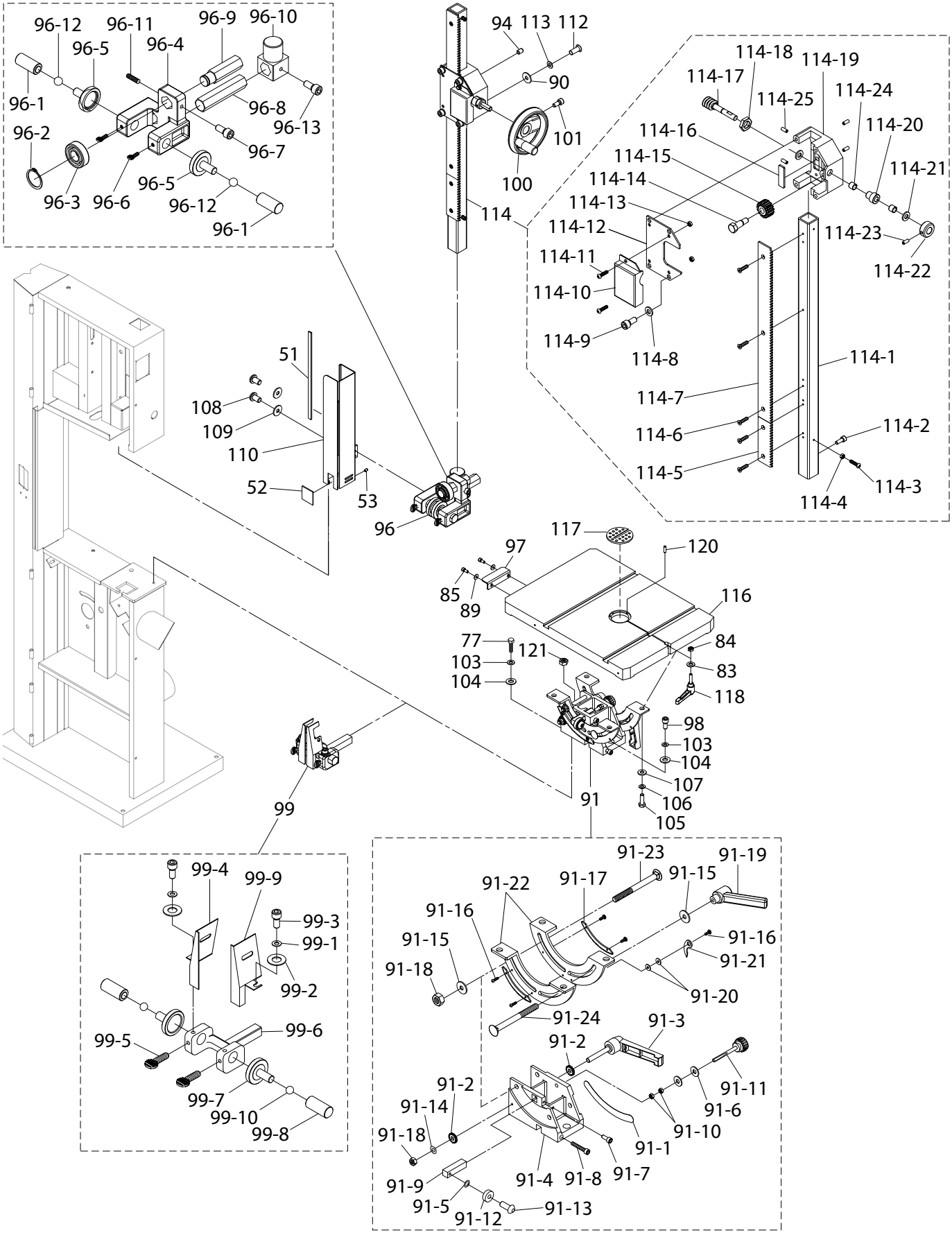

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Main Parts List

REF	PART #	DESCRIPTION
1	XP1849001	DOOR SEAL 10 X 760 X 1MM
2	X1849002	CAP SCREW M6-1 X 20
3	X1849003	BUSHING
4	X1849004	EYE BOLT M10-1.5 X 18
5	X1849005	MACHINE BODY
6	X1849006	E-CLIP 15MM
7	X1849007	POWER CORD 14G 3W 118" 5-15P
8	X1849008	FLAT WASHER 6MM
9	X1849009	PHLP HD SCR M4-.7 X 25
10	X1849010	HEX NUT M6-1
11	X1849011	POINTER
12	X1849012	SHOULDER SCREW M4-.7 X 5, 6 X 3
13	X1849013	UPPER BLADE PIVOT SHAFT
14	X1849014	ROLL PIN 5 X 36
15	X1849015	UPPER WHEEL SHAFT BLOCK
16	X1849016	UPPER WHEEL SHAFT
17	X1849017	MOTOR CORD 14G 3W 43"
18	X1849018	CAP SCREW M6-1 X 12
19	X1849019	UPPER WHEEL ASSEMBLY
19-1	X1849019-1	UPPER WHEEL 14"
19-2	X1849019-2	WHEEL TIRE
19-3	X1849019-3	BALL BEARING 6202-2RS
19-4	X1849019-4	INT RETAINING RING 35MM
19-5	X1849019-5	BUSHING
20	X1849020	HEX BOLT M8-1.25 X 110
21	X1849021	FENDER WASHER 8MM
22	X1849022	CAP SCREW M8-1.25 X 16
23	X1849023	SAW BLADE 120" X 3/8" 6-TPI HOOK
24	X1849024	LOCK WASHER 8MM
25	X1849025	SPARE BLADE HOLDER
26	X1849026	HEX NUT M8-1.25
27	X1849027	LOWER WHEEL ASSEMBLY
27-1	X1849027-1	LOWER WHEEL 14"
27-2	X1849027-2	WHEEL TIRE
27-3	X1849027-3	BALL BEARING 6202-2RS
27-4	X1849027-4	INT RETAINING RING 35MM
27-5	X1849027-5	BUSHING
27-6	X1849027-6	WHEEL PULLEY
27-7	X1849027-7	BUTTON HD CAP SCR M6-1 X 25
27-8	X1849027-8	LOCK WASHER 6MM
28	X1849028	PHLP HD SCR M4-.7 X 8
29	X1849029	SPACER
30	X1849030	LOWER WHEEL COVER
31	X1849031	CAP SCREW M8-1.25 X 20
32	X1849032	COMPRESSION SPRING 7 X 34 X 90
33	X1849033	ROLL PIN 3 X 16
34	X1849034	ALIGNMENT PLATE
35	X1849035	THRUST BEARING 51201
36	X1849036	LOCK WASHER 8MM
37	X1849037	HANDWHEEL TYPE-4 140D X 10B-S
38	X1849038	BLADE TENSION ADJUSTING ROD
39	X1849039	FLANGE SCREW M5-.8 X 8
40	X1849040	ON/OFF SWITCH KEDU HY56
41	X1849041	BUTTON HD CAP SCR M5-.8 X 8
42	X1849042	FLAT WASHER 5MM
43	X1849043	HEX NUT M5-.8

REF	PART #	DESCRIPTION
44	X1849044	CAP SCREW M8-1.25 X 16
45	X1849045	FENDER WASHER 8MM
46	X1849046	UPPER WHEEL SLIDING BRACKET
47	X1849047	CAP SCREW M6-1 X 50
48	X1849048	RIVET 3.2 X 10 BLIND
49	X1849049	CAP SCREW M6-1 X 10
50	X1849050	CLEAR WINDOW 90 X 70 X 3MM
54	X1849054	FENDER WASHER 8MM
55	X1849055	UPPER WHEEL COVER
56	X1849056	HEX BOLT M6-1 X 25
57	X1849057	FLAT WASHER 6MM
58	X1849058	WHEEL BRUSH 1-3/4"
59	X1849059	CAP SCREW M6-1 X 25
60	X1849060	LOCK KNOB 60MM DIA
61	X1849061	LOCK NUT M6-1
62	X1849062	STRAIN RELIEF TYPE-3 PG13.5
63	X1849063	GUIDE POST HEIGHT INDICATOR
64	X1849064	FLAT WASHER 10MM
65	X1849065	BUSHING
66	X1849066	KNOB BOLT 6-LOBE M10-1.5 X 20
67	X1849067	KNOB BOLT 6-LOBE M10-1.5 X 55
68	X1849068	LOCK LEVER M10-1.5
69	X1849069	ECCENTRIC BLOCK
70	X1849070	BLADE TENSION PILLOW BLOCK
71	X1849071	HANDLE M12-1.75, 26 X 85
72	X1849072	STUD-DE M12-1.75 X 240, 30
73	X1849073	HEX NUT M12-1.75
74	X1849074	LEVER HUB
75	X1849075	BUTTON HD CAP SCR M8-1.25 X 20
76	X1849076	LOCK WASHER 8MM
78	X1849078	DOCK WASHER 8 X 45 X 5
79	X1849079	SET SCREW M8-1.25 X 20
80	X1849080	HEX NUT M8-1.25
81	X1849081	LOWER WHEEL SHAFT
82	X1849082	MOTOR 2HP 110V/220V 1-PH
82-1	X1849082-1	MOTOR FAN COVER
82-2	X1849082-2	MOTOR FAN
82-3	X1849082-3	S CAPACITOR COVER
82-4	X1849082-4	S CAPACITOR 200M 250V 1-1/2 X 3-1/2
82-5	X1849082-5	R CAPACITOR COVER
82-6	X1849082-6	R CAPACITOR 50M 250V 1-1/2 X 3-1/2
82-7	X1849082-7	MOTOR JUNCTION BOX
82-8	X1849082-8	CONTACT PLATE
82-9	X1849082-9	CENTRIFUGAL SWITCH 1720 RPM
82-10	X1849082-10	BALL BEARING 6205ZZ (FRONT)
82-11	X1849082-11	BALL BEARING 6203ZZ (REAR)
86	X1849086	FLAT WASHER 8MM
87	X1849087	STRAIN RELIEF PLATE
88	X1849088	TAP SCREW M4 X 8
92	X1849092	MOTOR PULLEY
93	X1849093	POLY-V BELT 5V X 8.3L
95	X1849095	BLADE STORAGE COVER
111	X1849111	CAP SCREW M6-1 X 20
115	X1849115	CAP SCREW M8-1.25 X 16
119	X1849119	SET SCREW M6-1 X 10

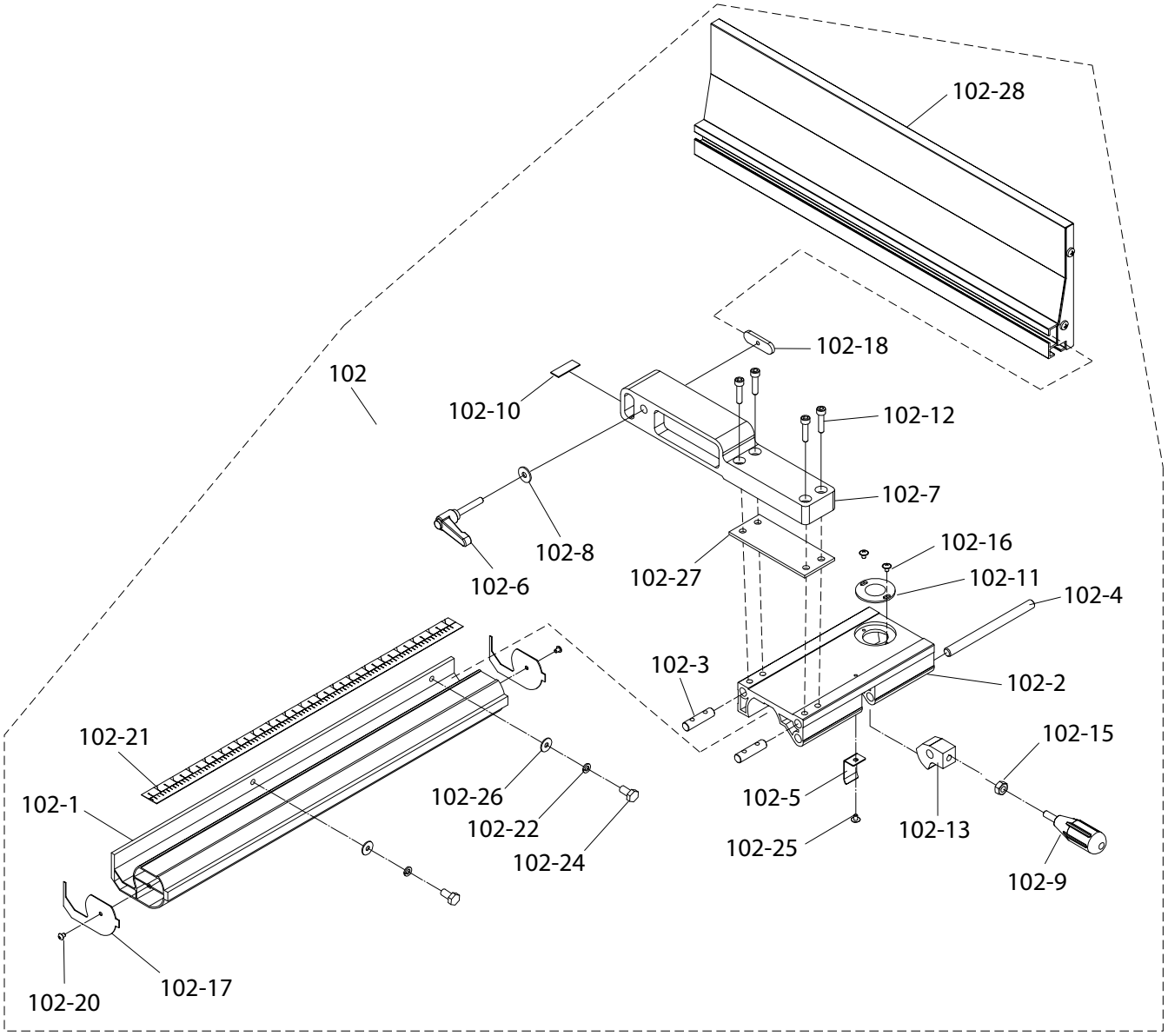
Table, Trunnion, & Blade Guides



Table, Trunnion, & Blade Guides Parts List

REF	PART #	DESCRIPTION
51	X1849051	MAGNET STRIP 7 X 340MM
52	X1849052	GUARD CLEAR WINDOW 52 X 47 X 3MM
53	X1849053	SET SCREW M4-.7 X 4
77	X1849077	HEX BOLT M10-1.5 X 35
83	X1849083	FLAT WASHER 8 X 20
84	X1849084	HEX NUT M8-1.25 THIN
85	X1849085	CAP SCREW M6-1 X 12
89	X1849089	FLAT WASHER 6MM
90	X1849090	FLAT WASHER 8MM
91	X1849091	TRUNNION SUPPORT ASSEMBLY
91-1	X1849091-1	ANGLE SCALE
91-2	X1849091-2	TRUNNION GEAR
91-3	X1849091-3	ADJ HANDLE 100L, M8-1.25 X 85
91-4	X1849091-4	TRUNNION SUPPORT BRACKET
91-5	X1849091-5	FLAT WASHER 10MM
91-6	X1849091-6	FLAT WASHER 6MM
91-7	X1849091-7	CAP SCREW M6-1 X 20
91-8	X1849091-8	CAP SCREW M6-1 X 50
91-9	X1849091-9	ADJUST BLOCK
91-10	X1849091-10	HEX NUT M6-1
91-11	X1849091-11	STAR KNOB BOLT M6-1 X 50
91-12	X1849091-12	BALL BEARING 6000ZZ
91-13	X1849091-13	BUTTON HD CAP SCR M10-1.5 X 20
91-14	X1849091-14	LOCK WASHER 8MM
91-15	X1849091-15	FLAT WASHER 8MM
91-16	X1849091-16	PHLP HD SCR M4-.7 X 6
91-17	X1849091-17	GEAR PLATE
91-18	X1849091-18	LOCK NUT M8-1.25
91-19	X1849091-19	ADJ HANDLE 100L, M8-1.25 X 25
91-20	X1849091-20	FLAT WASHER 4MM
91-21	X1849091-21	POINTER
91-22	X1849091-22	TRUNNION PLATE
91-23	X1849091-23	CARRIAGE BOLT M8-1.25 X 80
91-24	X1849091-24	CARRIAGE BOLT M8-1.25 X 85
94	X1849094	SET SCREW M8-1.25 X 6
96	X1849096	UPPER BLADE GUIDE ASSY
96-1	X1849096-1	ADJUST SHAFT
96-2	X1849096-2	EXT RETAINING RING 15MM
96-3	X1849096-3	BALL BEARING 6202ZZ
96-4	X1849096-4	UPPER BLADE GUIDE SUPPORT
96-5	X1849096-5	GUIDE RING
96-6	X1849096-6	THUMB SCREW M6-1 X 16
96-7	X1849096-7	CAP SCREW M6-1 X 16
96-8	X1849096-8	UPPER GUIDE ADJUSTMENT SHAFT
96-9	X1849096-9	SUPPORT BEARING ADJ SHAFT
96-10	X1849096-10	UPPER BLADE GUIDE SUPPORT BLOCK
96-11	X1849096-11	SET SCREW M6-1 X 16
96-12	X1849096-12	STEEL BALL 5MM
96-13	X1849096-13	CAP SCREW M6-1 X 12
97	X1849097	FENCE SUPPORT
98	X1849098	CAP SCREW M10-1.5 X 35
99	X1849099	LOWER BLADE GUIDE ASSY
99-1	X1849099-1	LOCK WASHER 6MM
99-2	X1849099-2	FLAT WASHER 6MM
99-3	X1849099-3	CAP SCREW M6-1 X 8
99-4	X1849099-4	LEFT COVER
99-5	X1849099-5	THUMB SCREW M6-1 X 16
99-6	X1849099-6	LOWER BLADE GUIDE MOUNTING BLOCK
99-7	X1849099-7	GUIDE RING
99-8	X1849099-8	ADJUST SHAFT
99-9	X1849099-9	RIGHT COVER
99-10	X1849099-10	STEEL BALL 5MM
100	X1849100	HANDWHEEL TYPE-4 140D X 10B-S
101	X1849101	CAP SCREW M6-1 X 20
103	X1849103	LOCK WASHER 10MM
104	X1849104	FLAT WASHER 10MM
105	X1849105	HEX BOLT M8-1.25 X 16
106	X1849106	LOCK WASHER 8MM
107	X1849107	FLAT WASHER 8MM
108	X1849108	CAP SCREW M5-.8 X 12
109	X1849109	FLAT WASHER 5MM
110	X1849110	BLADE GUARD COVER
112	X1849112	BUTTON HD CAP SCR M8-1.25 X 20
113	X1849113	LOCK WASHER 8MM
114	X1849114	GUIDE BRACKET ASSEMBLY
114-1	X1849114-1	UPPER GUIDE TUBE
114-2	X1849114-2	CAP SCREW M6-1 X 10
114-3	X1849114-3	PHLP HD SCR M4-.7 X 10
114-4	X1849114-4	HEX NUT M4-.7
114-5	X1849114-5	EXTENSION GEAR
114-6	X1849114-6	FLAT HD SCR M4-.7 X 8
114-7	X1849114-7	RACK
114-8	X1849114-8	LOCK WASHER 8MM
114-9	X1849114-9	CAP SCREW M8-1.25 X 16
114-10	X1849114-10	COVER
114-11	X1849114-11	BUTTON HD CAP SCR M5-.8 X 10
114-12	X1849114-12	COVER
114-13	X1849114-13	HEX NUT M5-.8
114-14	X1849114-14	FIXED SCREW
114-15	X1849114-15	GEAR
114-16	X1849114-16	FIXED PLATE
114-17	X1849114-17	WORM CYLINDER
114-18	X1849114-18	NUT
114-19	X1849114-19	GUIDE BRACKET
114-20	X1849114-20	BUSHING
114-21	X1849114-21	FIBER WASHER
114-22	X1849114-22	FIXED BUSHING
114-23	X1849114-23	SET SCREW M5-.8 X 5
114-24	X1849114-24	BUSHING DU 10 X 12
114-25	X1849114-25	SET SCREW M7-1 X 10 NYLON
116	X1849116	TABLE 21-3/4" X 16"
117	X1849117	TABLE INSERT
118	X1849118	ADJ HANDLE 315L, M12-1.75 X 30
120	X1849120	SET SCREW M5-.8 X 5
121	X1849121	HEX NUT M10-1.5

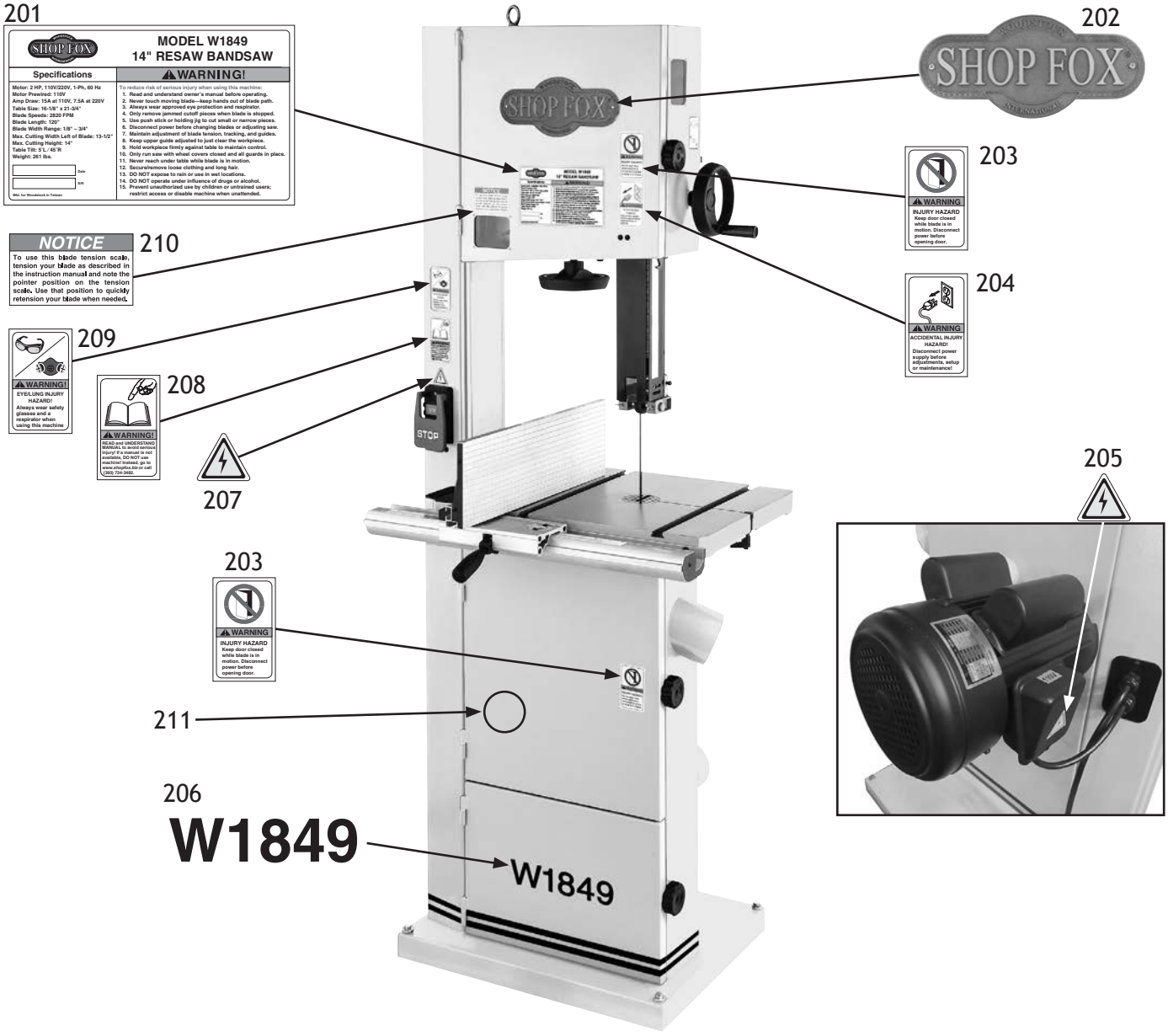
Fence



REF	PART #	DESCRIPTION
102	X1849102	FENCE ASSEMBLY
102-1	X1849102-1	FENCE RAIL
102-2	X1849102-2	FENCE BASE
102-3	X1849102-3	ALIGNMENT PIN
102-4	X1849102-4	LOCK CAM SHAFT
102-5	X1849102-5	SPRING PLATE
102-6	X1849102-6	ADJ HANDLE 78L, M8-1.25 X 50
102-7	X1849102-7	FENCE MOUNT BRACKET
102-8	X1849102-8	FLAT WASHER 8MM
102-9	X1849102-9	LOCK HANDLE M8-1.25 X 22, 30 X 77
102-10	X1849102-10	SLIDE (NYLON)
102-11	X1849102-11	SCALE WINDOW
102-12	X1849102-12	CAP SCREW M6-1 X 25

REF	PART #	DESCRIPTION
102-13	X1849102-13	LOCK CAM
102-15	X1849102-15	HEX NUT M8-1.25
102-16	X1849102-16	FLANGE SCREW M4-.7 X 6
102-17	X1849102-17	FENCE RAIL END CAP
102-18	X1849102-18	FENCE GUIDE PLATE
102-20	X1849102-20	TAP SCREW M3.5 X 12
102-21	X1849102-21	FENCE SCALE
102-22	X1849102-22	LOCK WASHER 6MM
102-24	X1849102-24	HEX BOLT M6-1 X 20
102-25	X1849102-25	FLANGE SCREW M4-.7 X 8
102-26	X1849102-26	FLAT WASHER 6MM
102-27	X1849102-27	FENCE MOUNTING PLATE
102-28	X1849102-28	RESAW FENCE

Labels & Cosmetics



REF	PART #	DESCRIPTION
201	X1849201	MACHINE ID LABEL
202	X1849207	SHOP FOX NAMEPLATE (D3377)
203	X1849208	CLOSE DOOR BANDSAW 1.5" W X 2.5" H
204	X1849209	DISCONNECT 110V 1.5" W X 2.5" H
205	X1849210	ELECTRICITY LABEL 0.7" W X 0.6" H
206	X1849206	MODEL # LABEL (W1849)

REF	PART #	DESCRIPTION
207	X1849205	ELECTRICITY LABEL 1.4" W X 1.2" H
208	X1849203	READ MANUAL 1.5" W X 2.5" H
209	X1849204	RESPIRATOR/GLASSES 1.5" W X 2.5" H
210	X1849202	BLADE TENSION LABEL
211	X1849211	TOUCH-UP PAINT, WHITE

⚠WARNING

Safety labels warn about machine hazards and how to prevent serious personal injury. The owner of this machine MUST maintain the original location and readability of all labels on this machine. If any label is removed or becomes unreadable, REPLACE that label before allowing machine to be operated again. Contact us at (360) 734-3482 or www.woodstockint.com to order new labels.

Warranty Registration

Name_____

Street _____

City _____ State_____ Zip_____

Phone #_____ Email_____ Invoice #_____

Model #_____ Serial #_____ Dealer Name_____ Purchase Date_____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. ***Of course, all information is strictly confidential.***

1. How did you learn about us?
   _____ Advertisement _____ Friend ____ Local Store
   _____ Mail Order Catalog _____ Website ____ Other:

2. How long have you been a woodworker/metalworker?
   _____ 0-2 Years _____ 2-8 Years ____ 8-20 Years _____ 20+ Years

3. How many of your machines or tools are Shop Fox?
   _____ 0-2 _____ 3-5 ____ 6-9 _____ 10+

4. Do you think your machine represents a good value? _____ Yes ____ No

5. Would you recommend Shop Fox products to a friend? _____ Yes ____ No

6. What is your age group?
   _____ 20-29 _____ 30-39 ____ 40-49
   _____ 50-59 _____ 60-69 ____ 70+

7. What is your annual household income?
   _____ $20,000-$29,000 _____ $30,000-$39,000 ____ $40,000-$49,000
   _____ $50,000-$59,000 _____ $60,000-$69,000 ____ $70,000+

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

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

9. Comments:_____

_____

_____

_____

_____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE

Place Stamp Here

WOODSTOCK INTERNATIONAL INC.
P.O. BOX 2309
BELLINGHAM, WA 98227-2309

FOLD ALONG DOTTED LINE

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY

Woodstock International, Inc. warrants all Shop Fox machinery to be free of defects from workmanship and materials for a period of two years from the date of original purchase by the original owner. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, lack of maintenance, or reimbursement of third party expenses incurred.

Woodstock International, Inc. will repair, replace, or arrange for a dealer refund, at its expense and option, the Shop Fox machine or machine part proven to be defective for its designed and intended use, provided that the original owner returns the product prepaid to an authorized warranty or repair facility as designated by our Bellingham, Washington office with proof of their purchase of the product within two years, and provides Woodstock International, Inc. reasonable opportunity to verify the alleged defect through inspection. If it is determined there is no defect, or that the defect resulted from causes not within the scope of Woodstock International Inc.'s warranty, then the original owner must bear the cost of storing and returning the product.

This is Woodstock International, Inc.’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 that Shop Fox machinery complies with the provisions of any law, acts or electrical codes. We do not reimburse for third party repairs. In no event shall Woodstock International, Inc.’s liability under this limited warranty exceed the purchase price paid for the product, and any legal actions brought against Woodstock International, Inc. 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.

Every effort has been made to ensure that all Shop Fox machinery meets high quality and durability standards. We are commited to continuously improving the quality of our products, and reserve the right to change specifications at any time.



High Quality Machines and Tools

Woodstock International, Inc. carries thousands of products designed to meet the needs of today's woodworkers and metalworkers. Ask your dealer about these fine products:

BROSEM® PRECISION STOP BLOCK

THE REBEL®

BOARD BUDDIES®

PLANER PAL®

SLICKPLANE®

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Rotacator®

Gutmann®

Junglee®

PARROT VISE®

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Aluma-Classic®

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