

MODEL W1825 19" HEAVY DUTY BANDSAW





OWNER'S MANUAL

(FOR MODELS MANUFACTURED SINCE 07/15)

Phone: (360) 734-3482 · Online Technical Support: tech-support@shopfox.biz

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

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

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

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

WARNING!

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

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

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



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INTRODUCTION

Woodstock Technical Support

This machine has been specially designed to provide many years of trouble-free service. Close attention to detail, ruggedly built parts and a rigid quality control program assure safe and reliable operation.

Woodstock International, Inc. is committed to customer satisfaction. Our intent with this manual is to include the basic information for safety, setup, operation, maintenance, and service of this product.

We stand behind our machines! In the event that questions arise about your machine, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: <u>tech-support@shopfox.</u> <u>biz.</u> Our knowledgeable staff will help you troubleshoot problems and process warranty claims.

If you need the latest edition of this manual, you can download it from http://www.shopfox.biz. If you have comments about this manual, please contact us at:

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MACHINE SPECIFICATIONS



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MODEL W1825 19" HEAVY-DUTY BANDSAW

Product Dimensions
Weight
Width (side-to-side) x Depth (front-to-back) x Height
· · · · ·
Shipping Dimensions
Type
Electrical
Power Requirement
Motors
Main
Horsepower
Amps
Speed
Type TEFC Capacitor-Start Induction Power Transfer Belt Drive
Bearings
Main Specifications
Main Specifications
Bandsaw Size



Blade Information
Standard Blade Length
Table Information
Table Length
-
Construction Materials
Table
Other Related Information
Wheel Diameter
Other
Country of Origin



Controls and Features

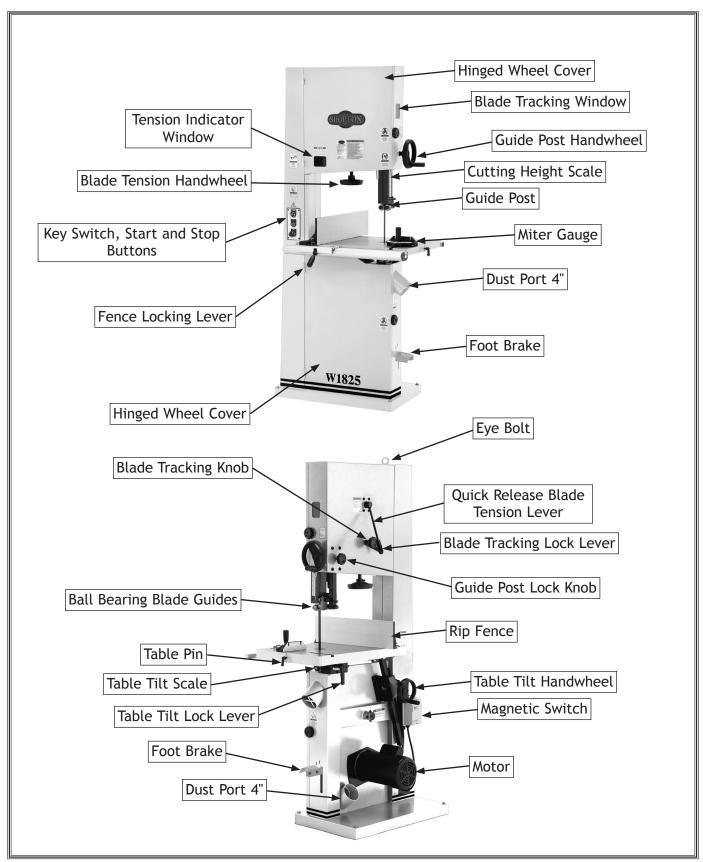


Figure 1. W1825 controls and features.



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!

ADANGER

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

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

ACAUTION

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.
- experience 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 220V 12 Amps

Circuit Requirements

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

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

AWARNING

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



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 220V Connection

This machine is equipped with a power cord that has an equipment-grounding wire and NEMA 6-15 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.

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:

AWARNING

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

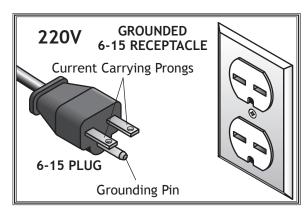


Figure 2. NEMA 6-15 plug & receptacle.



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



SETUP

Qty

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.

Inventory

The following is a description of the main components shipped with the Model W1825. Lay the components out to inventory them.

Crate Contents (Figure 3):

Α.	Miter Gauge 1
B.	Table
C. D.	Back Square Tube
D. E.	Front Rail
E. F.	Sliding Plate
G.	Table Tilt Handwheel
о. Н.	Fence Assembly
I.	Resaw Fence
J.	Foot Brake (Pre-Installed/not shown)
J.	Tool brake (Fre-installed/flot shown)
Har	dware and Tools (not shown): Qty
•	Eye Bolt M10-1.5 (may be installed)
•	Flat Washers 8mm (Table, Sliding Plate, Fence)7
•	Lock Washers 8mm (Table)4
•	Hex Bolts M8-1.25 x 25 (Table)4
•	Hex Bolt M8-1.25 x 55 (Sliding Plate)1
•	Lock Nut M8-1.25 (Sliding Plate)1
•	Cap Screws M6-1 x 12 (Sliding Plate)2
•	Hex Bolt M8-1.25 x 90 (Pos. Stop)1
•	Hex Nuts M8-1.25 (Pos. Stop, Fence)2
•	Table Pin1
•	Table Insert1
•	Cap Screws M6-1 x 16 (Fence)2
•	Hex Bolts M6-1 x 20 (Fence)2
•	Fence Handle M8-1.25 x 22 (Fence)
•	Lock Handle M8-1.25 x 44 (Fence)
•	Moving Plate (Fence)1
•	Lock Washers 6mm (Fence, Sliding Plate)4
•	Flat Washers 6mm (Fence, Sliding Plate)4
•	Hex Wrench 5mm & 8mm
•	Open End Wrench 10 x 13mm1

AWARNING

Keep machine disconnected from power until instructed otherwise.

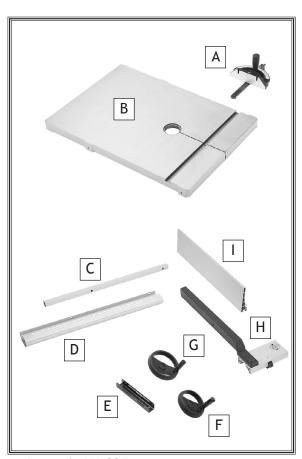


Figure 3. W1825 inventory components.

NOTICE

If you can't find an item on this list, check the mounting location on the machine or examine the packaging materials carefully. Occasionally we pre-install certain components for safer shipping.



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:

- 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.

AWARNING







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.



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.



ACAUTION

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.

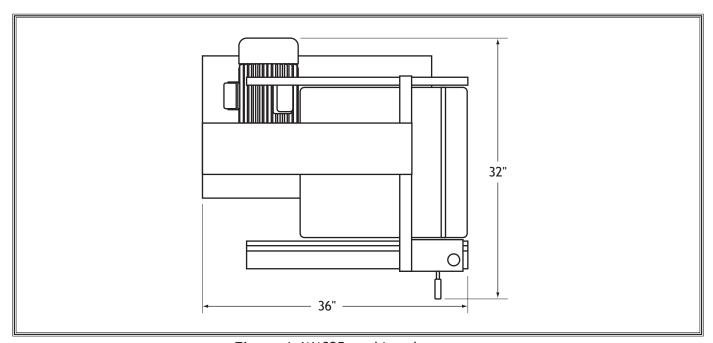


Figure 4. W1825 working clearances.



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.

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 5) 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 6**.
- **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.

WARNING

This is a heavy machine. Serious personal injury may occur if safe moving methods are not followed. To be safe, you will need assistance and a forklift or a hoist when removing the machine from the crate. Use a chain or a lifting strap with a minimum of 1000 lbs. lifting capacity. If the chain or lifting strap breaks, serious personal injury may occur.

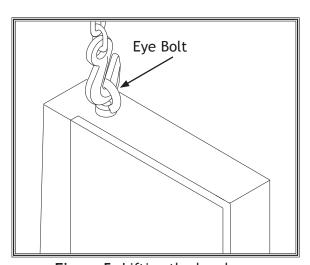


Figure 5. Lifting the bandsaw.

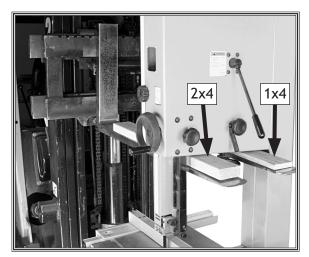


Figure 6. Example of lifting bandsaw with forklift using wood shims.



Anchoring to Floor

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

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

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

Anchoring to Concrete Floors

Lag shield anchors with lag screws (see Figure 7) 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.

Using Machine Mounts

Using machine mounts, shown in **Figure 8**, gives the advantage of fast leveling and vibration reduction. The large size of the foot pads distributes the weight of the machine to reduce strain on the floor.

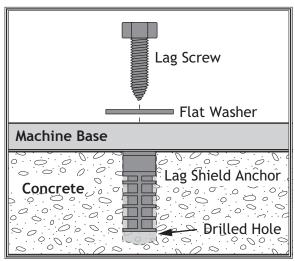


Figure 7. Popular method for anchoring machinery to a concrete floor.



Figure 8. Machine mount example.



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. Loosen blade tension by rotating quick release tension lever clockwise, as shown in **Figure 9**.
- 2. Open upper and lower covers and remove blade.

ACAUTION

Saw blades are sharp. Handling them may cause laceration injuries. To reduce this risk, wear leather gloves when handling.

- 3. Thread M8-1.25 hex nut halfway onto M8-1.25 x 90 hex bolt (positive stop bolt).
- 4. Thread positive stop bolt into threaded hole on bandsaw body, as shown in **Figure 10**. Ensure head of bolt is not higher than trunnions.

Note: Instructions for adjusting table to blade are covered in **Positive Stop** section on **Page 31**.

- **5.** Ensure that table tilt lever is tightened and trunnion is secure before proceeding to next step.
- **6.** With help of another person, lift table onto trunnion.

CAUTION

The table is HEAVY. Get help when lifting and use proper lifting techniques to reduce the risk of injury.

- 7. Secure table to trunnion using (4) M8-1.25 x 25 hex bolts, 8mm lock washers, and 8mm flat washers, as shown in **Figure 11**.
- 8. Loosen (4) M8-1.25 x 20 button head cap screws that secure guide bracket to guide bracket plate shown in Figure 12.

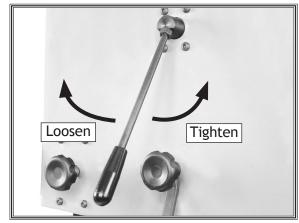


Figure 9. Quick-release tension lever.

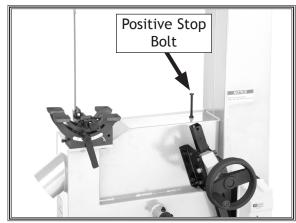


Figure 10. Positive stop bolt location.

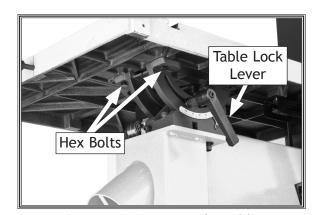


Figure 11. Mounting the table.

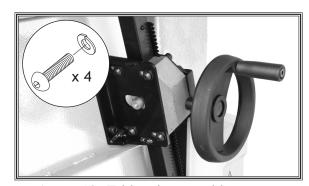


Figure 12. Table tilt assembly screws.



Attach the sliding plate to the underside of the table, with the channel positioned to the right, using (2) M6-1 x 12 cap screws, 6mm lock washers, and 6mm flat washers, as shown in Figures 13-14.

Tip: Install hardware loosely until all components are in place. This allows components to properly seat when you finish-tighten the hardware.

- 10. Secure the table tilt tube to the sliding plate with (1) M8-1.25 x 55 hex bolt, 8mm flat washer, and M8-1.25 lock nut. Do *NOT* overtighten—doing so will prevent the table tilt mechanism from operating properly (see **Figure 14**).
- **11.** Retighten the (4) M8-1.25 x 20 button head cap screws loosened in **Step 8**.
- **12**. Finish-tighten all other table hardware. The table tilt assembly should look like **Figure 15**.
- 13. Install the foot brake using (2) M6-1 x 16 cap screws, 6mm lock washers, and 6mm lock washers (see Figure 16).

Note: The foot brake and its mounting hardware is attached to the brake lever for shipping.

- 14. Re-install the blade (refer to **Changing Blades** on **Page 41** for detailed instructions).
- 15. Install the table insert and table pin (see Figure 16).

Note: The table pin keeps the table aligned and should always be replaced after blade changes or other maintenance that requires its removal.

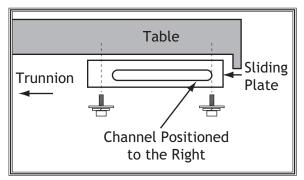


Figure 13. Sliding plate channel alignment.

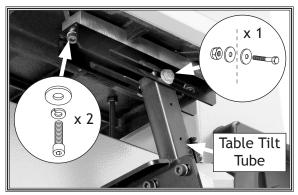


Figure 14. Table tilt tube secured to sliding plate.

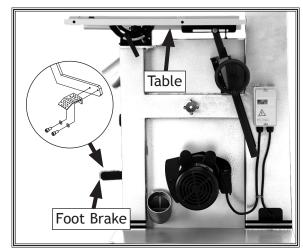


Figure 15. Table and foot brake installed.

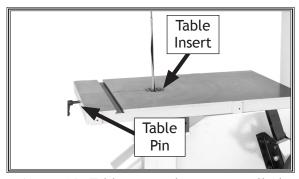


Figure 16. Table pin and insert installed.



16. Attach the rear fence rail to the table with the (2) M6-1 x 16 cap screws, as shown in **Figure 17**.

17. Attach the front rail with the (2) M6-1 x 20 hex bolts, 6mm lock washers, and 6mm flat washers, (see Figure 17).

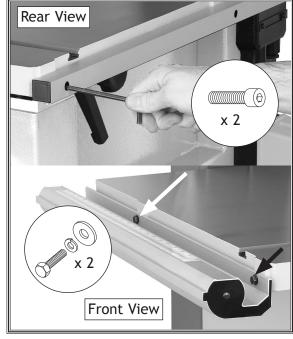


Figure 17. Rail installation.

- **18.** Install an M8-1.25 hex nut on the fence handle, then thread the handle into the fence assembly, (see **Figure 18**). Tighten the hex nut against the fence pivot block to secure the handle.
- **19.** Place an 8mm flat washer on the lock handle, slide it through the hole in the fence, then thread the moving plate onto the end of the lock handle threads.

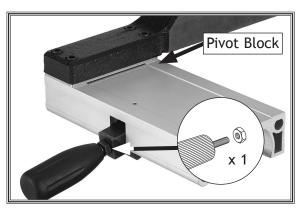


Figure 18. Handle installed on fence assembly.

- **20.** Slide the resaw fence over the moving plate, as shown in **Figure 19**, so the moving plate fits inside the channel of the resaw fence.
- 21. Tighten the lock handle.

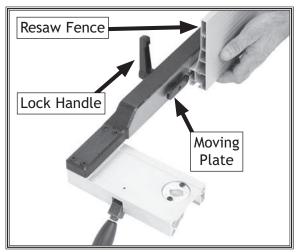


Figure 19. Attaching resaw fence to standard fence.



- **22.** Pull the fence handle up and place the fence assembly on the front rail (see **Figure 20**).
- **23.** Push the fence handle down to lock the fence assembly in place.
- **24.** Adjust the rail pad until there is an even gap between the bottom of the fence and the table, then tighten the hex nut against the fence.

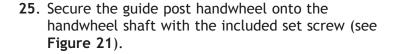




Figure 20. Correctly installed fence.

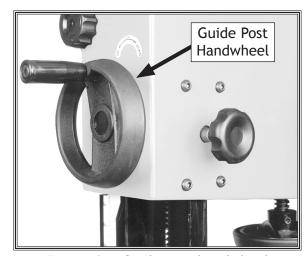


Figure 21. Guide post handwheel installed.



Blade Tracking

"Tracking" refers to how the blade rides on the bandsaw wheels. The tilt of the upper wheel determines how the blade tracks. 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.

This bandsaw has crowned wheels. As the wheels spin, the blade naturally tracks to the highest point of the crown at the center of the wheel (see Figure 22).

The wheels on the W1825 were aligned at the factory, so center tracking is the only adjustment that needs to be performed when the saw is new. This adjustment is necessary before turning the saw *ON* or performing other adjustments.

ACAUTION

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

To center track the blade, do these steps:

- DISCONNECT BANDSAW FROM POWER!
- 2. Make sure the upper and lower blade guides are adjusted away from the blade.
- 3. Engage the quick-tension lever and turn the blade tension handwheel until the tension scale (see Figure 23) reads between 4 and 6.

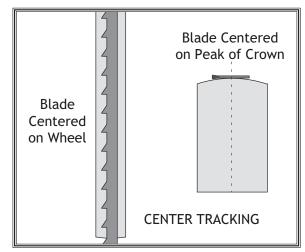


Figure 22. Center tracking profiles.

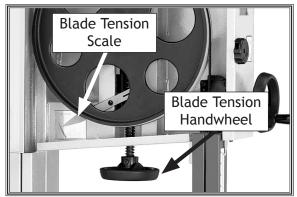


Figure 23. Blade tensioning controls.



- 4. Spin the upper wheel by hand at least three times and watch how the blade rides on the crown of the wheel. Refer to Figure 22 for an illustration of this concept.
 - If the blade rides in the center of the upper wheel and is centered on the peak of the wheel crown, then the bandsaw is already tracked properly and no further adjustments are needed at this time.
 - If the blade does not ride in the center of the upper wheel and is not centered on the peak of the wheel crown, then continue with the following steps.
- **5.** Loosen the lock lever (see **Figure 24**) so that the blade tracking knob can rotate.
- 6. Spin the upper wheel with one hand and rotate the blade tracking knob with the other hand to make sure the blade rides in the center of the bandsaw wheel tire.
- 7. Tighten the lock lever and close the upper wheel cover.

Additional "fine tune" tracking may be done *after* the bandsaw is connected to power. This is done while the bandsaw is running, using the wheel tilt knob to make small adjustments while watching the blade tracking through the window shown in **Figure 25**.

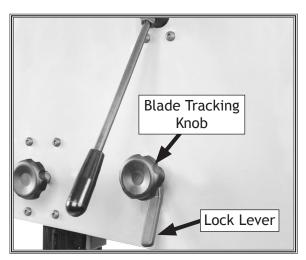


Figure 24. Blade tracking controls.



Figure 25. Blade tracking window.



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 take into account many variables, including the CFM rating of the dust collector, the length of hose between the dust collector and the machine, the amount of branches or Y's, and the amount of other open lines throughout the system. Explaining this calculation is beyond the scope of this manual. If you are unsure of your system, consult an expert or purchase a good dust collection "how-to" book.

To connect a dust collection hose, do these steps:

- 1. Fit a 4" dust hose over each dust port and secure them in place with a hose clamp (see Figure 26).
- 2. Tug the hoses to make sure they do not come off.

Note: A tight fit is necessary for proper performance.

Power Connection

After you have completed all previous setup instructions and circuit requirements, the machine is ready to be connected to the power supply.

To avoid unexpected startups or property damage, use the following steps whenever connecting or disconnecting the machine.

Connecting Power

- 1. Turn the machine power switch *OFF*.
- 2. Insert the power cord plug into a matching power supply receptacle. The machine is now connected to the power source.

Disconnecting Power

- 1. Turn the machine power switch *OFF*.
- 2. Grasp the molded plug and pull it completely out of the power supply receptacle. DO NOT pull by the cord as this may damage the wires inside.

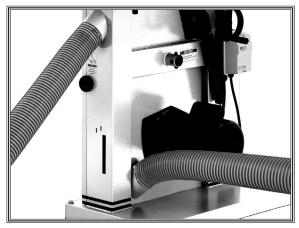


Figure 26. Dust hoses connected to dust ports.

ACAUTION

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



Test Run

Once assembly is complete, the next step is to test run your machine to make sure it runs properly and is ready for regular operation.

The test run consists of verifying the following: 1) The motor powers up and runs correctly, 2) the OFF button safety feature works correctly, 3) the foot brake operates correctly, and 4) the switch key works correctly.

If, during the test, any safety feature does not work as described, or you cannot easily locate the source of an unusual noise or vibration, then immediately disconnect the bandsaw from power, and refer to **Troubleshooting** on **Page 59**. Make sure you resolve the problem before proceeding with additional steps in this test run.

To test run the machine, do these steps:

- 1. Make sure you understand the safety instructions at the beginning of the manual, and verify that the machine is set up properly.
- 2. Clear away all tools and objects used during setup are from the machine.
- **3.** Connect the machine to the power source.
- **4.** Turn the switch disabling key to "1" and reset the OFF button by turning it clockwise until it pops out.
- 5. Press the ON button to turn the bandsaw *ON* (see Figure 27).
 - When operating correctly, bandsaw runs smoothly with little or no vibration or rubbing noises.
 - Investigate and correct strange or unusual noises or vibrations before operating the bandsaw further.
- **6.** Press the OFF button to stop the machine.
- 7. WITHOUT resetting the OFF button, press the ON button. The machine should not start.
 - If the machine does not start, the OFF button safety feature is working correctly.
 - If the machine does start (with the OFF button pushed in) the OFF button safety feature is not working correctly.

ACAUTION

Always disconnect the bandsaw from power before investigating or attempting to correct a problem. Failure to do so could lead to serious personal injury.

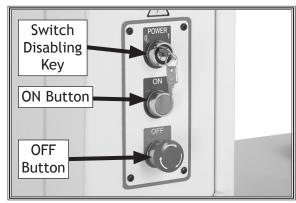


Figure 27. W1825 switch disabling key, ON button, and OFF button.

- Turn the bandsaw ON and allow it to reach full speed, then press the foot brake completely.
 - If the bandsaw blade stops, the foot brake is working correctly; continue to the next step.
 - If the bandsaw blade does not stop moving, the foot brake feature is not working correctly. Immediately disconnect power.
- **9.** Turn the switch disabling key to "0" (see **Figure 27**).
- **10.** Try to turn the machine *ON*.
 - If the bandsaw does not start, the switch disabling feature is working as designed. Proceed to Step 6.
 - If the bandsaw starts, immediately disconnect power. The switch disabling feature is not working correctly.



Tensioning Blade

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

Blade tensioning method is a matter of preference. The flutter method and the deflection method are described below. Either method safely tensions the blade. Experience and personal preference will help you decide which method your prefer. Optimal cutting results for any workpiece are a combination of correct blade selection, proper blade tension, and an appropriate feed rate.

The Flutter Method

- DISCONNECT BANDSAW FROM POWER!
- 2. Make sure the blade is properly center tracking as instructed in the **Blade Tracking** on **Page 20**.
- 3. Raise the guide post all the way, and move the upper and lower guide bearings away from the blade.
- **4.** Engage the blade tension quick release lever to apply tension to the blade.
- **5.** Connect the bandsaw to power, and turn the bandsaw *ON*.
- **6.** Using the blade tension adjustment knob, slowly decrease blade tension until you see the blade start to flutter.
- 7. Slowly increase the tension until the blade stops fluttering, then tighten the blade tension adjustment knob and additional 1/8 to 1/4 of a turn.
- **8.** Turn the bandsaw OFF and disconnect the bandsaw from power.
- Look at what the tension gauge reads and use that as a guide for tensioning that specific blade in the future.
- 10. Re-adjust blade guides as described in Adjusting Blade Guide Bearings and Adjusting Support Bearings on Pages 26-27.

ACAUTION

Improper blade tension is unsafe, produces inaccurate and inconsistent results, and introduces unnecessary wear on bandsaw components. Overtensioning 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.

NOTICE

Tensioning the blade according to the blade tension scale before the *Test Run* section gave an approximate tension for completing the bandsaw setup. The following procedures tension the blade for operation.

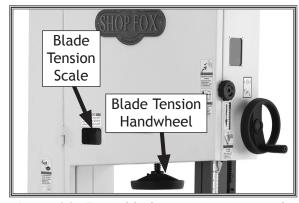


Figure 28. Front blade tensioning controls.

NOTICE

Do not rely on this setting for other blades or for long periods of time because all blades require specific tensioning and stretch with use. If you notice a decrease in performance at the setting repeat this procedure.



The Deflection Method

The deflection method is 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 the bandsaw blade, do these steps:

- 1. DISCONNECT BANDSAW FROM POWER!
- 2. Make sure the blade is properly tracking as instructed in the Blade Tracking section on Page 20.
- 3. Raise the guide post all the way, and move the upper and lower guide bearings away from the blade.
- **4.** Engage the blade tension quick release lever to apply tension to the blade.
- **5.** Using moderate pressure, push the center of the blade sideways.
 - If the blade deflects approximately ¹/₄" it is properly tensioned. Proceed to Step 6.
 - If the blade deflects less than ¹/₄" it is overtensioned. Turn the blade tensioning knob counterclockwise two full turns and repeat Step 6.
 - If the blade deflects more than 1/4", the blade is not properly tensioned. Apply tension to the blade incrementally and repeat Step 5 until properly tensioned.
- 6. Re-adjust blade guides as described in Adjusting Blade Guide Bearings and Adjusting Blade Support Bearings on Pages 26- 27.

NOTICE

With extended use, the blade tensioning system may need to be reset. Refer to Adjusting Tension Lever on Page 50 in the Service section in this manual for details.



Adjusting Blade Guide Bearings

The blade guides provide side-to-side support to keep the blade straight while cutting. The blade guides are adjustable in two ways—forward/backward and side-to-side. Make sure the blade is tracking properly and is correctly tensioned before adjusting the blade guide bearings.

To adjust the upper blade guides, do these steps:

- DISCONNECT BANDSAW FROM POWER!
- **2.** Familiarize yourself with the upper blade guide controls shown in **Figures 29-30**.
- 3. Loosen the lateral adjustment rod bolt, loosen the support bearing adjustment shaft cap screw, and adjust the blade guides until the edges of the bearings are 1/16" behind the blade gullets, as illustrated in Figure 31.

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

NOTICE

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

- 4. Tighten the lateral adjustment rod cap screw.
- **5.** Loosen the bearing rotation adjustment cap screws on both sides of the blade.
- **6.** Rotate the knurled knobs to position the bearings 0.004" away from the blade.

Note: 0.004" is approximately the thickness of a dollar bill.

7. Tighten both of the bearing rotation adjustment cap screws to lock the blade guide bearings in position.

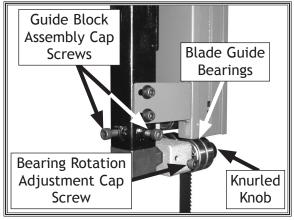


Figure 29. Upper blade guide controls (rear view).

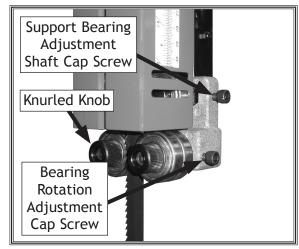


Figure 30. Upper blade guide controls (front view).

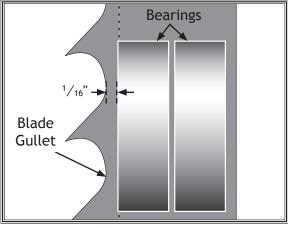


Figure 31. Lateral adjustment of blade guides.



NOTICE

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

To adjust the lower blade guides, do these steps:

- DISCONNECT BANDSAW FROM POWER!
- 2. Familiarize yourself with the lower blade guide controls shown in **Figures 32**.
- **3.** Follow the instructions for adjusting the upper blade guides on **Page 26** in a similar manner for adjusting the lower blade guides.

Adjusting Support Bearings

NOTICE

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

The support bearings are positioned behind the blade for support during cutting operations, because the blade is typically pushed back with the pressure from the advancing workpiece. Proper adjustment of the support bearings is an important part of making accurate cuts and also keeps the blade teeth from coming in contact with the guide bearings while cutting. Make sure the blade is tracking properly and that it is correctly tensioned before adjusting the upper and lower support bearings.

To adjust the upper support bearing, do these steps:

- 1. DISCONNECT BANDSAW FROM POWER!
- 2. Familiarize yourself with the upper support bearing controls shown in Figures 33-34.

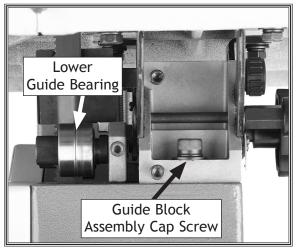


Figure 32. Lower blade guide controls.

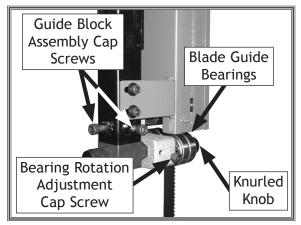


Figure 33. Upper blade guide controls (rear view).

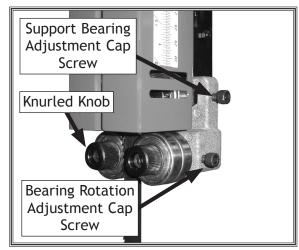


Figure 34. Upper blade guide controls (front view).



- 3. Loosen the guide block assembly cap screws and rotate the blade guide assembly side-to-side, until the blade is perpendicular with the face of the support bearing, as illustrated in Figure 35.
- 4. Tighten the guide block assembly cap screws.
- **5.** Loosen the bolt on the support bearing adjustment shaft—if it is not already loose.
- 6. Using a feeler gauge between the support bearing and the blade, position the bearing 0.016" away from the back of the blade, as illustrated in Figure 35.

Note: For a quick gauge, fold a crisp dollar bill in half twice (four thicknesses of a dollar bill is approximately 0.016") and place it between the support bearing and the blade, as illustrated in **Figure 36**.

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

To adjust the lower support bearing, do these steps:

- 1. DISCONNECT BANDSAW FROM POWER!
- 2. Familiarize yourself with the lower support bearing controls shown in Figure 37.
- 3. Open the upper and lower wheel covers.
- **4.** Loosen the cap screw on the support bearing adjustment shaft.
- 5. Using a feeler gauge, position the support bearing 0.016" away from the back of the blade, as illustrated in Figure 38, or use a dollar bill (see Figure 36).
- **6.** Tighten the cap screw to keep the support bearing locked in place.

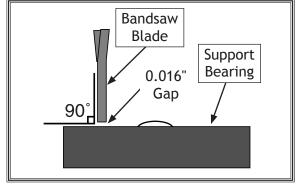


Figure 35. Blade set perpendicular (90°) to the support bearing face.

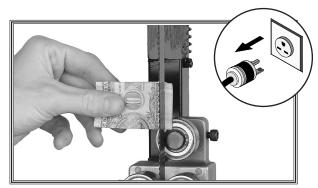


Figure 36. Example of using a dollar bill as a 0.016" gauge.

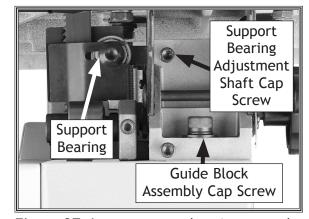


Figure 37. Lower support bearing controls.

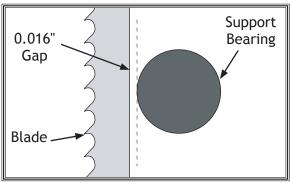


Figure 38. Blade aligned 0.016" away from the support bearing edge.



Aligning Table

To ensure cutting accuracy, the table should be aligned so that the miter slot is parallel with the bandsaw blade. This procedure works best with the widest blade possible installed. Make sure the blade is properly tensioned before aligning the table.

To align the table so the miter slot is parallel to the bandsaw blade, do these steps:

- DISCONNECT BANDSAW FROM POWER!
- 2. Loosen the four trunnion hex bolts that secure the table to the trunnions (see Figure 39).
- 3. Place a straightedge along the blade. The straightedge should lightly touch both the front and back of the blade.
- 4. Use a fine ruler to gauge the distance between the straightedge and the miter slot. The distance should be the same at both the front and the back of the miter slot, as indicated by positions "A" and "B" in Figure 40.
- **5.** Adjust the table as needed until the distance between the blade and miter slot is equal at both ends.
- **6.** Tighten the trunnion hex bolts when the alignment is correct.

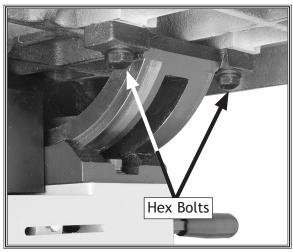


Figure 39. Hex Bolts securing table to trunnion.

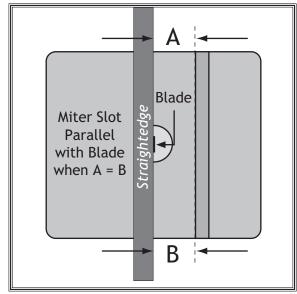


Figure 40. Checking if miter slot is parallel to blade.



Aligning Fence

To ensure cutting accuracy when the fence is first installed, the fence should be aligned with the miter slot.

To align the fence parallel with the miter slot, do these steps:

- DISCONNECT BANDSAW FROM POWER!
- 2. Make sure the miter slot is aligned with the bandsaw blade (see Page 29).
- 3. If the fence is mounted on the left-hand side of the blade, remove it and remount it next to the miter slot.
- **4.** Loosen the four cap screws located on the top face of the fence (see **Figure 41**).
- **5.** Adjust the fence face parallel with the edge of the miter slot, as shown in **Figure 42**.
- **6.** Tighten the cap screws that secure the rail to the table, being careful not to move the fence.

NOTICE

Adjusting the fence parallel to the miter slot does not guarantee straight cuts. The miter slot may need to be adjusted parallel to the side of the blade. Refer to the "Aligning Table" instructions on Page 29.

Note: Refer to the **Calibrating Fence Pointer** section on **Page 57** for instructions on adjusting the fence pointer.



Figure 41. Four fence cap screws.



Figure 42. Example of fence square with miter slot.



Positive Stop

To calibrate the positive stop, do these steps:

- 1. DISCONNECT BANDSAW FROM POWER!
- **2.** Adjust the blade tension until the mark on the blade tension scale is between 4 and 6.
- 3. Loosen the table lock lever and the hex nut that locks the positive stop bolt in place (see Figure 43).
- 4. Raise the guide post and place a machinist's square on the table next to the side of the blade, as illustrated in **Figure 44**.
- 5. Use the table tilt handwheel to adjust the table square with the blade, then secure it with the table tilt lock lever (see Figure 10 on Page 16).
- **6.** Adjust the positive stop bolt against the table and secure it by tightening the hex nut against the trunnion bracket.
- 7. Check the adjustment for accuracy once you have tightened the hex nut.
- **8.** Loosen the screw on the pointer, but do not remove it.
- **9.** Align the tip of the pointer with the 0° mark on the table tilt scale.
- **10.** Tighten the screw on the pointer so that the pointer is locked in place.

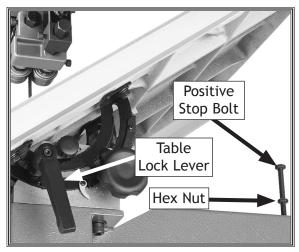


Figure 43. Table lock lever, positive stop bolt and hex nut.

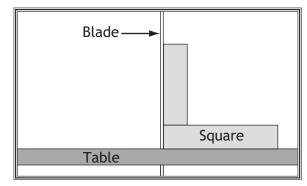


Figure 44. Squaring table to blade.



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!

If you are an inexperienced operator, we strongly recommend that you read books or trade articles, or seek training from an experienced bandsaw operator before performing any unfamiliar operations. Above all, your safety should come first!



READ and understand this entire instruction 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!

Disabling Switch

AWARNING

Children or untrained people can be killed or seriously injured by this machine. This risk increases with unsupervised operation. To help prevent unsupervised operation, turn the key to "0" and remove it before leaving the bandsaw unattended! Place the key in a well-hidden and secure location.

Refer to **Figures 45-47** and the descriptions below to become familiar with the basic controls and components of your bandsaw.

Control Panel

Switch Disabling Key: Disables the ON and OFF button when the key is turned to the "0" position. Enables ON and OFF button when the key is turned to "1" position.

ON Button: Starts motor only if the OFF button is popped out and switch disabling key is turned to "1" position.

OFF Button: Disables the ON button. Enable the ON button by twisting the OFF button until it pops out.

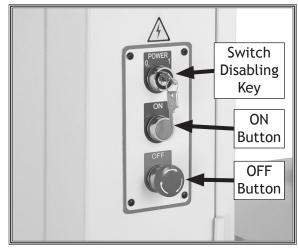


Figure 45. W1825 switch disabling key, ON button, and OFF button.



Basic Controls

- A. Blade Tension Scale: Allows for easy monitoring of blade tension.
- **B.** Blade Tension Handwheel: Tensions blade in gradual increments.
- **C. Blade Tracking Window:** Allows for easy monitoring of blade tracking (refer to **Page 20**).
- **D.** Fence, Rails, and Miter Gauge: Allows for controlled cutting at various angles.
- **E. Foot Brake**: Stops the motor and quickly stops the bandsaw blade.

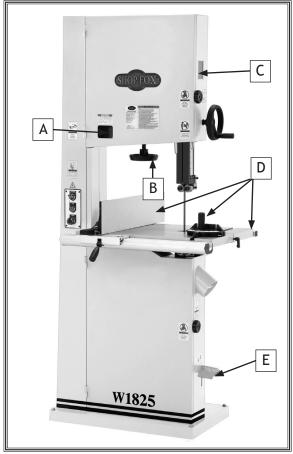


Figure 46. Front controls.

Rear Controls (Figure 47)

- F. Guide Post Handwheel and Lock Knob: Moves blade guide support quickly to the desired height on the guide post; locks setting (refer to Page 36).
- **G.** Blade Tracking Knob and Lock Lever: Moves and locks blade tracking.
- H. Quick-Release Blade Tension Lever: Adjusts blade tension for quick blade changes.
- **I. Table Tilt Handwheel:** Tilts the table 5° to the left or 45° to the right.
- J. Table Tilt Lock Lever: Locks or unlocks the table at the current angle.

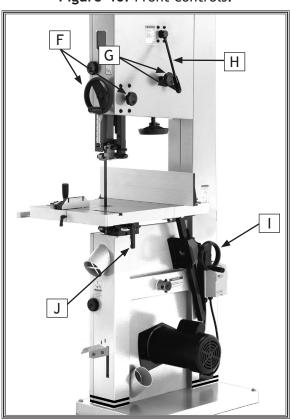


Figure 47. Rear controls.



Operation Overview

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

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

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

- 1. Examines the workpiece to make sure it is suitable for cutting.
- 2. Adjusts the fence away from the blade the same width of the desired cut or out of the way for curve cutting and then locks it in place.
- **3.** Adjusts the table tilt, if necessary, to the correct angle of the desired cut.
- **4.** Adjusts the blade guide height to approximately 1" from the top of the workpiece.
- 5. Checks to make sure the workpiece can safely pass all the way through the blade without interference from other objects.
- 6. Puts on safety glasses.
- 7. Starts the dust collector and bandsaw.
- **8.** Holds the workpiece firmly and flatly against both the table and fence, and then pushes the workpiece into the blade at a steady and controlled rate until the workpiece moves completely beyond the blade.

The operator is very careful to keep fingers away from the blade and uses a push stick to feed narrow workpieces.

9. Stops the bandsaw.

Basic Cutting Tips

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

- Keep the upper blade guide assembly adjusted to within 1" of the workpiece.
- Replace, sharpen, and clean blades as necessary. Make adjustments periodically to keep the saw running in top condition.
- Use light and even pressure while cutting. Light contact with the blade makes it easier to follow lines and prevents extra friction, which reduces blade life.
- Avoid twisting the blade when cutting around tight corners. Allow the blade to saw around the corners.
- Do not back the workpiece away from the blade while the saw is running.



Workpiece Inspection

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

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

- Foreign Objects (see Figure 48): Nails, staples, dirt, rocks and other foreign objects are often embedded in wood. While cutting, these objects can become dislodged and hit the operator or break the blade, which might then fly apart. Always visually inspect your workpiece for these items. If they can't be removed, do NOT cut the workpiece.
- Large/Loose Knots: Loose knots can become dislodged during the cutting operation. Large knots can cause blade damage. Choose workpieces that do not have large/loose knots or plan ahead to avoid cutting through them.
- Wet or "Green" Stock: Cutting wood with a moisture content over 20% causes unnecessary wear on the blade and yields poor results.
- Excessive Warping: Workpieces with excessive cupping, bowing, or twisting are dangerous to cut because they are unstable and can move unpredictably when being cut. DO NOT cut excessively warped wood.
- Minor Warping: Workpieces with slight cupping can be safely supported if the cupped side faces the table or fence, as illustrated in Figure 49. On the contrary, a workpiece supported on the bowed side will rock during a cut, leading to loss of control.

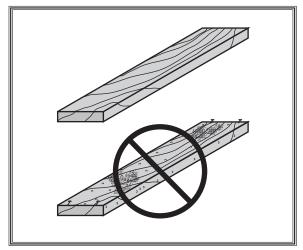


Figure 48. Choosing wood without foreign objects embedded.

AWARNING

Because of its unpredictable nature, use extreme caution if cutting warped stock. The difference between acceptable and unacceptable warped stock varies from machine to machine. If you are in doubt, square-up the stock first or do not cut it.

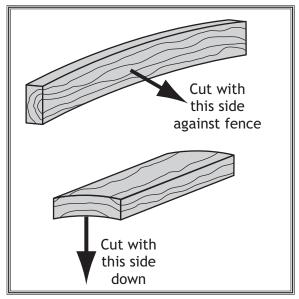


Figure 49. Cutting wood with minor warping.



Table Tilt

To tilt the table, do these steps:

- DISCONNECT BANDSAW FROM POWER!
- 2. Loosen the table tilt lock lever shown in Figure 50.
- 3. To tilt the table to the right, turn the table tilt handwheel clockwise (see Figure 50).
- 4. To tilt the table to the left, turn the table tilt handwheel clockwise one turn, lower the positive stop bolt, then turn the handwheel counterclockwise.
- 5. Secure the table tilt lock lever (see Figure 50).
- **6.** Follow "Positive Stop" instructions on Page 31 for resetting the stop bolt for horizontal (0°) operations.

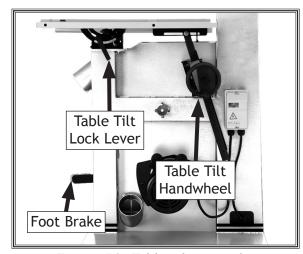


Figure 50. Table tilt controls.

Guide Post

The guide post, shown in **Figure 51**, connects the upper blade guide assembly to the bandsaw. The guidepost allows the blade guide assembly to move up or down to be as close to the workpiece as possible. In order to cut accurately and safely, the bottom of the blade guide assembly must be no more than 1" above the workpiece at all times—this positioning provides the greatest blade support and minimizes the amount of moving blade exposed to the operator.

To adjust the blade guide assembly on the guide post, do these steps:

- DISCONNECT BANDSAW FROM POWER!
- 2. Make sure that the blade tension, blade tracking, support bearings, and blade guides are adjusted correctly.
- 3. Loosen the guide post lock knob shown in Figure 51.

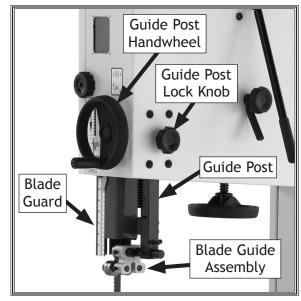


Figure 51. Guide post controls.



Blade Selection

Selecting the right blade for the cutting task requires knowledge about blade characteristics and cutting priorities (i.e. speed, finish, etc.).

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 measured from the tip of the tooth to the back edge of the blade.
- **E.** Tooth Rake: The angle of the tooth face from a line perpendicular to the length of the blade.
- **F. Gullet Depth:** The distance from the tooth tip to the bottom of the curved area (gullet).
- **G.** Tooth Pitch: The distance between tooth tips.
- **H.** Blade Back: The distance between the bottom of the gullet and the back edge of the blade.
- I. TPI: The number of teeth per inch measured from gullet to gullet.

Blade 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.

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 determines the largest and smallest curve that can be cut, and contributes to the accuracy of cutting straight—generally the wider the blade, the straighter it will cut.

Every bandsaw will have a range of blade widths determined by its manufacturing specifications (i.e. wheel size, horsepower, etc.). Use the table in **Figure 53** to determine the best blade width for an operation by finding the smallest radius curve that will be cut on your workpiece.

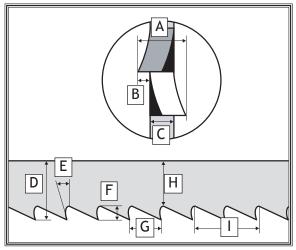


Figure 52. Bandsaw blade components.

Blade Minimum (Width x TPI) Circle Diam.
¹ / ₈ " x 14 Raker ³ / ₁₆ "
³ / ₁₆ " x 4 Skip ³ / ₈ "
³ / ₁₆ " x 10 Raker ⁷ / ₁₆ "
³ / ₁₆ " x 8 Hook ⁹ / ₁₆ "
¹ / ₄ " x 6 Hook Carbon & Bimetal ³ / ₄ "
¹ / ₄ " x 6 Hook
¹ / ₄ " x 6 Hook
³ / ₈ " x 4 Hook Carbon & Bimetal 1 ³ / ₄ "
³ / ₈ " x 4 Hook2 ¹ / ₄ "
³ / ₈ " x 6 Hook 2 ⁵ / ₈ "
¹ / ₂ " x 3 Hook 3 ⁵ / ₈ "
$^{1}/_{2}$ " x 3 Hook Carbon & Bimetal $6^{1}/_{2}$ "
³ / ₄ " x 3 Hook Carbon

Figure 53. Table of curve cutting capabilities.



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 54).

Bimetal 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 55**).

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 56**).

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.

Tooth Type

The most common tooth types for wood blades are shown and described below (see **Figure 57**).

Standard or Raker: Equally spaced teeth set a "0" rake angle. Recommended for thinner workpieces and general use.

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

Skip or Skip Tooth: Wide, flat gullets, a "0" rake angle, equally spaced teeth, and recommended for thick wood cutting.

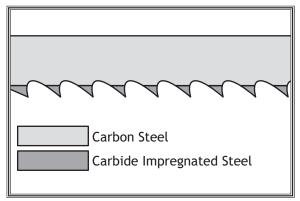


Figure 54. Carbide blade composition.

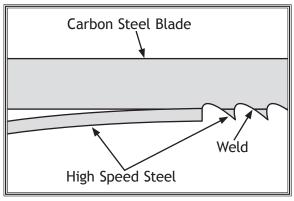


Figure 55. Bimetal blade composition.

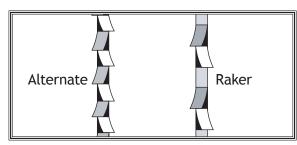


Figure 56. Typical woodcutting bandsaw blade tooth sets.

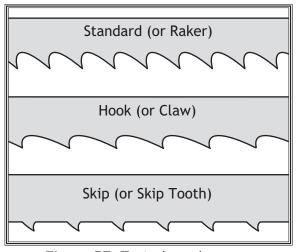


Figure 57. Typical tooth types.



Blade Selection Chart

Cutting Operation	Narrow (1/8"-1/4")	Blade Width Medium (3/16"-1/2")	Wide (1/2"-3/4")
Resawing			ZH C
Ripping Thin Stock			ZH M
Ripping Thick Stock			(H) C
Ripping Round Stock		ZR M	ZR M
Crosscutting Thin Stock			ZR F
Crosscutting Thick Stock			ZR M
Crosscutting Round Stock		RFM	RFM
Mitre Cut			RFM
Tenons		ZR M	ZR M
Sharp Curves	RF		
Gradual Curves		SFM	

			KEY			
Tootl	h Type				Tooth Pitch	
Hook	ZR Raker	Skip		(Tee F Fine 14-32 TPI	eth Per Inch or 1 M Medium 4-12TPI	C Coarse 2-4TPI



Blade Breakage

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

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

The most common causes of blade breakage are:

- Faulty alignment or adjustment of the blade guides.
- Forcing or twisting a wide blade around a short radius.
- Feeding the workpiece too fast.
- Dull or damaged teeth.
- Over-tensioned blade.
- Top blade guide assembly set too high above the workpiece. Adjust the top blade guide assembly so that there is approximately 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.
- Continuously running the bandsaw when not in use.
- Leaving the blade tensioned when not in use.
- Using the wrong pitch (TPI) for the workpiece thickness. The general rule of thumb is to have not less than two teeth in contact with the workpiece at all times during cutting.

Blade Care & Break-In

Blade Care

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

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

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

Blade Break-In

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

To properly break-in a new blade:

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



Changing Blades

Removing Blade

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

Installing Blade

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

Note: If the teeth will not point downward in any orientation, the blade is inside-out. Put on heavy gloves, remove the blade, and twist it right sideout.

- 3. Slip the blade through the guides, and mount it on the upper and lower wheels (see Figure 58).
- 4. Tighten the quick-release lever.

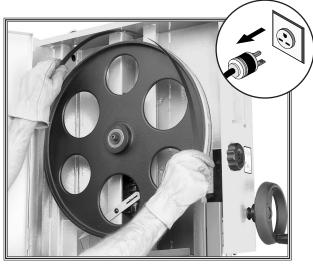


Figure 58. Placing blade on the wheels.

- Apply tension to the blade by turning the tension control knob. Rotate the upper wheel slowly by hand as tension is applied to allow the blade to center itself on the wheel. Adjust tracking if needed.
- 6. Close the wheel covers.
- 7. Adjust tension as described Page 24.
- **8.** Adjust the upper/lower guide bearings and the support bearings.
- 9. Replace the table insert and table pin.



Blade Speed

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

Most woodcutting can be performed successfully at the higher blade speed. The slower blade speed is generally used when cutting hardwoods, intricate curves, or when an exceptionally smooth cut is desired.

To adjust the blade speed, do these steps:

- DISCONNECT BANDSAW FROM POWER!
- Loosen the motor mount cap screws shown in Figure 59, and rotate the motor to loosen the V-belt.
- **3.** Refer to **Figure 60** to locate the correct V-belt position for the desired blade speed.
- 4. Move the V-belt to the desired pulley.
- **5.** Rotate the motor to tension the V-belt, then tighten the motor mount cap screws.
- **6.** Check the V-belt tension. When tensioned correctly, the V-belt deflects approximately ³/₄" with moderate pressure (see **Figure 61**).



Figure 59. Motor mount cap screws.

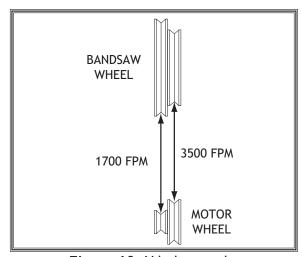


Figure 60. V-belt speeds.

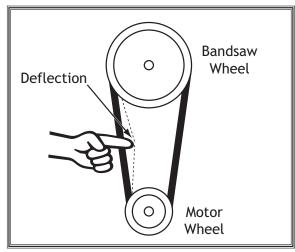


Figure 61. V-belt deflection.



Crosscutting

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

To make a 90° crosscut, do these steps:

- 1. Mark the workpiece on the edge where you want to begin the cut.
- 2. Adjust the blade guide assembly to the correct height and make sure the miter gauge is set to 90°.
- 3. Move the fence out of the way. Place the workpiece evenly against the miter gauge.
- **4.** Hold the workpiece against the miter gauge and line up the mark with the blade.
- 5. After all safety precautions have been met, turn the bandsaw *ON*. Slowly feed the workpiece into the blade and continue the cut until the blade is all the way through the workpiece. Figure 62 shows a typical crosscutting operation.

Ripping

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

To make a rip cut, do these steps:

- 1. Adjust the fence to match the width of the cut on your workpiece and lock the fence in place.
- **2.** Adjust the blade guide assembly to the correct height.
- 3. After all safety precautions have been met, turn the bandsaw *ON*. Slowly feed the workpiece into the blade and continue with the cut until the blade is completely through the workpiece. Figure 63 shows a typical ripping operation.

AWARNING

NEVER place fingers or hands in the line of cut. In the event that something unexpected happens, your hands or fingers may be pulled into the blade.

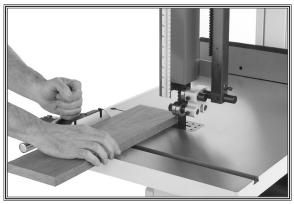


Figure 62. Crosscutting with miter gauge.

AWARNING

ALWAYS use a push stick when ripping narrow pieces to keep your fingers away from the blade. Failure to follow these warnings may result in serious personal injury!



Figure 63. Example of ripping with a push stick.



Resawing

Resawing (**Figure 64**) is cutting a board into two or more thinner boards. The maximum board width that can be resawn is limited by the maximum cutting height of the bandsaw.

Blade selection is crucial when resawing. A wide blade with a hook or a skip tooth style will have fewer teeth-per-inch (from 3 to 6), offering a larger gullet capacity for clearing sawdust. This improves cuts through wide boards and reduces heat buildup and strain on the motor.

To resaw a workpiece, do these steps:

- 1. Verify that the bandsaw is setup properly and that the table is perpendicular to the blade.
- 2. Use the widest blade your bandsaw will accept.
- 3. Install the resaw fence, set it to the desired width of cut, and lock it in place.

Note: The scale will not be accurate with the resaw fence installed.

- 4. Support the ends of the board if necessary.
- 5. Turn the bandsaw ON.

Stacked Cuts

The bandsaw can cut multiple copies of a particular shape by stacking a number of workpieces together. Ensure that both the table and the blade are properly adjusted to 90°. Otherwise, any error will be compounded.

To complete a stacked cut, do these steps:

- 1. Align the workpieces to ensure that each piece has adequate scrap to provide a clean, unhampered cut.
- 2. Secure the workpieces together in a manner that will not interfere with the cutting. Hot glue on the edges works well, as do brad nails through the waste portion. (Do *NOT* cut into the brads or you may break the blade!)
- 3. On the face of the top piece, lay out the shape you intend to cut.

AWARNING

Keep your hands clear of the blade. When resawing thin pieces the blade may tear through the surface of the workpiece, exposing your hands to the blade teeth. Always use push blocks and push sticks when resawing.



Figure 64. Resawing lumber.

6. Using push paddles and a push stick, keep pressure against the fence and table, and slowly feed the workpiece into the moving blade until the blade is completely through the workpiece (see Figure 64).

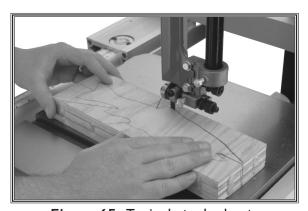


Figure 65. Typical stacked cut.

- 4. Make relief cuts for your intended shape, especially where changes in cutting direction cause the blade kerf to bind.
- **5.** Cut workpieces as though you were cutting a single piece. Follow layout lines with blade kerf on waste side of the line, as shown in **Figure 65**.



MAINTENANCE

General

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

Ongoing

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

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

Monthly

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

Cleaning

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. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning.

Table & Base

Protect the unpainted cast-iron surfaces on the table by wiping the table 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 general lubricants.

If the table becomes difficult to tilt, remove it and lubricate the trunnion and the slides in the trunnion base with multi-purpose grease.



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

Brushes

The bandsaw is equipped with two lower brushes. The brushes should be checked daily and cleaned when they become dirty. There are adjustment brackets that allow the brushes to be adjusted for bristle wear. Refer to Adjusting Wheel and Blade Brushes on Page 50 for adjustment details.



Lubrication

Since all bearings are sealed and permanently lubricated, simply leave them alone until they need to be replaced. Do not lubricate them.

This machine does need lubrication in other places. Do not over-lubricate. Too much lubrication will attract dirt and sawdust. Lubricate the following areas as needed to maintain smooth function of the bandsaw.

Blade Guide Rack and Pinion

Lubricant	Frequency	Quantity
Multi-Purpose GL2 Grease	As Needed	Thin Coat

- DISCONNECT BANDSAW FROM POWER!
- 2. Lower the blade guide until it reaches the table.
- 3. Using a rag and mineral spirits, wipe off any existing grease and sawdust buildup on rack (see Figure 66).
- **4.** Apply a thin coat of multi-purpose GL2 grease to the rack.
- 5. Move the blade guide up and down several times and remove any excess grease to help prevent sawdust buildup.

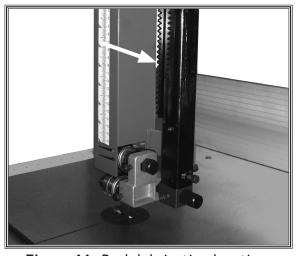


Figure 66. Rack lubrication location.

Tension Adjustment Assembly

Lubricant	Frequency	Quantity
Multi-Purpose GL2 Grease	As Needed	Thin Coat

- DISCONNECT BANDSAW FROM POWER!
- 2. Open the top wheel cover and look through the top of the wheel.
- 3. Using a rag and mineral spirits, wipe off any existing grease and sawdust buildup on the blade tension adjustment assembly and tension lever cam.
- **4.** Apply a thin coat of multi-purpose GL2 grease to the tension adjustment assembly and tension lever cam (see **Figure 67**).

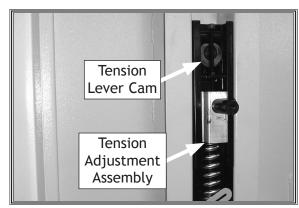


Figure 67. Tension adjustment assembly lubrication locations (top wheel removed for clarity).



Table Tilt Rack and Pinion Assembly

Lubricant	Frequency	Quantity
Multi-Purpose GL2 Grease	As Needed	Thin Coat

- 1. DISCONNECT BANDSAW FROM POWER!
- 2. With the table perpendicular to the blade, and using a rag and mineral spirits, wipe off all existing grease and sawdust buildup from the rack.
- 3. Move the table up to its maximum 45° angle and wipe (see **Figure 68**) off all existing grease and sawdust buildup from the rack.
- **4.** Apply a thin coat of multipurpose grease to the rack.
- **5.** Move the table up and down several times to distribute the grease, then wipe off any excess grease.

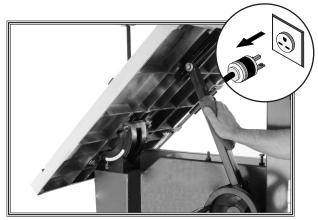


Figure 68. Table tilt rack and pinion assembly.

Trunnion

Lubricant	Frequency	Quantity
Multi-Purpose GL2 Grease	As Needed	Thin Coat

- 1. DISCONNECT BANDSAW FROM POWER!
- 2. Move the table up until it reaches its maximum 45° angle, and using a rag and mineral spirits, wipe off all excess grease and sawdust from the trunnion.
- **3.** Apply a thin coat of light all purpose grease to the outside surfaces of the trunnion (see **Figure 69**).
- 4. Move the table down and then back up to distribute the grease, then wipe off any excess grease from the trunnion.

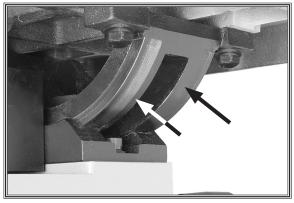


Figure 69. Trunnion lubrication location.



SERVICE

General

This section covers the most common service adjustments or procedures that may need to be made during the life of your machine.

If you require additional machine service not included in this section, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: techsupport@woodstockint.com.

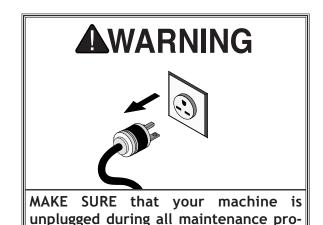
Checking & Tensioning V-Belt

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

Parts Needed: V-belt A42	No. X1825093
Tools Needed: Ruler	Qty
Hex Wrench 6mm	1

Checking V-Belt

- DISCONNECT BANDSAW FROM POWER!
- 2. Open the wheel covers.
- 3. Note the condition of the V-belt. If the V-belt is cracked, frayed, or glazed; they should be replaced.
- 4. Push the center of the V-belt. Note the amount of deflection (see Figure 70). If deflection is more than ³/₄", tension the V-belt.



cedures! If this warning is ignored, seri-

ous personal injury may occur.

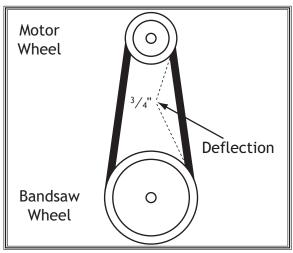


Figure 70. V-belt deflection.



Tensioning V-Belt

- Follow Steps 1-2 in Checking and Tensioning V-Belts on Page 48.
- 2. Loosen the motor pivot and adjustment cap screws shown in Figure 71.
- 3. Adjust the belt tension:
 - If the belt is too loose, pivot the motor down.
 - If the belt is too tight, pivot the motor up.
- 4. Push the center of the V-belt. If deflection is approximately ³/₄" with moderate pressure (see Figure 70 on Page 48), then the tension is correct. If the deflection is more than ³/₄", repeat Step 3.
- 5. When the V-belt tension is correct, tighten the motor adjustment screws, and close the wheel covers.

Replacing V-Belt

- 1. Follow Steps 1-2 in Checking V-Belt on Page 48.
- 2. Remove the bandsaw blade (refer to Changing Blades on Page 41).
- 3. Loosen the motor adjustment cap screws and shown in Figure 71, then turn the tension bolt counterclockwise.
- 4. Unthread the wheel mounting cap screw shown in Figure 72, slide the lower wheel off of the bearing shaft.
- **5.** Slip the old V-belts off the pulleys, then install the new V-belt set in their place.
- Install the lower wheel back onto the bearing shaft, tighten the wheel mount cap screw, then tension the V-belt (see Tensioning V-Belt on this page).
- 7. Close the lower wheel cover.

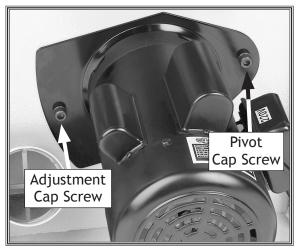


Figure 71. Motor mount and adjustment cap screws.

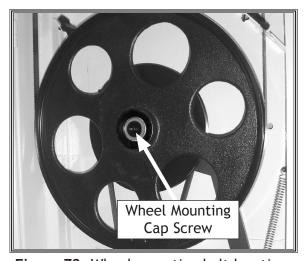


Figure 72. Wheel mounting bolt location.



Adjusting Tension Lever

The quick-release tension lever is setup for use with the pre-installed 143" blade. However, replacement blades may vary slightly in actual length even if they are sold as 143". If you install a different blade, you may need to adjust the tension lever adjustment screw so the quick-release tension lever works correctly.

Tools Needed:	Qty
Hex Wrench 6mm	1
Wrench 13mm	2

To adjust the tension lever, do these steps:

- 1. DISCONNECT BANDSAW FROM POWER!
- 2. Install the new blade (refer to Changing Blades on Page 41).
- 3. Loosen the jam nut on the tension adjustment screw 7-10 turns.
- 4. Put the quick-release tension lever in the down (engaged) position, then turn the blade tension handwheel until the blade tension matches the mark on the blade tension scale for the appropriate blade thickness.
- 5. Thread the tension adjustment screw (see Figure 73) down until it contacts the wheel block plate, then back it off 1-2 turns.
- 6. Tighten the jam nut.

Adjusting Wheel and Blade Brushes

The lower wheel compartment contains the brushes shown in **Figure 74**. These brushes are designed to sweep sawdust off the tire and blade during cutting operations. In order to work properly, the brushes must properly contact the wheel and blade.



To adjust the brushes, do these steps:

1. DISCONNECT BANDSAW FROM POWER!

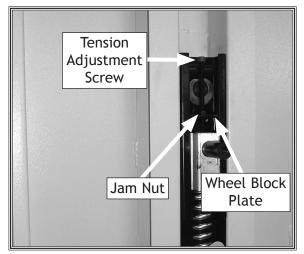


Figure 73. Quick release tension lever adjustment screw.

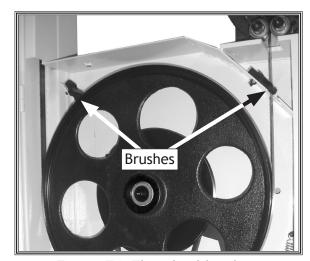


Figure 74. The wheel brushes.

- 2. Open the lower wheel cover.
- **3.** Loosen the bolt/nut that secures each brush in place.
- **4.** Adjust each brush so it makes even contact with the wheel or blade—without bending the bristles.
- 5. Tighten the bolt/nuts to secure each brush in place.



Adjusting Guide Post Travel

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

Tools Needed:

Machinist's Square	1
Small Ruler	
Hex Wrench 4mm & 5mm	1 Ea.
Metal Shims	(As Needed)

To adjust the guide post travel, do these steps:

- DISCONNECT BANDSAW FROM POWER!
- 2. Tighten the blade to the same tension that will be used during operation.
- 3. Loosen the guide post lock knob, raise the guide post and lock it in place, then place a machinist's square on the table next to the side of the blade, as illustrated in **Figure 75**.
- **4.** Adjust the table square with the blade using the table tilt knob, then secure it with the table tilt lock lever.
- 5. Loosen the guide post lock knob, lower the guide post to within 1" of the table top, then tighten the knob.
- 6. Place a machinist's square on the table next to the right hand side of the guide post, as illustrated in Figure 76.
 - If there is no gap between the square and the guide post along its full length, no adjustments need to be made. Proceed to Checking/Adjusting Guide Post Parallel with the Blade Front-to-Back on Page 52.
 - If there is a gap between the square and the guide post, the guide post is not parallel to the blade.
 Go to Step 7.
- 7. Loosen each of the four screws shown in Figure 77 ¹/₄ turn.

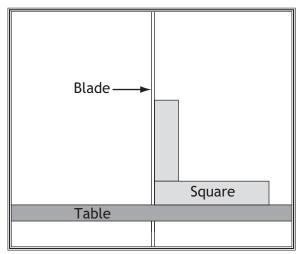


Figure 75. Squaring table to blade.

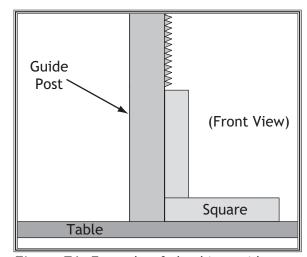


Figure 76. Example of checking guide post squareness.



Figure 77. Guide post adjustment screws.

- **8.** Gently tap the lower part of the guide post in the appropriate direction until there is no gap between the square and the guide post.
- Re-tighten the screws loosened in Step 7.



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

- 1. DISCONNECT BANDSAW FROM POWER!
- 2. Loosen the guide post lock knob, lower the blade guide assembly to within 1" of the table top, then tighten the lock knob.
- **3.** Remove the screws that secure the guide post guard and move it up and out of the way.
- 4. Measure the distance "A" between the top front face of the guide post rack and the back of the blade (see Figure 78).
- **5.** Measure the distance "B" between the bottom front face of the guide post rack and the back of the blade (see **Figure 78**).
 - If the measurements taken in Steps 4-5 are equal, no adjustments need to be made. Go to Step 9.
 - If the measurements taken in Steps 4-5 are not equal, go to Step 6.
- **6.** Place the guide post guard on top of the guide post assembly so you can access the guide post bracket.
- 7. Loosen the four screws shown in Figure 79 enough to fit metal shims between the frame and the guide post bracket (see Figure 80).
 - If the guide post to blade distance is greater at the bottom than at the top, place a shim between the bottom of the bracket and the frame (Shim "A"). This will tilt the bottom of the guide post toward the blade.
 - If the guide post to blade distance is less at the bottom than at the top, place a shim between the top of the bracket and the frame (Shim "B"). This will tilt the bottom of the guide post away from the blade.
- **8.** Re-tighten the four screws loosened in **Step 7**, then repeat **Steps 4-5**.
- **9.** Re-install the guide post guard with the screws removed in **Step 3**.

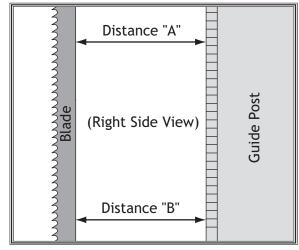


Figure 78. Example of measuring distance between rack and blade at top of guide post.

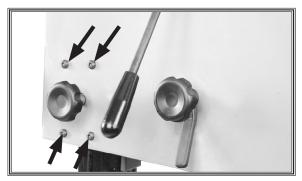


Figure 79. Guide post adjustment screws.

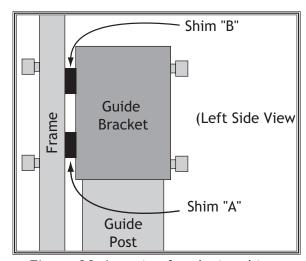


Figure 80. Location for placing shims.



Replacing Brake Shoe

The brake shoe should be replaced when it takes noticeably longer to stop the blade when the foot brake is pushed or if the foot brake makes metal-to-metal grinding sounds.

Contact Woodstock International Technical Support at (360) 734-3482 to order the replacement brake shoe.

Components and Hardware Needed: Replacement Brake Shoe (Part X1825099)1
Tools Needed: Hex Wrench 5mm 1 Hex Wrench 6mm 1 Wrench 10mm 1 Wrench 17mm 1

To replace the brake shoe, do these steps:

- DISCONNECT BANDSAW FROM POWER!
- 2. Follow Steps 1-4 in Replacing V-Belts on Page 49.
- 3. Remove the cap screws, lock washers, and bushings that secure the brake shoe to the brake lever, then remove the brake shoe (see **Figure 81**).
- 4. Install a new brake shoe onto the brake lever with the cap screws, lock washers, and bushings removed in **Step 3**.
- **5.** Re-install the V-belts onto the pulleys, then slide the lower wheel back onto the bearing shaft.
- 6. Tension V-belts (see Tensioning V-Belts on Page 49).
- 7. Re-install the bandsaw blade, adjust blade tension and tracking, then adjust the upper and lower blade guides and support bearings as needed.
- 8. Close the wheel covers.

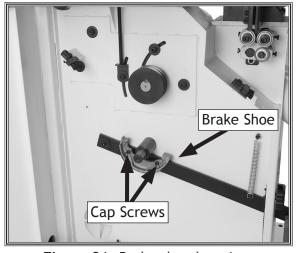


Figure 81. Brake shoe location.



Aligning Wheels

Qty

Components and Hardware Needed:

ood 2x4 60" Long	1
ools Needed:	
rench 13mmr	1
ex Wrench 4mm	1
ex Wrench 6mm	1
ape Measure	1
oplanarity Gauge (see Figure 82)	1
raightedge	
ne Ruler	

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

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

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

Checking Coplanarity

1. Make the "Coplanarity Gauge" shown in Figure 82.

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

- 2. DISCONNECT BANDSAW FROM POWER!
- 3. Remove the fence and open both wheel covers.
- **4.** Adjust the blade guides away from the blade, loosen blade tension, remove the table insert and pin, then remove the blade.
- **5.** Remove the four trunnion cap screws and the table.
- 6. Re-install the blade (refer to Changing Blades on Page 41), making sure the guide bearings and support bearings are away from the blade, then tighten your blade to the same tension that it will be used during operation.
- 7. Place your coplanarity gauge up against both wheels in the positions shown in **Figure 83**.

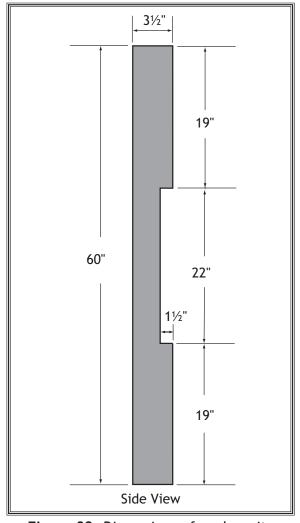


Figure 82. Dimensions of coplanarity gauge.

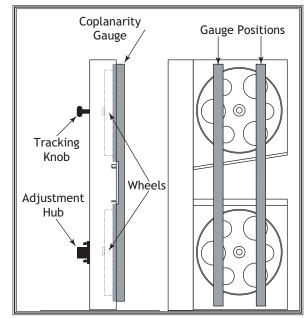


Figure 83. Checking for coplanarity.



- If the wheels are coplanar (Figure 84, A), the straightedge will evenly touch the top and bottom of both wheels.
- If the wheels are not coplanar (Figure 84, B), place the straightedge on the lower wheel first (ensuring that it touches both the top and bottom rim), then adjust the upper wheel tracking knob to make the upper wheel coplanar and parallel with the lower wheel.
- If the straightedge does not touch both wheels evenly, the lower wheel needs to be adjusted (Figure 84, C) or the upper wheel needs to be shimmed (Figure 84, D).

Shimming Upper Wheel

- 1. DISCONNECT BANDSAW FROM POWER!
- 2. Make sure the top wheel is adjusted parallel with the bottom wheel.
- 3. With a straightedge touching both points of the wheel that does not need to be adjusted, measure the distance away from the wheel that is out of adjustment (see Figure 85).
- **4.** Remove the blade from the saw, then remove the wheel that needs to be shimmed.
- 5. Determine how many shim washers are needed to compensate for the distance measured in **Step 3**, and place them on the wheel shaft.
- **6.** Replace the wheel, the original washers, the securing screw, and the blade.
- 7. Tighten the blade, then check the wheels with the coplanarity gauge. (Wheel coplanarity changes as the blade is tightened, so it is best to check the wheel alignment when the blade is tensioned as it would be for normal operations.)
- **8.** When the wheels are coplanar, place a mark on each wheel where you held the straightedge. This provides you with a future reference point to help assure repeated accuracy every time you adjust your wheels.

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

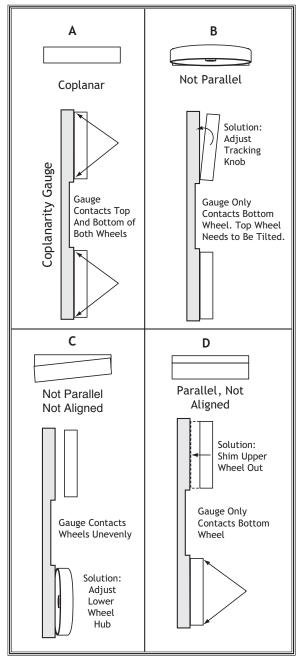


Figure 84. Coplanar diagram.

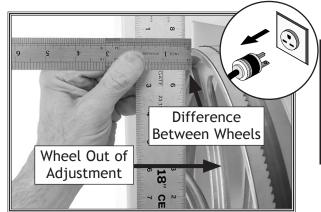


Figure 85. Determining distance needed to shim upper wheel.



Adjusting Lower Wheel

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

To adjust the lower wheel, do these steps:

- DISCONNECT BANDSAW FROM POWER!
- 2. Loosen the jam nuts on the lower wheel adjustment hub (see Figure 86).
- 3. Loosen one tilt adjustment set screw, then tighten the opposing set screw approximately an equal amount.
- 4. Check the wheels with the coplanarity gauge, then adjust the lower wheel at the hub as needed until it is parallel and coplanar with the top wheel.
- **5.** Tighten the jam nuts to lock the tilt adjustment set screws in position.

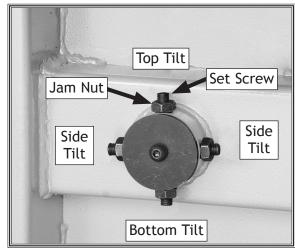


Figure 86. Lower wheel adjustment hub.



Calibrating Fence Pointer

This bandsaw is equipped with a fence measurement system that includes a fence pointer, which must be calibrated to ensure the fence scale is accurate.

To calibrate the pointer, do these steps:

- 1. Make sure the fence is installed on the left-hand side of the blade.
- 2. Place the fence flush against the bandsaw blade (see Figure 87).
- 3. Loosen the pointer adjustment screws (see Figure 88), and set the pointer in line with "0" and the measurement scale on the table.
- 4. Tighten the pointer adjustment screws.

Calibrating Miter Gauge

To ensure accuracy, the miter gauge should be calibrated to the blade when it is mounted in the miter slot.

To calibrate the miter gauge, do these steps:

- 1. Place one edge of a machinist's square against the face of the miter gauge and place the other edge against the blade face, as shown in **Figure 89**.
- 2. Loosen the lock knob on the miter gauge, and adjust the gauge flush with the edge of the square.
- 3. Tighten the lock knob and verify the setting.

Note: Sometimes the tightening procedure can affect the adjustment.

- **4.** Loosen the screw that secures the angle pointer, and adjust the pointer to the 0° mark on the scale.
- **5**. Retighten the screw that secures the angle pointer.



Figure 87. Example of fence flush with blade.



Figure 88. Fence pointer adjustment screws.

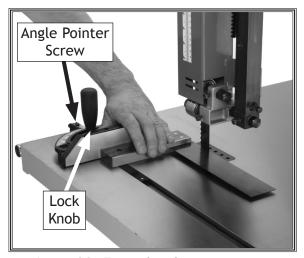


Figure 89. Example of squaring miter gauge to blade.



Correcting Blade Lead

The bandsaw blade may wander off the cut line when sawing, as shown in **Figure 90**. This is called blade lead. Blade lead is commonly caused by too fast of a feed rate, a dull or abused blade, or improper tension. If your blade is sharp/undamaged and you still have blade lead, perform the following instructions.

To correct blade lead, do these steps:

- 1. Use less pressure when feeding the workpiece through the cut.
- 2. Check that the miter slot or fence is parallel to the blade line, and correct if necessary (refer to Aligning Table on Page 29 and Aligning Fence on Page 30).
- 3. Check for proper blade tension. If the blade tension is correct and it is not convenient to replace the blade, compensate for lead by skewing the fence or adjusting the table, as explained below.

To skew your fence, do these steps:

- 1. Cut a piece of scrap wood approximately ³/₄" thick x 3" wide x 17" long. On a wide face of the board, draw a straight line parallel to the long edge.
- Slide the bandsaw fence out of the way and cut halfway through the board on the line by pushing it into the blade. Turn the bandsaw OFF and wait for the blade to stop.
- 3. Clamp the board to the bandsaw table without moving it. Now slide the fence over to the board so it barely touches one end of the board.
- 4. Loosen the four cap screws that secure the fence to the fence base (see Page 30).
- **5.** Skew the fence so it is parallel to the edge of the scrap piece.
- **6.** While maintaining the skew, tighten the cap screws loosened in **Step 4**.
- Make a few cuts using the fence. If the fence still does not seem parallel to the blade, repeat Steps
 1-6 until the blade and fence are parallel with each other.



Figure 90. Example of blade leading away from line of cut.

To shift the table, do these steps:

- On a scrap piece of wood, mark a line that is perpendicular to the front edge.
- 2. Cut halfway through the board on the line by pushing it into the blade.
- 3. Turn the bandsaw *OFF* and wait for the blade to stop.
- Loosen the four cap screws that mount the table to the trunnion (Figure 39 on Page 29). Shift the table to compensate for the blade lead, then retighten the cap screws.
- **5.** Repeat **Steps 1-4** until the blade cuts straight.



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	1. Off button engaged/at fault.	1. Reset/replace button.
not start or a	2. Switch disabling key removed.	2. Re-install switch disabling key.
breaker trips.	3. Overload relay in magnetic switch tripped.	3. Allow relay to cool. If necessary, reset.
	4. Wiring break or short; loose connections.	4. Replace broken wires; fix shorts or loose
		connections.
	5. Plug or receptacle is corroded or miswired.	5. Correct the wiring.
	6. Power supply off/incorrect voltage.	6. Switch power supply on/verify voltage.
	7. Motor connection wired incorrectly.	7. Wire motor correctly. Refer to diagram inside
		junction box or the wiring diagrams.
	8. Contactor has poor contacts or is at fault.	8. Fix contacts or replace.
	9. Blown fuse/tripped circuit breaker.	9. Replace fuse or reset circuit breaker. If problem is
		not due to circuit overload, find/repair short.
	10. Power switch at fault.	10. Replace switch.
	11. Start capacitor has blown.	11. Test/replace if at fault.
	12. Centrifugal switch at fault.	12. Adjust/replace centrifugal switch.
	13. Motor at fault.	13. Repair or replace.
Motor overheats.	1. Motor overloaded.	1. Reduce load on motor.
	2. Air circulation through the motor restricted.	2. Clean out motor to provide normal air circulation.
Machine has	1. V-belt tension incorrect.	1. Tighten V-belt (Page 48).
excessive vibra-	2. Loose, bent, dull, or damaged blade.	2. Tighten or replace blade (Page 41).
tion or noise.	3. Blade weld contacting support bearing or	3. Use file or stone to smooth and round the back of
	blade guides.	the blade.
	4. Loose machine component.	4. Tighten loose component.
	5. Machine incorrectly mounted on floor.	5. Level/shim base; tighten/adjust mounting hard-
		ware or feet.
	6. Motor fan rubbing on fan cover.	6. Fix/replace fan cover; replace loose or damaged
		fan.
	7. V-belt worn or damaged.	7. Replace V-belt, use link belts if possible
		(Page 48).
	8. Wheels not coplanar.	8. Adjust wheels coplanar (Page 54).
	9. V-belt has a high spot.	9. Replace/adjust the V-belt (Page 48).
	10. Pulley loose or not in alignment; shaft bent.	10. Replace worn pulley, key, and shaft, and realign.
	11. Worn wheel bearing.	11. Check/replace wheel bearing.
	12. Wheel tires worn or incorrectly installed.	12. Replace or re-install tires.
	13. Wheels out of balance.	13. Replace wheels.
	14. Motor bearings worn or damaged.	14. Replace motor bearings or replace motor.



Operating Machine

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Miter bar binds in miter slot.	1. Miter slot dirty or gummed up.	Carefully clean miter slot.
Table does not tilt to 90	Pointer or scale calibrated incorrectly.	Calibrate pointer/scale at true 90 degrees (Page 31).
degrees.	2. Positive stop bolt not set correctly.	2. Adjust positive stop bolt.
Table does	1. Pointer or scale calibrated incorrectly.	1. Calibrate pointer/scale at true 45 degrees.
not tilt to 45 degrees.	2. Machine component blocking path.	2. Remove component blocking table.
Table hard to tilt.	Sawdust or pitch trapped between trunnion and base.	1. Calibrate pointer/scale at true 45 degrees.
	2. Metal burrs on trunnion.	2. Remove burrs.
Cuts are rough,	1. Blade is overloaded and twists.	1. Decrease the feed rate.
or show scoring.	2. Incorrect blade selection for workpiece.	2. Match blade to material and cutting speed.
	3. The blade is loose and slipping on wheels.	3. Adjust bade tension as required.
	4. Blade tracking is incorrect.	4. Adjust the blade tracking back to normal.
	5. The blade has missing or bent teeth.	5. Replace the blade (Page 41).
	6. The blade has a faulty weld.	6. Replace the blade (Page 41).
Blade or teeth	1. Blade tension is incorrect.	1. Adjust blade tension (Page 24).
break.	2. Incorrect blade for application.	2. Use correct blade for application.
	3. Feed is too heavy or blade speed is wrong.	3. Reduce feed rate or increase blade speed.
	4. Cutting corners too sharply.	4. Use a wider arc on outside cuts, or use relief cuts
		to make tight inside cuts.
	5. Blade used when dull.	5. Replace the blade (Page 41).
	6. Blade tracking is wrong.	6. Adjust the blade tracking back to normal
		(Page 20).
	7. Blade guide adjustment at fault.	7. Adjust blade guide bearings for correct blade support.
	8. Inadequate blade support.	8. Adjust upper blade guide so it is as close as possible to workpiece.
	9. Blade weld at fault.	9. Replace with blade from different manufacturer (Page 41).
	10. Wheel tires worn or incorrectly installed.	10. Replace or re-install tires.
	11. Fence or miter slot out of alignment with	11. Align table miter slot and fence with blade
	blade.	(Page 29).
Blade wears on	Blade contacting table insert.	Adjust blade guide bearings to eliminate excess
one side, slows,	J	side pressure. Adjust table for correct blade clear
smokes or shows		ance and miter slot alignment.
overheating.	2. Blade guides are worn or mis-adjusted.	2. Tighten blade guide bracket.
	3. The blade has insufficient support.	3. Tighten the blade guide as close to the workpiece
		as possible.
	4. Blade is installed backwards or inside out.	4. Remove blade and install according to instructions
		on Page 41.
	Too much side pressure when feeding workpiece.	5. Feed workpiece straight into the blade.
	6. The wheels are out of alignment.	6. Adjust the wheels so they are coplanar (Page 54).
	7. Dull or incorrect blade.	7. Replace blade (Page 41).
	8. Blade is bell-mouthed.	8. Install new blade (Page 41).
	9. Fence not parallel with blade.	9. Adjust fence parallel with blade (Page 30).
	10. Table top surface is not parallel or square to	10. Adjust/shim table/trunnion position until blade
	blade.	and table are parallel and square.



Operating Machine (Cont.)

	,	
PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Sawdust buildup	1. Clogged dust port.	1. Clean out dust port.
inside cabinet.	2. Low CFM (airflow) from dust collection	2. Repair duct for leaks or clogs, move dust collector
	system.	closer to machine, install a stronger dust
		collector.
Blade tracks incor-	1. Tracking is not adjusted properly.	1. Adjust tracking (Page 20).
rectly, or comes off	2. Wheels are not coplanar.	2. Adjust wheel coplanarity (Page 54).
wheels.	3. Blade tension is too loose.	3. Increase blade tension (Page 24).
	4. Blade guides need adjustment.	4. Adjust blade guides (Page 26).
	5. Feeding workpiece too fast.	5. Feed workpiece slower (Page 34).
	6. Incorrect blade for bandsaw.	6. Install correct blade for machine.
	7. Blade is bell-mouthed, worn or dull.	7. Install new blade, and de-tension blade when not
		in use.
	8. Rubber tire on wheel is damaged or worn.	8. Replace rubber tires.
The cut is crooked,	1. The feed pressure is too high or the blade	1. Adjust feed rate and cutting speed as required.
or the blade wan-	speed is wrong.	
ders (blade lead).	2. The blade tension is low.	2. Increase the blade tension (Page 24).
	3. The blade is dull or damaged.	3. Replace the blade (Page 41).
	4. Inadequate blade support.	4. Adjust upper blade guide so it is as close as pos-
		sible to workpiece (Page 26).
	5. Incorrect blade for application.	5. Use wider blade.
	6. The blade tracking is wrong.	6. Adjust the blade tracking back to normal.
	7. Table is loose.	7. Tighten table trunnion mounting bolts or tilt lock
	8 Fonce or miter slot out of alignment with	lever.
	8. Fence or miter slot out of alignment with blade.	8. Align table miter slot and fence with blade (Page 30).
	9. Blade guide alignment at fault.	9. Adjust blade guide bearings for correct blade
		support.



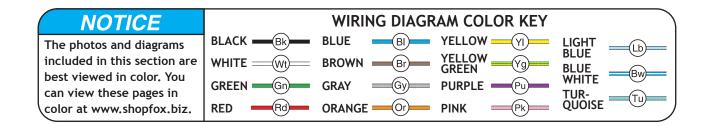
Electrical Safety Instructions

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. Study this diagram carefully. If you notice differences between your machine and these wiring diagrams, call Woodstock International Technical Support at (360) 734-3482.

AWARNING

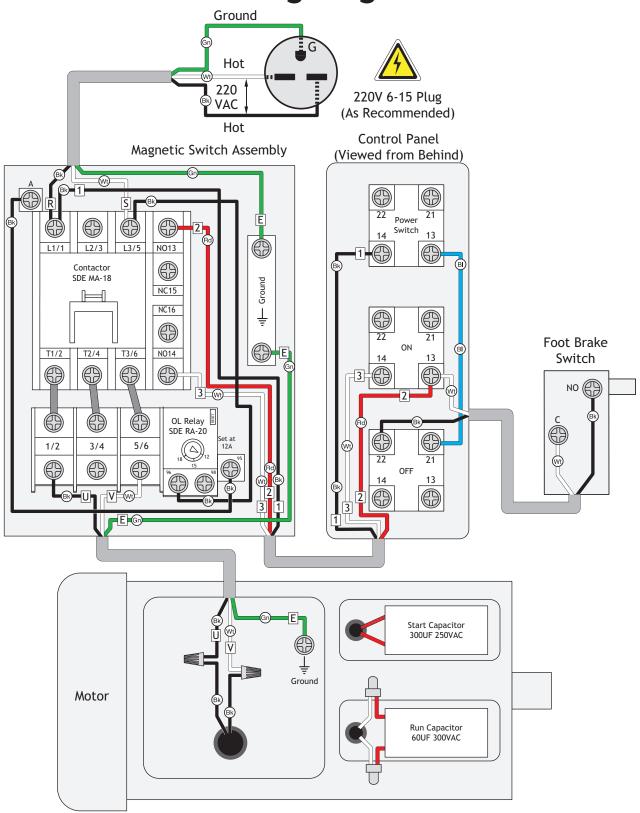
- SHOCK HAZARD. Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!
- QUALIFIED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

- 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.
- 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.
- capacitors and power inverters store an electrical charge for up to five minutes after being disconnected from the power source. To avoid being shocked, wait at least this long before working on these components.
- **ELECTRICAL REQUIREMENTS.** You MUST follow the electrical 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.





Wiring Diagram

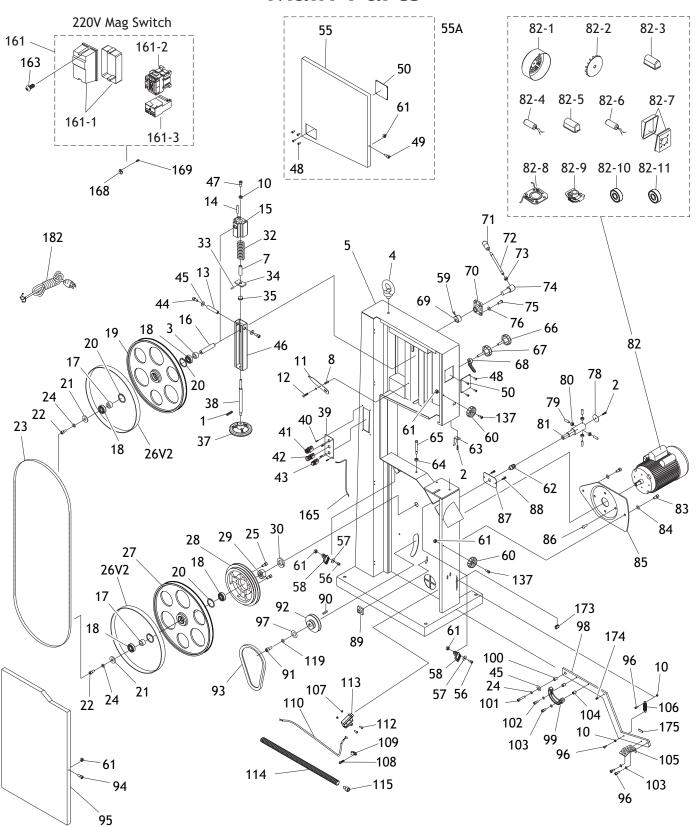






PARTS

Main Parts





Main Parts List

REF	PART #	DESCRIPTION
1	X1825001	SET SCREW M6-1 X 10
2	X1825002	FLANGE SCREW M58 X 10
3	X1825003	BUSHING
4	X1825004	LIFTING EYE BOLT M10-1.5
5	X1825005	MACHINE BODY
7	X1825007	BUSHING
8	X1825008	FLAT WASHER 6MM
10	X1825010	HEX NUT M6-1
11	X1825011	TENSION POINTER
12	X1825012	STEP SCREW M47 X 5
13	X1825013	SLEEVE
14	X1825014	ROLL PIN 5 X 35
15	X1825015	UPPER WHEEL SHAFT HINGE
16	X1825016	UPPER WHEEL SHAFT
17	X1825017	BUSHING
18	X1825018	BALL BEARING 6204-2RS
19	X1825019	UPPER WHEEL 19"
20	X1825020	INT RETAINING RING 47MM
21	X1825021	WHEEL FLAT WASHER 8MM
	X1825022	CAP SCREW M8-1.25 X 16
	X1825023	SAW BLADE 143" X 3/4" X 5MM
	X1825024	LOCK WASHER 8MM
25	X1825025	CAP SCREW M8-1.25 X 20
26V2	X1825026V2	POLYURETHANE TIRES V2.07.15
		LOWER WHEEL 19"
28	X1825028	IDLER PULLEY
29	X1825029	HEX NUT 1-14
30	X1825030	LOCK WASHER 1
32	X1825032	COMPRESSION SPRING 7 X 8 X 90
33	X1825033	ROLL PIN 3 X 16
34	X1825034	SPRING BASE PLATE
35	X1825035	THRUST BEARING 51201
37	X1825037	TENSION HANDWHEEL
38	X1825038	ADJUSTMENT SHAFT
	X1825039	CONTROL PANEL
40	X1825040	TAP SCREW M4 X 10
41	X1825041	KEYED POWER SWITCH
42	X1825042	ON BUTTON
43	X1825043	OFF BUTTON
44	X1825044	CAP SCREW M8-1.25 X 16
45	X1825045	FENDER WASHER 8MM
46	X1825046	UPPER WHEEL SLIDING BRACKET
47	X1825047	CAP SCREW M8-1.25 X 90
48	X1825048	STEEL BLIND RIVET 3 X 10MM
49	X1825049	CAP SCREW M6-1 X 12
50	X1825050	CLEAR WINDOW
55	X1825055	WHEEL COVER UPPER
55A	X1825055A	UPPER WHEEL COVER ASSY
56	X1825056	CAP SCREW M6-1 X 25
57	X1825057	FLAT WASHER 6MM
58	X1825058	WHEEL BRUSH

REF	PART #	DESCRIPTION
59	X1825059	CAP SCREW M6-1 X 25
60	X1825060	STAR HANDLE
61	X1825061	LOCK NUT M6-1
62	X1825062	STRAIN RELIEF 16MM
63	X1825063	HEIGHT POINTER
64	X1825064	HEX NUT M8-1.25
65	X1825065	HEX BOLT M8-1.25 X 90
66	X1825066	KNOB BOLT M10-1.5 X 20
67	X1825067	KNOB BOLT M10-1.5 X 53
68	X1825068	THREADED HANDLE 10MM
69	X1825069	CAM
70	X1825070	HUB BRACKET
71	X1825071	KNOB
72	X1825072	LEVER
73	X1825073	HEX NUT M12-1.75
74	X1825074	LEVER HUB
75	X1825075	BUTTON HD CAP SCR M8-1.25 X 20
76	X1825076	LOCK WASHER 8MM
78	X1825078	SHAFT END CAP
79	X1825079	SET SCREW M8-1.25 X 20
80	X1825080	HEX NUT M8-1.25
81	X1825081	LOWER WHEEL SHAFT
82	X1825082	MOTOR 3HP 220V 1-PH 60HZ
82-1	X1825082-1	MOTOR FAN COVER
82-2	X1825082-2	MOTOR FAN
82-3	X1825082-3	S CAPACITOR COVER
82-4	X1825082-4	S CAPACITOR 300uF 250V 1-3/4 X 3-3/4
82-5	X1825082-5	R CAPACITOR COVER
82-6	X1825082-6	R CAPACITOR 60uF 300V 1-1/2 X 2-1/2
82-7	X1825082-7	MOTOR JUNCTION BOX
82-8	X1825082-8	CONTACT PLATE
82-9	X1825082-9	CENTRIFUGAL SWITCH 1725
82-10	X1825082-10	FRONT MOTOR BEARING
82-11	X1825082-11	REAR MOTOR BEARING
83	X1825083	HEX BOLT M10-1.5 X 25
84	X1825084	LOCK WASHER 10MM
85	X1825085	MOTOR MOUNT PLATE
86	X1825086	BUTTON HD CAP SCR M8-1.25 X 20
87	X1825087	PLATE
88	X1825088	FLANGE SCREW M58 X 10
89	X1825089	GUIDE KEY
90	X1825090	KEY 5 X 5 X 35
91	X1825091	HEX BOLT M8-1.25 X 20 LH
92	X1825092	MOTOR PULLEY
93	X1825093	V-BELT A42
94	X1825094	CAP SCREW M6-1 X 10
95	X1825095	LOWER WHEEL COVER
96	X1825096	CAP SCREW M6-1 X 16
97	X1825097	FENDER WASHER 8MM
98	X1825098	BRAKE LEVER
99	X1825099	BRAKE PAD



Main Parts List

REF	PART #	DESCRIPTION
100	X1825100	BUSHING
101	X1825101	CAP SCREW M8-1.25 X 25
102	X1825102	CAP SCREW M6-1 X 25
103	X1825103	LOCK WASHER 6MM
104	X1825104	BUSHING
105	X1825105	BRAKE PEDAL PAD
106	X1825106	EXTENSION SPRING
107	X1825107	HEX NUT M47
108	X1825108	TAP SCREW M4 X 8
109	X1825109	CORD CLAMP 5/8"
110	X1825110	BRAKE SWITCH CORD
112	X1825112	PHLP HD SCR M47 X 30
113	X1825113	BRAKE SWITCH KL7141
114	X1825114	CORD CONDUIT 1/2" X 43-5/16"
115	X1825115	STRAIN RELIEF

REF	PART #	DESCRIPTION
119	X1825119	LOCK WASHER 8MM
137	X1825137	CAP SCREW M6-1 X 20
161	X1825161	MAG SWITCH ASSY 3HP 1-PH 220V
161-1	X1825161-1	MAG SWITCH BOX
161-2	X1825161-2	CONTACTOR SDE MA-18 220V
161-3	X1825161-3	OL RELAY SDE RA-20 12-18A
163	X1825163	FLANGE SCREW M58 X 10
165	X1825165	SWITCH CORD 2W 100MM
168	X1825168	CORD CLAMP 5/16"
169	X1825169	FLANGE SCREW M58 X 12
173	X1825173	STRAIN RELIEF 9 X 10MM
174	X1825174	SET BOLT M7-1 X 10 NYLON
175	X1825175	SPACER NYLON
182	X1825182	POWER CORD 14G 3W 72" 6-15P



Table & Fence

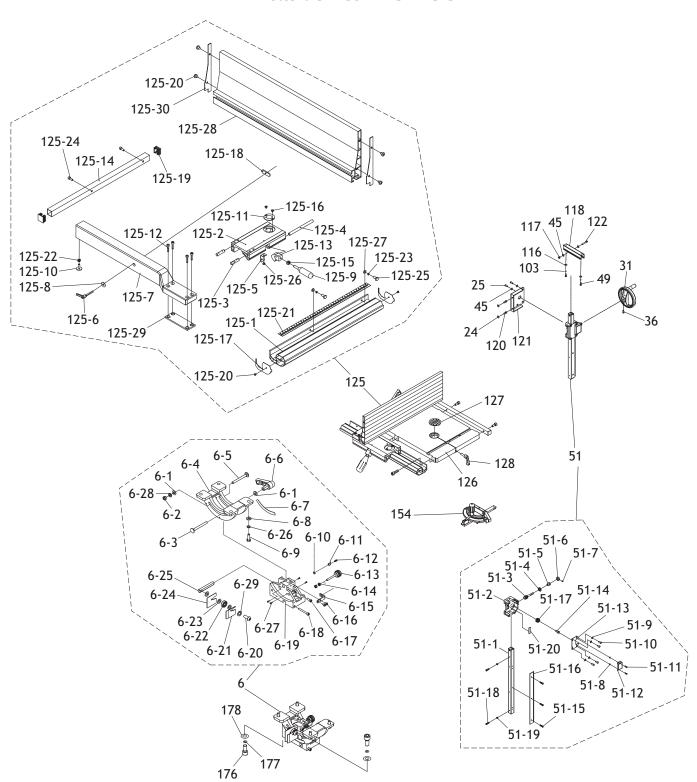




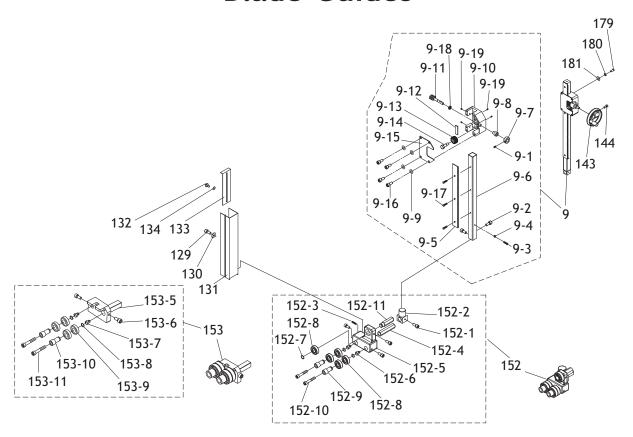
Table & Fence Parts List

REF	PART #	DESCRIPTION
6	X1825006	TRUNNION ASSEMBLY
6-1	X1825006-1	FLAT WASHER 8MM
6-2	X1825006-2	LOCK NUT M8-1.25
6-3	X1825006-3	CARRIAGE BOLT M8-1.25 X 85
6-4	X1825006-4	UPPER TRUNNION
6-5	X1825006-5	CARRIAGE BOLT M8-1.25 X 80
6-6	X1825006-6	LOCK HANDLE
6-7	X1825006-7	ANGLE SCALE
6-8	X1825006-8	FLAT WASHER 8MM
6-9	X1825006-9	HEX BOLT M8-1.25 X 25
6-10	X1825006-10	FLAT WASHER 4MM
6-11	X1825006-11	TILT POINTER
6-12	X1825006-12	PHLP HD SCR M47 X 6
6-13	X1825006-13	ADJUSTMENT KNOB BOLT M6-1
6-14	X1825006-14	HEX NUT M6-1
6-15	X1825006-15	L-BRACKET
6-16	X1825006-16	FLAT HD SCR M58 X 8
6-17	X1825006-17	CAP SCREW M6-1 X 16
6-18	X1825006-18	CAP SCREW M6-1 X 50
6-19	X1825006-19	TRUNNION SUPPORT BRACKET
6-20	X1825006-20	BUTTON HD CAP SCR M10-1.5 X 30
6-21	X1825006-21	RIGHT CLAMP PLATE
6-22	X1825006-22	BALL BEARING 6000ZZ
6-23	X1825006-23	FLAT WASHER 10MM
6-24	X1825006-24	LEFT CLAMP PLATE
6-25	X1825006-25	ADJUSTMENT BLOCK
6-26	X1825006-26	LOCK WASHER 8MM
6-27	X1825006-27	CAP SCREW M58 X 6
6-28	X1825006-28	LOCK WASHER 8MM
6-29	X1825006-29	LOCK WASHER 10MM
24	X1825024	LOCK WASHER 8MM
25	X1825025	CAP SCREW M8-1.25 X 20
31	X1825031	TABLE TILT HANDWHEEL
36	X1825036	CAP SCREW M6-1 X 25
45	X1825045	FENDER WASHER 8MM
49	X1825049	CAP SCREW M6-1 X 12
51	X1825051	TABLE TILT BRACKET ASSEMBLY
51-1	X1825051-1	SQUARE TUBE
51-2	X1825051-2	GUIDE BRACKET
51-3	X1825051-3	WORM SHAFT
51-4	X1825051-4	HEX NUT M16-1.5
51-5	X1825051-5	BUSHING
51-6	X1825051-6	LOCK COLLAR 22 X 10 X 10MM
51-7	X1825051-7	SET SCREW M58 X 5
51-8	X1825051-8	HEX NUT M58
51-9	X1825051-9	LOCK WASHER 8MM
51-10	X1825051-10	CAP SCREW M8-1.25 X 16
51-11	X1825051-11	FLANGE SCREW M58 X 10
51-12	X1825051-12	PINION GEAR COVER
51-13	X1825051-13	BRACKET COVER
51-14	X1825051-14	PINION GEAR STEP BOLT

REF	PART #	DESCRIPTION
51-15	X1825051-15	FLAT HD SCR M47 X 8
51-16	X1825051-16	RACK
51-17	X1825051-17	PINION GEAR 15T
51-18	X1825051-18	PHLP HD SCR M47 X 10
51-19	X1825051-19	HEX NUT M47
51-20	X1825051-20	FIXED PLATE
103	X1825103	LOCK WASHER 6MM
116	X1825116	FLAT WASHER 6MM
117	X1825117	LOCK NUT M8-1.25
118	X1825118	SLIDING PLATE
120	X1825120	HEX BOLT M8-1.25 X 20
121	X1825121	TRUNNION PLATE
122	X1825122	CAP SCREW M8-1.25 X 55
125	X1825125	FENCE SET ASSEMBLY
125-1	X1825125-1	FRONT RAIL 720MM
125-2	X1825125-2	FENCE BASE
125-3	X1825125-3	ALIGNMENT ROD
125-4	X1825125-4	LOCK ROD
125-5	X1825125-5	LOCK PLATE
125-6	X1825125-6	LOCK HANDLE M8-1.25 X 44
125-7	X1825125-7	FENCE 640MM
125-8	X1825125-8	FLAT WASHER 8MM
125-9	X1825125-9	LOCK LEVER
125-10	X1825125-10	RAIL PAD M6-1 X 20
125-11	X1825125-11	SCALE WINDOW
125-12	X1825125-12	CAP SCREW M6-1 X 25
125-13	X1825125-13	LOCK WEDGE
125-14	X1825125-14	REAR RAIL 710MM
125-15	X1825125-15	HEX NUT M8-1.25
125-16	X1825125-16	FLANGE SCREW M47 X 6
125-17	X1825125-17	FRONT RAIL END PLATE
125-18	X1825125-18	GUIDE PLATE
125-19	X1825125-19	REAR RAIL END PLUG
125-20	X1825125-20	TAP SCREW M3.5 X 8
125-21	X1825125-21	SCALE 21-1/2"
125-22	X1825125-22	HEX NUT M6-1
125-23	X1825125-23	LOCK WASHER 6MM
125-24	X1825125-24	CAP SCREW M6-1 X 16
	X1825125-25	HEX BOLT M6-1 X 20
	X1825125-26	FLANGE BOLT M47 X 8
	X1825125-27	FLAT WASHER 6MM
	X1825125-28	RESAW FENCE 640MM ALUMINUM
	X1825125-29	FENCE BASE PLATE
	X1825125-30	RESAW FENCE END PLATE
126	X1825126	TABLE 27 X 19"
127	X1825127	TABLE INSERT
128	X1825128	TABLE PIN
154	X1825154	MITER GAUGE ASSEMBLY
	X1825176	CAP SCREW M10-1.5 X 35
176 177	X1825176 X1825177	CAP SCREW M10-1.5 X 35 LOCK WASHER 10MM



Blade Guides

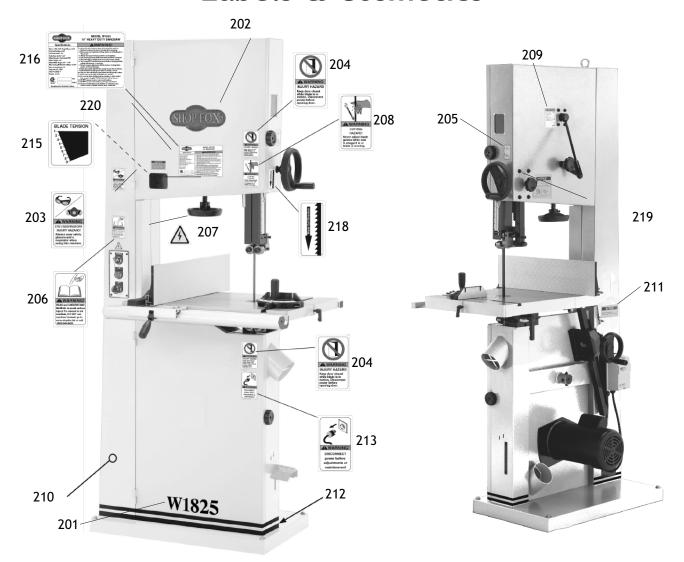


REF	PART #	DESCRIPTION
9	X1825009	UPPER GUIDE POST ASSEMBLY
9-1	X1825009-1	SET SCREW M58 X 5
9-2	X1825009-2	CAP SCREW M6-1 X 16
9-3	X1825009-3	PHLP HD SCR M47 X 10
9-4	X1825009-4	HEX NUT M47
9-5	X1825009-5	RACK
9-6	X1825009-6	GUIDE POST
9-7	X1825009-7	LOCK COLLAR
9-8	X1825009-8	BUSHING
9-9	X1825009-9	LOCK WASHER 8MM
9-10	X1825009-10	GUIDE POST BRACKET
9-11	X1825009-11	WORM SHAFT
9-12	X1825009-12	FIXED PLATE
9-13	X1825009-13	GEAR 15T
9-14	X1825009-14	GEAR STEP BOLT
9-15	X1825009-15	COVER PLATE
9-16	X1825009-16	CAP SCREW M8-1.25 X 16
9-17	X1825009-17	FLAT HD SCR M47 X 8
9-18	X1825009-18	HEX NUT M16-1.5
9-19	X1825009-19	BRACKET SET SCREW PLASTIC
129	X1825129	CAP SCREW M58 X 10
130	X1825130	FLAT WASHER 5MM
131	X1825131	GUIDE POST COVER
132	X1825132	STEP SCREW
133	X1825133	SLIDING COVER
134	X1825134	FLAT WASHER FIBER

REF	PART #	DESCRIPTION
143	X1825143	GUIDE POST HANDWHEEL
144	X1825144	CAP SCREW M6-1 X 20
152	X1825152	UPPER BLADE GUIDE ASSEMBLY
152-1	X1825152-1	CAP SCREW M6-1 X 16
152-2	X1825152-2	GUIDE POST CONNECTOR
152-3	X1825152-3	SET SCREW M6-1 X 10
152-4	X1825152-4	BRACKET ROD
152-5	X1825152-5	UPPER BLADE GUIDE BRACKET
152-6	X1825152-6	BIAS SHAFT
152-7	X1825152-7	EXT RETAINING RING 15MM
152-8	X1825152-8	BALL BEARING 6202ZZ
152-9	X1825152-9	BEARING BUSHING
152-10	X1825152-10	CAP SCREW M6-1 X 35
152-11	X1825152-11	ADJUSTMENT ROD
153	X1825153	LOWER BLADE GUIDE ASSEMBLY
153-5	X1825153-5	GUIDE BRACKET CONNECTOR
153-6	X1825153-6	CAP SCREW M6-1 X 16
153-7	X1825153-7	BIAS SHAFT
153-8	X1825153-8	EXT RETAINING RING 15MM
153-9	X1825153-9	BALL BEARING 6202ZZ
153-10	X1825153-10	BEARING BUSHING
153-11	X1825153-11	CAP SCREW M6-1 X 35
179	X1825179	BUTTON HD CAP SCR M8-1.25 X 30
180	X1825180	LOCK WASHER 8MM
181	X1825181	FLAT WASHER 8MM



Labels & Cosmetics



RFF	PART #	DESCRIPTION
I/LI	FAILI #	DESCINIT HON

201	X1825201	MODEL NUMBER LABEL
202	X1825202	SHOP FOX NAMEPLATE LARGE
203	X1825203	GLASSES/RESPIRATOR LABEL
204	X1825204	OPEN DOOR HAZARD LABEL
205	X1825205	SCALE DIRECTIONS LABEL
206	X1825206	READ MANUAL LABEL
207	X1825207	ELECTRICITY LABEL
208	X1825208	BLADE HAZARD LABEL
209	X1825209	BLADE MOVING/ADJUSTING LABEL

REF PART # DESCRIPTION

210	X1825210	TOUCH-UP PAINT, SHOP FOX WHITE
211	X1825211	TABLE LOCK LABEL
212	X1825212	WOODSTOCK STRIPE LABEL
213	X1825213	DISCONNECT BANDSAW LABEL
215	X1825215	BLADE TENSION LABEL
216	X1825216	MACHINE ID LABEL
218	X1825218	BLADE DIRECTION LABEL
219	X1825219	LOOSEN LOCK KNOB LABEL
220	X1825220	ADJUSTING BLADE TENSION LABEL

AWARNING

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

Stre	et			
City	'	State	Zip	
Pho	ne #	Email	Invoice #	
Mod	lel #Serial #	Dealer Name	Purchase Date	
deve	elop better products and serv	ices. Of course, all information is	sed for marketing purposes to help us strictly confidential.	
1.	How did you learn about uAdvertisementMail Order Catalog	Friend	Local Store Other:	
2.		woodworker/metalworker? 2-8 Years 8-2	20 Years20+ Years	
3.	How many of your machine0-2		10+	
4.	Do you think your machine	represents a good value?	Yes No	
5.	Would you recommend Sho	op Fox products to a friend? _	Yes No	
6.	What is your age group?20-2950-59	30-39 60-69	40-49 70+	
7.	What is your annual house\$20,000-\$29,000\$50,000-\$59,000	hold income? \$30,000-\$39,000 \$60,000-\$69,000	\$40,000-\$49,000 \$70,000+	
3.	Which of the following ma	gazines do you subscribe to?		
	Cabinet Maker Family Handyman Hand Loader Handy Home Shop Machinist Journal of Light Cont. Live Steam Model Airplane News Modeltec Old House Journal	Popular Mechanics Popular Science Popular Woodworkin Practical Homeowne Precision Shooter Projects in Metal RC Modeler Rifle Shop Notes Shotgun News		
9.	Comments:			

FOLD ALONG DOTTED LINE			
			Place Stamp Here
	SHOP FOX		
	WOODSTOCK INTERNATIONAL INC. P.O. BOX 2309 BELLINGHAM, WA 98227-2309		
	llaladaaladaalallaadada	.11.111.1111.1.1.1.1	ll

FOLD ALONG DOTTED LINE

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.

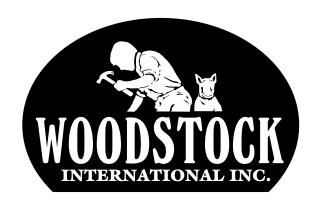
Woodstock International, Inc. will repair, replace, or arrange for a dealer refund, at its expense and option, the Shop Fox machine or machine part proven to be defective for its designed and intended use, provided that the original owner returns the product prepaid to an authorized warranty or repair 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 committed to continuously improving the quality of our products, and reserve the right to change specifications at any time.

To register the warranty, go to https://www.woodstockint.com/warranty, or scan the QR code below. You will be directed to the Warranty Registration page on www.woodstockint.com. Enter all applicable production information.





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