WOODSTOCK

SHOP FOX®

INTERNATIONAL

MODEL W1715
4" X 6" Metal Cutting Bandsaw

OWNER'S MANUAL

(FOR MODELS MANUFACTURED SINCE 2/19)

Phone: 1-360-734-3482 • On-Line Technical Support: tech-support@woodstockint.com

#5435JT **Printed in China**

⚠ WARNING!

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

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

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

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

⚠ WARNING!

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

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

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

Contents

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

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 Ext. 2 or send e-mail to: **techsupport@woodstockint.com**. 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.woodstockint.com/manuals**.
If you have comments about this manual, please contact us at:

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

MACHINE SPECIFICATIONS

MODEL W1715
3/4 HP METAL CUTTING BANDSAW

Product Dimensions

Weight..... 117 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 16 x 39 x 19 in.
Footprint (Length x Width)..... 13-3/4 x 19-3/4 in.

Shipping Dimensions

Type..... Cardboard Box
Content..... Machine
Weight..... 139 lbs.
Length x Width x Height..... 39 x 13 x 15 in.

Electrical

Power Requirement..... 110V, Single-Phase, 60 Hz
Prewired Voltage..... 110V
Full-Load Current Rating..... 5A
Minimum Circuit Size..... 15A
Connection Type..... Cord & Plug
Power Cord Included..... Yes
Power Cord Length..... 6-1/2 ft.
Power Cord Gauge..... 18 AWG
Plug Included..... Yes
Included Plug Type..... 5-15
Switch Type..... Sealed Toggle Switch w/Automatic Shut-Off

Motors

Main

Horsepower..... 3/4 HP
Phase..... Single-Phase
Amps..... 5A
Speed..... 1725 RPM
Type..... TEFC Capacitor-Start Induction
Power Transfer ..... V-Belt Drive
Bearings..... Shielded & Permanently Lubricated
Centrifugal Switch/Contacts Type..... N/A

Main Specifications

Operation Info

Blade Speeds..... 78, 108, 180 FPM
Std. Blade Length..... 64-1/2 in.
Blade Size Range..... 1/2 in.

Cutting Capacities

Cutting Height	6 in.
Cutting Capacity Left of Blade	6 in.
Angle Cuts	0 - 60 deg.
Vise Jaw Depth	6-1/2 in.
Vise Jaw Height	3-1/4 in.
Max. Capacity Rectangular Height at 90 Deg	4-1/2 in.
Max. Capacity Rectangular Width at 90 Deg	6 in.
Max. Capacity Round at 90 Deg	4-1/2 in.
Max. Capacity Rectangular Height at 45 Deg	4-1/2 in.
Max. Capacity Rectangular Width at 45 Deg	3-1/2 in.
Max. Capacity Round at 45 Deg	3-1/2 in.
Max. Capacity Rectangular Height at 60 Deg	4-1/2 in.
Max. Capacity Rectangular Width at 60 Deg	5 in.
Max. Capacity Round at 60 Deg	4-1/2 in.

Construction

Table	Cast Iron
Upper Wheel	Cast Iron
Lower Wheel	Cast Iron
Body	Aluminum Cast
Base	Cast Iron
Stand	Pre-Formed Steel
Wheel Cover	Pre-Formed Steel
Paint Type/Finish	Urethane Hammertone

Other

Wheel Size	7-3/8 in.
Blade Guides Upper	Ball Bearing
Blade Guides Lower	Ball Bearing
Mobile Base	Built-In

Table Info

Table Size Length	10-1/4 in.
Table Size Width	6-3/4 in.
Table Size Thickness	1-1/4 in.
Floor To Cutting Area Height	33 in.

Other

Country of Origin	China
Warranty	2 Years
Approximate Assembly & Setup Time	30 Minutes
Serial Number Location	ID on Body Frame
ISO 9001 Factory	No
Certified by a Nationally Recognized Testing Laboratory (NRTL)	No

Features

Horizontal and Vertical Operation
Automatic Shut-Off
3/4 HP Motor
Work Stop

Controls & Features

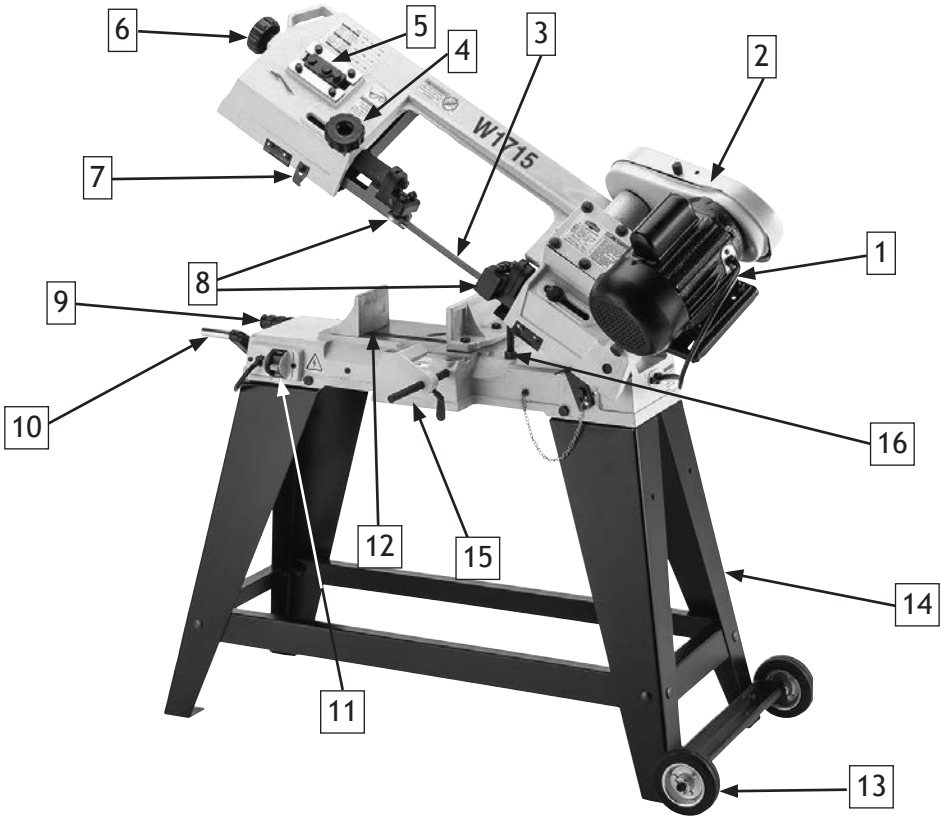


Figure 1. Machine Identification.

1. Motor
2. Pulley Cover
3. Blade
4. Blade Guard Adjustment Knob
5. Tilting Tracking Mechanism
6. Blade Tension Knob
7. Auto Off Tab
8. Blade Guide Bearing Assemblies
9. Feed Adjustment Handle
10. Vise Crank
11. ON/OFF Switch
12. Vise Jaws
13. Stand Wheels
14. Stand
15. Work Stop
16. Horizontal Stop

SAFETY

For Your Own Safety, Read Manual Before Operating Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures—this responsibility is ultimately up to the operator!

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

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

⚠CAUTION **Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury.**

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

Standard Machinery Safety Instructions

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

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

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

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

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

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

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

WEARING PROPER APPAREL. Do not wear clothing, apparel, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips, which could cause loss of workpiece control.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

EXPERIENCING DIFFICULTIES. If at any time you experience difficulties performing the intended operation, stop using the machine! Contact Technical Support at (360) 734-3482.

Additional Safety Instructions for Metal Cutting Bandsaws

⚠WARNING

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

⚠WARNING

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

Serious injury or death can occur from getting fingers, hair, or clothing entangled in rotating or moving parts or making direct contact with the moving blade. To minimize risk of injury, anyone operating this machine MUST completely heed hazards and warnings below.

BLADE CONDITION. Do not operate with dull, cracked, or badly worn blade. Inspect blades for cracks and missing teeth before each use.

HAND PLACEMENT. Never position hands or fingers in line with the cut or under bandsaw headstock while lowering or operating. Hands could be cut or crushed.

ENTANGLEMENT HAZARDS. Do not operate this saw without blade guard in place. Loose clothing, jewelry, long hair and work gloves can be drawn into working parts.

BLADE REPLACEMENT. When replacing blades, disconnect the machine from power, wear gloves to protect hands and safety glasses to protect eyes.

WORKPIECE HANDLING. Always properly support workpiece with table, vise, or some type of support fixture. Flag long pieces to avoid a tripping hazard. Never hold the workpiece with your hands during a cut.

UNSTABLE WORKPIECES. Avoid cutting workpieces that cannot be properly supported or clamped in a vise or jig, because they can unexpectedly move while cutting and draw the operator's hands into the blade causing serious personal injury. Examples are chains, cables, round or oblong-shaped workpieces, and those with internal or built-in moving or rotating parts, etc.

FIRE HAZARD. Use EXTREME CAUTION if cutting magnesium. Using the wrong cutting fluid could lead to chip fire and possible explosion.

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

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

ELECTRICAL

Circuit Requirements

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

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

Full-Load Current Rating

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

Full-Load Current Rating at 110V .....5 Amps

Circuit Requirements for 110V

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

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

⚠WARNING

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

⚠WARNING

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

NOTICE

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

Grounding Requirements

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

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

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

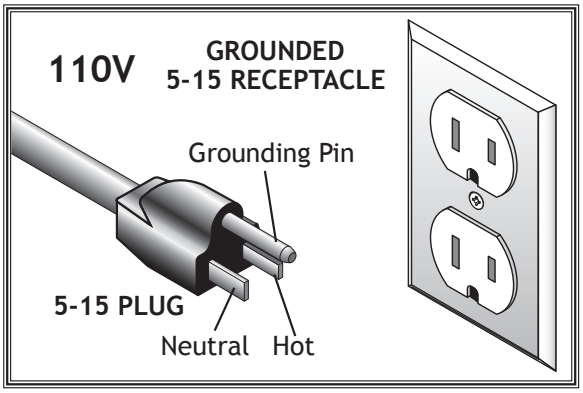
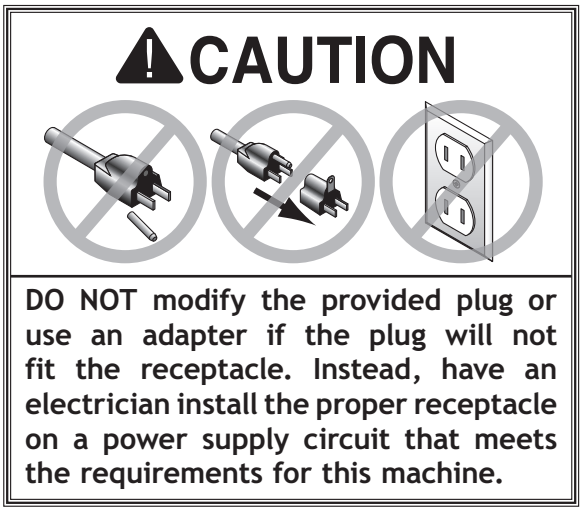


Figure 2. NEMA 5-15 plug & receptacle.



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

For 110V Connection

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

Extension Cords

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

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

Minimum Gauge Size at 110V ..... 14 AWG
Maximum Length (Shorter is Better) ..... 50 ft.

SETUP

Unpacking

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

Items Needed for Setup

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

Description	Qty
• Safety Glasses for Each Person	1
• Open-End Wrench 10mm	1
• Open-End Wrench 14mm	1
• Sawhorses	2
• Assistant for Lifting	1
• Cleaning Supplies (**Page 13**)	1
• Pliers	1
• Straightedge 12" Minimum	1

⚠WARNING

This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!

⚠WARNING

Wear safety glasses during entire setup process!

⚠WARNING

USE helpers or power lifting equipment to lift this machine. Otherwise, serious personal injury may occur.

⚠WARNING

SUFFOCATION HAZARD!

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

Inventory

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

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

Inventory (Figure 3)	**Qty**
A. Bandsaw (not shown)	1
B. Stand Legs	2
C. Wheel Mounting Bracket	1
D. Axle	4
E. Table Support	1
F. Table	1
G. Long Braces	2
H. Short Braces	2
I. Wheels	2
J. Pulley Cover	1
K. V-Belt	1
L. Pulleys with Keys	2
M. Work Stop	1
N. Work Stop Rod	1
O. Transport Handle	1

Hardware Bag (not shown)

- Hex Wrench 4mm (Work Stop) 1
- Hex Bolts M8-1.25 x 25 (Saw to Stand) 8
- Hex Nuts M8-1.25 (Saw to Stand) 8
- Flat Washers 8mm (Saw to Stand) 8
- Lock Washers 8mm (Saw to Stand) 8
- Carriage Bolts M8-1.25 x 16 (Stand) 8
- Flat Washers 8mm (Stand) 8
- Lock Washers 8mm (Stand) 8
- Hex Nuts M8-1.25 (Stand) 8
- Hex Bolts M6-1 x 12 (Bracket/Legs) 2
- Flat Washers 6mm (Bracket/Legs) 4
- Lock Washers 6mm (Bracket/Legs) 2
- Hex Nuts M6-1 (Bracket/Legs) 2
- Cotter Pins M4 x 30 (Axle & Handle) 4
- Flat Head Screw M6-1 x 12 (Table) 1
- Fender Washer 6mm 1
- Hex Nut M6-1 1

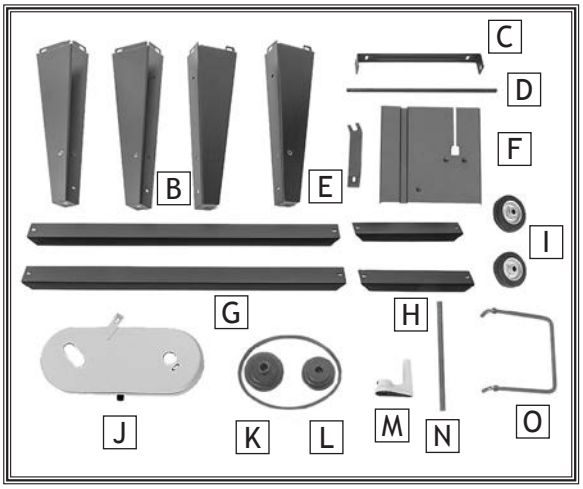


Figure 3. The loose parts shipped with the bandsaw.

Cleaning Machine

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

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

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

To remove rust preventative coating, do these steps:

1. DISCONNECT MACHINE FROM POWER!

2. Put on safety glasses and disposable gloves.

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

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

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

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

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

⚠WARNING

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

NOTICE

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

Site Considerations

Weight Load

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

Space Allocation

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

⚠CAUTION

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

Physical Environment

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

Electrical Installation

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

Lighting

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

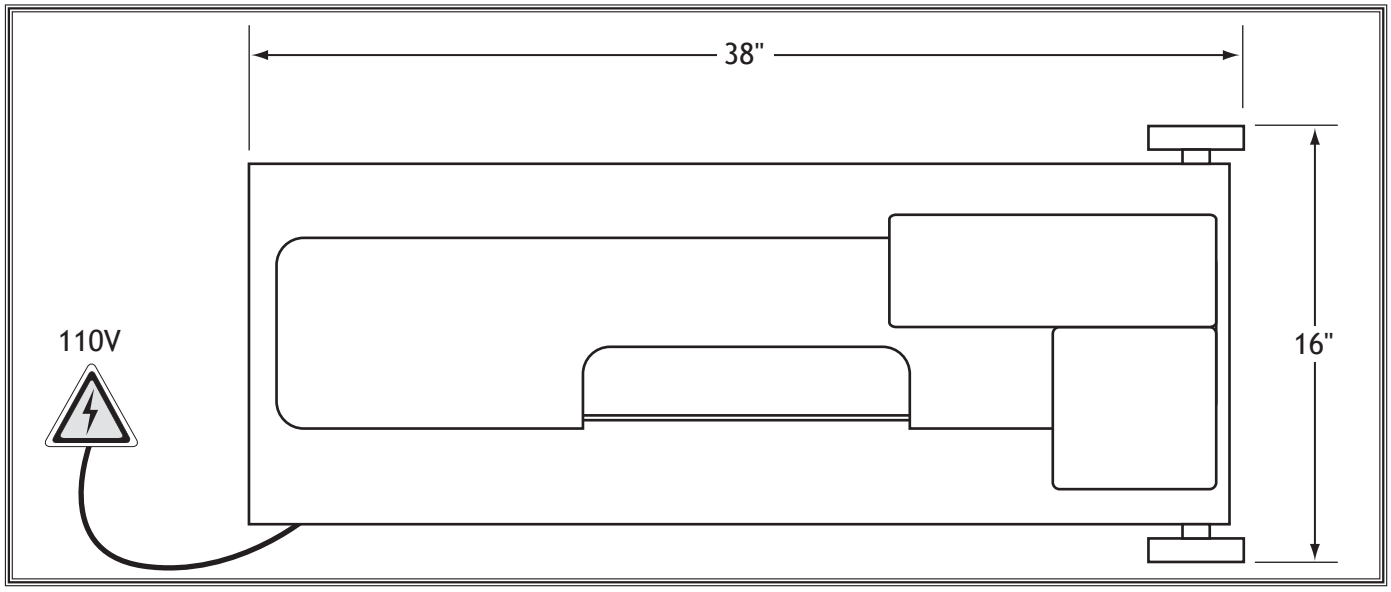


Figure 4. Minimum working clearances.

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 any 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**.

Although the main components of the SHOP FOX® W1715 are assembled at the factory, some assembly is required. The following series of instructions are the recommended sequence best suited for the machine assembly.

To assemble the bandsaw, do these steps:

1. Install head-locking pin (refer to **Page 22**).

2. With help of an assistant, lift bandsaw onto a pair of closely spaced sawhorses or other suitable support (see **Figure 5**).

3. Attach legs to bandsaw with (8) M8-1.25 x 25 hex bolts, (8) 8mm flat washers, (8) 8mm lock washers, and (8) M8-1.25 hex nuts (see **Figure 5**).

   Note: *At this time, tighten with a 14mm wrench or socket just enough to secure the parts. Final tightening will take place when the stand is fully assembled.*

4. Attach short brace to legs with (4) M8-1.25 x 16 carriage bolts, (4) 8mm flat washers, (4) 8mm lock washers, and (4) M8-1.25 hex nuts (see **Figure 6**).

5. Remove bandsaw from sawhorses and attach long braces to legs with (4) M8-1.25 x 16 carriage bolts, (4) 8mm flat washers, (4) 8mm lock washers, and (4) M8-1.25 hex nuts (see **Figure 7**).

6. Attach wheel-mounting bracket to bottom of two legs with (2) M6-1 x 12 hex bolts, (4) 6mm flat washers, (2) 6mm lock washers, and (2) M6-1 hex nuts, as shown in **Figure 8**.

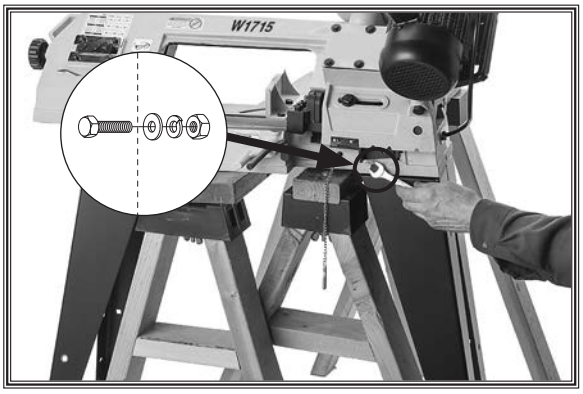


Figure 5. Attaching legs to bandsaw.

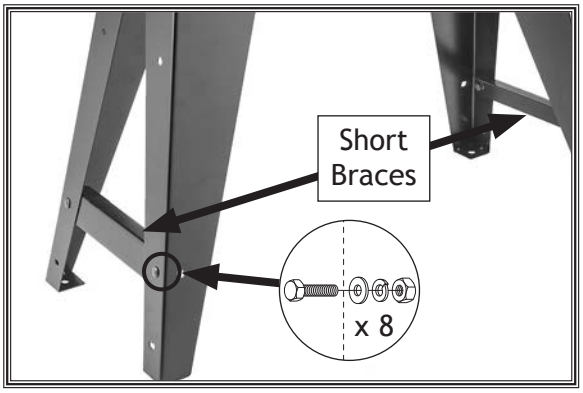


Figure 6. Short braces attached to legs.

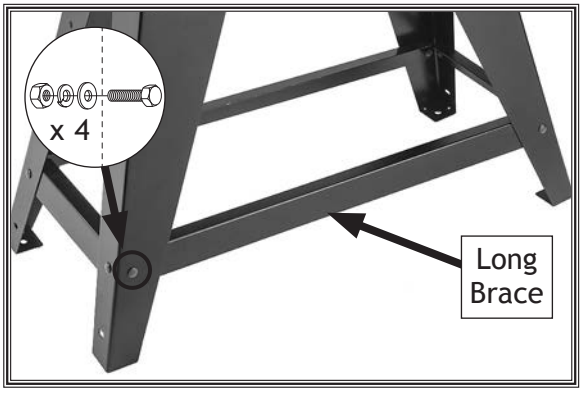


Figure 7. Long braces attached to legs.

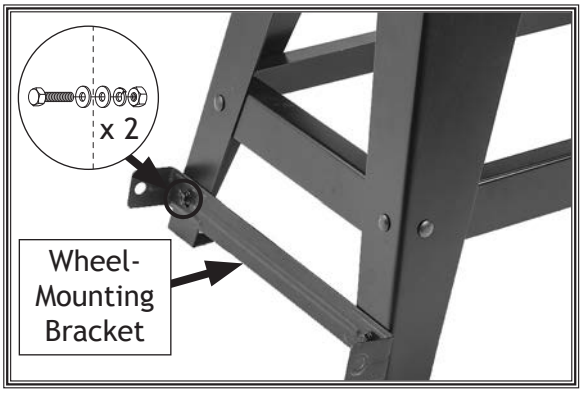


Figure 8. Bracket attached to legs.

7. Slide axle through holes in wheel-mounting bracket (see **Figure 9**).

8. Slide wheels onto axle on outside of mounting brackets, and secure them with (2) cotter pins (see **Figure 9**).

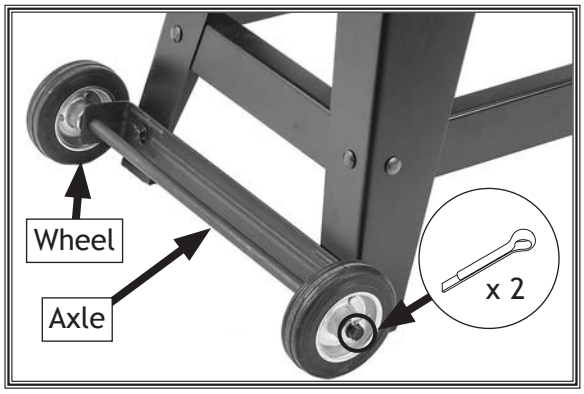


Figure 9. Wheels attached to axle.

9. On opposite side of stand, insert handle into holes and secure with (2) cotter pins (see **Figure 10**).

10. Check to see if bandsaw is relatively level, then final tighten all bolts and nuts.

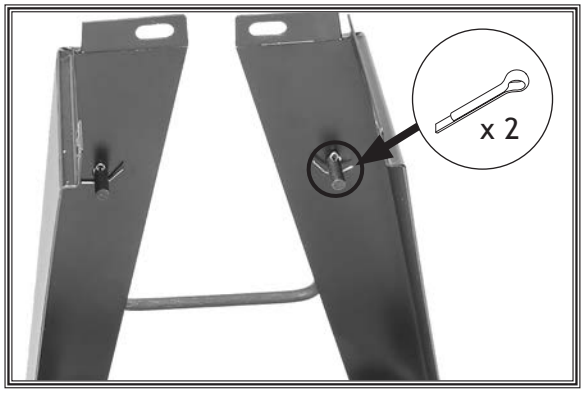


Figure 10. Cotter pins installed in handle.

11. Place pulley cover over motor and gear shafts, and secure it with pre-installed M6-1 x 12 Phillips head screws and 12mm flat washers, as shown in **Figure 11**.

12. Open pulley cover, then insert keys into the slots on pulley shafts.

Figure 11. Installing the pulley cover.

13. Slide the large-diameter motor pulley onto the motor shaft (see **Figure 12**).

14. Install worm gear pulley with small-diameter wheel on shaft closest to gear box.

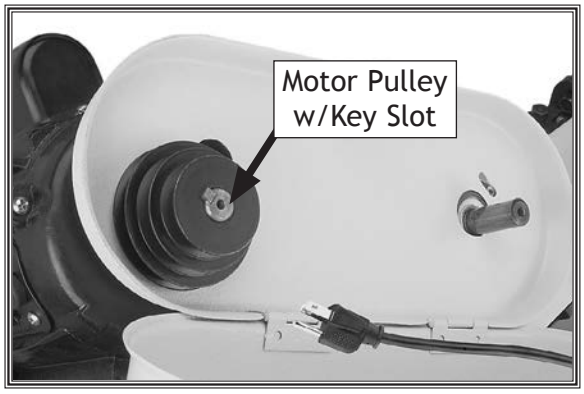


Figure 12. Motor pulley installed.

15. Use a straightedge to check alignment of the pulley wheels, as shown in **Figure 13**, and adjust them as needed.

16. When the pulley wheels are aligned, tighten the set screws on both pulleys.

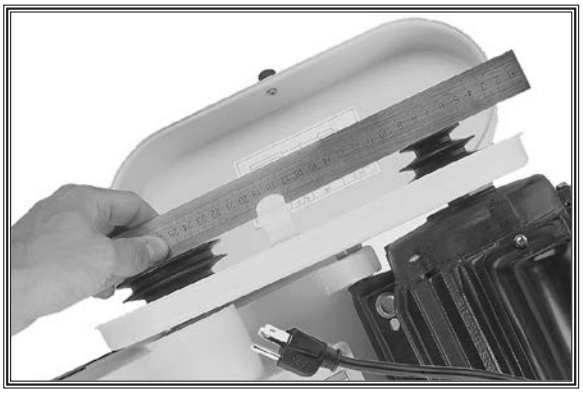


Figure 13. Checking the pulley alignment.

17. Unthread motor lock bolt, then pivot motor up and slide the V-belt into pulley grooves, as shown in **Figure 14**.

18. Release motor, letting its weight tension V-belt, then thread V-belt tension hex bolt against the side of bandsaw.

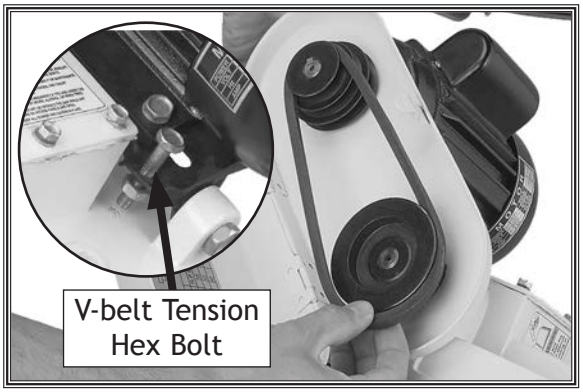


Figure 14. Installing the V-belt.

19. Install work stop shaft into side of bandsaw, then lock it in place by tightening the set screw, as shown in **Figure 15**.

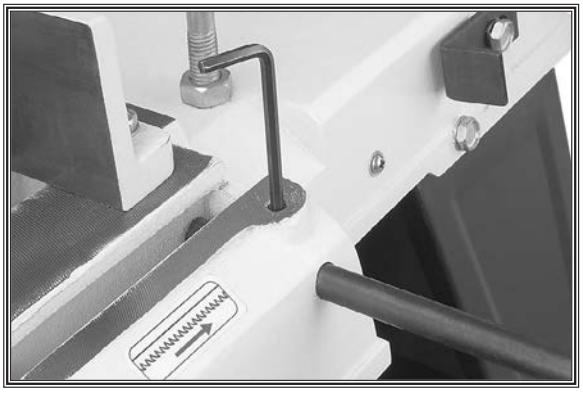


Figure 15. Installing the work stop shaft.

20. Slide work stop onto end of the shaft and lock it into position with locking lever, as shown in **Figure 16**.

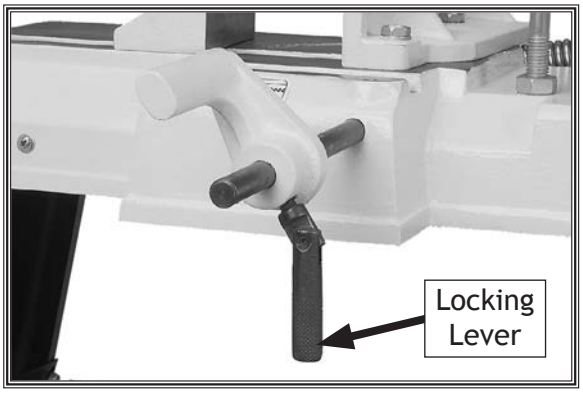


Figure 16. Work stop locking lever installed.

Test Run

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

If you find an unusual problem during the test run, immediately stop the machine, disconnect it from power, and fix the problem BEFORE operating the machine again. The **Troubleshooting** table in the **SERVICE** section of this manual can help.

To test run the machine, do these steps:

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

   The motor should run smoothly and without unusual noises.
4. Remove key from toggle switch (see example).
5. Try to start machine with the switch.

   Machine should NOT start. If it *does* start, the switch disabling feature is not functioning properly and the switch must be replaced.

⚠WARNING

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

⚠WARNING

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

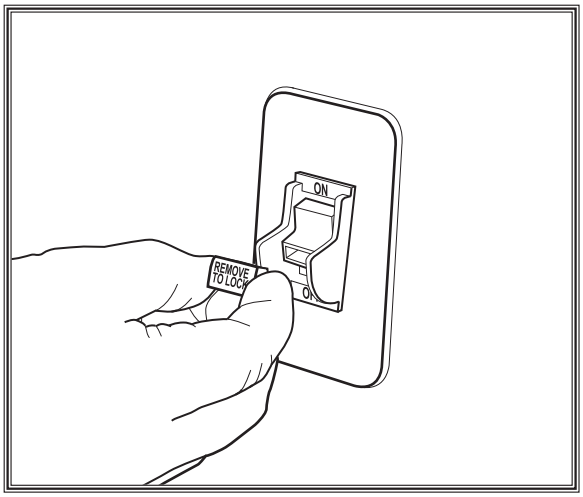


Figure 17. Removing switch key from toggle switch.

Recommended Adjustments

The adjustments listed below have been performed at the factory. However, because of the many variables involved with shipping, we recommend that you at least verify the following adjustments to ensure the adjustments remain unchanged.

Step-by-step instructions on verifying these adjustments can be found in the **Service** section.

Factory adjustments that should be verified:

1. Blade Tracking **(Page 32).**
2. Squaring the Blade **(Page 33).**
3. Blade Guide Bearings **(Page 34).**

OPERATIONS

General

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

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

The overview below provides the novice machine operator with a basic understanding of how the machine is used during operation, so the machine controls/components discussed later in this manual are easier to understand. Due to its generic nature, this overview is **NOT** intended to be an instructional guide.

WARNING

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

WARNING

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

Operation Overview

To complete typical operation, operator does following:

1. Prepares workpiece for cutting.
2. Raises the head.
3. Clamps workpiece in vise and adjusts vise angle.
4. Checks/adjusts V-belt position on pulleys to ensure correct cutting speed for workpiece.
5. Adjusts the spring tension for the correct feed rate.
6. Ensures workpiece/bandsaw are stable and there are no obstructions.
7. Wears safety glasses.
8. Starts machine, waits for blade to reach full speed.
9. Slowly lowers head until blade makes contact with workpiece, then releases head so that spring-controlled feed rate continues to lower blade into workpiece until cut is finished.
10. Stops machine, raises head, and removes workpiece.

NOTICE

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

WARNING

Electrocution Hazard. The motor and switch on this bandsaw are not protected against liquids. Do not use water-based cutting fluids with this bandsaw.

Operation Tips

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

Horizontal Cutting

- Use the work stop to quickly and accurately cut multiple pieces of stock to the same length (see **Figure 18**).
- Clamp the material firmly in the vise jaws to ensure a straight cut through the material.
- Allow the blade reach full speed before engaging the workpiece. Never start a cut with the blade in contact with the workpiece (see **Figure 19**).
- Chips should be curled and silvery. If the chips are thin and powder like, increase your feed rate (refer to the **Metal Chip Inspection Chart** on **Page 28**).
- If the chips are burned, reduce the blade speed.
- Wait until the blade has completely stopped before removing the workpiece from the vise, and avoid touching the cut end—it could be very hot!

Vertical Cutting

- Workpieces that cannot be properly supported or stabilized without a vise should not be cut in the vertical position. Examples are chains, cables, round or oblong-shaped workpieces, workpieces with internal or built-in moving or rotating parts, etc.
- Make sure that the vertical table assembly is securely fastened to the bandsaw frame so it will adequately support the workpiece.
- Always keep your fingers away from the blade and always hold the workpiece securely in your hand (see **Figure 20**).
- Adjust the blade guides as close as possible to the workpiece to minimize side-to-side blade movement.

NOTICE

Release the blade tension at the end of the day to prolong blade life.

Figure 18. Work stop and lever.

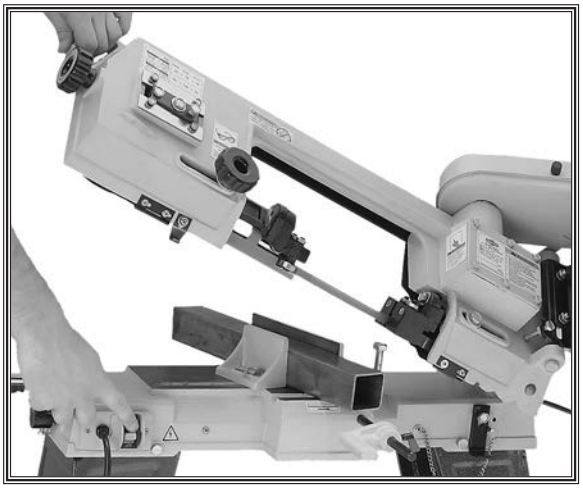


Figure 19. Proper bandsaw horizontal starting position.

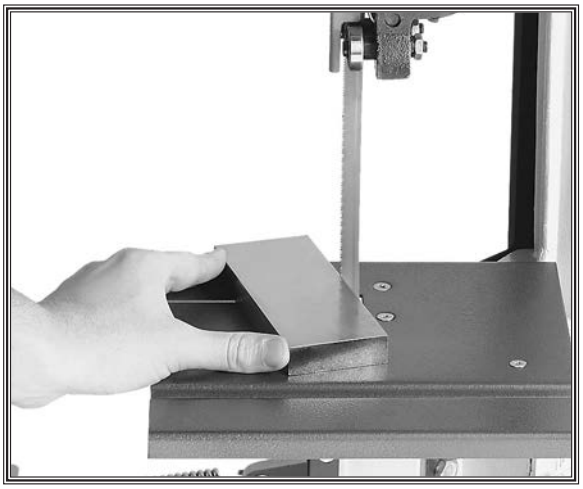


Figure 20. Proper bandsaw vertical starting position.

Vertical Operation

The Model W1715 can easily be set up for vertical cutting operations to make cuts that are not a straight cut through the entire workpiece, such as curves or pattern cuts.

To assemble the bandsaw for vertical cutting, do these steps:

1. DISCONNECT BANDSAW FROM POWER!

2. Remove the two flat head screws and the blade guide cover shown in **Figure 21**.

3. Install the table and replace the two screws removed in **Step 2**.

4. Install the table bracket with the pre-installed hex bolt, the M6-1 x 12 flat head screw, and the M6-1 hex nut, as shown in **Figure 22**.

5. Place a level on the table, as shown in **Figure 23**, then use the adjustment bolt shown in **Figure 24** to make the table level.

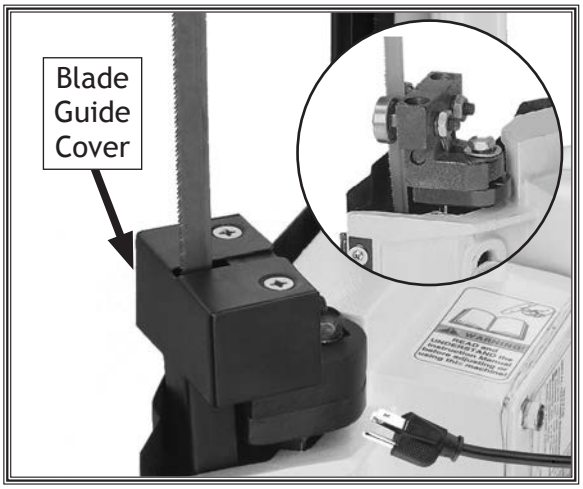


Figure 21. Blade guide cover.

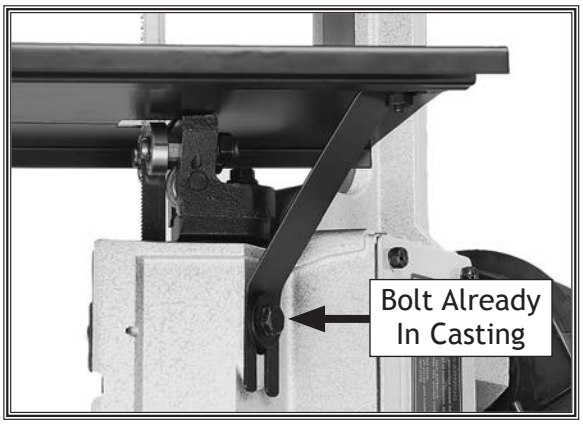


Figure 22. Table and table bracket installed.

Figure 23. Adjusting table with a level.

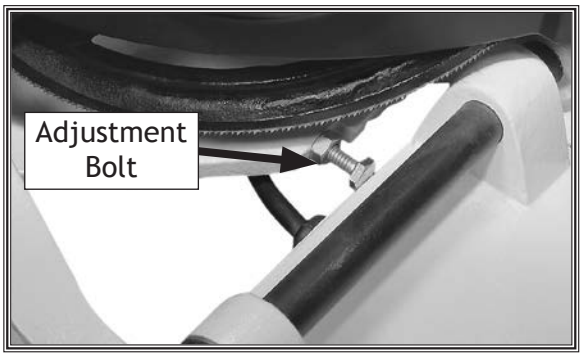


Figure 24. Table adjustment bolt.

6. Install the safety bracket and lock it in place with the pin shown in **Figure 25** to keep the saw from falling.

Note: *To ensure the safety bracket fits securely in the notch on the body frame, the safety bracket may need to be slightly "modified" with a hammer or other appropriate implement to fit securely.*

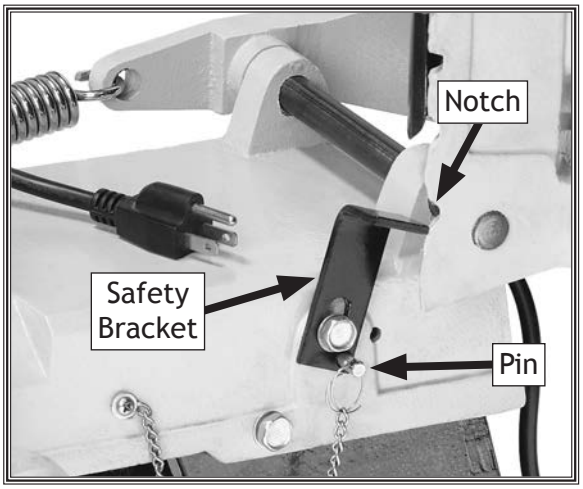


Figure 25. Safety bracket in position.

Head Locking Pin

⚠CAUTION

The head locking pin secures the head in the down, horizontal position. You MUST secure the head with the locking pin before moving the machine to prevent the head unexpectedly springing up, causing the machine to tip or fall. Otherwise, serious personal injury or property damage could occur.

The head locking pin safely secures the head in the down position. To ensure the head does not unexpectedly spring up and tip the bandsaw over, this locking pin must be properly inserted when the bandsaw is not in use or before moving it.

To use the head locking pin, do these steps:

1. DISCONNECT BANDSAW FROM POWER!

2. Fully lower the head down, then insert the locking pin through the holes in the head pivot arm and base, as shown in **Figure 26**.

3. Before connecting the machine to power, remove the locking pin.

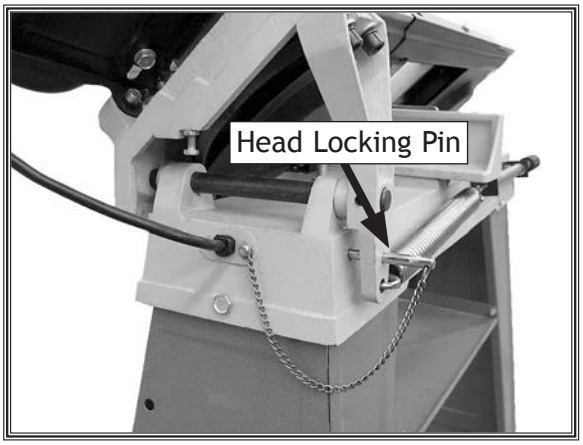


Figure 26. Head locking pin correctly installed.

Using the Vise

The vise is designed to secure the workpiece during horizontal cutting operations. Always use the vise when cutting with the bandsaw in the horizontal position.

Tools Needed **Qty**
Machinist's Square 1

To use the vise on your bandsaw, do these steps:

1. DISCONNECT BANDSAW FROM POWER!

2. Check the vise with a machinist's square to make sure the vise is perpendicular to the blade and reads 0˚ on the scale as shown in **Figure 27**.

3. When the vise is square to the blade, place the material to be cut between the vise jaws.

4. Turn the vise crank handle (see **Figure 28**) clockwise to firmly secure the workpiece in the vise jaws. The workpiece is now ready to cut.

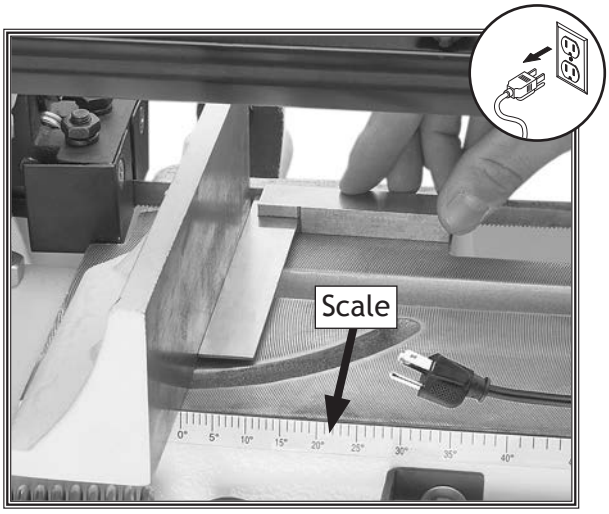


Figure 27. Using a machinist's square to adjust the vise perpendicular to the blade.

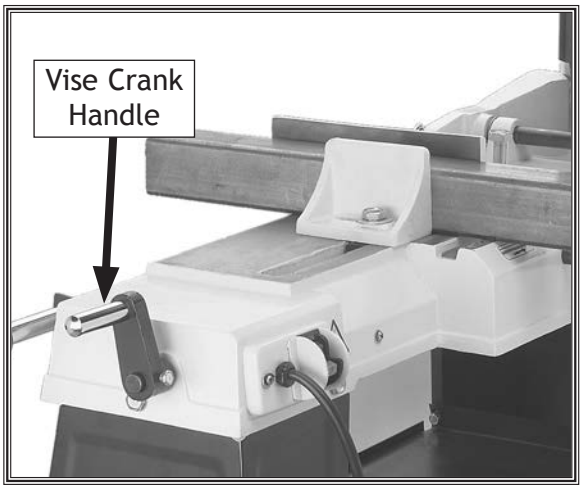


Figure 28. Vise crank handle.

Clamping Angles

The vise can hold workpieces for angle cuts ranging from 0˚ to 60˚.

Tools Needed **Qty**
Wrench or Socket 14mm.....1

To adjust the vise for angle cuts, do these steps:

1. DISCONNECT BANDSAW FROM POWER!

2. Loosen the hex bolts on the stationary vise jaw, as shown in **Figure 29**.

3. Rotate the sliding edge of the vise to the desired angle, indicated by the scale, and secure the bolts.

4. Place the workpiece between the jaws and clamp firmly.

   Note: *The vise jaw on the lead screw pivots freely to match the angle of the other jaw.*

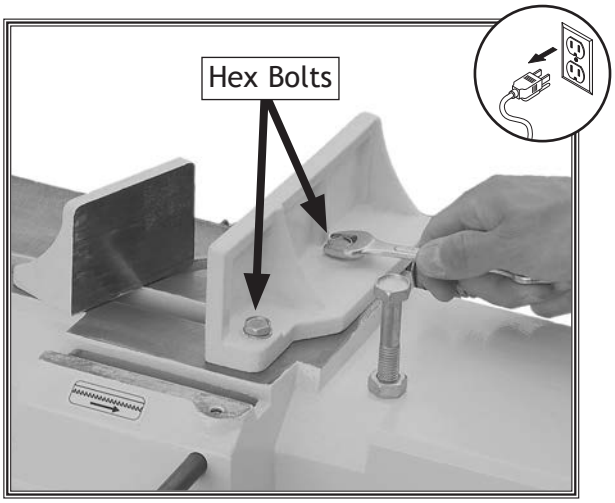


Figure 29. Loosening vise hex bolts.

Blade Guides

The blade guides should be as close to the workpiece as possible. This will help ensure straight cuts by keeping the blade from twisting and drifting off the cut line.

To adjust the blade guides, do these steps:

1. DISCONNECT BANDSAW FROM POWER!

2. Loosen the adjustment knob shown in **Figure 30** and slide the blade guide as close to the workpiece as possible, then re-tighten the knob.

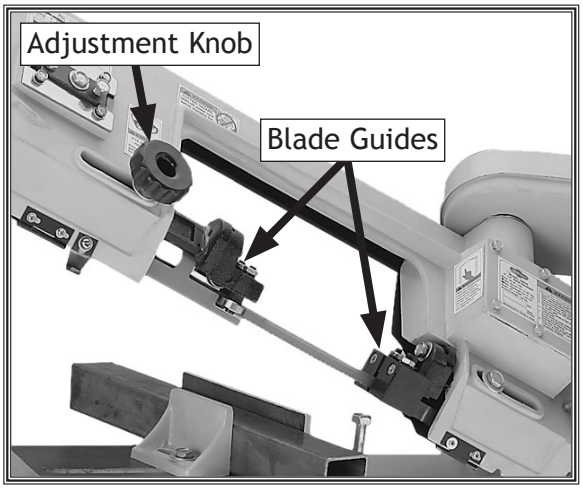


Figure 30. Blade guide adjustment knob.

Feed Rate

The feed rate is controlled by the spring and handle shown in **Figure 31**.

For Slower Feed Rate: Twist the handle clockwise to add tension to the spring.

For Faster Feed Rate: Twist the handle counterclockwise to remove tension from the spring.

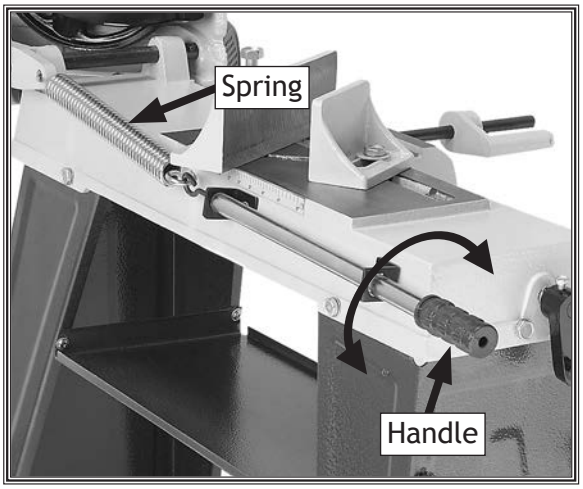


Figure 31. Feed rate spring and handle.

Blade Speed

The bandsaw is capable of operating at 78, 108, or 180 FPM. The speed can easily be adjusted by changing the V-belt placement. **Figure 32** shows an illustration of each pulley to belt combination, and the following list provides the blade speeds in feet per minute.

Belt Position	Blade Speed
A	78 FPM
B	108 FPM
C	180 FPM

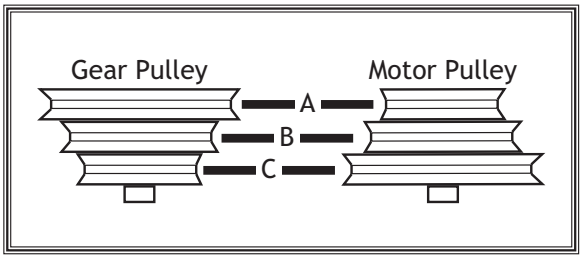


Figure 32. Pulley configurations.

To change the blade speeds, do these steps:

1. DISCONNECT BANDSAW FROM POWER!
2. Unthread the V-belt tension hex bolt to allow the motor to pivot (see **Figure 33**).
3. Raise the motor to relieve the belt tension and position the belt in the desired pulley alignment.
4. Release the motor and let the motor weight tension the belt.
5. Position the V-belt tension hex bolt back against the frame of the bandsaw.

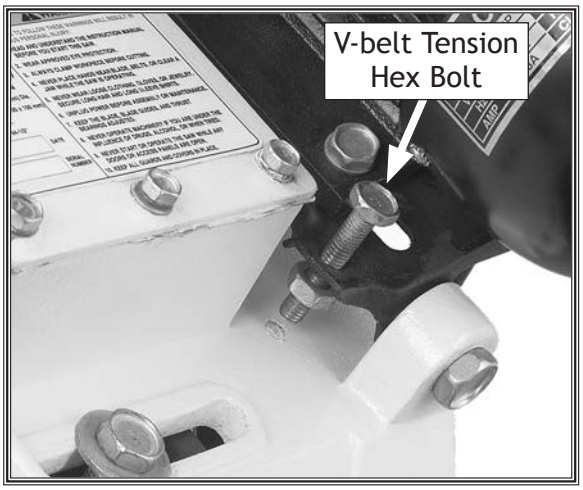


Figure 33. V-belt tension hex bolt.

Blade Terminology

Selecting the right blade for the cut requires a knowledge of various blade characteristics. Use the illustration in **Figure 34** and the following descriptions to better understand blade characteristics.

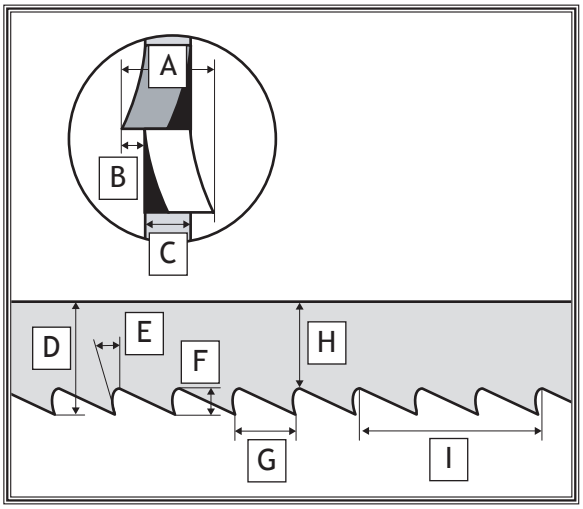


Figure 34. Bandsaw blade components.

A. Kerf: The width of the cut by the blade during cutting.

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

C. Gauge: The thickness of the blade.

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

E. Tooth Rake: The angle of the tooth 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 Selection

Blade Size

The Model W1715 accepts only 1/2" x 0.025 x 64 1/2" blades.

Tooth Pitch

Usually measured as TPI (Teeth Per Inch), tooth pitch determines the size/number of the teeth. More teeth per inch (fine pitch) will cut slower, but smoother; while fewer teeth per inch (coarse pitch) will cut rougher, but faster.

As a general rule, choose blades that will have at least three teeth in the material at all times. Use fine pitched blades on harder metals and coarse pitched blades on softer metals. When selecting blades, refer to **Figure 35** for recommended blade tooth (TPI) and speed (FPM) based on the workpiece material.

Material	TPI	FPM
Tool Steel Stainless Steel Bearing Bronze	24	78
Mild Steel Hard Brass Bronze	18	108
Soft Brass Aluminum Other Light Metals	14	180

Figure 35. Blade TPI and FPM chart.

Tooth Style

When selecting blades, another option to consider is the shape, gullet size, teeth set and teeth angle—otherwise known as "Tooth Style." Many blade manufacturers offer variations of the four basic styles shown in **Figure 36**.

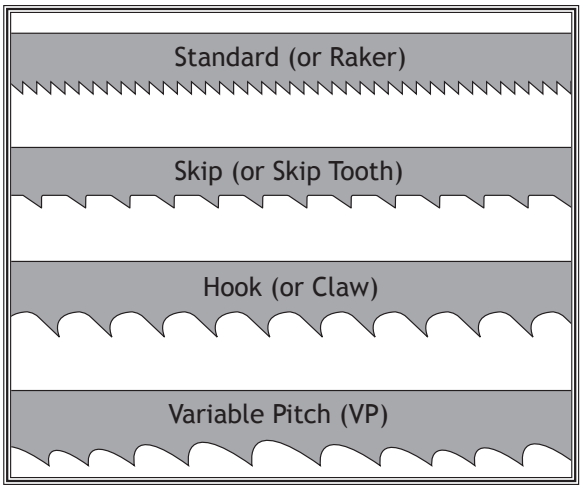


Figure 36. Bandsaw blade tooth styles.

Tooth Set

Three of the most common tooth sets are alternate, wavy, and raker (see **Figure 37**).

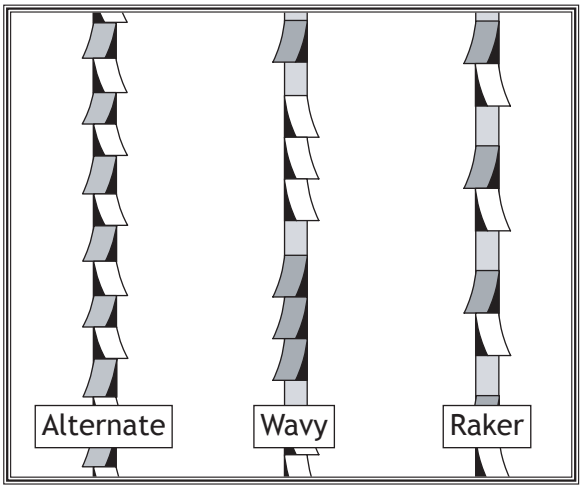


Figure 37. Bandsaw blade tooth sets.

Metal Chip Inspection Chart

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

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

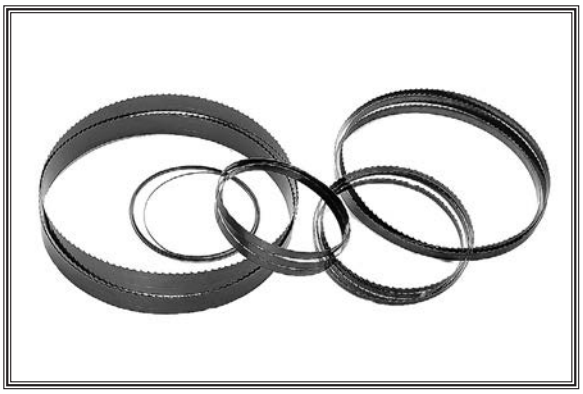
Figure 38. Metal chip inspection chart.

ACCESSORIES

Metal Cutting Bandsaw Accessories

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

Metal Cutting Bandsaw Blades
D4372—64-1/2" x 1/2" x 0.025" 6-10 TPI Variable Pitch
D4373—64-1/2" x 1/2" x 0.025" 8-12 TPI Variable Pitch
D4374—64-1/2" x 1/2" x 0.025" 10-14 TPI Variable Pitch
D4375—64-1/2" x 1/2" x 0.025" 14-18 TPI Variable Pitch
D4376—64-1/2" x 1/2" x 0.020" 20-24 TPI Variable Pitch



Model D2273 Single-Roller Stand
Large diameter ball bearing roller stand features smooth operation for a variety of processing and work support applications. Heavy pedestal base is stable and secure.

Model D2274 5-Roller Stand
For greater work stability and support, this 5 roller stand features large diameter, ball bearing rollers mounted on a sturdy adjustable pedestal base.

Model D2675 Safety Glasses Metal Frame
Exceeding ANSI Z87.1-1989 standards for impact resistance, these Safety Glasses offer outstanding eye protection and stylish good looks. Wrap-around side shields provide additional protection and a wide field of view.

MAINTENANCE

General

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

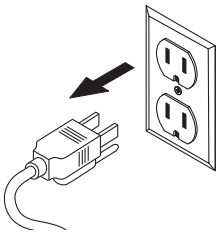
Ongoing
To maintain a low risk of injury and proper machine operation, if you ever observe any of the items below, shut down the machine immediately and fix the problem before continuing operations:

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

Monthly Check
- V-belt tension, damage, or wear.
- Lubricate vise screw.

Annual Check
- Lubricate gear box.

WARNING



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

Cleaning

Frequently use a brush and a shop vacuum to remove chips and other debris from the machine. Keep the non-painted surfaces rust-free with regular applications of an anti-rust protectorate.

Periodically, remove the blade and thoroughly clean all metal chips or built-up grease from the wheel surfaces and blade housing.

Lubrication

Before applying lubricant to any area, wipe the area clean to avoid contamination. Lubricate the vice screw shown in **Figure 39** with multi-purpose gear grease.

Remove the cover on the gearbox shown in **Figure 40** and coat the gears with multi-purpose gear grease.

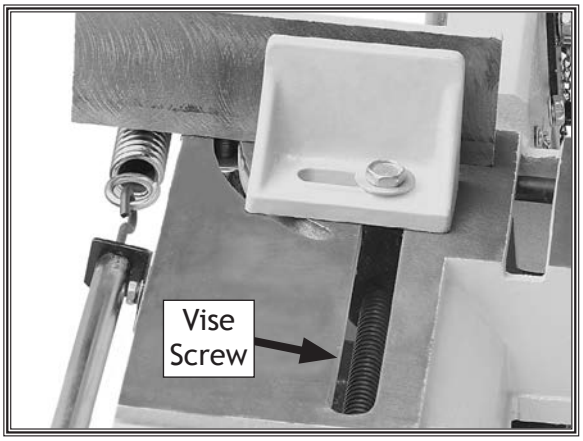


Figure 39. Vise screw.

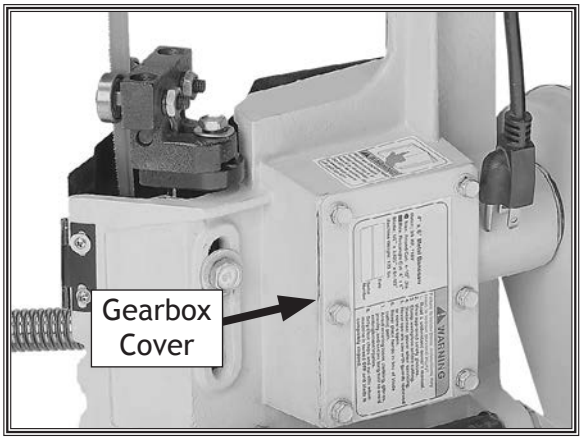


Figure 40. Gearbox cover.

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**.

Blade Change

Blades should be changed when they become dull, damaged, or when operation requires a different blade.

To change the blade on the bandsaw, do these steps:

1. DISCONNECT BANDSAW FROM POWER!

2. Raise the head of the bandsaw to the vertical position, use head locking pin to hold in place, then remove wheel access cover.

3. Loosen the tension knob and slip blade off wheels.

4. Install new blade through both blade guide bearings, as shown in **Figure 41**, around bottom wheel.

5. Hold the blade around bottom wheel with one hand and slip it around top wheel with other hand, keeping the blade between the blade guide bearings.

   Note: *It is sometimes possible to flip blade inside out, in which case blade will be installed in wrong direction. Check to make sure blade teeth are facing toward workpiece, as shown in* ***Figure 42****, after mounting to bandsaw. Some blades will have a directional arrow as a guide.*

6. When blade is around both wheels, adjust position so back of blade is against shoulder of wheels (see **Figure 43**).

7. Tighten tension knob so blade will not slip on wheels upon start up.

8. Connect the bandsaw to the power source.

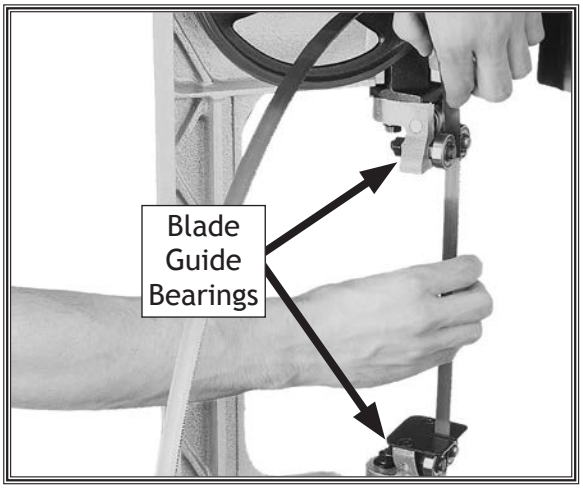


Figure 41. Installing the blade.

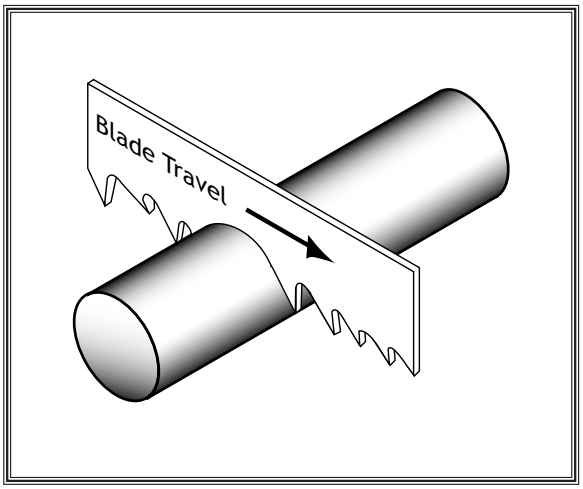


Figure 42. Correct blade travel.

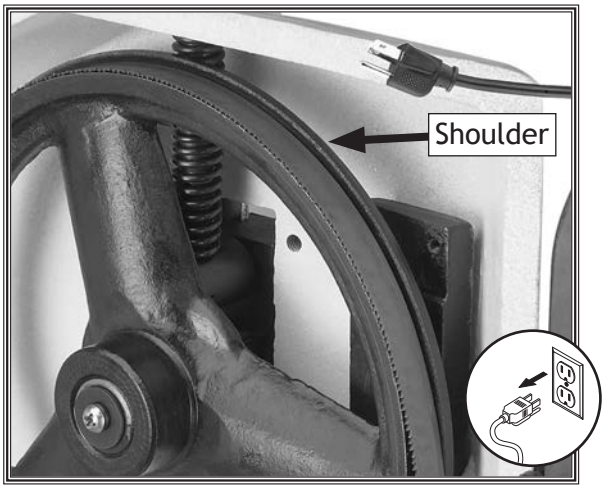


Figure 43. Blade installed on top wheel.

9. Briefly turn bandsaw ***ON*** then ***OFF*** to position blade and resume previous tracking.

—If tracking needs adjustment, see **Blade Tracking** in next section.

—If tracking is fine, proceed to **Blade Tension**.

Blade Tracking

Blade tracking has been properly set at the factory. Tracking will rarely need to be adjusted if bandsaw is used properly.

Tools Needed **Qty**
Wrench or Socket 14mm.....1

To adjust blade tracking on bandsaw, do these steps:

1. DISCONNECT BANDSAW FROM POWER!

2. Position the bandsaw in the vertical position.

3. Open the wheel access cover.

4. Loosen, but do not remove lower hex bolt in blade wheel tilting mechanism shown in **Figure 44**.

5. Use blade tension knob to release blade tension (see **Figure 45**).

6. Adjust tracking hex bolt, as shown in **Figure 45**, then tighten lower hex bolt loosened in **Step 4**.

—Tightening tracking hex bolt will move blade closer to shoulder of wheel.

—Loosening bolt will move blade away from shoulder.

7. Tension the blade.

8. Reconnect the power and turn ***ON*** the bandsaw.

—If blade tracks along shoulder of wheel (without rubbing), blade is tracking properly and this adjustment is completed.

—If blade walks away from shoulder of wheel or hits shoulder, turn bandsaw ***OFF***, disconnect from power, then repeat **Steps 4-8**.

9. Turn bandsaw ***OFF***, disconnect from power, then replace the blade guard and wheel access cover.

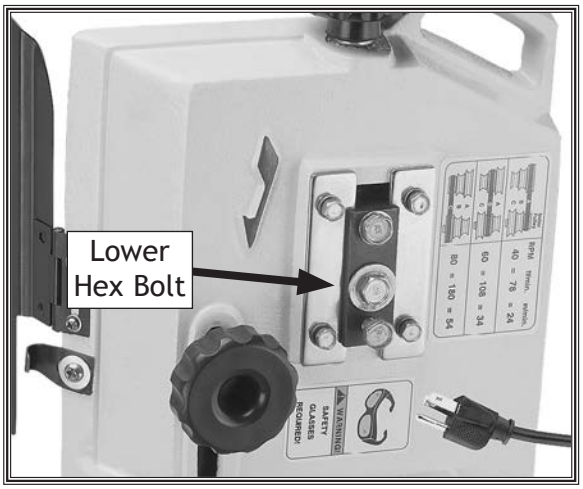


Figure 44. Blade wheel tilting lower hex bolt.

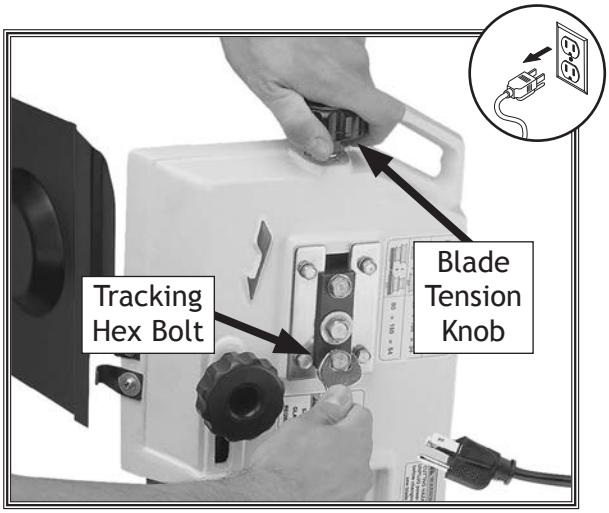


Figure 45. Adjusting the tracking hex bolt.

SERVICE

Blade Tension

Proper blade tension is essential to long blade life, straight cuts, and efficient cutting times.

Two major signs that you do not have the correct blade tension are: 1) The blade stalls in the cut and is slipping on the wheels, and 2) the blade frequently breaks from being too loose.

To tension the blade on the bandsaw, do these steps:

1. Make sure the blade is tracking properly.
2. DISCONNECT BANDSAW FROM POWER!
3. Loosen and slide the blade guides as far apart as they will go then tighten them down again.
4. Turn the blade tension knob in **Figure 46** clockwise to tighten the blade as tight as you can.
5. Using moderate finger pressure, push against the side of the blade. The blade should not move more than 0.004".

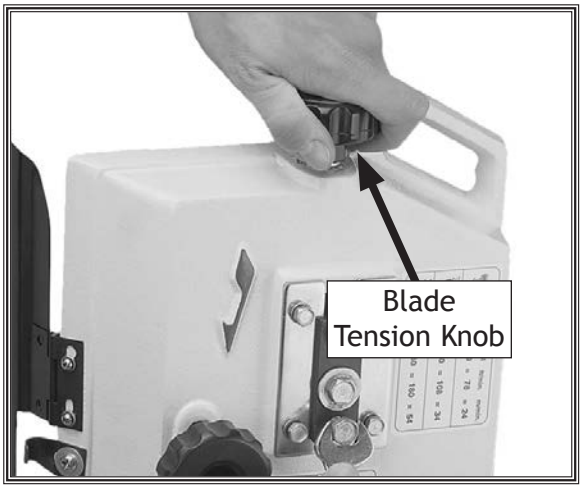


Figure 46. Blade tension knob.

Squaring Blade

It is always a good idea during the life of your saw to check and adjust this setting. This adjustment will improve your cutting results and extend the life of your blade.

To square the blade to the bed of the table, do these steps:

1. DISCONNECT BANDSAW FROM POWER!
2. Separate the blade guides as far as possible, the lower the head of the bandsaw all the way until it contacts the horizontal stop.
3. Place a square on the table bed and against the edge of the blade (**Figure 47**), and check different points along the length of the table between the blade guides.
4. Loosen the hex bolt shown in **Figure 47**, and rotate the seat until the blade is vertical to the bed, then re-tighten the hex bolt.

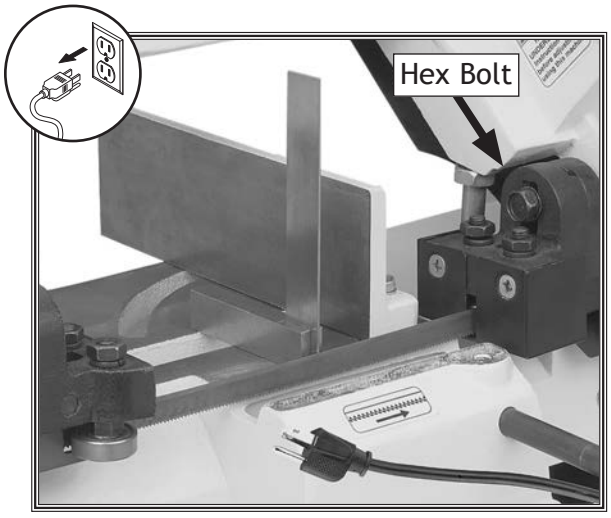


Figure 47. Squaring the blade.

SERVICE

Blade Guide Bearings

The blade guide bearings must be properly adjusted to make square cuts. One bearing on each assembly has an eccentric bushing that allows it to be adjusted so the blade is square to the vise. The bearings are secured in place by a hex nut and lock washer, as shown in **Figure 48**.

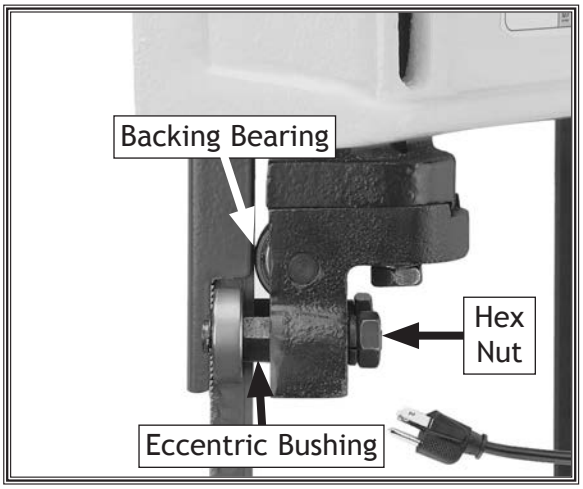


Figure 48. Blade guide adjustment controls.

Before adjusting the blade guide bearings, make sure that you have squared the blade to the table as discussed in the previous section.

To adjust the blade guide bearings, do these steps:

1. DISCONNECT BANDSAW FROM POWER!

2. Position the vise to 90°, then lock it in place.

3. Put a machinist's square against the face of the vise and move it over to the blade.

   — The square should evenly touch both the face of the vise and the blade. If it does, skip ahead to **Step 6**.

   — If the square does not evenly touch the blade, but it does evenly touch the vise, continue with the next step.

4. Loosen the hex nuts that secure the eccentric bushings attached to the guide bearings.

5. Adjust the bearings as necessary to force the blade to be 90° to the vise, then re-tighten the hex nuts.

6. If any of the bearings are not touching the blade evenly, loosen the hex nuts and adjust them so the contact surface of the bearings touch the blade evenly.

   Note: *Since the bearings twist the blade into position, it is acceptable if there is 0.001"-0.002" gap between the blade and the front or back of the bearing. Just make sure not to squeeze the blade too tightly with the bearings. After the guide bearings are set, you should be able to rotate the guide bearings (although they will be stiff) with your fingers.*

7. Adjust the backing bearing in the same manner, but leave a gap between 0.002-0.003" from the back of the blade.

Changing V-Belt

Check the V-belt periodically for signs of glazing, cracking, or fraying. If any of these conditions are present, change the V-belt.

To change the V-belt, do these steps:

1. DISCONNECT BANDSAW FROM POWER!

2. Loosen the V-belt tension hex bolt on the motor mounting plate to allow the motor to pivot (see **Figure 49**).

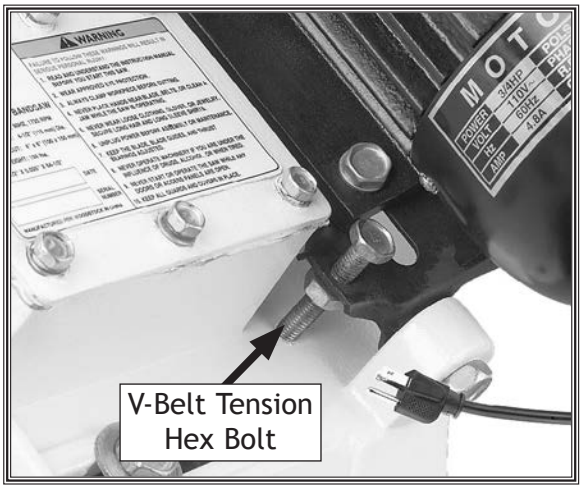


Figure 49. V-belt tension hex bolt.

3. Open the pulley cover door to access the V-belt, as shown in **Figure 50**.

4. Pivot the motor towards the gear box to release belt tension and remove the V-belt.

5. Replace the V-belt and let the weight of the motor provide the tension.

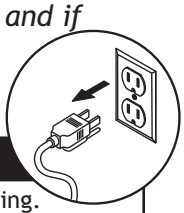
6. Secure the V-belt tension bolt.

Figure 50. Installing the V-belt.

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.*



PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Machine does not start or a breaker trips.	1. Plug/receptacle is at fault or wired incorrectly. 2. Start capacitor is at fault. 3. Motor connection wired incorrectly. 4. Power supply is at fault/switched OFF. 5. ON/OFF switch is at fault. 6. Wiring is open/has high resistance. 7. Motor is at fault.	1. Test for good contact or correct the wiring. 2. Test/replace if faulty. 3. Correct motor wiring connections. 4. Make sure all hot lines/grounds are operational and have correct voltage on all legs. 5. Replace faulty ON button or ON/OFF switch. 6. Troubleshoot wires for internal/external breaks; check for disconnected/corroded connections; repair/replace wiring. 7. Test/repair/replace.
Machine stalls or is underpowered.	1. Wrong blade for the workpiece material (metal). 2. Feed rate too fast for task. 3. V-belt slipping. 4. Blade is slipping on wheels. 5. Pulley/sprocket slipping on shaft. 6. Motor bearings are at fault. 7. Motor is at fault.	1. Use blade with correct properties for your type of cutting. 2. Decrease feed rate. 3. Replace bad V-belt and re-tension. 4. Adjust blade tracking and tension. 5. Replace loose pulley/shaft. 6. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. 7. Test/repair/replace.
Machine has vibration or noisy operation.	1. V-belt is slapping belt cover. 2. V-belt worn or loose. 3. Pulley is loose.	1. Inspect belt cover for proper installation. 2. Inspect/replace belt with a new one. 3. Realign/replace shaft, pulley, setscrew, and key as required.
Machine is loud when cutting or bogs down in the cut.	1. Excessive feed rate. 2. The blade TPI is too great, or the material is too coarse.	1. Refer to **Feed Rate** on **Page 24**, or **Blade Speed** on **Page 25** and adjust as required. 2. Refer to **Blade Selection** on **Page 27** and adjust as required.

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Blades break often.	1. The workpiece is loose in the vise. 2. The feed or cut speed is wrong. 3. The blade TPI is too great, or the material is too coarse. 4. The blade is rubbing on the wheel flange. 5. The bandsaw is being started with the blade resting on the workpiece. 6. The guide bearings are misaligned, or the blade is rubbing on the wheel flange. 7. The blade is too thick, or the blades are of low quality.	1. Clamp the workpiece tighter, or use a jig to hold the workpiece. 2. Refer to **Feed Rate** on **Page 24,** or **Blade Speed** on **Page 25** and adjust as required. 3. Refer to **Blade Selection** on **Page 27** and adjust as required. 4. Refer to **Blade Tracking** on **Page 32**, and adjust as required. 5. Start bandsaw and then slowly lower the headstock by setting the feed rate. 6. Refer to **Blade Tracking** on **Page 32**, or **Blade Guides** on **Page 24**, and adjust as required. 7. Use a higher quality blade.
Blade dulls prematurely.	1. The cutting speed is too fast. 2. The blade TPI is too coarse. 3. The blade feed pressure is too light. 4. The workpiece has hard spots, welds, or scale is on the material. 5. The blade is twisted. 6. The blade is slipping on the wheels.	1. Refer to **Blade Speed** on **Page 25** and adjust as required. 2. Refer to **Blade Selection** on **Page 27** and adjust as required. 3. Refer to **Feed Rate** on **Page 24**, and adjust as required. 4. Increase the feed pressure, and reduce the cutting speed. 5. Replace the blade. 6. Refer to **Blade Tension** on **Page 33**, and adjust as required.
Blade wears on one side.	1. The blade guides are worn or misadjusted. 2. The blade guide slide bracket is loose. 3. The wheels are out of alignment.	1. Refer to Blade Guides on **Page 24** and replace or adjust. 2. Tighten the blade guide bracket. 3. Refer to **Blade Tracking** on **Page 32**, and adjust as required.
Teeth are ripping from the blade.	1. The feed pressure is too heavy and the blade speed is too slow; or the blade TPI is too coarse for the workpiece. 2. The workpiece is vibrating in the vise. 3. The blade gullets are loading up with chips.	1. Refer to **Blade Selection** on **Page 27** and decrease the feed pressure. Refer to **Feed Rate** on **Page 24**, and adjust as required. 2. Re-clamp the workpiece in the vise, and use a jig if required. 3. Use a coarser-tooth blade.
The cuts are crooked.	1. The feed pressure is too high. 2. The guide bearings are out of adjustment, or too far away from the workpiece. 3. The blade tension is low. 4. The blade is dull. 5. The blade speed is wrong.	1. Refer to **Feed Rate** on **Page 24**, and adjust as required. 2. Refer to **Blade Guides** on **Page 24** and replace or adjust. 3. Refer to **Blade Tension** on **Page 33**, and adjust as required. 4. Refer to **Blade Change** on **Page 31** and replace the blade. 5. Refer to **Blade Speed** on **Page 25** and adjust as required.

Electrical Safety Instructions

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

If there are differences between your machine and what is shown in this section, call Technical Support at (360) 734-3482 for assistance BEFORE making any changes to the wiring on your machine. An updated wiring diagram may be available. **Note:** *Please gather the serial number and manufacture date of your machine before calling. This information can be found on the main machine label.*

⚠WARNING

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

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

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

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

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

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

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

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

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

NOTICE

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

WIRING DIAGRAM COLOR KEY

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

SERVICE

Electrical Components

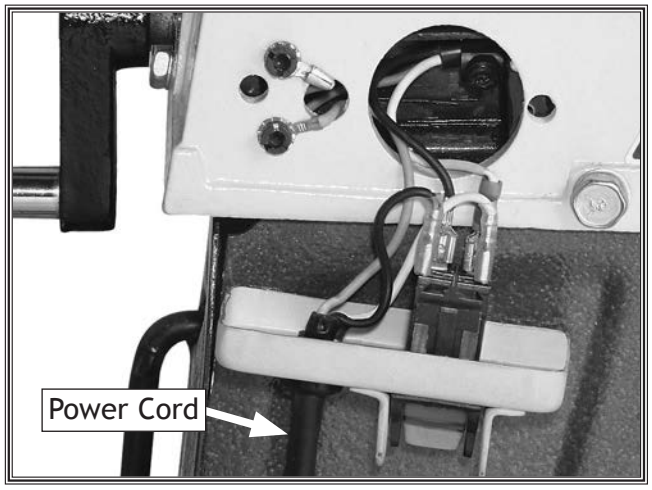
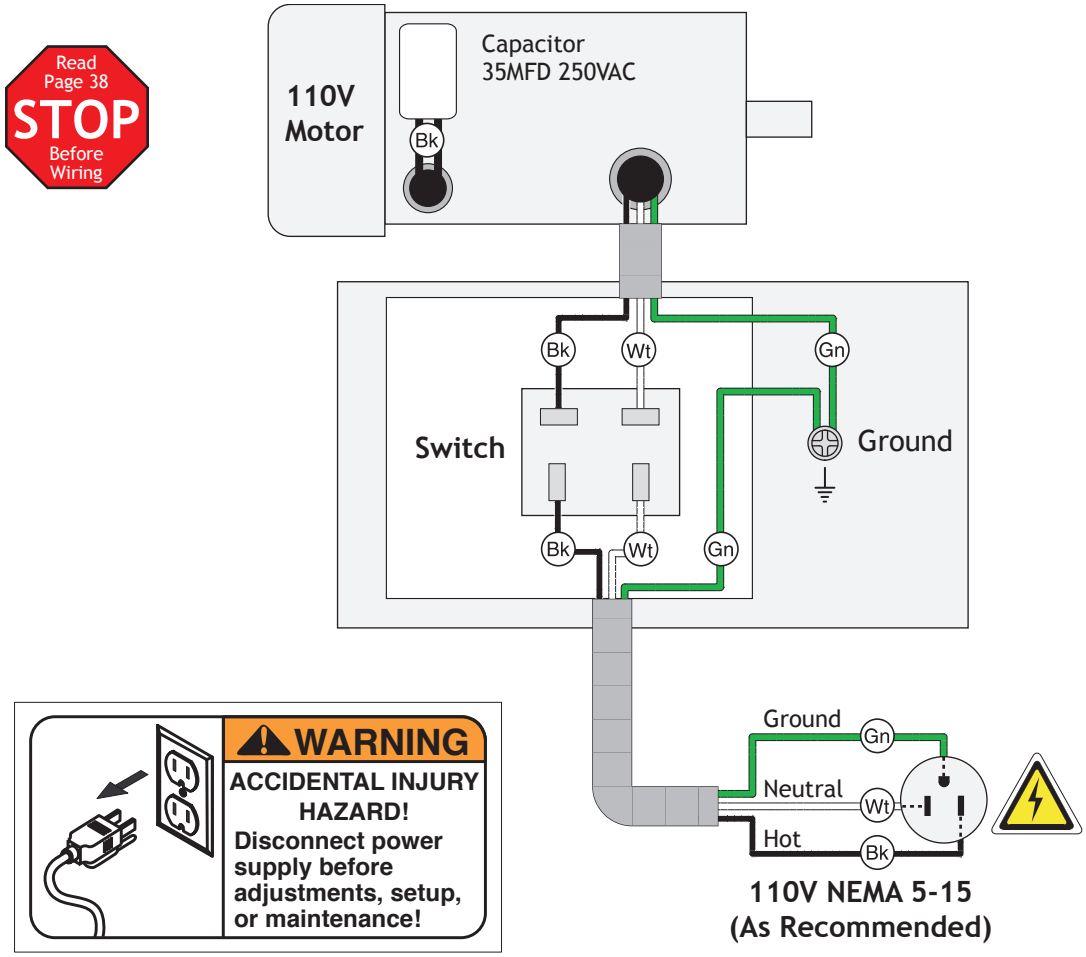


Figure 51. ON/OFF switch wiring.

Figure 52. Start capacitor.

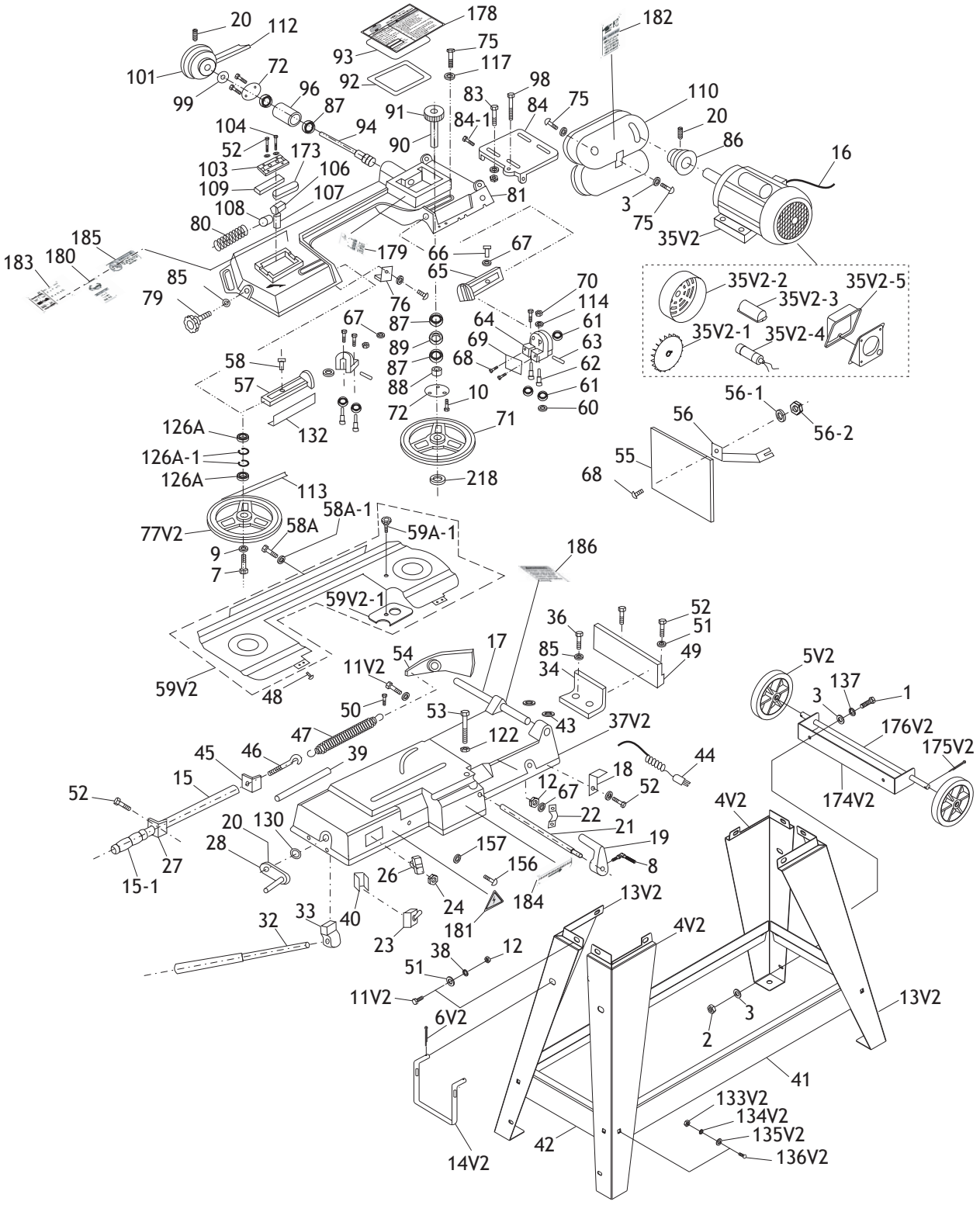
Wiring Diagram



SERVICE

PARTS

Main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76
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114
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64
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62
87
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72
10
71
218
58
57
132
126A
126A-1
126A-1
113
77V2
58A
58A-1
59A-1
9
7
59V2-1
59V2
48
186
36
52
51
85
49
34
54
17
11V2
50
53
43
37V2
47
122
39
45
46
15
52
44
18
12
67
52
22
21
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8
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130
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157
156
184
26
24
181
23
40
33
32
15-1
27
110
20
86
16
3
75
35V2
35V2-2
35V2-5
35V2-3
35V2-1
35V2-4
56-1
56
56-2
55
68
5V2
137
3
1
176V2
175V2
174V2
4V2
13V2
4V2
38
12
51
11V2
6V2
3
2
13V2
41
133V2
134V2
135V2
136V2
42
14V2

Main Parts List

REF	PART #	DESCRIPTION
1	X1715001	HEX BOLT M6-1 X 12
2	X1715002	HEX NUT M6-1
3	X1715003	FLAT WASHER 6MM
4V2	X1715004V2	STAND LEG (RIGHT) V2.09.17
5V2	X1715005V2	WHEEL V2.09.17
6V2	X1715006V2	COTTER PIN M4 X 30 V2.09.17
7	X1715007	PHLP HD SCR M6-1 X 12
8	X1715008	LOCKING LEVER
9	X1715009	FLAT WASHER 6MM
10	X1715010	FLAT HD SCR M4-.7 X 10
11V2	X1715011V2	HEX BOLT M8-1.25 X 25 V2.09.17
12	X1715012	HEX NUT M8-1.25
13V2	X1715013V2	STAND LEG (LEFT) V2.09.17
14V2	X1715014V2	TRANSPORT HANDLE V2.09.17
15	X1715015	ADJUSTING ROD
15-1	X1715015-1	RUBBER HANDLE GRIP
16	X1715016	MOTOR CORD
17	X1715017	PIVOTING ROD
18	X1715018	SUPPORT PLATE
19	X1715019	WORK STOP
20	X1715020	SET SCREW M6-1 X 12
21	X1715021	STOCK STOP ROD
22	X1715022	WIRE RELIEF RETAINER
23	X1715023	SWITCH
24	X1715024	HEX NUT M5-.8
26	X1715026	SWITCH PANEL
27	X1715027	ADJUSTING ROD SUPPORT
28	X1715028	HAND WHEEL
30	X1715030	EXT RETAINING RING 13MM
32	X1715032	LEADSCREW M16-4 X 358
33	X1715033	VISE NUT M6-4
34	X1715034	FRONT VISE JAW
35V2	X1715035V2	MOTOR W/D SHAPE FAN SHAFT V2.04.10
35V2-1	X1715035V2-1	FAN D SHAPE HOLE V2.04.10
35V2-2	X1715035V2-2	FAN COVER V2.04.10
35V2-3	X1715035V2-3	CAPACITOR COVER V2.04.10
35V2-4	X1715035V2-4	R CAPACITOR 35M 250V 1-1/2 X 2-3/4 V2.04.10
35V2-5	X1715035V2-5	MOTOR JUNCTION BOX V2.04.10
36	X1715036	HEX BOLT M10-1.5 X 30
37	X1715037	BED V1
37V2	X1715037V2	BED V2.09.17
38	X1715038	LOCK WASHER 8MM
39	X1715039	SCALE
40	X1715040	ELECTRIC CORD COVER
41	X1715041	LONG BRACE
42	X1715042	SHORT BRACE
43	X1715043	GASKET
44	X1715044	POWER CORD
45	X1715045	NUT PLATE
46	X1715046	SPRING ADJUST SCREW M5-.8 X 40
47	X1715047	EXTENSION SPRING 22 x 4.5 x 215
48	X1715048	PHLP HD SCR M4-.7 X 10
49	X1715049	REAR VISE JAW
50	X1715050	SET SCREW M8-1.25 X 12

REF	PART #	DESCRIPTION
51	X1715051	FLAT WASHER 8MM
52	X1715052	HEX BOLT M8-1.25 X 25
53	X1715053	HEX BOLT M12-1.75 X 75
54	X1715054	PIVOT
55	X1715055	TABLE
56	X1715056	TABLE BRACKET
56-1	X1715056-1	FENDER WASHER 6MM
56-2	X1715056-2	HEX NUT M6-1
57	X1715057	ADJUSTABLE BRACKET TOP
58	X1715058	KNOB BOLT M10-1.5 X 25
58A	X1715058A	PHLP HD SCR M5-.8 X 10
58A-1	X1715058A-1	FLAT WASHER 5MM
59V2	X1715059V2	BLADE BACK SAFETY COVER V2.02.08
59V2-1	X1715059V2-1	BLADE BACK SAFETY COVER PLATE V2.02.08
59A-1	X1715059A-1	KNOB M6-1 X 8
60	X1715060	EXT RETAINING RING 8MM
61	X1715061	BALL BEARING 629ZZ
62	X1715062	GUIDE PIVOT
63	X1715063	BEARING SHAFT PIN 8 X 40MM
64	X1715064	BLADE ADJUSTABLE SEAT
65	X1715065	ADJUSTABLE BRACKET
66	X1715066	GUIDE BEARING LOCK
67	X1715067	LOCK WASHER 8MM
68	X1715068	FLAT HD SCR M6-1 X 12
69	X1715069	BLADE GUARD
70	X1715070	HEX NUT M8-1.25
71	X1715071	FRONT BLADE WHEEL
72	X1715072	BLADE WHEEL BEARING COVER
73	X1715073	KEY 5 X 5 X 30
75	X1715075	PHLP HD SCR M6-1 X 12
75-1	X1715075-1	MOTOR PLATE PIN
75-2	X1715075-2	MOTOR PLATE BOLT M12-1.75 X 1-3/16
76	X1715076	SWITCH CUT OFF TIP
77V2	X1715077V2	REAR BLADE WHEEL V2.02.08
79	X1715079	BLADE TENSION KNOB
80	X1715080	COMPRESSION SPRING 14.5 X 2 X 76
81	X1715081	BODY FRAME
83	X1715083	HEX BOLT M8-1.25 X 25
84	X1715084	MOTOR MOUNT PLATE
84-1	X1715084-1	MOTOR PLATE HEX BOLT M12-1.75 X 30
85	X1715085	FLAT WASHER 10MM
86	X1715086	MOTOR PULLEY
87	X1715087	BALL BEARING 6202ZZ
88	X1715088	BEARING BUSHING
89	X1715089	OIL SEAL
90	X1715090	TRANSMISSION WHEEL SHAFT
91	X1715091	TRANSMISSION GEAR
92	X1715092	GEAR BOX GASKET
93	X1715093	GEAR BOX COVER
94	X1715094	WORM GEAR
96	X1715096	BEARING BUSHING
98	X1715098	HEX BOLT M8-1.25 X 50
99	X1715099	RUBBER O-RING 15 X 7

Main Parts List (Cont.)

REF	PART #	DESCRIPTION
101	X1715101	WORM GEAR PULLEY
103	X1715103	BLADE TENSION PLATE
104	X1715104	HEX BOLT M8-1.25 X 35
105	X1715105	ROLL PIN 5 X 10
106	X1715106	SLIDING PLATE DRAW BLOCK
106-1	X1715106-1	ROLL PIN
107	X1715107	BLADE WHEEL SHAFT
108	X1715108	SHAFT BLOCK
109	X1715109	BLADE TENSION SLIDING GUIDES
110	X1715110	MOTOR PULLEY COVER
112	X1715112	V-BELT M22 3L220
113	X1715113	BLADE 1/2 X .025 X 64-1/2
114	X1715114	FLAT WASHER 8MM
117	X1715117	FLAT WASHER 6MM
118	X1715118	EXT RETAINING RING 15MM
120	X1715120	BALL BEARING 6202ZZ
122	X1715122	HEX NUT M12-1.75
126	X1715126	BUSHING
126A	X1715126A	BALL BEARING 6202ZZ
126A-1	X1715126A-1	INT RETAINING RING 35MM
131	X1715131	DISC SWITCH PROTECTION BRACKET
132	X1715132	BLADE SAFE GUARD
133V2	X1715133V2	HEX NUT M8-1.25 V2.09.17
134V2	X1715134V2	LOCK WASHER 8MM V2.09.17
135V2	X1715135V2	FLAT WASHER 8MM V2.09.17
136V2	X1715136V2	CARRIAGE BOLT M8-1.25 X 16 V2.09.17

REF	PART #	DESCRIPTION
137	X1715137	LOCK WASHER 6MM
156	X1715156	PHLP HD SCR M5-.8 X 25
157	X1715157	LOCK WASHER 5MM
170	X1715170	TOOL PLATE
171	X1715171	HEX BOLT M6-1 X 25
172	X1715172	HEX NUT M6-1
173	X1715173	FLAT WASHER 6MM
174V2	X1715174V2	WHEEL STAND V2.09.17
175V2	X1715175V2	COTTER PIN M4 X 30 V2.09.17
176V2	X1715176V2	AXLE V2.09.17
177	X1715177	CORNER BRACKET
178	X1715178	MACHINE ID LABEL
179	X1715179	READ MANUAL LABEL
180	X1715180	SAFETY GLASSES LABEL
181	X1715181	ELECTRICITY LABEL
182	X1715182	UNPLUG MACHINE LABEL
183	X1715183	RPM LABEL
184	X1715184	BLADE TRAVEL LABEL
185	X1715185	BLADE SAFETY LABEL
186	X1715186	TIPPING HAZARD LABEL
187	X1715187	STYROFOAM 2PC
188	X1715188	CARTON FOR W1715
189	X1715189	SAFETY BRACKET PIN
190	X1715190	SAFETY BRACKET PIN CHAIN
191	X1715191	HEAD LOCKING PIN
192	X1715192	HEAD LOCKING PIN CHAIN

⚠WARNING

Safety labels warn about machine hazards and how to prevent machine damage or 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 the machine to enter service again. Contact Woodstock International, Inc. at (360) 734-3482 or www.shopfoxtools.com to order new labels.

Warranty Registration

Name_____

Street _____

City _____ State_____ Zip_____

Phone #_____ Email_____ Invoice #_____

Model #_____ Serial #_____ Dealer Name_____ Purchase Date_____

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

1. How did you learn about us?

_____ Advertisement _____ Friend ____ Local Store
_____ Mail Order Catalog _____ Website ____ Other:

2. How long have you been a woodworker/metalworker?

_____ 0-2 Years _____ 2-8 Years ____ 8-20 Years _____ 20+ Years

3. How many of your machines or tools are Shop Fox?

_____ 0-2 _____ 3-5 ____ 6-9 _____ 10+

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

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

6. What is your age group?

_____ 20-29 _____ 30-39 ____ 40-49
_____ 50-59 _____ 60-69 ____ 70+

7. What is your annual household income?

_____ $20,000-$29,000 _____ $30,000-$39,000 ____ $40,000-$49,000
_____ $50,000-$59,000 _____ $60,000-$69,000 ____ $70,000+

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

____ Cabinet Maker
____ 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 Woodworking
____ Practical Homeowner
____ Precision Shooter
____ Projects in Metal
____ RC Modeler
____ Rifle
____ Shop Notes
____ Shotgun News
____ Today's Homeowner
____ Wood
____ Wooden Boat
____ Woodshop News
____ Woodsmith
____ Woodwork
____ Woodworker West
____ Woodworker's Journal
____ Other:

9. Comments:_____

_____

_____

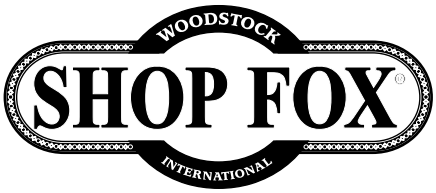
_____

_____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE

Place
Stamp
Here



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

FOLD ALONG DOTTED LINE

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY

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

Woodstock International, Inc. will repair, replace, or arrange for a dealer refund at its expense and at its option, the Shop Fox machine or machine part, which in proper and intended use has proven to be defective, 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 reserve the right to change specifications at any time because of our commitment to continuously improve the quality of our products.

High Quality Machines and Tools

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

BROSEM® PRECISION STOP BLOCK

THE REBEL®

BOARD BUDDIES®

PLANER PAL®

SLICKPLANE®

ACCU-SHARP®

STEELEX® FINE TOOLS

JOINTER PAL®

DURASTICK®

WOODSTOCK SHOP FOX® INTERNATIONAL

ROMAN CARBIDE®

Rotacator®

Gutmann®

Junglee®

PARROT VISE®

PRO-STIK® ABRASIVE BELT & DISC CLEANER

STEELEX® PLUS

Aluma-Classic®

WHOLESALE ONLY

WOODSTOCK INTERNATIONAL, INC.

Phone: (360) 734-3482 · Fax: (360) 671-3053 · Toll Free Fax: (800) 647-8801

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