

# MODEL W1829 6" JOINTER

ODEL W1829 6" JOINTER

# **OWNER'S MANUFACTURED SINCE 9/11**)

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

**COPYRIGHT © SEPTEMBER, 2011 BY WOODSTOCK INTERNATIONAL, INC.** WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT THE WRITTEN APPROVAL OF WOODSTOCK INTERNATIONAL, INC.

#14362KN Printed in China

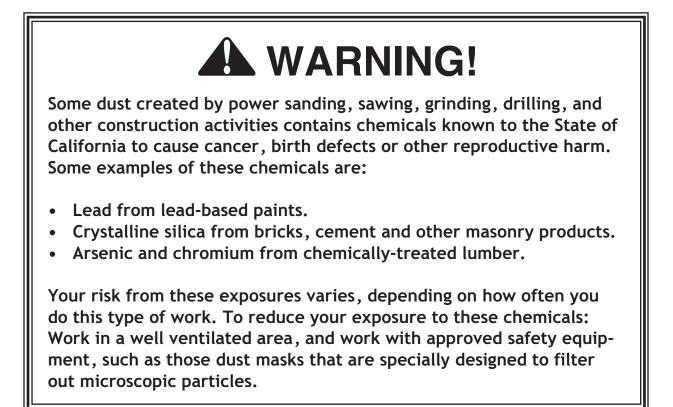
# WARNING!

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.





### Contents

INTRODUCTION2Woodstock Technical Support2About Your Machine2Machine Specifications4Controls & Features5
SAFETY
ELECTRICAL9Circuit Requirements9Grounding Requirements10Extension Cords10
SETUP11Unpacking11Inventory11Machine Placement12Cleaning Machine12Bench Mounting13Assembly14Dust Collection16Recommended Adjustments16Power Connection17Test Run18
OPERATIONS19General19Basic Controls19Stock Inspection & Requirements20Squaring Stock21Surface Planing22Edge Jointing23Bevel Cutting24

ACCESSORIES 25	)
MAINTENANCE27General27Cleaning27Table & Base27V-Belts27Lubrication27	7 7 7
SERVICE28General28Troubleshooting28Checking/Adjusting Knife Height30Replacing Knives32Setting Fence Angle Stops33V-Belt Replacement36Motor Brush Replacement37Electrical Safety Instructions38Wiring Diagram39	3 ) ) ; ; ; ; ; ; ; ;
PARTS         40           Main         40           Labels         42	)
WARRANTY 45	j

SAFETY

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 or send e-mail to: tech-support@shopfox. biz. 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 <u>http://www.shopfox.biz</u>. 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

### **About Your Machine**

The W1829 6" Jointer is a benchtop machine; its compact size makes for convenient placement in any shop. It mounts and dismounts quickly to a workbench making it portable when necessary.

It is primarily used to produce straight, flat faces on a workpiece, in order to properly square the material for further layout, construction and joining.







© Woodstock International, Inc. • Phone: (800) 840-8420 • Web: www.shopfox.biz

# MODEL W1829 Shop Fox® 6" Benchtop Jointer

#### Motors

### Main

_	
Туре	Universal
Horsepower	1-1/2 HP
Voltage	
Phase	
Amps	12A
Speed	
Cycle	
Number of Speeds	
Power Transfer	Belt Drive
Bearings	Shielded and Lubricated

### **Main Specifications**

#### **Cutting Capacities**

Bevel Jointing L	eft & Right 45
Maximum Width of Cut	-
Maximum Depth of Cut	1/8 in.
Number of Cuts Per Minute	

#### Fence Information

Fence Length	22-7/8 in.
Fence Width	
Fence Height	4-5/16 in.
Fence Stops	45 & 90 deg.

### **Cutterhead Information**

Cutterhead Type	2 Knife
Cutterhead Diameter	
Cutterhead Speed	10,000 RPM

#### **Knife Information**

Number of Knives	
Knife Type	Straight
Knife Length	
Knife Width	
Knife Thickness	3/32 in.
Knife Adjustment	Jack Screw



#### **Table Information**

Table Length	
Table Width	
Table Thickness	1/4 in.
Floor to Table Height	73-1/4 in.
Table Adjustment Type	Knob
Table Movement Type	

### Construction

Base	Pre-formed Steel
Body Assembly	Pre-formed Steel
Fence Assembly	Cast Iron
Guard	
Table	Precision-Ground Cast Iron
Paint	Powder Coated

#### Other Information

Number of Dust Ports	1
Dust Port Size 2-	1/2 in.

### **Product Dimensions**

Weight	
Width (side-to-side) x Depth (front-to-back) x Height	
Footprint (Length x Width)	18-7/8 x 11 in.

### **Shipping Dimensions**

Туре	Cardboard
Content	
Weight	
Length x Width x Height	

#### Electrical

Power Requirement	110V, Single-Phase, 60 Hz
Minimum Circuit Size	
Cord Length	
Cord Gauge	16 AWG
Plug Included	Yes
Included Plug Type	NEMA 5-15

#### Other

Country Of Origin	China
Warranty	
Assembly Time	30 Minutes

#### Features

45 Degree Inward, 90 and 45 Degree Outward Stops Jack Screw Knife Adjustment 2-1/2" Dust Port 2 Safety Push Blocks Dust Collection Fan, Chute and Bag

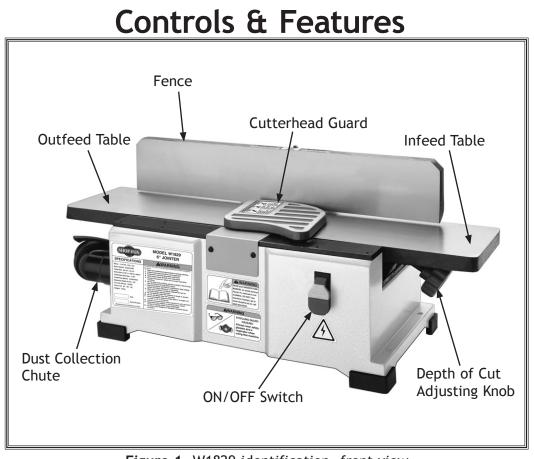
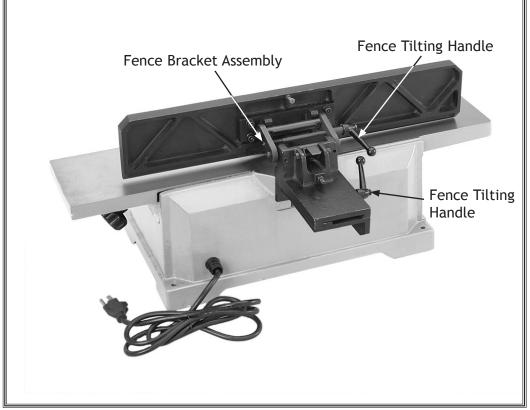


Figure 1. W1829 identification-front view.



### Figure 2. W1829 identification-rear view.



# 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!



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

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

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

This symbol is used to alert the user to useful information about proper operation of the equipment, and/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. Untrained users can be seriously hurt.
- **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.
- HAZARDOUS DUST. Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with workpiece materials, and always wear a NIOSH-approved respirator to reduce your risk.
- 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 a loss of workpiece control.

- 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.
- **MENTAL ALERTNESS.** Be mentally alert when running machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.
- DISCONNECTING POWER SUPPLY. Always disconnect machine from power supply before servicing, adjusting, or changing cutting tools (bits, blades, cutters, etc.). Make sure switch is in OFF position before reconnecting to avoid an unexpected or unintentional start.
- DANGEROUS ENVIRONMENTS. Do not use machinery in wet or rainy locations, cluttered areas, around flammables, or in poorly-lit areas. Keep work area clean, dry, and welllighted to minimize risk of injury.



- APPROVED OPERATION. Untrained operators can be seriously hurt by machinery. Only allow trained or properly supervised people to use 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!
- **ONLY USE AS INTENDED.** Only use machine for its intended purpose. Never modify or alter machine for a purpose not intended by the manufacturer or serious injury may result!
- USE RECOMMENDED ACCESSORIES. Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.
- **CHILDREN & BYSTANDERS.** Keep children and bystanders a safe distance away from work area. Stop using machine if children or bystanders become a distraction.
- **REMOVE ADJUSTING TOOLS.** Never leave adjustment tools, chuck keys, wrenches, etc. in or on machine—especially near moving parts. Verify removal before starting!
- SECURING WORKPIECE. When required, use clamps or vises to secure workpiece. A secured workpiece protects hands and frees both of them to operate the machine.
- FEED DIRECTION. Unless otherwise noted, feed work against the rotation of blades or cutters. Feeding in the same direction of rotation may pull your hand into the cut.
- **GUARDS & COVERS.** Guards and covers can protect you from accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly before using machine.
- NEVER STAND ON MACHINE. Serious injury or accidental contact with cutting tool may occur if machine is tipped. Machine may be damaged.

- **STABLE MACHINE.** Unexpected movement during operations greatly increases the risk of injury and loss of control. Verify machines are stable/secure and mobile bases (if used) are locked before starting.
- FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.
- 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.
- **UNATTENDED OPERATION.** Never leave machine running while unattended. Turn machine off and ensure all moving parts completely stop before walking away.
- MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. An improperly maintained machine may increase the risk of serious injury.
- CHECK DAMAGED PARTS. Regularly inspect machine for damaged parts, loose bolts, mis-adjusted or mis-aligned parts, binding, or any other conditions that may affect safe operation. Always repair or replace damaged parts, wires, cords, or plugs 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. Do not handle the cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet or damp locations.
- **EXPERIENCING DIFFICULTIES.** If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact our Technical Support for help at (360) 734-3482.



## **Additional Safety for Jointers**

REA enti this sona if sa info stoo NOT not

**AVARNING** 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!

# 

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.

- JOINTER KICKBACK. "Kickback" is when the workpiece is thrown off the jointer table by the force of the cutterhead. Always use push blocks and safety glasses to reduce the likelihood of injury from "kickback." If you do not understand what kickback is, or how it occurs, DO NOT operate this machine.
- **CUTTERHEAD ALIGNMENT.** Keep the edge of the cutterhead knives at top dead center (TDC) even with the top edge of the outfeed table to avoid kickback and personal injuries.
- **WORKPIECE SUPPORT.** Supporting the workpiece adequately at all times while jointing is crucial for making safe cuts and avoiding injury. Never attempt to make a cut with an unstable workpiece.
- **PUSH BLOCKS.** Always use push blocks whenever surface planing. Never pass your hands directly over the cutterhead without a push block.
- **KICKBACK ZONE.** The "kickback zone" is the path directly through the end of the infeed table. Never stand or allow others to stand in this area during operation.
- **MAXIMUM CUTTING DEPTH.** The maximum cutting depth for one pass is 1/8". Never attempt any single cut deeper than this!
- JOINTING WITH THE GRAIN. Jointing against the grain or jointing end grain is dangerous and could produce chatter or excessive chip out. Always joint with the grain.
- **CUTTERHEAD GUARD.** All operations must be performed with the cutterhead guard in place. Always ensure that the cutterhead guard is in proper working condition before operating the jointer.
- **PROPER CUTTING.** When cutting, always keep the workpiece moving toward the outfeed table until the workpiece has passed completely over the cutterhead. Never back the work toward the infeed table.
- **USING GOOD STOCK.** Jointing safety begins with the choice of stock. Inspect your stock carefully before feeding it over the cutterhead. Never joint a board that has loose knots, nails, or staples. If you have any doubts about the stability or structural integrity of your stock, DO NOT joint it!
- **EXPERIENCING DIFFICULTIES.** If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact Tech Support at (360) 734-3482.



# 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 fullload 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 ..... 12 Amps

### **Circuit Requirements for 110V**

This machine can be converted to operate on a 110V power supply (details about voltage conversion can be found later in this manual). The 110V power supply circuit must have a verified ground and meet the requirements that follow:

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

# 

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



Incorrectly wiring or grounding this machine can cause electrocution, fire, or machine damage. To reduce this risk, only a qualified electrician or service personnel should do any required electrical work for 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 a qualified 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 equipmentgrounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipmentgrounding wire to a live (current carrying) terminal.

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

### For 110V Connection

A NEMA 5-15 plug has a grounding prong that must be attached to the equipment-grounding wire inside the included power cord. The plug must only be inserted into a matching receptacle (see **Figure 3**) that is properly installed and grounded in accordance with all local codes and ordinances.

### **Extension Cords**

We do not recommend using an extension cord with this machine. Extension cords cause voltage drop, which may damage electrical components and shorten motor life. Voltage drop increases with longer extension cords and the gauge 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:

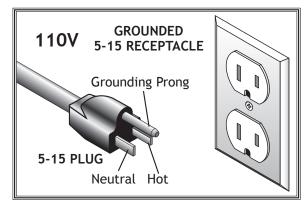


Figure 3. NEMA 5-15 plug & receptacle.



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



# 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.

### Inventory

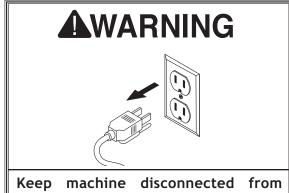
The following is a description of the main components shipped with the Model W1829. Lay the components out to inventory them.

**Note:** 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.

Joi	nter Inventory: (Figures 4-5)	Qty
Α.	Jointer Bed Assembly	1
Β.	Fence	1
С.	Dust Collection Bag	1
D.	Push Blocks	2
Ε.	Fence Tilting Handle	1
F.	Fence Bracket Assembly	1
G.	Fence Sliding Handle	1
Η.	Locking Plate Assembly	
Ι.	Fence Support	1
J.	Dust Chute	1
Κ.	Dust Collection Bag Clamp	1

### Hardware and Tools (Not shown)

-Cap Screws M8-1.25 x 206	
-Lock Washers 8mm6	
-Hex Wrench 4mm1	
-Hex Wrench 6mm1	



power until instructed otherwise.

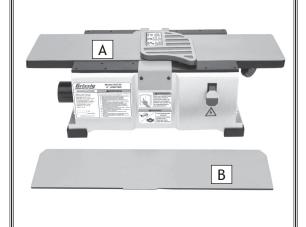


Figure 4. Large components.

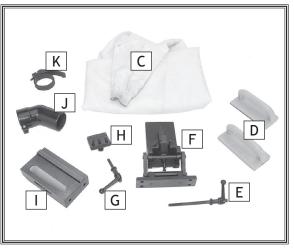


Figure 5. Small components.



### Machine Placement

- Workbench Load: Refer to the Machine Specifications, on Page 3, for the weight and footprint specifications of your machine. Some workbenches may require additional reinforcement to support both the weight of the machine and materials.
- Working Clearances: Consider the size of material to be processed through the machine, space for auxiliary stands, work tables and other machinery when establishing a location for your Jointer. See Figure 6 for the overall machine measurements.

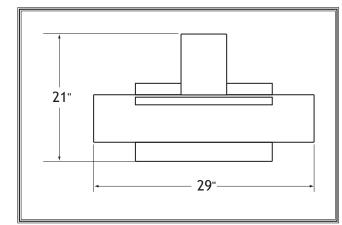


Figure 6. Machine dimensions.



# WARNING

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



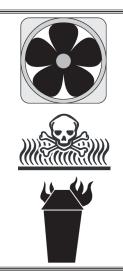
### **Cleaning Machine**

The tables and other unpainted parts of your jointer are coated with a waxy grease that protects them from corrosion during shipment. Clean this grease off with a solvent cleaner or citrus-based degreaser. DO NOT use chlorinebased solvents such as brake parts cleaner or acetone-if you happen to splash some onto a painted surface, you will ruin the finish.



# WARNING

NEVER clean with gasoline other petroleumor based solvents. Most have low flash points, which make them extremely flammable. A risk of explosion and burning exists if these products are used. Serious personal injury may occur if this warning is ignored!



# 

ALWAYS work in wellventilated areas far from possible ignition sources when using solvents to clean machinery. Many solvents are toxic when inhaled or ingested. Use care when disposing of waste rags and towels to be sure they DO NOT create fire or environmental hazards.

vou

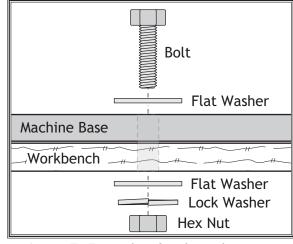
## **Bench Mounting**

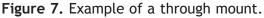
The strongest bench mounting option is a "Through Mount" where holes are drilled all the way through the workbench, and hex bolts, washers, and hex nuts are used to secure the machine to the workbench.

Another option for mounting is a "Direct Mount" where the machine is simply secured to the workbench with a lag screw.

### NOTICE

This machine must be securely fastened to a stable working surface before operating. Failure to do so will produce unsafe operating conditions.





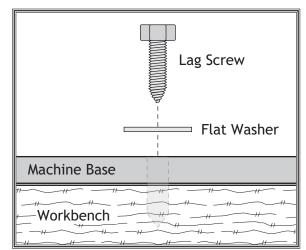


Figure 8. Example of a direct mount.





### Assembly

To assemble the jointer, do these steps:

- 1. DISCONNECT JOINTER FROM POWER!
- 2. Use two of the included M8-1.25 x 20 cap screws and lock washers 8mm to attach the fence support to the jointer bed, as shown in Figure 9.
- 3. Insert the locking plate assembly into the fence support, positioning it so the two pins are against the bottom edge of the fence support, as shown in Figure 10.

4. Secure the locking plate in position with the fence sliding handle, as shown in Figure 11.

5. Use the remaining four M8-1.25 x 20 cap screws and 8mm lock washers to attach the fence to the fence bracket assembly, as shown in Figure 12.

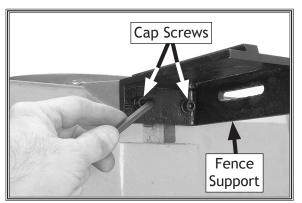


Figure 9. Attaching the fence support.

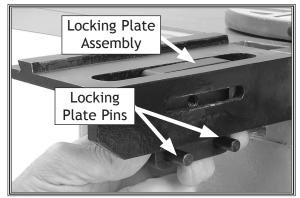


Figure 10. Inserting the locking plate.

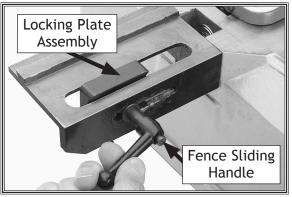


Figure 11. Installing fence sliding handle.

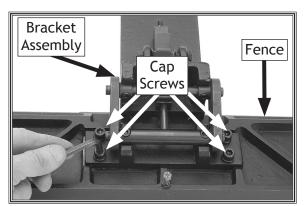


Figure 12. Attaching the fence bracket assembly to the fence.

SETUP

6. Slide the fence bracket assembly over and onto the dovetail of the support and locking plate, as shown in Figure 13.

 Slide the fence forward until it contacts the cutterhead guard and the cutterhead guard completely covers the cutterhead, as shown in Figure 14.

 Install the fence tilting handle by screwing the handle shaft into the bracket assembly, as shown in Figure 15.

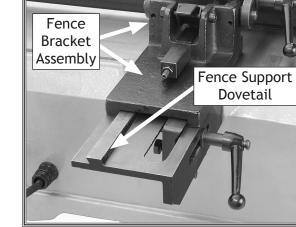


Figure 13. Sliding the fence bracket onto the fence support dovetails.

Jointer Tables

Fence



Cutterhead Guard

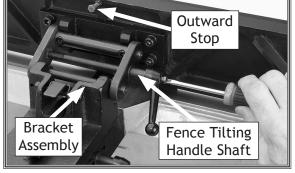


Figure 15. Installing the fence tilting handle.





### **Dust Collection**

The W1829 has a built-in dust collection fan and chip exhaust. It also includes a 2.5" dust port, clamp, and dust collection bag. The W1829 can also be hooked up to a pre-existing dust collection system.

Recommended CFM at Dust Port: ...... 150 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 install the dust port and collection bag, do these steps:

- 1. Install the dust port to the chip exhaust, as shown in Figure 16.
- 2. Slip the bag clamp over the collection bag, then attach the collection bag to the dust port and clamp it in place, as shown in Figure 17.

### Recommended Adjustments

For your convenience, the adjustments listed below have been performed at the factory and no further setup is required to operate your machine.

However, because of the many variables involved with shipping, we recommend that you at least verify the following adjustments to ensure the best possible results from your new machine.

Step-by-step instructions for these adjustments can be found in **Service** on **Page 28**.

- 1. Knife settings (see Page 30).
- 2. Fence stop accuracy (see Page 33).

# 

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.



Figure 16. Installing the dust port.



Figure 17. Attaching the dust collection bag.

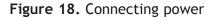
# **Power Connection**

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.

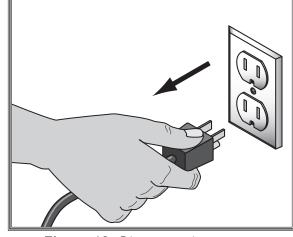
### **Connecting Power**

- 1. Turn the machine power switch OFF.
- 2. Insert the power cord plug into a matching power supply receptacle, as shown in Figure 18. The machine is now connected to the power source.



### Disconnecting Power

- 1. Turn the machine power switch OFF.
- Grasp the molded plug and pull it completely out of the power supply receptacle, as shown in Figure 19. DO NOT pull by the cord as this may damage the wires inside.









### Test Run

Once the assembly is complete, 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, and 2) the safety disabling mechanism on the switch works correctly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting** on **Page 28**. If you still cannot remedy a problem, contact our Tech Support at (360) 734-3482 for assistance.

### 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. Ensure all tools and objects used during setup are cleared away from the machine.
- 3. Verify that the machine is operating correctly by turning it *ON*.
  - When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.
  - Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.
- 4. Turn the machine OFF.
- 5. Remove the switch disabling key (see Figure 20).
- 6. Try to start the machine with the paddle switch.
  - If the machine *does not* start, the switch disabling feature is working as designed.
  - If the machine *does start*, immediately stop the machine. The switch disabling feature is not working correctly. Call Tech Support for help.



Projectiles thrown from the machine could cause serious eye injury. Wear safety glasses to reduce the risk of injury.



Loose hair and clothing could get caught in machinery and cause serious personal injury. Keep loose clothing rolled up and long hair tied up and away from machinery.

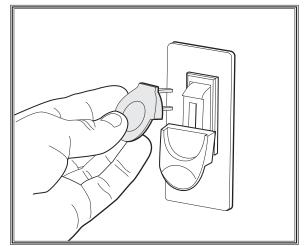


Figure 20. Removing switch key from paddle switch.



# **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 jointer operator before performing any unfamiliar operations. Above all, your safety should come first!

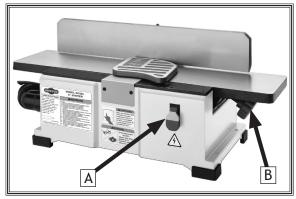
### **Basic Controls**

This section covers the basic parts and controls used during routine operations. Refer to **Figures 21-22** for basic parts and control locations.

A. ON/OFF Switch: Starts and stops the cutterhead rotation.

The switch has a yellow safety key-removing it locks the switch in the OFF position. Always remove this yellow key when leaving the work area. This prevents unsupervised persons in your shop (especially children) from starting the jointer.

- **B.** Depth of Cut Adjustment Knob: Changes the height of the infeed table to control the depth of cut.
- C. Fence Tilting Handle: Locks the fence at the desired angle. Use fence stops to quickly set the fence to 90° (perpendicular to the tables), 45° inward, or 45° outward.
- **D.** Fence Sliding Handle: Allows you to adjust the position of the fence over the tables. ALWAYS tighten it before you begin operations. The position of the fence determines the width of the cut as the workpiece moves over the cutterhead. NEVER operate the jointer if ANY part of cutterhead is exposed on the work area.



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!

Figure 21. W1829 basic controls in front.



Figure 22. W1829 basic controls in back.



### Stock Inspection & Requirements

Here are some rules to follow when choosing and jointing stock:

- DO NOT joint or surface plane stock that contains loose knots. Injury to the operator or damage to the workpiece can occur if the knots become dislodged during the cutting operation.
- DO NOT joint or surface plane against the grain direction. Cutting against the grain increases the likelihood of stock kickback, as well as tear-out on the workpiece.
- Jointing and surface planing with the grain produces a better finish and is safer for the operator. Cutting with the grain is described as feeding the stock on the jointer so the grain points down and toward you as viewed on the edge of the stock (see Figure 23).

**Note:** If the grain changes direction along the edge of the board, decrease the cutting depth and make additional passes.

- Remove foreign objects from the stock. Make sure that any stock you process with the jointer is clean and free of any dirt, nails, staples, tiny rocks or any other foreign objects that may damage the jointer blades.
- Only process natural wood fiber through your jointer. Never joint MDF, particle board, plywood, laminates or other synthetically made materials.
- Make sure all stock is sufficiently dried before jointing. Wood with a moisture content over 20% will cause unnecessary wear on the knives and poor cutting results.
- DO NOT joint stock that is excessively warped or twisted.
- Make sure your workpiece exceeds the minimum dimension requirements (see Figures 24-25) before edge jointing or surface planing, or it may break or kick back during the operation!

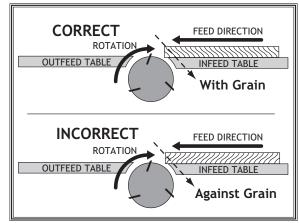


Figure 23. Correct setting for grain alignment.

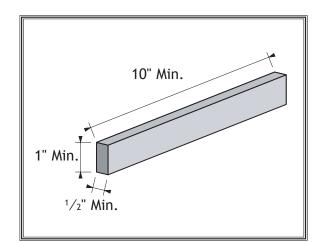


Figure 24. Minimum dimensions for edge jointing.

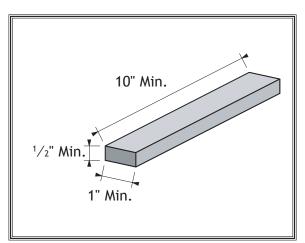


Figure 25. Minimum dimensions for surface planing.



# Squaring Stock

Squaring stock involves four steps performed in the order below:

- 1. Surface Plane on the Jointer: The concave face of the workpiece is surface planed flat with the jointer (see Figure 26).
- 2. Surface Plane on a Thickness Planer: The opposite face of the workpiece is surface planed flat with a thickness planer (see Figure 27).
- 3. Edge Joint on the Jointer: The concave edge of the workpiece is jointed flat with the jointer (see Figure 28).
- 4. Rip Cut on a Table Saw: The jointed edge of the workpiece is placed against a table saw fence and the opposite edge cut off (see Figure 29).

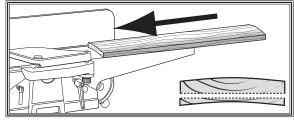


Figure 26. Surface plane on the jointer.

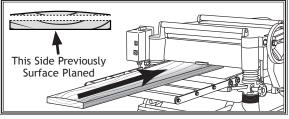


Figure 27. Surface plane on a thickness planer.

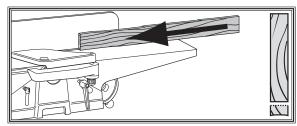


Figure 28. Edge joint on the jointer.

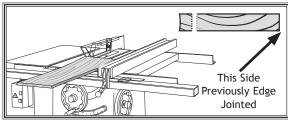


Figure 29. Rip cut on a table saw.



# Surface Planing

The purpose of surface planing on the jointer is to make one flat face on a piece of stock (see **Figures 30-31**) to prepare it for surface planing on a thickness planer.

### NOTICE

If you are not experienced with a jointer, set the depth of cut to 0", and practice feeding the workpiece across the tables as described below. This procedure will better prepare you for the actual operation.

To surface plane on the jointer, do these steps:

- 1. Read and understand SAFETY, beginning on Page 6.
- Make sure your stock has been inspected for dangerous conditions as described in the Stock Inspection & Requirements instructions, on Page 20.
- Set the cutting depth for your operation. (We suggest <sup>1</sup>/<sub>32</sub>" for surface planing, using a more shallow depth for hard wood species or for wide stock.)
- 4. Make sure your fence is set to 90°.
- 5. If your workpiece is cupped (warped), place it so the concave side is face down on the surface of the infeed table.
- 6. Start the jointer.
- 7. With a push block in each hand, press the workpiece against the table and fence with firm pressure, and feed the workpiece over the cutterhead (Figure 30).

**Note:** When your leading hand (with push block) gets within 4" of the cutterhead, lift it up and over the cutterhead, and place the push block on the portion of the workpiece that is on the outfeed table. Now, focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same action with your trailing hand when it gets within 4" of the cutterhead. To keep your hands safe, DO NOT let them get closer than 4" from the cutterhead when it is moving!



Figure 30. Typical surface planing operation.

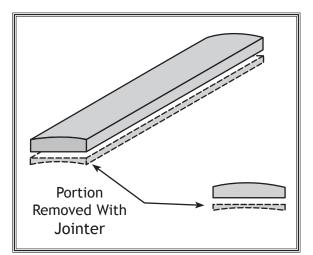


Figure 31. Illustration of surface planing results.

# 

Failure to use push blocks when surface planing may result in cutterhead contact, which will cause serious personal injury. Always use push blocks to protect your hands when surface planing on the jointer.

8. Repeat Step 7 until the entire surface is flat.

## **Edge Jointing**

The purpose of edge jointing is to produce a finished, flat-edged surface that is suitable for joinery or finishing (see **Figure 32**). It is also a necessary step when squaring rough or warped stock.

To edge joint on the jointer, do these steps:

- 1. Read and understand SAFETY, on Page 6.
- 2. Inspect your stock for dangerous conditions as described in the Stock Inspection & Requirements instructions, on Page 20.
- 3. Set the cutting depth for your operation.

**Note:** Between 1/16" and 1/8" for edge jointing, using a more shallow depth for certain species or for wide stock.

- 4. Make sure the fence is set to 90°.
- 5. If your workpiece is bowed (warped), place it so the concave side is face down on the surface of the infeed table.
- 6. Start the jointer.
- 7. Press the workpiece against the table and fence with firm pressure. Use your trailing hand to guide the workpiece through the cut, and feed the workpiece over the cutterhead (see Figure 33).

**Note**: If your leading hand gets within 4" of the cutterhead, lift it up and over the cutterhead, and place it on the portion of the workpiece that is over the outfeed table. Focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same action with your trailing hand if it gets within 4" of the cutterhead. Keep your hands safe—DO NOT let them get closer than 4" from the cutterhead!

8. Repeat Step 7 until the entire edge is flat.

### NOTICE

If you are not experienced with a jointer, set the depth of cut to 0", and practice feeding the workpiece across the tables as described below. This procedure will better prepare you for the actual operation.

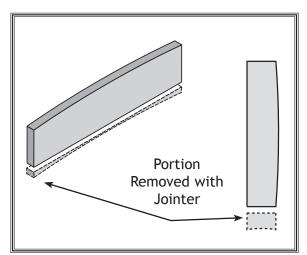


Figure 32. Illustration of edge jointing results.



Figure 33. Typical edge jointing operation.



## **Bevel Cutting**

The purpose of bevel cutting is to cut a specific angle into the edge of a workpiece (see **Figure 34**).

The Model W1829 has preset fence stops at 45° inward, 90°, and 45° outward (135°). If your situation requires a different angle, the preset fence stops can be easily adjusted for your needs.

To bevel cut on the jointer, do these steps:

- 1. Read and understand SAFETY, beginning on Page 6.
- Make sure your stock has been inspected for dangerous conditions as described in the Stock Inspection & Requirements instructions, on Page 20.
- 3. Set the cutting depth for your operation.

**Note:** We suggest between 1/16'' and 1/8'' for bevel cutting, using a more shallow depth for hard wood species or for wide stock.

- 4. Make sure your fence is set to the angle of your desired cut.
- 5. If your workpiece is cupped (warped), place it so the concave side toward the fence.
- 6. Start the jointer.
- 7. With a push block in your leading hand, press the workpiece against the table and fence with firm pressure, and feed the workpiece over the cutterhead, as in Figure 35.

**Note:** If your leading hand gets within 4" of the cutterhead, lift it up and over the cutterhead, and place the push block on the portion of the workpiece that is on the outfeed table. Now, focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same action with your trailing hand when it gets within 4" of the cutterhead. To keep your hands safe, DO NOT let them get closer than 4" from the cutterhead when it is moving!

8. Repeat Step 7 until the angled cut is satisfactory to your needs.

# NOTICE

If you are not experienced with a jointer, set the depth of cut to 0", and practice feeding the workpiece across the tables as described below. This procedure will better prepare you for the actual operation.

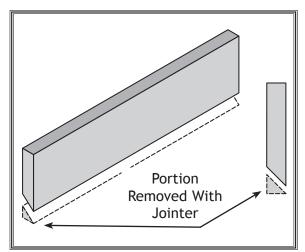


Figure 34. Illustration of bevel cutting results.



Figure 35. Typical bevel cutting operation.



# ACCESSORIES

The following jointer 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.

### D3319-6" Replacement Jointer Knives (Set of 2)

### D1123–Steelex<sup>®</sup> Knife Sharpener

Add a razor hone to your planer and jointer knives with this hand-held sharpening device. This handy tool sharpens flat and beveled surfaces quickly and easily. Great for touch-ups.



### D3640-Shop Fox Tool Table Plus

This new tool table plus was designed to answer customer requests for a slightly wider and taller table. It is built to accommodate a variety of bench-top machines including the W1829 Jointer.



### W1218A-Rotacator®

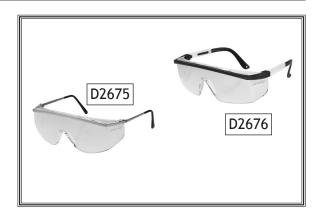
Adjust the W1829 to within  $\pm$  .001". The magnetic base keeps the Rotacator<sup>®</sup> firmly in position while the indicator indexes at 0°, 90°, 180°, and 270° for unmatched versatility. This is an extremely precise and useful tool!





#### D2675—Safety Glasses D2676—Adjustable Safety Glasses

Exceeding ANSI Z87.1-1989 standards for impact resistance, these Safety Glasses offer outstanding eye protection. Wrap around side shields provide additional protection and a wide field of view. Model D2676 features easily adjustable ear pieces.



### D2759-Safety Filter Mask

This Safety Filter Mask provides greater protection over paper filters with its form fitting cloth seal. Level 2 filtration provides 98.6% filtration. Ideal for the dusty shop and work environments. One size fits all.



#### W1041-3" x 2<sup>1</sup>/<sub>2</sub>" Adapters W1044-4" x 2<sup>1</sup>/<sub>2</sub>" Adapters

These adapters will allow you to connect the  $2^{1}/_{2}$ " dust chute of the W1829 to an existing dust collection system with standard 3" or 4" fittings.





# MAINTENANCE

### General

Regular periodic maintenance on your machine will ensure its optimum performance. Make a habit of inspecting your machine each time you use it.

Check for the following conditions and repair or replace when necessary:

- Loose mounting bolts.
- Worn switch.
- Worn or damaged cords and plugs.
- Damaged V-belt.
- Any other condition that could hamper the safe operation of this machine.

# Cleaning

Frequently blow-off sawdust and chips with compressed air. This is especially important for the internal working parts and motor. Dust build-up around the motor is a sure way to decrease its life span.

### Table & Base

Tables can be kept rust-free with regular applications of products like SLIPIT<sup>®</sup>. For long term storage you may want to consider products like Boeshield T-9<sup>m</sup>.

### **V-Belts**

To ensure optimum power transmission from the motor to the blade, the V-belt must be in good condition (free from cracks, fraying and wear) and properly aligned and tensioned (refer to V-Belt Replacement on Page 36).



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

# Lubrication

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



# 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: tech-support@shopfox.biz.

# Troubleshooting

This section covers the most common problems and corrections with this type of machine. WARNING! DO NOT make any adjustments until power is disconnected and moving parts have come to a complete stop!



### Motor & Electrical

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Machine does not start or a breaker trips.	<ol> <li>Safety key removed from ON/OFF switch.</li> </ol>	1. Replace safety key.
	2. Plug/receptacle is at fault or wired incorrectly.	2. Test for good contacts; correct the wiring.
	3. Power supply is at fault/switched <i>OFF</i> .	3. Ensure hot lines have correct voltage on all legs and main power supply is switched <b>ON</b> .
	4. Lockout key is malfunctioning.	4. Replace lockout key; replace switch.
	5. Motor brushes are at fault.	5. Remove/replace brushes.
	6. Motor ON/OFF switch is at fault.	6. Replace faulty ON/OFF switch.
	7. Wiring is open/has high resistance.	<ol> <li>Check for broken wires or disconnected/corroded connections, and repair/replace as necessary.</li> </ol>
	8. Motor is at fault.	8. Test/repair/replace.
Machine stalls, is underpowered, or is	1. Wrong workpiece material (wood).	<ol> <li>Use wood with correct moisture content, without glues, and little pitch/resins.</li> </ol>
overloaded.	2. Cutterhead belt slipping.	2. Replace cutterhead belt and re-tension.
	3. Plug/receptacle is at fault.	3. Test for good contacts; correct the wiring.
	4. Motor brushes are at fault.	4. Remove/replace brushes.
	5. Motor bearings are at fault.	<ol> <li>Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.</li> </ol>
	6. Knives dull, feed rate is too fast depth of cut too great.	6. Use sharp knives; reduce feed rate/depth of cut.
	7. Motor has overheated.	7. Clean off motor, let cool, and reduce workload.
	8. Motor is at fault.	8. Test/repair/replace.



### Motor & Electrical (continued)

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Machine has vibration or noisy operation.	1. Motor or component is loose.	1. Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid.
	2. Knife blades, clamp or jack screws are at fault.	<ol> <li>Resharpen/replace knives as required; set knife alignment correctly.</li> </ol>
	3. Belts worn or loose.	3. Inspect/replace belts with a new ones.
	4. Motor fan is rubbing on fan cover.	4. Replace dented fan cover; replace loose/damaged fan.
	5. Loose mounting bolts.	5. Replace/tighten as required.
	6. Blade is at fault.	<ol> <li>Replace warped, bent, or twisted blade; resharpen dull blade.</li> </ol>

### Operation

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Excessive snipe (gouge in the end of the board that is uneven with the rest of the cut).	<ol> <li>Knives set too high.</li> <li>Operator pushing down on trailing end of the workpiece.</li> </ol>	<ol> <li>Set the knives just even with the outfeed table when they're at TDC (top dead center).</li> <li>Reduce/eliminate downward pressure on that end of workpiece.</li> </ol>
Workpiece stops in the middle of the cut.	1. Knives set too low.	1. Set the knives just even with the outfeed table when they're at TDC (top dead center).
Chipping.	<ol> <li>Knots or conflicting grain direction in wood.</li> <li>Nicked or chipped blades.</li> <li>Feeding workpiece too fast.</li> <li>Taking too deep of a cut.</li> </ol>	<ol> <li>Inspect workpiece for knots and grain (Page 20); only use clean stock.</li> <li>Adjust one of the nicked knives sideways; replace knives (Page 32).</li> <li>Slow down the feed rate.</li> <li>Take a smaller depth of cut. (Always reduce cutting depth when surface planing or working with hard woods.)</li> </ol>
Fuzzy Grain.	<ol> <li>Wood may have high moisture con- tent or surface wetness.</li> <li>Dull knives.</li> </ol>	<ol> <li>Check moisture content and allow to dry if moisture is over 15%.</li> <li>Replace knives (Page 32).</li> </ol>
Long lines or ridges that run along the length of the board.	1. Nicked or chipped knives.	1. Sharpen or replace knives (Page 32).
Uneven cutter marks, wavy surface, or chatter marks across the face of the board.	<ol> <li>Feeding workpiece too fast.</li> <li>Knives not adjusted at even heights in the cutterhead.</li> </ol>	<ol> <li>Slow down the feed rate.</li> <li>Adjust the knives so they are set up evenly in the cutterhead (Page 30).</li> </ol>
Board edge is concave or convex after jointing.	<ol> <li>Board not held with even pressure on infeed and outfeed table during cut.</li> <li>Board started too uneven.</li> </ol>	<ol> <li>Hold board with even pressure as it moves over the cutterhead.</li> <li>Take partial cuts to remove the extreme high spots before doing a full pass.</li> </ol>
	<ol> <li>Board has excessive bow or twist along its length.</li> <li>Insufficient number of passes.</li> </ol>	<ol> <li>Surface plane one face so there is a good surface to position against the fence.</li> <li>It may take 3 to 5 passes to achieve a perfect edge, depending on the starting condition of the board and the depth of cut.</li> </ol>



### Checking/Adjusting Knife Height

The knives MUST be level with the outfeed table when they are at top dead center (their highest point during rotation) or the workpiece cannot be safely fed across the jointer.

### **Tools Needed**

	~
Hex Wrench 4mm	1
Hex Wrench 5mm	

Otv

### **Checking Knife Height**

- 1. DISCONNECT JOINTER FROM POWER SOURCE!
- 2. Place a straightedge on the outfeed table so it extends over the cutterhead. For best results, use a straightedge that will stand on edge without having to be held in place, as illustrated in Figure 36.
- 3. Rotate the cutterhead under the straightedge.
  - If the knives are parallel to the straightedge, rotating the cutterhead will move the straightedge slightly (1/8") forward; no adjustments are necessary.
  - If the knives fall below the straightedge, or if the knives lift the straightedge and move it more than <sup>1</sup>/<sub>8</sub>" when you rotate the cutterhead, the knives must be adjusted.

### Adjusting Knife height

- 1. DISCONNECT JOINTER FROM POWER SOURCE!
- 2. Block the cutterhead guard back so the cutterhead is fully exposed.
- 3. Locate the knife clamp screws and knife adjustment jack screws (see Figures 37-38).

**Note:** You will perform the procedure in **Steps 4-8** for each of the two knives.

- 4. Use a 4mm hex wrench to loosen the four knife clamp screws.
- 5. Adjust the two jack screws until both ends are sightly below the straightedge.



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

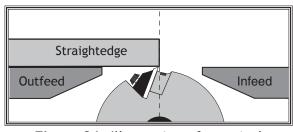


Figure 36. Illustration of a typical cutterhead alignment setup.

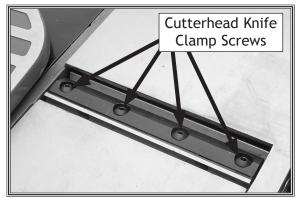


Figure 37. Cutterhead knife clamp screws.

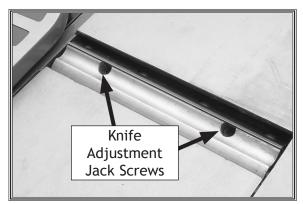


Figure 38. Knife adjustment jack screws.

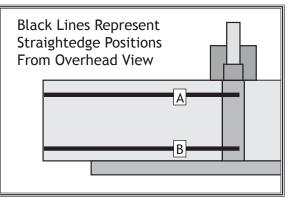
- 6. Move the straightedge to position A, as shown in Figure 39. Turn the jack screw nearest the fence counterclockwise until the end of the knife touches the straightedge.
- 7. Move the straightedge to position **B**, as shown in Figure 39. Turn the jack screw nearest the guard counterclockwise until the end of the knife touches the straightedge.
- Slightly tighten the clamp screws, according to the proper tightening sequence, as shown in Figure 40. Repeat Steps 6-7 for the other cutterhead knife.

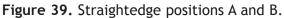
**Note**: Slightly tightening the clamp screws maintains the knife position while performing the same step on the other knife. They will be final tightened in a later step.

- 8. Without disturbing the knife clamp, rotate the cutterhead slightly to check the knife height.
  - If the knife moves the straightedge slightly (1/8") forward and back on the table, the knife height is set correctly.
  - If the knife does not move the straightedge slightly (1/8") forward and back on the table, continue to make fine adjustments with the jack screws until the knife is set correctly.
- **10.** When the knife heights are set correctly, final tighten each of the knives' clamp screws according to the proper tightening sequence (see **Figure 40**).
- **11.** Return the cutterhead guard to the operating position and ensure it is working properly.
- 12. Re-align the fence and tables as needed.
- **13.** Perform a test cut on suitable piece of scrap material.

### 

Cutterhead knives are sharp and laceration injuries may occur. Use caution when handling the cutterhead knives.





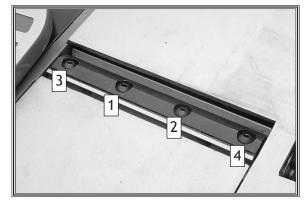


Figure 40. Knife clamp screw tightening sequence.





### **Replacing Knives**

Sharp cutterhead knives provide the best cutting results. Under normal operation these knives will become dull and need to be sharpened or replaced. Refer to **Troubleshooting** (see **Page 28**) to determine if the knives may be dull.

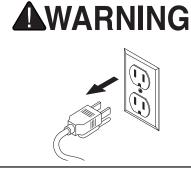
Tools Needed	Qty
Hex Wrench 4mm	1
Hex Wrench 5mm	1

To replace the cutterhead knives, do these steps:

- 1. DISCONNECT JOINTER FROM POWER.
- 2. Carefully rotate the cutterhead until the clamp screws are accessible.
- 3. Remove the cutterhead clamp screws fastening the knife to the cutterhead (see Figure 41). Carefully remove the knife and clamp from the cutterhead.
- 4. Repeat **Steps 2-3** for the second cutterhead knife.
- 5. Clean the cutterhead thoroughly before installing new knives or re-installing sharpened knives.
- 6. Install one knife, clamp it in the cutterhead, and slightly tighten each of the clamp screws in sequence, as shown in Figure 42.

Note: By tightening the clamp screws out of sequence, jointing results may be hampered. Following the tightening sequence reduces that possibility.

- 7. Repeat Step 6 for the second cutterhead knife.
- 8. Check the alignment of the knives to the outfeed table. They should be parallel to the outfeed table.
  - If the knife is not parallel to the outfeed table, adjust the jack screws to fine tune the knife height. Refer to Checking/Adjusting Knife Height on Page 30.
- **9.** Follow the tightening sequence and final tighten each of the clamp screws for both knives, as shown in **Figure 42**.
- **10.** Ensure cutterhead guard is working properly. Align the fence as needed. Perform a test cut on a suitable piece of scrap material.



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

# 

Cutterhead knives are sharp and laceration injuries may occur. Use caution when handling the cutterhead knives.

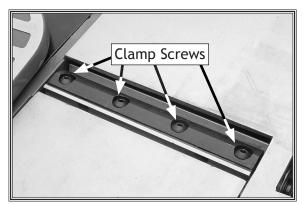


Figure 41. Cutterhead clamp screw location.

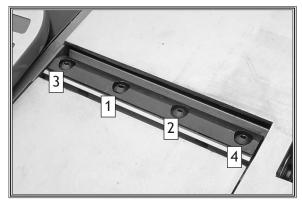


Figure 42. Knife clamp screw tightening sequence.



## Setting Fence Angle Stops

This section provides instructions for setting the fence angle stops precisely at  $90^{\circ}$ ,  $45^{\circ}$  inward, or  $45^{\circ}$  outward.

**Note:** To ensure accurate results when edge jointing, check the accuracy of these settings frequently (monthly at a minimum) and re-adjust them if necessary.

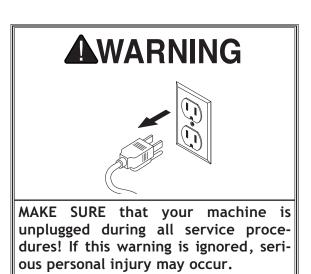
Tools Needed	Qty
Flathead Screwdriver	1
Wrench 8mm	1
Wrench 10mm	1

### Setting 90° Fence Angle Stop

- 1. DISCONNECT THE JOINTER FROM POWER!
- 2. Position the fence over the bed and tighten the sliding handle, loosen the fence tilting handle.
- 3. Press the forward tab of the limit plate into the rear slot of the limit block.
- 4. Tilt the fence as far as it will go towards 90° (perpendicular to the table) until it hits the limit block shaft. Tighten the fence tilting handle.
- 5. Use a square to check the angle of the fence, as shown in Figure 44.
  - If the fence is perpendicular to the table, the 90° stop is set correctly; no additional steps are necessary. Proceed to set the 45° inward and 45° outward stops (see Page 34).
  - If the fence is not perpendicular to the table, adjust the 90° stop by doing Steps 6-9.
- 6. Loosen the fence tilting handle, bring the fence to 90° with the square set against the fence, then tighten the handle.

*Note:* Keep the limit plate tab in the rear slot of the limit block.

- **7.** Loosen the jam nut (located at the rear of the limit block shaft).
- 8. Using a flathead screwdriver, turn the limit block shaft until it hits the fence.
- 9. Tighten the jam nut. The 90° stop is now set.



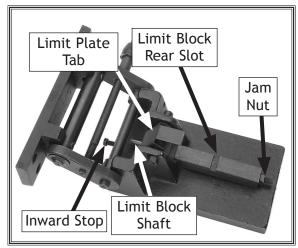


Figure 43. Fence stop parts identification.



Figure 44. Checking the 90° stop.

-33-Download from Www.Somanuals.com. All Manuals Search And Download.



### Setting 45° Inward Stop

- 1. DISCONNECT JOINTER FROM POWER!
- 2. With the fence positioned over the bed and the sliding handle locked, loosen the fence tilting handle and release the limit tab.
- 3. Tilt the fence towards the table as far as it will go, then tighten the fence tilting handle.

**Note:** When you tilt the fence towards the table, it will stop when it hits the inward stop bolt.

- 4. Use a combination square to check the angle of the fence, as shown in Figure 45.
  - If the fence leans 45° towards the table, the inward 45° stop is set correctly; proceed to set the outward 45° stop (see Page 35).
  - If the fence does not lean 45° towards the table, adjust the inward 45° stop by performing Steps 5-9.
- 5. Loosen the fence tilting handle, bring the fence to 45°, then tighten the handle just enough to keep the fence in position.
- 6. Remove the limit block from the fence bracket assembly and set it aside.
- 7. Using two 8mm wrenches, adjust the inward stop bolt (see Figure 46) until it contacts the fence at precisely 45° inward, then tighten the jam nut (where the bolt meets the bracket assembly) while holding the stop bolt in place. Some trial-and-error will be required to set this stop correctly.
- 8. Use two 8mm wrenches to tighten the hex nut on the inward stop as you hold the stop in place.
- **9.** Put the limit block back, bring the fence back to 90° and tighten the tilting handle.

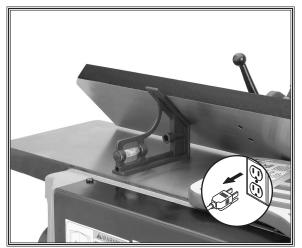


Figure 45. Checking the inward 45° stop.

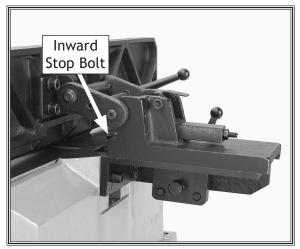


Figure 46. Adjusting the inward stop bolt.

#### Setting 45° Outward Stop

- 1. DISCONNECT JOINTER FROM POWER!
- 2. Loosen the fence tilting handle, remove the limit block and set it aside.
- 3. Tilt the fence backward (away from the table) until it stops.

**Note:** The fence will stop when the outward stop bolt hits the fence bracket.

- 4. Use a square to check the angle of the fence, as shown in Figure 47.
  - If the fence is tilting away from the table at 45°, the outward stop is set correctly. Put the limit block back, bring the fence to  $90^{\circ}$ , and tighten the tilting handle.
  - If the fence is not tilting away from the table at 45°, perform Steps 5-6 to set the outward stop correctly.

Figure 47. Checking the outward 45° stop.

- 5. With the outward stop bolt resting against the fence bracket, use an 8mm wrench to adjust the length of the stop until the fence is at 45°, then tighten the jam nut (see **Figure 48**).
- 6. Put the limit block back, bring the fence to 90° and tighten the fence tilting handle.

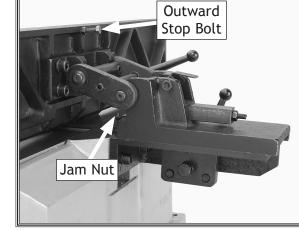


Figure 48. Outward stop bolt detail.







#### V-Belt Replacement

The Model W1829 uses two belts to drive the cutterhead and the dust collection impeller. When these belts are not tensioned correctly, misaligned, or damaged, your jointer will not function properly.

The part number for the replacement drive belt is X1829070; the part number for the replacement fan belt is X1829092.

Refer to the parts diagram in this manual when fixing belt problems. If you need further assistance, call our Tech Support at (360) 734-3482 or send e-mail to: <u>tech-support@shopfox.biz</u>.

To realign or replace the cutterhead belt, do these steps:

- 1. DISCONNECT JOINTER FROM POWER!
- 2. While facing the rear of the jointer, tip it away from you until it rests on the fence assembly.
- 3. Remove the screws that hold the motor cover to the jointer base. Lift the cover off and set it aside.
- 4. Inspect the cutterhead belt for proper tension, straight alignment, and possible damage or wear.

**Note:** The belt is properly tensioned if it deflects about  $\frac{3}{8}$ " when you press down on middle of the belt with moderate pressure from your thumb or forefinger. The belt is properly aligned if it lies flat and straight on the motor shaft and drive pulley. Belt damage will be evident upon inspection.

- 5. Loosen the four motor mounting cap screws (see Figure 49), but do not remove them.
- 6. Replace a damaged belt with a new one. Realign and re-tension the belt.
- 7. Tighten the motor mounting screws and replace the motor cover.
- 8. Test run the jointer, as described on Page 18. If this procedure does not solve the problem, call Tech Support.

**Note:** The fan belt is installed without releasing motor tension. Simply slide the old belt off. Slide the new belt on and replace the motor cover.

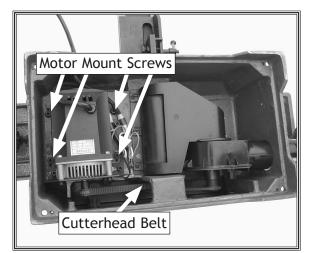


Figure 49. Motor mounting screws and belt locations.

## **Motor Brush Replacement**

This jointer has a universal motor that uses carbon brushes, which are considered wear-items. Refer to the troubleshooting guide to determine if the motor brushes must be replaced.

You can order a new brush kit (two brush assemblies) by calling customer service and ordering part X1829024-1.

To replace motor brushes, do these steps:

- 1. DISCONNECT JOINTER FROM POWER!
- 2. While facing the rear of the jointer, tip it away from you until it rests on the fence assembly.
- 3. Remove the screws that hold the motor cover to the jointer base. Lift the cover off and set it aside.
- 4. Vacuum all dust and debris from the motor and belt areas.
- Use a dime to unscrew the brush caps. (See Figure 50 to locate the brush caps.)

**Note:** When you remove the brush caps, a spring will pop out of the socket; the carbon brush is firmly attached to this spring. When you buy a new brush kit, you will get a pair of brush/spring assemblies.

- 6. Check the brushes for wear. If a brush is worn to less than  $3/_{32}$ " in length, replace both brushes.
- 7. Insert the brush assemblies, positioning them so they slide into the slots built into the sockets, then press the brush cap against the spring, push it into the socket, and turn it to lock it in the motor housing.
- 8. Replace the motor cover.
- 9. Test run the jointer, as described on Page 18.
  - If the jointer runs properly, you are done.
  - If the motor does not start, either the brushes are not correctly aligned in the sockets or there is another problem with the motor or wiring. Refer to the **Troubleshooting** section for assistance.

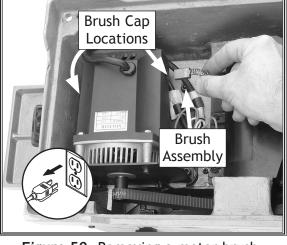


Figure 50. Removing a motor brush.





#### **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.

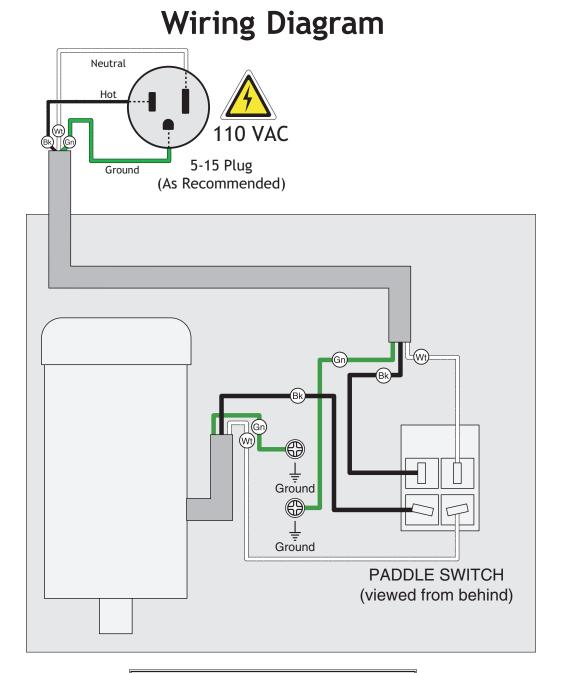
## 

- 1. 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!
- 2. 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.
- 3. 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.
- 4. 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.

- 5. 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.
- 6. 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.
- 7. CAPACITORS/INVERTERS. Some 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.
- 8. ELECTRICAL REQUIREMENTS. You MUST follow the electrical requirements at the beginning of this manual when connecting your machine to a power source.
- **9. EXPERIENCING DIFFICULTIES.** If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (360) 734-3482.

NOTICE	WIRING DIAGRAM COLOR KEY
The photos and diagrams	BLACK BLUE BLUE PYELLOW HIGHT BLUE
included in this section are	WHITE Wt BROWN (Br) TELEN (Yg) BILLE
best viewed in color. You can view these pages in	GREEN GRAY GV PURPLE WHITE WHITE
color at www.shopfox.biz.	RED Red ORANGE OF PINK PK QUOISE





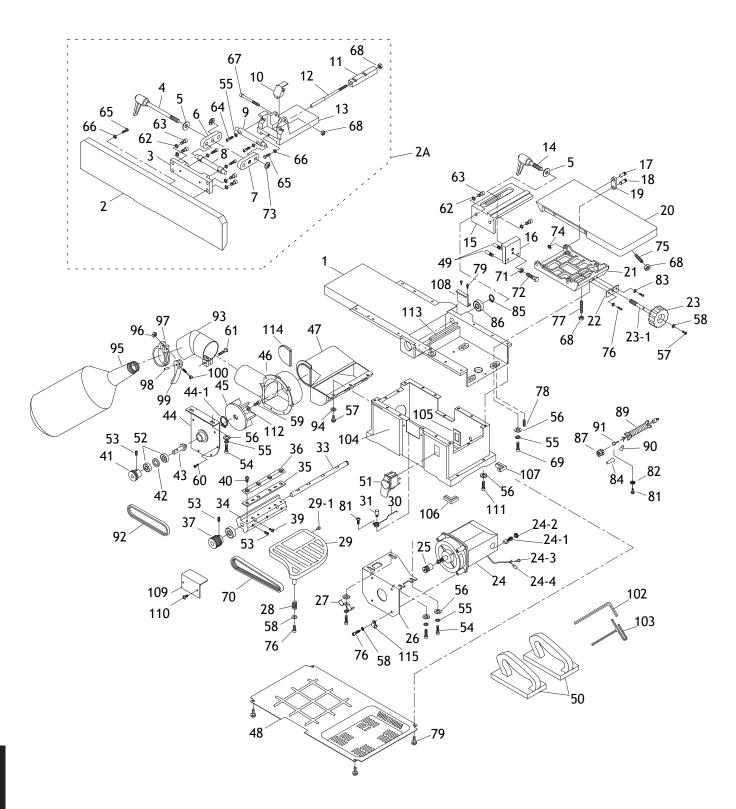
## NOTICE

These motor wiring diagrams are current at the time of printing; however, always default to the diagram on the inside of the junction box cover if it does not match this diagram, as it will reflect any changes since this manual was printed!





PARTS Main



-40-Download from Www.Somanuals.com. All Manuals Search And Download.



#### **Parts List**

REF	PART #	DESCRIPTION	
1	X1829001	TABLE	
2	X1829002	FENCE	
2A	X1829002A	FENCE ASSEMBLY	
3	X1829003	FENCE PLATE	
4	X1829004	FENCE TILTING HANDLE	
5	XPW01M	FLAT WASHER 8MM	
6	X1829006	RIGHT LINK	
7	X1829007	LEFT LINK	
8	X1829008	PLATE SHAFT	
9	X1829009	BRACKET SHAFT	
10	X1829010	LIMIT PLATE	
11	X1829011	BLOCK	
12	X1829012	SHAFT	
13	X1829013	FENCE BRACKET	
14	X1829014	FENCE SLIDING HANDLE	
15	X1829015	FENCE SUPPORT	
16	X1829016		
17	X1829017	TABLE PIN	
18	X1829018	FRAME PIN	
19	X1829019	BRACKET	
20	X1829019	INFEED TABLE	
20	X1829020		
22	X1829022	SUPPORT PLATE	
23	X1829023	KNOB	
23-1	X1829023-1	KNOB BOLT	
24	X1829024	MOTOR 2HP UNIVERSAL	
24-1	X1829024-1	CARBON BRUSH SET	
24-2	X1829024-2	BRUSH COVER	
24-3	X1829024-3	RING TERMINAL	
24-4	X1829024-4	SPADE TERMINAL	
25	X1829025	MOTOR PULLEY	
26	X1829026	MOTOR MOUNTING PLATE	
27	X1829027	CORD CLAMP	
28	X1829028	COMPRESSION SPRING	
29	X1829029	BLADE GUARD	
29-1	X1829029-1	RUBBER BUMPER	
30	X1829030	TORSION SPRING	
31	X1829031	PIN	
33	X1829033	SHAFT	
34	X1829034	CUTTERHEAD	
35	X1829035	KNIVES 2-PC SET 6 x 7/8 x 3/32"	
36	X1829036	KNIFE CLAMP	
37	X1829037	DRIVE PULLEY	
39	X1829039	JACK SCREW M47 X 10	
40	XPCAP115M	BUTTON HD CAP SCR M6-1 X 16	
41	X1829041	FAN PULLEY	
42	X1829042	SPACER	
43	X1829043	FAN SHAFT	
44	X1829044	CHIP BLOWER MOUNTING PLATE	
44-1	XPR17M	EXT RETAINING RING 26MM	
45	X1829045	IMPELLER	
46	X1829046		
47	X1829047	CHIP COLLECTOR	
48	X1829048	BASE BOTTOM	
	1027040	DASE DUTIUM	

REF	PART #	DESCRIPTION	
49	X1829049	ALIGNMENT PIN	
50	X1829050	PUSH BLOCKS	
51	X1829051	PADDLE SWITCH	
52	XP6000ZZ	BALL BEARING 6000ZZ	
53	XPSS01M	SET SCREW M6-1 X 10	
54	XPCAP26M	CAP SCREW M6-1 X 12	
55	XPLW03M	LOCK WASHER 6MM	
56	XPW03M	FLAT WASHER 6MM	
57	XPS09M	PHLP HD SCR M58 X 10	
58	XPW02M	FLAT WASHER 5MM	
59	XPCAP17M	CAP SCREW M47 X 10	
60	X1829060	TAP SCREW M6 X 12	
61	XPS26M	PHLP HD SCR M6-1 X 20	
62	XPLW04M	LOCK WASHER 8MM	
63	XPCAP14M	CAP SCREW M8-1.25 X 20	
64	XPCAP02M	CAP SCREW M6-1 X 20	
65	XPB94M	HEX BOLT M58 X 25	
66	XPN06M	HEX NUT M58	
67	XPCAP83M	CAP SCREW M6-1 X 55	
68	XPN01M	HEX NUT M6-1	
69	XPCAP07M	CAP SCREW M6-1 X 30	
70	X1829070	RIBBED V-BELT 171J5 NK	
71	XPN03M	HEX NUT M8-1.25	
72	XPB20M	HEX BOLT M8-1.25 X 35	
73	X1829073	SHAFT RETAINER M10	
74	XPEC09M	E-CLIP 6MM	
75	XPSS28M	SET SCREW M6-1 X 30	
76	XPCAP07M	CAP SCREW M6-1 X 30	
77	XPSS29M	SET SCREW M6-1 X 35	
78	XPSS11M	SET SCREW M6-1 X 16	
79	XPS05M	PHLP HD SCR M58 X 8	
81	XPS38M	PHLP HD SCR M47 X 10	
82	XPTLW01M	EXT TOOTHED WASHER 4MM	
83	XPLW01M	LOCK WASHER 5MM	
84	X1829084	WIRE NUT	
85	XPR03M	EXT RETAINING RING 12MM	
86	XP6201ZZ	BALL BEARING 6201ZZ	
87	X1829087	STR SNAP-IN STRAIN RELIEF 5/8"	
89	X1829089	POWER CORD 16G 3W 5-15 72"	
90	X1829090	SPADE TERMINAL	
91	X1829091	RING TERMINAL	
92	X1829092	FAN RIBBED V-BELT V1.25-7A	
93	X1829093	DUST PORT	
94	XPW02M	FLAT WASHER 5MM	
95	X1829095	DUST COLLECTION BAG	
96	XPN01M	HEX NUT M6-1	
97	X1829097	CLAMP 60MM	
98	X1829098	SOLID PIN 4.5 X 20MM	
99	X1829099	CLAMP HANDLE	
100	X1829100	SWING BOLT M6-1 X 50	
102	XPAW06M	HEX WRENCH 6MM	
102	XPAW04M	HEX WRENCH 4MM	
103	X1829104	BASE	
105	X1829105	SWITCH MOUNTING PLATE	



#### Parts List (continued)

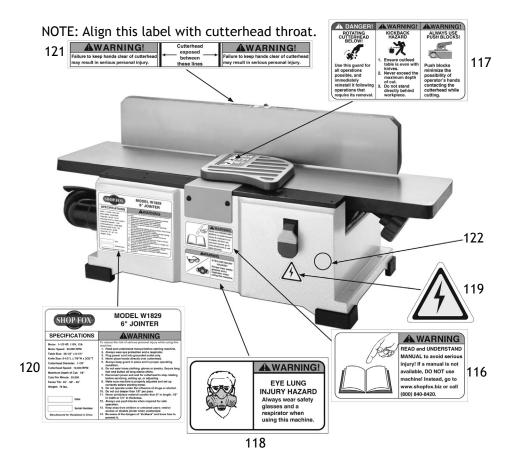
REF	PART #	DESCRIPTION
106	X1829106	RIGHT RUBBER FOOT
107	X1829107	LEFT RUBBER FOOT
108	X1829108	GUARD PLATE
109	X1829109	CUTTERHEAD COVER
110	XPS19M	PHLP HD SCR M58 X 6

REF	PART #	DESCRIPTION
111	XPCAP68M	CAP SCREW M6-1 X 8
112	X1829112	FENDER WASHER 5MM
113	X1829113	INFEED TABLE SUPPORT ARM
114	X1829114	CHIP COLLECTOR COVER PLATE
115	X1829115	WIRE RESTRAINT

## Labels

## **A**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.



REF	PART #	DESCRIPTION
116	XLABEL-08A	READ MANUAL LABEL
117	X1829117	CUTTERHEAD GUARD LABEL
118	XLABEL-06C	EYE/LUNG HAZARD LABEL
119	XLABEL-04	ELECTRICITY LABEL

REF	PART #	DESCRIPTION	
120	X1829120	MACHINE ID LABEL	
121	X1829121	CUTTERHEAD EXPOSURE LABEL	
122	XPPAINT-1	SHOP FOX WHITE(M1006)	



## Warranty Registration

City		State	Zip
Phone # Em			
Nodel #_	Serial #	Dealer Name	Purchase Date
-		n a voluntary basis. It will be used 5. <b>Of course, all information is str</b>	
	v did you learn about us? Advertisement Mail Order Catalog	Friend Website	Local Store Other:
	v long have you been a wo 0-2 Years	oodworker/metalworker? _2-8 Years8-20 Y	ears20+ Years
	/ many of your machines ( 0-2		10+
. Do y	ou think your machine re	presents a good value?	_YesNo
. Wou	ld you recommend Shop I	Fox products to a friend?	_YesNo
	nt is your age group? 20-29 50-59	30-39 60-69	40-49 70+
	nt is your annual househol \$20,000-\$29,000 \$50,000-\$59,000	d income? \$30,000-\$39,000 \$60,000-\$69,000	\$40,000-\$49,000 \$70,000+
. Whi	ch of the following magaz	zines do you subscribe to?	
F F	Cabinet Maker Family Handyman Hand Loader Handy Home Shop Machinist Journal of Light Cont. Live Steam Model Airplane News Modeltec DId House Journal	Popular MechanicsPopular SciencePopular WoodworkingPractical HomeownerPrecision ShooterProjects in MetalRC ModelerRifleShop NotesShotgun News	Today's HomeownerWoodWooden BoatWoodshop NewsWoodsmithWoodworkWoodworkWoodworker WestOther:
. Com	ments:		

FOLD ALONG DOTTED LINE



Place Stamp Here



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

#### Մեհանանենեն անդեսնեն անդեսնեն հետ

FOLD ALONG DOTTED LINE

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

Download from Www.Somanuals.com. All Manuals Search And Download.



# 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 or replace, at its expense and at its option, the Shop Fox machine or machine part, which in normal use has proven to be defective, provided that the original owner returns the product prepaid to a Shop Fox factory service center 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 or acts. In no event shall Woodstock International, Inc.'s liability under this 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:



#### WHOLESALE ONLY

WOODSTOCK INTERNATIONAL, INC. Phone: (360) 734-3482 · Fax: (360) 671-3053 · Toll Free Fax: (800) 647-8801 P.O.Box 2309 · Bellingham, WA 98227

# SHOPFOX.BIZ

Free Manuals Download Website <u>http://myh66.com</u> <u>http://usermanuals.us</u> <u>http://www.somanuals.com</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.com</u> <u>http://www.404manual.com</u> <u>http://www.luxmanual.com</u> <u>http://aubethermostatmanual.com</u> Golf course search by state

http://golfingnear.com Email search by domain

http://emailbydomain.com Auto manuals search

http://auto.somanuals.com TV manuals search

http://tv.somanuals.com