# **READ THIS FIRST**

Model W1875 \*\*\*IMPORTANT UPDATE\*\*\* Applies to Models Mfd. Since 01/21

and Owner's Manual Printed 11/20

Phone #: (360) 734-3482 • Tech Support: techsupport@woodstockint.com • Web: www.woodstockint.com

The following changes were recently made since the owner's manual was printed:

• Miter Slot to Blade Parallelism on Page 50 of the owner's manual has been revised.

Aside from the information contained in this update, all other content in the owner's manual is applicable and MUST be read and understood for your own safety.

IMPORTANT: Keep this update with the owner's manual for future reference. If you have any further questions, contact our Technical Support.

#### **Revised Miter Slot to Blade Parallelism**

Your table saw will give the best results if the miter slot is adjusted parallel to the blade. If the miter slot is not exactly parallel, your cuts and your finished work will be lower in quality, but more importantly, the risk of kickback will be increased.

Tools Needed	Qty
Combination Square	1
Marker	1
Flat Head Screwdriver 1/4"	1

#### To adjust blade parallel to miter slot, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Tilt blade to 0°, raise blade all the way, then remove blade guard and anti-kickback pawls.
- 3. Use combination square to measure distance from miter slot to a carbide tip on blade, as shown in Figure 64. Make sure face of square is even along miter slot.
- 4. With end of square just touching blade tip, lock square in place. Now, mark carbide tip with a marker where you made this measurement.







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#22495CS



- 5. Rotate marked blade tip to other end of table insert.
- 6. Slide square down to other end of table insert and compare distance from marked blade tip to end of square, as shown in Figure 65.
  - If blade tip measurement *is* equal on both sides, blade is parallel to miter slot.
  - If blade tip *does not* touch end of square similar to first measurement, blade parallelism eccentric will need to be adjusted. Proceed to Step 7.
- 7. Remove table insert.



- Turn eccentric clockwise to adjust rear of blade and spreader/riving knife *toward* motor.
- Turn eccentric counterclockwise to adjust rear of blade and spreader/riving knife *away* from motor.
- 9. Repeat Steps 3-8 until blade and miter slot are parallel.
- 10. Install table insert, blade guard, and pawls.



Figure 65. Making second slot-to-blade measurement at 0°.



Figure 66. Location of blade parallelism eccentric.



# MODEL W1875 BENCHTOP TABLE SAW



# **OWNER'S MANUFACTURED SINCE** 1/21)

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# WARNING!

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

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

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

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





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WARRANTY





(SHOP FOX)

# 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: <u>techsupport@woodstockint.com</u>. Our knowledgeable staff will help you troubleshoot problems and process warranty claims.

If you need the latest edition of this manual, you can download it from <u>http://www.woodstockint.com/manuals</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

# WARNING

Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to decrease the risk of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

# 

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





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### MODEL W1875 2 HP BENCHTOP TABLE SAW WITH STAND

Product Dimensions	
Weight	
Width (side-to-side) x Depth (front-to-back) x Height	57 x 28-1/2 x 36 in.
Footprint (Length x Width)	35-1/2 x 26-1/2 in.
Shipping Dimensions	
Туре	Cardboard
Content	Machine
Weight	
Length x Width x Height	40 x 31 x 17 in.
Electrical	
Power Requirement	120V, Single-Phase, 60 Hz
Full-Load Current Rating	
Minimum Circuit Size	20A
Connection Type	Cord & Plug
Power Cord Included	Yes
Power Cord Length	
Power Cord Gauge	
Plug Included	Yes
Included Plug Type	
Switch Type	etic ON/OFF Button Switch

#### Motors

#### Main

Horsepower	
Phase	Single-Phase
Amps	15A
Speed	
Туре	Universal
Power Transfer	Direct
Bearings	Sealed & Permanently Lubricated



#### Main Specifications

#### Main Information

Table Saw Type	Portable
Maximum Blade Diameter	10 in.
Arbor Size	
Arbor Speed	4400 RPM
Maximum Width of Dado	13/16 in.
Blade Tilt Direction	Right
Max Blade Tilt	45 deg.
Maximum Depth of Cut At 90 Degrees	3-1/2 in.
Maximum Depth of Cut At 45 Degrees	2-1/2 in.
Max Rip Right of Blade w/Included Fence & Rails	31-1/8 in.
Max Rip Left of Blade w/Included Fence & Rails	12 in.

#### Additional Blade Information

Included Blade Information	. 10" x 40T
Riving Knife/Spreader Thickness	0.090 in.
Required Blade Body Thickness	- 0.086 in.
Required Blade Kerf Thickness0.094	- 0.126 in.
Rim Speed at Max Blade Diameter	11,500 FPM

#### Table Information

Floor to Table Height	36-1/2 in.
Table Size with Extension Wings Width	
Table Size with Extension Wings Depth	
Distance Front of Table to Center of Blade	
Distance Front of Table to Blade At Maximum Cut	8-5/8 in.
Main Table Size Thickness	1-5/8 in.

#### Fence Information

Fence Type	Aluminum
Fence Size Length	27 in.
Fence Size Width	1-9/16 in.
Fence Size Height	2-3/8 in.
Fence Rail Type	Aluminum
Fence Rail Length	35 in.
Fence Rail Width	
Fence Rail Height	1-1/4 in.

#### Miter Gauge Information

Miter Gauge Slot Type	T-Slot
Miter Gauge Slot Size Width	3/4 in.
Miter Gauge Slot Size Height	3/8 in.

#### Construction

Table	Aluminum
Wings	Aluminum
Trunnions	Cast Iron
Body Assembly	Plastic
Fence Assembly	Aluminum
Rails	Aluminum
Miter Gauge Construction	Aluminum
Guard	Clear Plastic
Arbor Bearings	. Sealed & Permanently Lubricated

#### Other Related Information

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

#### Other

Country of Origin	China
Warranty	2 Years
Approximate Assembly & Setup Time	15 Minutes
Serial Number Location	Machine ID Label
Sound Rating	97 - 99 dB

#### Features

Built-In Folding Stand Offers Easy Portability and Quick Setup at Job Sites All Accessories Mount Directly to Saw Body for Easy Transport and Storage Micro-Adjusting Blade Angle Handwheel Aluminum Fence with Micro-Adjustment Quick-Release Blade Guard and Riving Knife/Spreader 2-1/2" Dust Port Extension Table Expands Up To 42-1/2" Wide for Ripping Large Workpieces

#### Accessories

Aluminum Fence Miter Gauge Blade Guard with Anti-Kickback Pawls Combo Riving Knife/Spreader Plastic Push Stick Arbor Wrench Included 10 in. Carbide-Tipped Blade Standard and Dado Table Inserts



NTRODUCTION

# Identification

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



# 

For Your Own Safety Read Instruction Manual Before Operating Saw

- a) Wear eye protection.
- b) Use saw-blade guard and spreader for every operation for which it can be used, including all through sawing.
- c) Keep hands out of the line of saw blade.
- d) Use a push-stick when required.
- e) Pay particular attention to instructions on reducing risk of kickback.
- f) Do not perform any operation freehand.
- g) Never reach around or over saw blade.

# **Controls & Components**

Refer to **Figures 1-3** and the following descriptions to become familiar with the basic controls and components of this machine. Understanding these items and how they work will help you understand the rest of the manual and reduce your risk of injury when operating this machine.



- **B.** Blade Tilt Lock Lever: Secures blade tilt setting. Move right to unlock and allow blade tilt adjustment; move left to secure setting.
- C. Blade Height/Tilt Handwheel: Rotates to adjust blade height from  $0-3^{1}/2^{"}$ . Rotate clockwise to raise blade; rotate counterclockwise to lower blade. Push inward and rotate to angle blade from  $0^{\circ}-45^{\circ}$ .
- D. Blade Tilt Indicator: Indicates angle of blade from 0-45°.
- E. Blade Guard w/Anti-Kickback Protection: Clear guard helps to prevent hands and fingers from contacting rotating blade. Anti-kickback pawls and spreader reduce risk of kickback (for information on kickback and how to prevent it, refer to Page 12).
- F. Fence: Supports long edge of workpiece during rip cuts. Refer to Page 33 for more information.
- **G.** Fence Lock Lever: Locks fence position. Move up to loosen fence; move down to lock fence.
- H. Fence Scale & Pointer: Indicates distance from fence to blade. Set to desired width of finished workpiece.
- I. Fence Micro-Adjust Knob: Rotates to finely adjust distance between fence and blade.





Figure 1. Power and blade controls.



Figure 2. Blade guard and fence.



Figure 3. Fence controls.



# **Glossary of Terms**

The following is a list of common definitions, terms and phrases used throughout this manual as they relate to this table saw and woodworking in general. Become familiar with these terms for assembling, adjusting or operating this machine.

- Arbor: A metal shaft extending from the drive mechanism that is the mounting location for the saw blade.
- **Bevel Edge Cut:** A cut made with the blade tilted to an angle between 0° and 45° to cut a beveled edge onto a workpiece. Refer to **Page 35** for more details.
- Blade Guard Assembly: Metal or plastic safety device that mounts over the saw blade. Its function is to prevent the operator from coming into contact with the saw blade. Refer to Page 28 for more details.
- **Crosscut:** Cutting operation in which the miter gauge is used to cut across the shortest width of the workpiece. Refer to **Page 34** for more details.
- Dado Blade: Blade or set of blades that are used to cut grooves, rabbets, or other nonthrough cuts. Refer to Page 26 for more details. The saw and arbor are not intended to safely use a larger dado blade.
- Dado Cut: Non-through cutting operation that uses a dado blade to cut a flat bottomed groove into the face of the workpiece. Refer to Page 36 for more details.
- Featherboard: Safety device used to keep the workpiece against the rip fence and against the table surface. Refer to Page 41 for more details.
- **Kerf:** The resulting cut or gap in the workpiece after the saw blade passes through during a cutting operation.
- **Kickback:** An event in which the workpiece is propelled back towards the operator at a high rate of speed.

- Non-Through Cut: A cut in which the blade does not cut through the top of the workpiece. Refer to Page 24 for more details.
- **Parallel:** Being an equal distance apart at every point along two given lines or planes (i.e. the rip fence face is parallel to the face of the saw blade).
- **Perpendicular:** Lines or planes that intersect and form right angles (i.e. the blade is perpendicular to the table surface).
- Push Stick: Safety device used to push the workpiece through a cutting operation. Used most often when rip cutting thin workpieces. Refer to Page 44 for more details.
- Rabbet: Non-through cutting operation that creates an L-shaped channel along the edge of the workpiece. Refer to Page 39 for more details.
- **Rip Cut:** Cutting operation in which the rip fence is used to cut across the widest width of the workpiece. Refer to **Page 33** for more details.
- **Riving Knife:** Metal plate located behind the blade. It maintains the kerf opening in the wood when performing a cutting operation. Refer to **Page 31** for more details.
- **Straightedge:** A tool used to check the flatness, parallelism, or consistency of a surface(s).
- Thin Kerf Blade: A blade with a kerf or thickness that is thinner than a standard blade cannot be used on this saw without using a thin-kerf riving knife.
- Through Cut: A cut in which the blade cuts completely through the workpiece. Refer to Page 24 for more details.

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# 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 or a situation that may cause damage to the machinery.

# **Standard Machinery Safety Instructions**

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

- TRAINED OPERATORS ONLY. Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!
- DANGEROUS ENVIRONMENTS. Do not use machinery in areas that are wet, cluttered, or have poor lighting. Operating machinery in these areas greatly increases the risk of accidents and injury.
- MENTAL ALERTNESS REQUIRED. Full mental alertness is required for safe operation of machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

- ELECTRICAL EQUIPMENT INJURY RISKS. You can be shocked, burned, or killed by touching live electrical components or improperly grounded machinery. To reduce this risk, only allow an electrician or qualified service personnel to do electrical installation or repair work, and always disconnect power before accessing or exposing electrical equipment.
- DISCONNECT POWER FIRST. Always disconnect machine from power supply BEFORE making adjustments, changing tooling, or servicing machine. This eliminates the risk of injury from unintended startup or contact with live electrical components.
- EYE PROTECTION. Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are not approved safety glasses.



- WEARING PROPER APPAREL. Do not wear clothing, apparel, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips, which could cause loss of workpiece control.
- HAZARDOUS DUST. Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material, and always wear a NIOSH-approved respirator to reduce your risk.
- HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.
- **REMOVE ADJUSTING TOOLS.** Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!
- INTENDED USAGE. Only use machine for its intended purpose—never make modifications without prior approval from Woodstock International. Modifying machine or using it differently than intended will void the warranty and may result in malfunction or mechanical failure that leads to serious personal injury or death!
- AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.
- CHILDREN & BYSTANDERS. Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.
- GUARDS & COVERS. Guards and covers reduce accidental contact with moving parts or flying debris—make sure they are properly installed, undamaged, and working correctly.

- FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.
- **NEVER STAND ON MACHINE.** Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.
- **STABLE MACHINE.** Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.
- USE RECOMMENDED ACCESSORIES. Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase risk of serious injury.
- **UNATTENDED OPERATION.** To reduce the risk of accidental injury, turn machine *OFF* and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.
- MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.
- CHECK DAMAGED PARTS. Regularly inspect machine for any condition that may affect safe operation. Immediately repair or replace damaged or mis-adjusted parts before operating machine.
- MAINTAIN POWER CORDS. When disconnecting cord-connected machines from power, grab and pull the plug—NOT the cord. Pulling the cord may damage the wires inside, resulting in a short. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.
- **EXPERIENCING DIFFICULTIES.** If at any time you experience difficulties performing the intended operation, stop using the machine! Contact Technical Support at (360) 734-3482.



# Additional Safety for Table Saws

Serious cuts, amputation, or death can occur from contact with rotating saw blade during operation. Workpieces, broken blades, or flying particles thrown by blade can blind or strike operators or bystanders with deadly force. To reduce the risk of these hazards, operator and bystanders MUST completely heed the hazards and warnings below.

- HAND & BODY POSITIONING. Keep hands away from saw blade and out of blade path during operation, so they cannot accidentally slip into blade. Only operate at front of machine and always stand to side of blade path. Never reach behind or over blade, or under blade guard when blade is spinning.
- **BLADE GUARD.** The blade guard protects operator from rotating saw blade. Make sure blade guard is installed, adjusted correctly, and used for all possible "through cuts." Promptly repair or replace if damaged. Re-install immediately after operations that require its removal.
- **RIVING KNIFE.** Use riving knife for all "nonthrough cuts." Make sure it is aligned and positioned correctly. Promptly repair or replace it if damaged.
- **KICKBACK.** Kickback occurs when saw blade ejects workpiece back toward operator. Know how to reduce risk of kickback, and learn how to protect yourself if it does occur.
- FEEDING WORKPIECE. Feeding workpiece incorrectly increases risk of kickback. Always allow blade to reach full speed before cutting, feed workpiece from front of saw, making sure workpiece is flat against table and a fence, miter gauge, or other guide is used to feed workpiece in a straight line. Feed cuts through to completion. Never start saw with workpiece touching blade or pull workpiece from behind blade. Never back workpiece out of cut, move it sideways, or perform a "freehand" operation. Never plunge cut.
- DADO AND RABBET OPERATIONS. Dado and rabbeting operations require special attention since they must be performed with blade guard removed, which increases risk of blade contact. DO NOT attempt dado or rabbeting operations without first reading these sections in this manual.

- **PUSH STICKS/PUSH BLOCKS.** To reduce risk of accidental blade contact, use push sticks/push blocks whenever possible. In event of an accident, these will often take damage that would have occurred to hands/fingers.
- **FENCE.** To reduce risk of kickback, make sure fence remains properly adjusted and parallel with blade. Always lock fence before using. Do not use fence while using miter gauge. Make sure fence is not touching the blade when the saw is started.
- **CUT-OFF PIECES.** To avoid risk of injury due to blade contact, turn saw OFF and allow blade to completely stop before removing cut-off pieces near blade or trapped between blade and table insert. Never use your hands to move cut-off pieces away from blade while saw is running.
- **BLADE ADJUSTMENTS.** Adjusting blade height or tilt during operation increases risk of crashing blade and sending metal fragments flying with deadly force at operator or bystanders. Only adjust blade height and tilt when blade is completely stopped and saw is OFF. Make sure blade is not touching the guard, riving knife, or workpiece before the saw is started.
- CHANGING BLADES. Accidental startup while changing saw blade can result in serious injury. To reduce risk of accidental blade contact, always disconnect power before changing blades.
- **DAMAGED SAW BLADES.** Damaged saw blade teeth can become deadly projectiles. Never use blades that have been dropped or damaged.
- **CUTTING CORRECT MATERIAL.** Cutting metal, glass, stone, tile, etc., increases risk of operator injury due to kickback or flying particles. Only cut natural and man-made wood products, laminatecovered wood products, and some plastics. Never cut materials not intended for this saw.

SAFETY



# **Preventing Kickback**

Below are ways to avoid the most common causes of kickback:

- Only cut workpieces with at least one smooth and straight edge. DO NOT cut warped, cupped or twisted wood.
- Keep the blade guard installed and working correctly for all through cuts.
- Never attempt freehand cuts. If the workpiece is not fed parallel with the blade, kickback will likely occur. Always use the rip fence or miter gauge to guide the workpiece.
- Make sure the spreader or riving knife is aligned with the blade and secured tightly. A misaligned spreader or riving knife can cause the workpiece to catch or bind, increasing the chance of kickback.
- Take the time to check and adjust the rip fence parallel with the blade; otherwise, the chances of kickback are extreme.
- The spreader or riving knife maintains the kerf in the workpiece, reducing the chance of kickback. Always use the riving knife for all non-through operations, unless a dado blade is installed. Always use the spreader with the blade guard for all through cuts.
- Feed cuts through to completion. Anytime you stop feeding a workpiece in the middle of a cut, the chance of kickback is greatly increased.
- Keep the blade guard installed and in good working order. Only remove it when performing non-through cuts and immediately re-install the blade guard when finished. Remember, always use the riving knife for all non-through operations, unless a dado blade is installed.
- Make multiple, shallow passes when performing a non-through cut. Making a deep nonthrough cut will greatly increase the chance of kickback.

Never move the workpiece backwards or try to back it out of a cut while the blade is moving. If you cannot complete a cut for some reason, stop the saw motor and allow the blade to completely stop before backing the workpiece out. Promptly fix the condition that prevented you from completing the cut before starting the saw again.

# Protecting Yourself From Kickback

Even if you know how to prevent kickback, it may still happen. Here are some ways to protect yourself if kickback DOES occur:

- Stand to the side of the blade during every cut. If kickback does occur, the thrown workpiece usually travels directly in front of the blade.
- Wear safety glasses or a face shield. In the event of kickback, your eyes and face are the most vulnerable parts of your body.
- Never, for any reason, place your hand behind the blade. Should kickback occur, your hand will be pulled into the blade, which could cause amputation.
- Use a push stick to keep your hands farther away from the moving blade. If kickback occurs, the push stick will most likely take the damage your hand would have received.
- Use featherboards or anti-kickback devices to assist with feeding and prevent or slow down kickback.

# 

Statistics show that most common accidents among table saw users can be linked to kickback. Kickback is typically defined as the high-speed expulsion of stock from the table saw toward its operator. In addition to the danger of the operator or others in the area being struck by the flying stock, it is often the case that the operator's hands are pulled into the blade during kickback.



# 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 120V ...... 15 Amps

#### **Circuit Requirements for 120V**

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	
Plug/Receptacle	NEMA 1-15

# WARNING

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



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.



# **Polarized Plug**

This tool is double-insulated and therefore does not have a grounding wire or plug. The two-pronged, NEMA 1-15 plug has a polarized end; this means that one prong (the neutral connector) is wider than the other (the hot connector). Polarized plugs must be used only with polarized receptacles. Do not attempt to plug this tool into a non-polarized receptacle. If a polarized receptacle is not available, a qualified electrical technician will have to install one before the saw can be plugged in.

# **Extension Cords**

When using extension cords, make sure the cords are rated for outdoor use. Outdoor use cords are marked with a "W-A" or a "W" to signify their rating. Always check to make sure that the extension cords are in good working order and free of any type of damage, such as exposed wires, cuts, creased bends, or missing prongs.

Extension cords cause voltage drop, which may damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes. When using extension cords, always choose the shortest cord possible, with the greatest-sized gauge.

Below is a list of minimum gauge sizes needed for running this tool at different lengths:

Minimum	Gauge Size at	120V	12 AWG
Maximum	Length (Short	er is Better)	)



Figure 4. NEMA 1-15 plug & receptacle.

ELECTRICAL



# 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
An Assistant	
• Safety Glasses for Each Person	
Wrench or Socket 13mm	
Hex Wrench 3mm	
Straightedge	
Dust Collection System	
• Dust Hose 2 <sup>1</sup> / <sub>2</sub> "	
• Hose Clamps 2 <sup>1</sup> / <sub>2</sub> "	2
·	



**A**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!



Wear safety glasses during entire setup process!



# 

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







### 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.

Tat	ole Saw Inventory (Figure 5)	Qty
Α.	Main Table Saw Unit (Not Shown)	1
B.	Miter Gauge	1
C.	Blade Guard	1
D.	Push Stick	1
E.	Anti-Kickback Pawls	1
F.	Arbor Wrenches	2
G.	Spreader/Riving Knife	1
Н.	Dado Insert (Not Shown)	1

#### Stand Inventory (Figure 6)

Ι.	U-Bracket	.1
J.	Middle Bracket	.1
Κ.	Foot Bracket	.1
L.	Handles	.2
Μ.	Wheel Bracket	.1
N.	8" Wheels	.2

#### Stand Hardware (Figure 7)

Star	nd Hardware (Figure 7)	Qty
0.	Tap Screws M5 x 10	2
Ρ.	Button Head Cap Screws M6-1 x 55 (Machine)	4
Q.	Lock Nuts M6-1 (Machine)	4
R.	Middle Bracket Fasteners	
	-Carriage Bolts M8-1.25 x 40	4
	- Spacers	4
	-Lock Nuts M8-1.25	4
S.	Foot Bracket Fasteners	
	-Carriage Bolts M8-1.25 x 40	4
	- Spacers	4
	-Lock Nuts M8-1.25	4
т.	Fender Washers 8mm (Wheel)	2
U.	Lock Nuts M8-1.25 (Wheel)	2
۷.	Wheel Caps	2



Figure 5. Table saw inventory.



Figure 6. Stand inventory.



Figure 7. Stand hardware.

Qty



# **Machine Placement**

#### Workbench Load

Refer to the **Machine Specifications** for the weight and footprint specifications of your machine. Some workbenches may require additional reinforcement to support the weight of the machine and workpiece materials.

#### **Placement Location**

Consider anticipated workpiece sizes and additional space needed for auxiliary stands, work tables, or other machinery when establishing a location for this machine in the shop. Below is the minimum amount of space needed for the machine.







**CAUTION** INJURY HAZARD! Untrained users can injure themselves with this machine. Restrict access to machine when you are away, especially if it is installed where children are present.

# 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** or connecting the machine to power.

#### To assemble stand and mount saw, do these steps:

- 1. Attach each handle to U-bracket with M5 x 10 tap screw (see Figure 9).
- Attach middle bracket to U-bracket with (2) M8-1.25 x 40 carriage bolts, (2) spacers, and (2) M8-1.25 lock nuts (see Figure 9).
- 3. Attach foot bracket to U-bracket with (2) M8-1.25 x 40 carriage bolts, (2) spacers, and (2) M8-1.25 lock nuts (see Figure 10).



Figure 9. U-bracket assembly.



Figure 10. Foot bracket assembly.



- Attach wheel bracket to middle bracket with (2) M8-1.25 x 40 carriage bolts, (2) spacers, and (2) M8-1.25 lock nuts (see Figure 11).
- Attach wheel bracket to foot bracket with (2) M8-1.25 x 40 carriage bolts, (2) spacers, and (2) M8-1.25 lock nuts (see Figure 11).
- Remove wheel cap from stand and mounting hardware from wheels. Attach each wheel to wheel bracket with (2) 8mm fender washers and (2) M8-1.25 lock nuts, then replace wheel cap (see Figure 11).
- 7. Push release latch (see Figure 12) and pull handles up until release latch clicks, locking the stand.
- Place table saw on stand and secure with (4) M6-1 x 55 button head cap screws and (4) M6-1 lock nuts (see Figure 12).

Note: Full extension of extension wing requires table saw be oriented on stand as shown in Figure 12.

**9.** Place fence on front rail, then lower back of fence onto rear rail. Lower lock lever to secure and align fence (see **Figure 13**).



Figure 11. Wheel bracket assembly.



Figure 12. Table saw mounted on stand.



Figure 13. Fence in position on table.



**10.** Slide fence up against right hand edge of miter slot, and lock it in place. Examine how fence lines up with miter slot (see **Figure 14**).

**Note:** It is permissible for back of fence to pivot outward not more than <sup>1</sup>/<sub>64</sub>" from being parallel with miter slot. This creates a slightly larger opening between fence and blade, at rear of blade, to reduce risk of workpiece binding or burning as it is fed through cut. Many woodworkers intentionally set up their fence in this manner. Keep this in mind before adjusting your fence. For more details refer to **Offsetting Fence** on **Page 55**.

- If fence *is* still parallel with miter slot, proceed to Step 11.
- If fence *is not* parallel with miter slot, then you MUST adjust fence so that it is parallel, as described in Calibrating Fence to Blade on Page 55.
- If miter slot *is not* parallel with blade, you must follow procedures described in Miter Slot to Blade Parallelism on Page 50.
- 11. Install blade guard as instructed on Page 28.

### **Dust Collection**

#### 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 consider these variables: (1) CFM rating of the dust collector, (2) hose type and length between the dust collector and the machine, (3) number of branches or wyes, and (4) amount of other open lines throughout the system. Explaining how to calculate these variables is beyond the scope of this manual. Consult an expert or purchase a good dust collection "how-to" book.

Tools Needed	Qty
Dust Collection System	1
Dust Hose 2 <sup>1</sup> / <sub>2</sub> "	1
Hose Clamps 2 <sup>1</sup> / <sub>2</sub> "	2

#### To connect a dust collection hose, do these steps:

 Fit a 2<sup>1</sup>/<sub>2</sub>" dust hose over the dust port, as shown in Figure 15, and secure it in place with a hose clamp.



Figure 14. Checking fence parallelism with blade.



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



- Figure 15. Dust port connected to dust collection system.
- 2. Tug the hose to make sure it does not come off.

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



# 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.

The Test Run consists of verifying the following: 1) The motor powers up and runs correctly.

#### To test run machine, do these steps:

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

The motor should run smoothly and without unusual noises.

# 

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.

# **AWARNING**

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.



# **OPERATIONS**

# General

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

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

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

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

- 1. Examines workpiece to make sure it is suitable for cutting.
- 2. Adjusts blade tilt, if necessary, to correct angle for desired cut.
- **3.** Adjusts blade height no more than <sup>1</sup>/<sub>4</sub>" higher than thickness of workpiece.
- 4. Adjusts fence to desired width of cut, then locks it in place.
- 5. Checks outfeed side of machine for proper support and to make sure workpiece can safely pass all the way through blade without interference.
- 6. Puts on safety glasses, respirator, and hearing protection, and locates push sticks/blocks if needed.
- 7. Starts saw.
- 8. Feeds workpiece all the way through blade while maintaining firm pressure on workpiece against table and fence, and keeping hands and fingers out of blade path and away from blade.
- 9. Stops machine immediately after cut is complete.



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

### **A**WARNING





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

# NOTICE

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



# **Workpiece Inspection**

Some workpieces are not safe to cut or may require modification before they can be made safe to cut.

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

- *Material Type:* This machine is intended for cutting natural and man-made wood products, laminate covered wood products, and some plastics. Cutting drywall or cementitious backer board creates extremely fine dust and may reduce the life of the bearings. This machine is NOT designed to cut metal, glass, stone, tile, etc.; cutting these materials with a table saw may lead to injury.
- Foreign Objects: Nails, staples, dirt, rocks and other foreign objects are often embedded in wood. While cutting, these objects can become dislodged and hit the operator, cause kickback, or break the blade, which might then fly apart. Always visually inspect your workpiece for these items. If they can't be removed, DO NOT cut the workpiece.



# 

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!

- Large/Loose Knots: Loose knots can become dislodged during the cutting operation. Large knots can cause kickback and machine damage. Choose workpieces that do not have large/loose knots or plan ahead to avoid cutting through them.
- Wet or "Green" Stock: Cutting wood with a moisture content over 20% causes unnecessary wear on the blades, increases the risk of kickback, yields poor results.
- **Excessive Warping:** Workpieces with excessive cupping, bowing, or twisting are dangerous to cut because they are unstable and often unpredictable when being cut. DO NOT use workpieces with these characteristics!
- Minor Warping: Workpieces with slight cupping can be safely supported if the cupped side is facing the table or the fence. On the contrary, a workpiece supported on the bowed side will rock during a cut and could cause kickback or severe injury.

# 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.



# Non-Through & Through Cuts

#### Non-Through Cuts

A non-through cut is a sawing operation where the blade does not protrude above the top face of the wood stock, as shown in **Figure 16**.

Examples of non-through cuts include dadoes and rabbets. Non-through cuts have a higher risk of injury from kickback because the blade guard must be removed. However, the riving knife MUST be installed because it still provides some protection.

**IMPORTANT:** When making non-through cuts with a dado blade, do not attempt to cut the full depth in one pass. Instead, take multiple light passes to reduce the load on the blade.

A dado blade smaller than 10" will require removal of the riving knife, because the riving knife will be higher than the blade.

#### Through Cuts

A through cut is a sawing operation in which the workpiece is completely sawn through, as shown in **Figure 17.** Examples of through cuts are rip cuts, cross cuts, miter cuts, and beveled cuts. The blade guard assembly MUST be used when performing through cuts.

# NOTICE

If you have never used this type of machine or equipment before, seek training from an experienced machine operator or read "how to" books before beginning any projects. Regardless of the content in this section, Shop Fox will not be held liable for accidents caused by lack of training.







Figure 17. Example of a through cut (blade guard not shown for illustrative purposes).

**OPERATIONS** 



# **Blade Size Requirements**

When choosing a main blade, make sure the blade size meets the requirements listed below. The thickness of the blade body and teeth can be measured with calipers or any precision measuring device.

#### Blade Size Requirements:

- Body Thickness: 0.060"-0.086" (1.5-2.1mm)
- Kerf (Tooth) Thickness: 0.094"-0.126" (2.4-3.2mm)
- Riving Knife Thickness: 0.09" (2.3mm)
- Blade Size Required for Riving Knife: 10"

# 

Using a blade that does not meet the specified blade size requirements presents a hazardous condition that could cause kickback, operator injuries, or property damage. ALWAYS use a blade that meets the given blade size requirements.

# **Blade Selection**

This section on blade selection is by no means comprehensive. Always follow the saw blade manufacturer's recommendations to ensure safe and efficient operation of your table saw.

#### Ripping Blade Features (Figure 18):

- Best for cutting with the grain
- 20-40 teeth
- Flat-top ground tooth profile
- Large gullets for large chip removal

#### Crosscut Blade Features (Figure 19):

- Best for cutting across the grain
- 60-80 teeth
- Alternate top bevel tooth profile
- Small hook angle and a shallow gullet

#### Combination Blade Features (Figure 20):

- Designed to cut both with and across grain
- 40-50 teeth
- Alternate top bevel and flat, or alternate top bevel and raker tooth profile
- Teeth are arranged in groups
- Gullets are small and shallow (similar to a cross-cut blade), then large and deep (similar to a ripping blade



Figure 18. Example of a ripping blade.



Figure 19. Example of a crosscut blade.



Figure 20. Example of a combination blade.



#### Laminate Blade Features (Figure 21):

- Best for cutting plywood or veneer
- 40-80 teeth
- Triple chip tooth profile
- Very shallow gullet

Thin Kerf Blade: A blade with thinner kerf than a standard blade. Since the spreader/riving knife included with this table saw is sized for standard blades, thin kerf blades *cannot* be used on this saw unless they meet the **Blade Requirements** specified in this manual; otherwise, they will increase the risk of kickback.

#### **Dado Blades**

**Stacked Dado Blade** (see **Figure 22**): Multiple blades are stacked together to control the cutting width. Stacked dado blades are more expensive than wobble blades, but typically produce higher quality results.

Wobble Dado Blade: A single blade mounted at a slight angle on an arbor hub. The blade angle is adjustable on the hub, and the width of the dado cut is controlled by the angle setting of the blade.



Figure 21. Example of a laminate blade.



Figure 22. Stacked dado blade.



### **Blade Installation**

Review this section, even if your saw blade came preinstalled.

#### To remove & install blade, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Raise blade all the way up, then remove blade guard and anti-kickback pawls (see Page 28), table insert, and spreader/riving knife.
- 3. Use included arbor wrench on inner flange to hold blade in place.
- 4. Use second included arbor wrench to loosen and remove arbor nut and flange (see Figure 23). Arbor nut has right-hand threads; rotate counterclockwise to loosen.

# 



To reduce risk of injury, always disconnect power to saw before changing blades. Since the blade is sharp, use extra care and wear gloves when installing it.



Figure 23. Example of removing table saw blade.

- Install new blade, flange, and arbor nut as shown in Figure 24, with blade teeth facing front of the saw.
- 6. Re-install spreader, table insert, and blade guard with anti-kickback pawls (see Page 28).

**Figure 24.** Correct order of installation with teeth facing the correct direction.



# **Blade Guard Assembly**

The term "blade guard" refers to the assembly that consists of the clear polycarbonate shield, the spreader, and the anti-kickback pawls on each side of the spreader (see **Figure 25**). Each of these components has important safety functions during the operation of the saw.

#### Guard

The clear polycarbonate guard allows the operator to see the blade cut the workpiece during operation. This guard is designed to lift as the workpiece is pushed into the blade and remain in contact with the workpiece throughout the entire cut.

The guard reduces injury risk by providing a barrier around the blade that prevents accidental contact and contains flying wood chips.

To ensure that the guard does its job effectively, the guard must always be in the downward position against the table during idle operation, and the hinge mechanism must be maintained in good working condition so the guard can freely pivot up and down to accommodate the height of the workpiece and return to the table surface.

#### Spreader/Riving Knife

The spreader/riving knife is a metal plate that prevents the newly cut kerf of the workpiece from pinching the backside of the blade, causing kickback.

The spreader/riving knife also acts as a barrier behind the blade to shield hands from being pulled into the blade if a kickback occurs.

#### Installing Blade Guard & Spreader/Riving Knife

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Raise blade all the way up, then remove table insert.
- 3. Lift lock lever up to release spreader/riving knife clamp (see Figure 26).



Figure 25. Blade guard assembly components.



In order to work properly, the spreader cannot be bent or misaligned with the blade. If the spreader accidentally gets bent, take the time to straighten it or just replace it. Using a bent or misaligned spreader will increase the risk of kickback! Refer to Page 51 to check or adjust alignment if necessary.



Figure 26. Spreader lock lever.



- 4. Push spreader/riving knife towards lock lever to disengage positioning pins.
- 5. Pull spreader/riving knife upwards until positioning pins lock into lowest mounting holes (see Figure 27).
- 6. Push lock lever down and check spreader/riving knife alignment (see Page 51).
- 7. Install table insert.



9. Push down blade guard lock lever to secure position. Tug blade guard to make sure it is locked in place.



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Figure 28. Placing blade guard on spreader/riving knife.

- **10.** Hold pawls assembly lock lever and insert front of pawls assembly into rear slot of spreader/riving knife as shown in **Figure 29**.
- 11. Release lever. Tug pawls assembly to make sure it is locked in place.

# **A**CAUTION

The blade guard assembly reduces the risk of laceration and amputation injuries and MUST always be installed on the saw for all normal through cuts. For more information on the spreader/riving knife and how to use it, refer to Page 31.



Figure 29. Installing pawls assembly.



#### Anti-Kickback Pawls

The anti-kickback pawls allow the workpiece to travel in only one direction. If the workpiece moves backwards, such as during a kickback, the pawls will dig into the workpiece to slow or stop it.

To work properly, the pawls must return to their resting position after pivoting, as shown in **Figure 30**.

If the pawls fail to return to the resting position, the pivot area may need to be cleaned or the spring may have been dislodged or broken and will need to be fixed/replaced.

#### **Disabling Pawls**

You might disable the pawls if you are concerned about them scratching a delicate workpiece, or if you believe that they will obstruct a narrow workpiece and cause feeding difficulty or loss of control. Use your best judgment before retracting the pawls, as they are provided for your safety.

#### To disable pawls, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Hold pawl lock lever (see Figure 30) and pull front of pawl assembly from spreader/riving knife.

#### When to Use Blade Guard

The blade guard assembly MUST always be installed on the saw for all normal through cuts (those where the blade cuts all the way through the thickness of the workpiece). If the blade guard is removed for specific operations, always immediately replace it after those operations are complete.

#### When Not to Use Blade Guard

The blade guard cannot be used on any non-through cuts (those in which the blade does not cut all the way through the thickness of the workpiece).

Sometimes the blade guard or its components can get in the way when cutting very narrow workpieces or other specialized cuts. Because the blade guard is provided to decrease your risk of injury, it should not be used if it gets in the way of making a safe cut. Use good judgment!



Figure 30. Pawls in resting position.

# 

We do not recommend disabling pawls during normal operations unless absolutely necessary. In most situations, disabling pawls will increase your risk of serious personal injury in event of a kickback.

# 

The pawls are sharp and can lacerate fingers or hands. Use caution, and wear leather gloves when handling the pawls to reduce risk of injury.

### NOTICE

Whenever blade guard cannot be used, spreader/riving knife must be adjusted to riving knife position. For more information on the spreader/ riving knife and how to use it, refer to Page 31.

# Riving Knife

The spreader also functions as a riving knife, which works in the same manner as the spreader, but is used for nonthrough cuts. It is a metal plate that prevents the newly cut workpiece from pinching the backside of the blade and causing kickback.

The key difference between the spreader and the riving knife is that the riving knife mounts below the blade's highest point of rotation, as shown in **Figure 31**.

The height difference between the riving knife and the blade allows the workpiece to pass over the blade during non-through cuts (those in which the blade does not cut all the way through the thickness of the workpiece).

The riving knife acts as a barrier behind the blade to reduce the risk of hands being pulled into the blade if a kickback occurs.

When used as a riving knife, the spreader/riving knife must be kept within the range shown in **Figure 32**. Therefore, we only recommend using a 10" blade for operations that require use of the riving knife.

#### To adjust riving knife, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Raise blade all the way up, then remove table insert.
- 3. Lift lock lever up to release spreader/riving knife clamp (see Figure 33).
- 4. Push spreader/riving knife towards lock lever to disengage positioning pins.







Figure 32. Example of allowable distance between riving knife and blade.



Figure 33. Spreader lock lever.





- 5. Push spreader/riving knife down until positioning pins lock into top mounting holes (see Figure 34).
- 6. Push lock lever down and check spreader/riving knife alignment (see Page 51).
- 7. Install table insert.

#### When to Use Riving Knife

Use the riving knife for all non-through cuts made with a standard table saw blade (i.e., dadoes or rabbet cuts, and when using a tenoning jig).

Also, use the riving knife for those special operations where the blade guard or its components get in the way of safe operation, such as with very narrow cuts.

#### When Not to Use Riving Knife

DO NOT use the riving knife with a dado blade. Dado blades are too wide to be used with the spreader clamp engaged and doing so can lead to operator injury and machine damage.

In addition, although it is possible to use the riving knife for through cutting operations, the blade guard offers far more injury protection and risk reduction than the riving knife. Therefore, **we strongly recommend** you use the blade guard assembly instead of the riving knife for through cuts.





# 

To ensure riving knife works safely, it MUST be aligned with and correctly adjusted to blade. Refer to Page 51 to check or adjust riving knife alignment.


### Ripping

Ripping means cutting with the grain of a natural wood workpiece. In man-made materials such as MDF or plywood, ripping simply means cutting lengthwise.

To make a rip cut, do these steps:

- 1. Review **Preventing Kickback** on **Page 12** and take necessary precautions to reduce likelihood of kickback.
- 2. If using natural wood, joint one long edge of workpiece on a jointer.
- 3. DISCONNECT MACHINE FROM POWER!
- 4. Ensure that blade guard/spreader is installed.
- 5. Set fence to desired width of cut on scale.
- 6. Adjust blade height so highest saw tooth protrudes no more than 1/4" above workpiece.
- 7. Set up safety devices such as featherboards or other anti-kickback devices, making sure no safety devices are contacting blade.
- 8. Plug saw into power source, turn it *ON*, and allow it to reach full speed.

**Note:** Jointed edge of workpiece must slide against fence during cutting operation.

9. Use a push stick to feed workpiece through saw blade, as shown in Figure 35, until workpiece is completely beyond saw blade.

### 

Serious injury can be caused by kickback. Kickback is a high-speed ejection of stock from table saw toward an operator. The operator or bystanders may be struck by flying stock, or the operator's hands can be pulled into blade during kickback.



Figure 35. Typical ripping operation.

### WARNING

Turn saw OFF and allow blade to come to a complete stop before removing cutoff piece. Failure to follow this warning could result in severe cuts or amputation.





### Crosscutting

"Crosscutting" means cutting across the grain of a natural wood workpiece, usually with a miter saw. In other manmade materials, such as MDF or plywood, crosscutting means cutting across the width of the workpiece.

To make a crosscut using miter gauge, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Ensure that blade guard assembly is installed.
- 3. To avoid kickback, move rip fence aside and position miter gauge, adjusted to  $90^{\circ}$ , in a miter slot.
- 4. Adjust blade height so teeth protrude no more than 1/4" above workpiece.
- 5. Slide miter gauge near blade and adjust workpiece so blade will cut on waste side of line.
- 6. Plug in table saw, turn it *ON*, and allow it to reach full speed.
- 7. Hold workpiece firmly against face of miter gauge (as shown in Figure 36), and ease it through blade until workpiece is completely past saw blade.

### **WARNING**

Turn saw OFF and allow blade to come to a complete stop before removing cutoff piece. Failure to follow this warning could result in severe cuts or amputation.



Figure 36. Typical crosscutting operation.



### **Miter Cuts**

A miter cut is an angled crosscut. Miters are usually cut in the same manner as crosscuts, using the miter gauge and a predetermined mark on the workpiece.

To perform a miter cut, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Ensure that blade guard assembly is installed.
- 3. Determine angle of cut. If angle needs to be precise, use a protractor to set miter gauge to blade.
- 4. Place face of miter gauge against edge of workpiece and place bar across face of workpiece. Use bar as a guide to mark your cut, as shown in **Figure 37**.
- 5. Place miter gauge back into slot and hold workpiece firmly against miter gauge body. Slide miter gauge near blade and adjust workpiece so blade will cut on waste side of line.
- 6. Proceed to make cut in same manner as described in **Crosscutting** instructions.

### **Blade Tilt/Bevel Cuts**

The blade tilt handwheel allows the operator to tilt the blade to the right, between  $0^{\circ}$  and  $45^{\circ}$ . This is used most often when cutting bevels, compound miters, or chamfers. **Figure 38** shows an example of the blade when tilted to  $45^{\circ}$ .



Figure 37. Example of marking miter line.



**Figure 38.** Example of blade tilted to 45° for bevel cutting (blade guard only removed for clarity).



### **Dado Cutting**

Commonly used in furniture joinery, a dado is a straight channel cut in the face of the workpiece. Dadoes are "non-through" cuts that can be made with a dado blade or a standard saw blade. **Figure 39** shows a cutaway view of a dado cut being made with a dado blade.

The Model W1875 can accommodate dado blades up to 10" in diameter with a maximum thickness of  $^{13}/_{16}$ ".

DO NOT use the riving knife if you install a dado blade.

#### Installing Dado Blade

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Remove table insert, blade guard assembly, spreader/riving knife, and saw blade.
- 3. Attach and adjust dado blade system according to dado blade manufacturer's instructions.
- 4. Install included dado table insert.



Figure 39. Example of a dado being cut with a dado blade.

### **A**WARNING

DO NOT make through cuts with a dado blade. The extra width of a dado blade will increase risk of kickback during a through cut. Dado blades are only intended for non-through cuts. Failure to heed this warning could result in serious injury.

### 

Never try to cut a warped board by pushing it flat against the table. If kickback occurs, your hand could be pulled into blade, resulting in severe cuts or amputation.



#### Cutting Dadoes with a Dado Blade

Because dado blades are much wider than standard blades, they place a greater amount of force against the workpiece when cutting. This additional force increases the risk of kickback, requiring the operator to take additional steps when cutting to keep the risk of injury at an acceptable level.

**Figure 40** demonstrates the sequential process of making multiple, light cuts that get progressively deeper. The actual number of cuts used should be determined by workpiece hardness, total dado depth, and feed rate. In general, if you hear the motor slow down during the cut, you are cutting too deep or feeding too fast. Slow down!

#### To cut dado with dado blade, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Adjust dado blade to desired depth of cut.
- 3. Adjust distance between fence and inside edge of blade, as shown in Figure 39 on Page 36, to dado length of a workpiece.
  - If dadoing across workpiece, use miter gauge and carefully line up desired cut with dado blade. DO NOT use fence in combination with miter gauge.
- 4. Reconnect saw to power source.
- 5. Turn saw *ON*. Blade should run smoothly, with no vibrations.
- 6. When blade has reached full speed, perform test cut with scrap piece of wood.
  - If cut is satisfactory, repeat cut with actual workpiece.

### 

Dado blades have a higher risk of kickback than normal blades because their larger size applies stronger forces to the workpiece. This risk increases relative to depth and width of cut. To minimize your risk of serious personal injury, ensure that stock is flat and straight, and make multiple light cuts (rather than one deep cut) to achieve desired cutting depth.



Figure 40. Example of dado being cut with multiple light cuts, instead of one deep cut.



#### Cutting Dadoes with a Standard Blade

A ripping blade (described on **Page 25**) is typically the best blade to use when cutting dadoes with a standard blade because it removes sawdust very efficiently.

To use standard saw blade to cut dadoes, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Mark width of dado cut on workpiece. Include marks on edge of workpiece so cut path can be aligned when workpiece is lying on table.
- **3.** Raise blade up to desired depth of cut (depth of dado channel desired).
- 4. Set saw up for type of cut you need to make, depending on whether it is a rip cut (Page 33) or crosscut (Page 34).
- 5. Align blade to cut one side of dado, as shown in Figure 41.
- 6. Reconnect saw to power source and turn saw *ON*. Allow blade to reach full speed, then perform cutting operation.
- 7. Repeat cutting operation on other side of dado, as shown in **Figure 42**.
- 8. Make additional cuts (see Figure 43) in center of dado to clear out necessary material. Dado is complete when channel is completely cleared out.



Figure 41. First cut for a single-blade dado.



Figure 42. Second cut for a single-blade dado.



Figure 43. Additional single-blade dado cuts.



### Rabbet Cutting

Commonly used in furniture joinery, a rabbet cut is an L-shaped groove cut in the edge of the workpiece. Rabbets can be cut with either a dado blade or a standard saw blade.

Rabbet cutting along the edge of a workpiece with a dado blade requires a sacrificial fence (see **Figure 44**). Make the sacrificial fence the same length as the fence and  $^{3}/_{4}$ " thick. Attach it to the fence with screws or clamps, making sure they are all secure and tight. Raise the blade into the sacrificial fence to the height and rabbet width needed.

When using a dado blade, the included dado table insert must be installed and used during rabbeting operations.

#### Cutting Rabbets with a Dado Blade

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Lower dado blade all the way down.
- 3. Secure sacrificial fence with clamps to fence.

**Note:** Be sure to allow adequate clearance below clamps for workpiece to travel freely.

- 4. Position fence so dado blade protrudes beyond fence the same amount as desired width of rabbet (see Figure 45).
- 5. Mark a reference line on the face of the sacrificial fence indicating approximate rabbet depth.
- 6. Secure fence, reconnect machine to power, and turn machine *ON*.
- **7.** Slowly raise dado blade into sacrificial fence until it reaches line marked previously on sacrificial fence.
- 8. Perform test cut on a scrap piece of wood to verify rabbet height and width.
  - If cut is satisfactory, repeat cut with workpiece.

### 

Dado blades have a higher risk of kickback than normal blades because their larger size applies stronger forces to the workpiece. This risk increases relative to the depth and width of the cut. To minimize your risk of serious personal injury, ensure that stock is flat and straight, and make multiple light cuts (rather than one deep cut) to achieve the desired cutting depth.



Figure 44. Example of sacrificial fence.



Figure 45. Rabbet cutting.



#### Cutting Rabbets with a Standard Blade

A ripping blade is typically the best blade to use for cutting rabbets when using a standard blade because it removes sawdust very efficiently. (See **Page 25** for blade details.) Also, a sacrificial fence is not required when cutting rabbets with a standard blade.

#### To cut rabbets with standard blade, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Ensure that riving knife and standard table insert are installed.
- 3. Mark width of rabbet cut on edge of workpiece, so you can clearly identify intended cut while it is laying flat on saw table.
- 4. Raise blade up to desired depth of cut (depth of rabbet channel desired).
- 5. Stand workpiece on edge, as shown in Figure 46, then adjust fence so blade is aligned with inside of your rabbet channel.
  - If workpiece is very tall, or is unstable when placed against fence, lay it flat on table and use a dado blade to perform rabbet cut.
- 6. Reconnect saw to power source, then perform cut.





DO NOT place a tall board on edge to perform a rabbet cut with a standard blade. Workpieces that are too tall to properly support with fence can easily shift during operation and cause kickback. Instead, place stock flat on saw and perform rabbet cut with a dado blade, as instructed on Page 39.



Figure 46. Example of rabbet cutting with a standard blade.



Figure 47. Example of second cut to create a rabbet.



# SHOP-MADE SAFETY ACCESSORIES

### Featherboards

Easily made from scrap stock, featherboards provide an added degree of protection against kickback, especially when used together with push sticks. They also maintain pressure on the workpiece to keep it against the fence or table while cutting, which makes the operation easier and safer because the cut can be completed without the operator's hands getting near the blade. The angled ends and flexibility of the fingers allow the workpiece to move in only one direction.

#### Making a Featherboard

This sub-section covers the two basic types of featherboards: 1) Those secured by clamps, and 2) those secured with the miter slot.

#### Material Needed for Featherboard:

Hardwood <sup>3</sup> / <sub>4</sub> " x 3" x 10"	(Minimum)1
Hardwood <sup>3</sup> / <sub>4</sub> " x 6" x 28"	(Maximum)1

#### Additional Material Needed for Mounting Featherboard:

Hardwood <sup>3</sup> / <sub>8</sub> " x (Miter Slot Width) x 5"L	.1
Wing Nut <sup>1</sup> / <sub>4</sub> "-20	.1
Flat Head Screw 1/4"-20 x 2"	.1
Flat Washer 1/4"-20	1

#### To make a featherboard, do these steps:

- Cut a hardwood board that is approximately <sup>3</sup>/<sub>4</sub>" thick to size. The length and width of the board can vary according to your design. Most featherboards are 10"-28" long and 3"-6" wide. Make sure wood grain runs parallel with length of featherboard, so fingers you will create in Step 3 will bend without breaking.
- 2. Cut 30° angle at one end of board.
- Make a series of end cuts with the grain <sup>3</sup>/<sub>8</sub>"-<sup>1</sup>/<sub>4</sub>" apart and 2"-3" long, as shown in Figure 48 (A). Alternatively, start cuts at 2"-3" deep, then make them progressively deeper, as shown in Figure 48 (B).

### **A**CAUTION

We recommend using a bandsaw for making fingers in the next step because it tends to be safer. A table saw can be used, but it will over-cut the underside of the ends, produce a thicker kerf, and require you to stop the blade half-way through the cut, which can be dangerous.



Figure 48. Patterns for making featherboards.

**IMPORTANT:** Cuts made across grain result in weak fingers that easily break when flexed. When made correctly, fingers should withstand flexing from moderate pressure. To test finger flexibility, push firmly on ends with your thumb. If fingers do not flex, they are likely too thick (cuts are too far apart).



Only *Steps 1-3* are required to make a clamp-mounted featherboard. Refer to *Page 43* for instructions on clamping.



- 4. Rout a 1/4"-3/8" wide slot 4"-5" long in workpiece and 1"-2" from short end of featherboard (see Figure 49).
- 5. Cut a miter bar approximately 5" long that will fit in table miter slot, as shown in Figure 50.

**Tip:** Consider making miter bar longer for larger featherboards—approximately half the length of total featherboard—to support force applied to the featherboard during use.

- 6. Drill a 1/4" hole in center of bar, then countersink bottom to fit a 1/4"-20 flat head screw.
- 7. Mark a 4" line through center of countersunk hole in center, then use a jig saw with a narrow blade to cut it out.
- Assemble miter bar and featherboard with a <sup>1</sup>/<sub>4</sub>" 20 flat head screw, flat washer, and a wing nut or a star knob (see Figure 51). Congratulations! Your featherboard is complete.

**Note:** The routed slot, countersunk hole, and flat head screw are essential for miter bar to clamp into miter slot. When wing nut is tightened, it will draw flat head screw upward into countersunk hole. This will spread sides of miter bar and force them into walls of miter slot, locking featherboard in place.

**Tip:** The length of the flat head screw depends on the thickness of the featherboard—though  $1^{1}/2^{"}$  to  $2^{"}$  lengths usually work.

9. Now, proceed to Mounting Featherboard in Miter Slot on Page 43.



Figure 49. Slot routed in featherboard.



Figure 50. Miter bar pattern.



Figure 51. Assembling miter slot featherboard components.



#### Mounting Featherboard w/Clamps

- 1. Lower saw blade, then adjust fence to desired width and secure it.
- 2. Place workpiece against fence, making sure it is 1" in front of the blade.
- 3. Place a featherboard on table away from blade so all fingers point forward and contact workpiece (see Figure 52).
- 4. Secure featherboard to table with a clamp.
- 5. Check featherboard by pushing it with your thumb to ensure it is secure.
  - If featherboard moves, tighten clamp more.
- 6. Optional: If cutting long workpieces, it may be beneficial to use another featherboard to keep board firmly against table while feeding.

#### Mounting Featherboard in Miter Slot

- 1. Lower saw blade, then adjust fence to desired width and secure it.
- 2. Place workpiece evenly against fence, making sure it is 1" in front of blade.
- Slide featherboard miter bar into miter slot, making sure fingers slant toward blade, as shown in Figure 53.
- 4. Position fingered edge of featherboard against edge of workpiece, so that all fingers contact workpiece. Slide featherboard toward blade until first finger is nearly even with end of workpiece, which should be 1" away from blade.
- Double check workpiece and featherboard to ensure they are properly positioned, as described in Step 4. Then secure featherboard to table. Check featherboard by hand to make sure it is tight.

**Note:** The featherboard should be placed firmly enough against workpiece to keep it against fence but not so tight that it is difficult to feed workpiece.

### NOTICE

The featherboard should be placed firmly enough against the workpiece to keep it against the fence but not so tight that it is difficult to feed the workpiece.







Figure 53. Featherboard installed in miter slot and supporting workpiece for ripping cut.



### **Push Sticks**

When used correctly, push sticks reduce the risk of injury by keeping hands away from the blade while cutting. In the event of an accident, a push stick can also absorb damage that would have otherwise happened to hands or fingers.

#### Using a Push Stick

Use push sticks whenever your hands will get within 12" of the blade. To maintain control when cutting large workpieces, start the cut by feeding with your hands then use push sticks to finish the cut, so your hands are not on the end of the workpiece as it passes through the blade.

Feeding: Place the notched end of the push stick against the end of the workpiece (see Figure 55 below), and move the workpiece into the blade with steady downward and forward pressure. Supporting: A second push stick can be used to keep the workpiece firmly against the fence while cutting. When using a push stick in this manner, only apply pressure before the blade; otherwise, pushing the workpiece against or behind the blade will increase the risk of kickback (see Push Stick Prohibition Zone in Figure 54 below).



Figure 54. Using push sticks to rip narrow stock.



Figure 56. Template for a basic shop-made push stick (not shown at actual size).



### **Push Blocks**

When used correctly, a push block reduces the risk of injury by keeping hands away from the blade while cutting. In the event of an accident, a push block often takes the damage that would have otherwise happened to hands or fingers.

#### Using a Push Block

A push block can be used in place of or in addition to a push stick for feeding workpieces into the blade. Due to their design, push blocks allow the operator to apply firm downward pressure on the workpiece that could not otherwise be achieved with a push stick.

The push block design on this page can be used in two different ways (see inset **Figure 57** below). Typically, the bottom of the push block is used until the end of the workpiece reaches the blade. The notched end of the push block is then used to push the workpiece the rest of the way through the cut, keeping the operator's hands at a safe distance from the blade. A push stick is often used at the same time in the other hand to support the workpiece during the cut (see **Using a Push Stick** on previous page).



Figure 58. Using a push block and push stick to make a rip cut.



Figure 59. Template for a shop-made push block (shown at 50% of full size).



### ACCESSORIES Table Saw Accessories

The following table saw 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.

#### W1500-Right Angle Jig

This jig is constructed using top quality aluminum castings and plates which are machined to exacting tolerances. It has the perfect weight-use ratio to dampen vibration, yet is still light enough to easily slide the workpiece through the machining process. Its quality and precision are evident from the first cut. Cut tenons, dadoes, rail ends, and finger joints safely and with complete accuracy.

#### 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.

#### 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.

#### D3122–Shop Fox Push Stick

This essential safety item keeps hands at a safe distance from blades and cutters while still maintaining control of the workpiece against machine fences. A true necessity when running narrow stock. The durable handle is designed for maximum control. Measures  $13^{1/2}$ " overall. Super ergonomic design!

#### D3096-Shop Fox Featherboard

Reduce the risk of kickback and achieve consistent feeding results with these Shop Fox featherboards. Fits standard 3/8" x 3/4" miter gauge slots.









## MAINTENANCE

### General

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

#### Ongoing

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

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

#### Weekly Maintenance

- Clean table surface and miter slot grooves.
- Clean rip fence.

#### Monthly Check

Clean/vacuum dust buildup from inside cabinet and off motor.

#### Every 6-12 Months

- Lubricate trunnion slides (Page 48).
- Lubricate blade height worm and bevel gears (Page 48).

### **Cleaning & Protecting**

Cleaning the Model W1875 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it.



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



### Lubrication

It is essential to clean components before lubricating them because dust and chips build up on lubricated components and make them hard to move. Simply adding more grease to them will not yield smooth moving components.

Clean the components in this section with mineral spirits or other oil/grease solvent cleaner and shop rags.

If you thoroughly clean the components in this section before lubricating them, the result will be silky smooth movement when turning the handwheels, which will result in much higher enjoyment on your part!

### The following are the main components that need to be lubricated:

- Trunnion Slides
- Blade Height Worm & Bevel Assemblies

#### **Trunnion Slides**

Lubrication Type	NLGI#2 Grease or Equivalent
Amount	1-2 Dabs
Lubrication Frequency	6-12 Months

Clean out the front and rear trunnion slides with mineral spirits and a rag, then apply grease into each groove. Move the blade tilt back and forth to spread the grease (see **Figure 60**).

#### Blade Height Worm & Bevel Assemblies

Lubrication Type	. NLGI#2 Grease or Equivalent
Amount	1-2 Dabs
Lubrication Frequency	6-12 Months

Clean away any built-up grime and debris from the worm & bevel assemblies (see **Figure 61**) with a wire brush, rags, and mineral spirits. Allow the components to dry, then apply a thin coat of grease to them. Move components through range of motion to spread grease.



Figure 60. Location of trunnion slides.



Figure 61. Worm and bevel gears.



### SERVICE

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### 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 Angle Indicator**

The blade angle indicator has been set by the factory to show  $0^{\circ}$  when the blade is at  $90^{\circ}$  and should require no adjustments unless you notice that your cuts are not accurate.

#### **Tools Needed**

90° Square	1	
Phillips Head Screwdriver #2	1	

To adjust blade angle indicator alignment, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Raise blade as high as it will go, then tilt it toward  $0^\circ$  until it stops and cannot be tilted any more.
- Place 90° square against table and blade so it contacts blade evenly from bottom to top, as shown in Figure 62. Make sure blade tooth does not obstruct placement of square.
  - If blade *is* 90° to table and blade angle indicator points to 0°, then no adjustment is necessary.
  - If blade *is not* 90° to table or blade angle indicator does not point to 0°, proceed to Step 4.
- 4. Tilt blade to 90° using square as a guide. Close blade angle lock lever to hold blade angle in place.
- 5. Loosen adjustment screw on blade angle indicator and reposition indicator to point to 0°. Tighten adjustment screw (see Figure 63).



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



Figure 62. Checking blade at 90°.



Figure 63. Blade angle indicator adjustment.



### Miter Slot to Blade Parallelism

Your table saw will give the best results if the miter slot is adjusted parallel to the blade. If the miter slot is not exactly parallel, your cuts and your finished work will be lower in quality, but more importantly, the risk of kickback will be increased.

Tools Needed	Qty
Adjustable Square	1
Marker	1
Hex Wrench 5mm	1

#### To adjust blade parallel to miter slot, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- Tilt blade to 0°, then use an adjustable square to measure distance from miter slot to a carbide tip on blade, as shown in Figure 64. Make sure that face of adjustable square is even along miter slot.
- 3. With end of adjustable square just touching tip, lock square in place. Now, mark carbide tip with a marker where you made this measurement.
- 4. Rotate marked blade tip to other end of table insert.





Figure 64. Making first slot-to-blade measurement at 90°.



Figure 65. Making second slot-to-blade measurement at 90°.

- 5. Slide adjustable square down to other end of table insert and compare distance from marked blade tip to end of adjustable square, as shown in Figure 65.
  - If blade tip measurement *is* equal on both sides, your blade is parallel to the miter slot.
  - If blade tip *does not* touch end of adjustable square similar to first measurement, table will need to be adjusted. Proceed to Step 6.



- 6. Loosen (4) trunnion mounting bolts on table as shown in Figure 66.
- 7. Move the trunnion assembly in the direction needed by gently pushing the blade height handwheel or the dust port. Tighten the trunnion mounting bolts.
- 8. Repeat Steps 4-7 until the blade and miter slot are parallel.

### Spreader or Riving Knife Alignment

#### **Checking Alignment**

The blade guard spreader/riving knife must be aligned with the blade when installed. If the spreader/riving knife is not aligned with the blade, then the workpiece will be forced sideways during the cut, which will increase the risk of kickback.

Tools Needed	Qty
Straightedge (min. 12")	

To check spreader/riving knife alignment, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Raise saw blade to maximum height so you have easy working access.
- Place straightedge against side of blade and spreader/riving knife at top and bottom, as shown in Figure 67. Spreader/riving knife should be parallel with blade along its length at both positions, and in "Alignment Zone," as shown in Figure 68.
  - If spreader *is* in alignment zone no adjustments need to be made.
  - If spreader/riving knife *is not* parallel with blade and inside alignment zone, then it needs to be adjusted. Proceed to Adjusting Alignment instructions.
  - If spreader/riving knife *is not* parallel with the blade at either the top or bottom, it may be bent.



Figure 66. Trunnion mounting bolts.



**Figure 67.** Example of checking top and bottom riving knife parallelism with blade.



Figure 68. Spreader/riving knife alignment zone.

- Remove spreader/riving knife and place it on flat surface and check to see if spreader/riving knife lays evenly along its length.
  - If spreader/riving knife does not lay evenly, proceed to Adjusting Bent Spreader/Riving Knife on Page 52.



#### Adjusting Alignment

The spreader/riving knife mounting position can be adjusted into alignment with the blade using the cap screws on the spreader/riving knife bracket.

Tools NeededQtyHex Wrench 4mm1

To adjust spreader/riving knife position, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Raise blade all the way up then remove table insert.
- 3. Loosen (2) cap screws on the spreader/riving knife bracket (see Figure 69), then slide spreader/riving knife as needed to move it into alignment with blade.
- 4. Follow Checking Alignment, Steps 1-3 on Page 51.
  - If spreader/riving knife *is* in alignment zone, no additional steps are necessary.
  - If spreader *is not* in alignment zone, continue adjusting position of spreader/riving knife bracket as necessary to correctly align spreader/riving knife.
- 5. Tighten (2) cap screws on spreader bracket to secure spreader/riving knife adjustment.
- 6. Replace table insert.

#### Adjusting Bent Spreader/Riving Knife

- 1. DISCONNECT MACHINE FROM POWER!
- Bend spreader/riving knife by hand while installed, then follow Steps 1-3 in Checking Alignment on Page 51 to determine if it is parallel with blade and inside "Alignment Zone".
  - If this *does not* work, remove spreader/riving knife to straighten.
  - If you cannot straighten spreader/riving knife properly, replace it.



Figure 69. Cap screws for adjusting spreader/riving knife position.



### **Fence Scale Calibration**

The fence scale indicator window, shown in **Figure 70**, can be calibrated with the fence scale if you notice that your cuts do not accurately match what is shown on the fence scale.

Tools Needed	Qty
Phillips Head Screwdriver #2	1
Scrap Wood (14" Min. Length)	1
Tape Measure	1

### To calibrate fence scale indicator windows, do these steps:

- 1. Position and lock fence at 13", as indicated by scale, then cut your scrap piece of wood.
- 2. Reposition and lock fence at 12", as indicated by scale.
- 3. Flip your scrap piece of wood over, placing side that was cut in **Step 2** against fence, and cut your scrap piece of wood.
- 4. Measure width of freshly cut workpiece with tape measure. Workpiece width should be exactly 12". If it is not, then adjust indicator window to match the width of workpiece.



Figure 70. Fence indicator window.



### Table/Dado Insert Adjustment

The table/dado insert must sit perfectly flush with the table to provide a smooth, continuous surface for the workpiece to slide over. The insert is held in place by a magnet and sits on top of four adjustment screws (see Figure 71).

The insert should be checked and adjusted any time it is removed and replaced, after prolonged use, or any time you notice the workpiece or fence does not slide smoothly over the insert.

Too	ls	Ne	ede	d	
	• •				

Hex Wrench 4mm	.1	
Straightedge	.1	

To check and adjust table insert, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Place straightedge across insert and make sure insert is flush with table at front and back of throat.
  - If insert *is* flush with table, no adjustments are necessary.
  - If insert *is not* flush with table, proceed to **Step 3**.
- 3. Insert hex wrench through holes shown in Figure 71. Loosen screws to raise insert, or tighten screws to lower it.
- 4. Repeat **Steps 2-3** until insert is perfectly flush with surface of table.

**Note:** Table insert should be firmly installed (should not rock) in the table. Each screw should support insert evenly.



Figure 71. Location of table/dado insert holes with adjustment screws.

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### Calibrating Fence to Blade

Two hex bolts on top of the fence position it parallel with the blade (see **Figure 73**). Follow the procedures below to check the fence/blade parallelism and adjust the fence if necessary.

Tools Needed	Qty
Socket or Wrench 8mm	1
Ruler	1

To check and adjust fence parallelism, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Slide fence against right edge of miter slot, lock it in place, then raise blade fully. Using a ruler, examine how fence lines up with miter slot and blade (see Figure 72).
  - If fence *is* parallel with blade, no further adjustments need to be made.
  - If fence *is not* parallel with blade, proceed to Step 3.
- 3. Unlock fence from table.
- 4. Loosen two hex bolts on top of fence, as shown in Figure 73.
- 5. Hold fence parallel to blade and tighten hex bolts.
- 6. Lock fence and measure parallelism with blade. Repeat Steps 3–6 as needed.

#### **Offsetting Fence**

Some woodworkers prefer to offset the rear of the fence 1/64" from the blade, as shown in **Figure 74**.

The reason for this wider gap at the back side of the blade is to help prevent the chance of kickback and the blade burning the workpiece because a workpiece may be inconsistent. However, the trade-off is less accurate cuts, and if the fence is placed on the other side of the blade for other table saw operations, the potential of workpiece burning and kickback can be increased. Whenever using a fence, make sure that if an offset has been adjusted in the fence alignment, you use the fence on the side of the blade where the offset creates the wide gap.



Figure 72. Checking fence parallelism with blade.



Figure 73. Location of hex nuts to adjust fence parallelism.







### **Miter Gauge Adjustments**

The miter gauge has quick stops set at  $-60^{\circ}$ ,  $-45^{\circ}$ ,  $-30^{\circ}$ ,  $0^{\circ}$ ,  $30^{\circ}$ ,  $45^{\circ}$ , and  $60^{\circ}$  and should require no adjustments unless you notice that your cuts are not accurate.

Tools Needed	Qty
Phillips Head Screwdriver #2	1
90° Square	1

To check miter gauge alignment, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Slide miter gauge into T-slot on table and set to  $90^{\circ}$ .
- 3. Place square evenly against face of miter gauge and blade, as shown in Figure 75.
  - If square touches miter body and body of blade evenly at same time, then it is square to blade. No adjustments are necessary.
  - -If square *does not* touch miter body and blade evenly, then proceed to **Step 4**.
- 4. Using a square, position miter shaft at 90° to miter gauge body.
- 5. Remove miter gauge from T-slot and loosen (2) Phillips head screws that secure miter gauge indicator (see Figure 76).
- 6. Adjust indicator so it lines up with 0° mark on miter gauge scale, then tighten Phillips head screws.



Figure 75. Checking 90° stop on miter gauge.



Figure 76. Location of miter gauge adjustment screws.



### **Brush Replacement**

This table saw is equipped with a universal motor that uses two carbon brushes to transmit electrical current inside the motor. These brushes are considered to be regular "wear items" or "consumables" that will need to be replaced during the life of the motor. The frequency of required replacement is often related to how much the motor is used and how hard it is pushed.

Replace the carbon brushes (part number X18750726) at the same time when the motor no longer reaches full power, or when the brushes measure less than 1/4" long (new brushes are  $\frac{5}{8}$ " long). If saw will see daily use, we recommend keeping extra brushes on hand to avoid downtime when the brushes wear out.

#### Tools Needed

Tools Needed	Qty
Flat Head Screwdriver 1/4"	1

To inspect and replace motor brushes, do these steps:

- 1. **DISCONNECT MACHINE FROM POWER!**
- 2. Remove brush caps and worn brushes from motor (see Figure 77).
- 3. Replace both motor brushes, then install brush caps.



Figure 77. Motor brush replacement.



### Troubleshooting

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

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

#### Motor & Electrical

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Machine does not	1. Switch disabling key removed.	1. Insert switch disabling key.
start, or power-	2. Machine circuit breaker tripped.	2. Reset circuit breaker on switch.
supply fuse/break-	3. Power supply circuit breaker tripped or fuse	3. Ensure circuit is free of shorts. Reset circuit break-
er trips immedi-	blown.	er or replace fuse (Page 13).
ately after startup.	4. Wiring broken, disconnected, or corroded.	4. Fix broken wires or disconnected/corroded connec- tions.
	5. Motor brushes worn out.	5. Replace motor brushes (Page 57).
	6. ON/OFF or circuit breaker switch at fault.	6. Replace switch/circuit breaker.
	7. Motor at fault.	7. Replace motor.
Machine stalls or	1. Workpiece material unsuitable for machine.	1. Only cut wood; ensure moisture is below 20%.
is underpowered.	2. Feed rate too aggressive for motor blade.	2. Reduce feed pressure and speed.
	3. Workpiece crooked; fence not parallel with	3. Use jointer to straighten edge of workpiece that
	blade.	slides against fence; adjust fence parallel with
		blade ( <b>Page 55</b> ).
	4. Blade dull or wrong blade for task.	4. Use correct blade for type of cut (Page 25). Use sharp blade.
	5. Motor brushes worn out.	5. Replace motor brushes (Page 57).
	6. Motor overheated.	6. Clean motor, let cool, and reduce workload.
	7. Motor or motor bearings at fault.	7. Replace motor.
Machine has	1. Motor or component loose.	1. Replace missing bolts/nuts or tighten if loose.
vibration or noisy	2. Mobile stand fasteners loose or feet not	2. Tighten machine to mobile stand or adjust feet to
operation.	adjusted properly.	stabilize machine.
	3. Blade damaged or warped.	3. Replace warped/damaged blade (Page 27).
	4. Arbor bearings at fault.	4. Replace arbor housing bearings; replace arbor.
	5. Motor bearings at fault.	5. Test by rotating shaft; grinding/loose shaft requires
		bearing replacement.



### Operation

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Fence does not	1. Fence not mounted/adjusted correctly.	1. Remount fence and adjust correctly.
move smoothly.	2. Rails dirty or sticky.	2. Clean and lubricate/wax rails.
Material moves	1. Improper feeding technique.	1. Learn/use proper feeding technique.
away from fence	2. Fence not parallel with blade.	2. Adjust fence parallel with blade (Page 55).
when ripping.	3. Workpiece crooked or bowed.	3. Use jointer to straighten edge of workpiece that
		slides against fence.
Blade not paral-	1. Blade is damaged or warped.	1. Replace blade (Page 27).
lel with miter	2. Table misadjusted.	2. Adjust miter slot parallel with blade ( <b>Page 50</b> ).
slot.		
Blade hits table	1. Sawdust/debris stuck in trunnion slides.	1. Clean sawdust or debris out of trunnion slides.
insert when tilt-	2. Miter slot not parallel with blade.	2. Adjust miter slot parallel with blade (Page 50).
ing to 45°.	3. Blade incorrectly installed.	3. Correctly install blade (Page 27).
Blade too close	1. Blade position on arbor is incorrect.	1. Verify that blade arbor washers are correct and in
to insert.		the required position.
	2. Table/trunnion assembly mounting position	2. Adjust table mounting position (Page 50).
	not correct.	
Board binds or	1. Board warped.	1. Use a different board or use jointer to straighten
burns when feed-		edge of workpiece that slides against fence.
ing through saw.	2. Feed rate too slow or inconsistent.	2. Reduce feed rate and apply consistent pressure
		through entire cut.
	3. Blade is warped/damaged/dull.	3. Replace blade (Page 27).
	4. Too many teeth on blade for cutting type.	4. Change blade to one with fewer teeth (Page 25).
	5. Fence not parallel with blade.	5. Adjust fence parallel with blade (Page 55).
	6. Miter slot not parallel with blade.	6. Adjust miter slot parallel with blade (Page 50).
	7. Spreader/riving knife not correctly aligned	7. Adjust spreader/riving knife into alignment with
	With blade.	Dlade (Page 52).
Handwheel binds	1. Lock knob is engaged.	1. Loosen lock knob.
or blade will not	2. Sawdust/debris stuck in trunnion slides.	2. Clean sawdust/debris out of trunnion slides.
move up/down or		
loo much saw-	1. Dust collector not turned on or connected.	1. Connect and turn on dust collector.
dust blown back	2. Blade guard has been removed.	2. Re-install blade guard for maximum safety and dust
toward operator.	Duck collection systems desced as the	Control (Page 28).
	3. Dust collection system clogged or lacks	3. Remove clog; revise ducting layout for improved
1	required CFM at machine.	i suction; use a stronger dust collector (Page 20).



PROBLEM		POSSIBLE CAUSE		CORRECTIVE ACTION
Tooth marks on	1.	Blade is warped/damaged/dull.	1.	Replace blade (Page 27).
cut edge.	2.	Fence not parallel with blade.	2.	Adjust fence parallel with blade (Page 55).
	3.	Miter slot not parallel with blade.	3.	Adjust miter slot parallel with blade (Page 50).
Finished board	1.	Fence scale pointer not adjusted correctly or	1.	Adjust fence scale pointer (Page 53) or re-apply
narrower than		fence scale label misapplied.		fence scale label in correct position.
expected.				
Kickback occurs.	1.	Fence not parallel with blade.	1.	Adjust fence parallel with blade (Page 55).
	2.	Feeding boards freehand without fence or	2.	Always use fence or miter gauge as a guide when
		miter gauge.		feeding workpiece.
	3.	Spreader/riving knife not correctly aligned	3.	Adjust spreader/riving knife into alignment with
		with blade.		blade (Page 51).
	4.	Blade guard not installed/not working cor-	4.	Install blade guard (Page 28). Replace blade guard
		rectly.		before using saw if damaged.
	5.   ∠	Blade warped/damaged/dull.	5.   4	Replace blade (Page 27).
	0.	Board not hold firmly against table and fonce	0.	Hold board firmly against table and fonce: use push
	1.	board not neto minity against table and rence.	1.	stick(c) whenever possible to keep fingers away
				from blade
	8	Using miter gauge and fence at the same	8	Never use miter gauge and fence together Always
	.	time.	.	use one or the other.
	9.	Board is warped or edge that slides against	9.	Always cut bowed workpiece with cupped side
		fence is bowed/curved.		against table; use a jointer to straighten edge of
				board that slides against fence (Page 12).
	10	. Taking too deep of a cut.	10	Always take multiple shallow passes for non-
				through cuts.
Miter Gauge	1.	Bent miter gauge bar; burrs on bar/slot; dirty	1.	Straighten/replace bar; deburr bar or slot; clean
does not move		slot.		debris from slot.
smoothly.				
Will not make	1.	Pointer calibrated incorrectly to scale.	1.	Adjust blade 90 $^{\circ}$ to table using a square, then cali-
accurate cuts.				brate pointer to scale.
	2.	Miter slot not parallel with blade.	2.	Adjust miter slot parallel with blade (Page 50).
	3.	Fence not parallel with blade.	3.	Adjust fence parallel with blade (Page 55).



### **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.* 

### **A**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.







Figure 78. Switch box wiring.



Figure 79. Motor brushes.

### Wiring Diagram



#### NOTICE

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

SERVICE







RFF	PART #	DESCRIPTION

10	X18750010	TAP SCREW M4 X 12
11	X18750011	FENDER WASHER 5MM
12	X18750012	LOWER BLADE GUARD
13	X18750013	ARBOR NUT 5/8"
14	X18750014	OUTER ARBOR FLANGE
15	X18750015	SAW BLADE 10" X 36T
16	X18750016	INNER ARBOR FLANGE
17	X18750017	TRUNNION MOUNTING SCREW
18	X18750018	REAR TRUNNION
19	X18750019	TRUNNION SLIDE
20	X18750020	FRONT TRUNNION
21	X18750021	TRUNNION MOUNTING SCREW
22	X18750022	PHLP HD SCR M58 X 12
23	X18750023	TILT INDICATOR BRACKET
24	X18750024	BLADE TILT INDICATOR
25	X18750025	PHLP HD SCR M47 X 12
26	X18750026	CAP SCREW M6-1 X 16
27	X18750027	BLADE TILT LOCK PLATE
28	X18750028	SPACER
29	X18750029	BLADE TILT STOP
30	X18750030	CAP SCREW M58 X 20
31	X18750031	TRUNNION GEAR PLATE
32	X18750032	FLAT WASHER 5MM
33	X18750033	CAP SCREW M58 X 16
34	X18750034	CAM WASHER
35	X18750035	CAMLOCK STUD M10-1.5

REF	PART #	DESCRIPTION
36	X18750036	CAP SCREW M47 X 25
37	X18750037	BLADE TILT LOCK HANDLE
38	X18750038	HEX NUT M10-1.5
39	X18750039	SET SCREW M58 X 10
40	X18750040	FLAT WASHER 12MM
41	X18750041	COMPRESSION SPRING
42	X18750042	MICRO ADJUST WHEEL
43	X18750043	BLADE TILT ADJUSTMENT HANDWHEEL
44	X18750044	HEIGHT WHEEL CLAMP SLEEVE
45	X18750045	LOCK NUT M6-1
46	X18750046	BLADE HEIGHT ADJUSTMENT HANDWHEEL
47	X18750047	BLADE HEIGHT LOCK
48	X18750048	BLADE HEIGHT HANDLE GRIP
49	X18750049	SHOULDER SCREW M6-1 X 10, 8 X 43
50	X18750050	BLADE HEIGHT HANDLE CAP
51	X18750051	TAP SCREW M4 X 16
52	X18750052	ON/OFF SWITCH JIABEN FD2-12G-2116A 125V
53	X18750053	SWITCH BRACKET
54	X18750054	SWITCH BOX
55	X18750055	STRAIN RELIEF TYPE-3 1/16 - 1/8
56	X18750056	STRAIN RELIEF TYPE-3 1/16 - 1/8
57	X18750057	FLANGE BOLT M6-1 X 16
58	X18750058	BUTTON HD CAP SCR M6-1 X 55
59	X18750059	LOCK NUT M6-1
60	X18750060	FENDER WASHER 8MM





REF	PART #	DESCRIPTION
100	X18750100	FENCE ASSEMBLY
101	X18750101	PHLP HD SCR M47 X 10
102	X18750102	FLAT WASHER 4MM
103	X18750103	INDICATOR
104	X18750104	FENCE BASE
105	X18750105	FRONT SLIDER
106	X18750106	MICRO ADJUST SUPPORT
107	X18750107	PHLP HD SCR M58 X 10
108	X18750108	PHLP HD SCR M58 X 25
109	X18750109	MICRO ADJUST WHEEL
110	X18750110	FENCE LOCK LEVER
111	X18750111	LOCK BUSHING
112	X18750112	LOCK ROD
113	X18750113	FLANGE BOLT M6-1 X 16

REF	PART #	DESCRIPTION
114	X18750114	FENCE
115	X18750115	FENDER WASHER 6MM
116	X18750116	COMPRESSION SPRING
117	X18750117	REAR SLIDER
118	X18750118	CLAMPING PLATE
119	X18750119	TAP SCREW M5 X 10
120	X18750120	LOCK NUT M6-1
121	X18750121	END CAP
122	X18750122	FENCE FACE FRONT COVER
123	X18750123	FENCE FACE
124	X18750124	FENCE FACE REAR COVER
125	X18750125	SQUARE NECK SCREW M6-1 X 50
126	X18750126	FENDER WASHER 6MM
127	X18750127	WING NUT M6-1





#### REF PART # DESCRIPTION

200	X18750200	MITER GAUGE ASSEMBLY
201	X18750201	HANDLE CAP
202	X18750202	FIXED HANDLE 18 X 33, M6-1 X 10
203	X18750203	FENDER WASHER 6MM
204	X18750204	MITER GAUGE BODY
205	X18750205	TAP SCREW M5 X 8
206	X18750206	COMPRESSION SPRING
207	X18750207	BALL

#### REF PART # DESCRIPTION

208	X18750208	MITER GAUGE INDICATOR
209	X18750209	MITER HINGE PIN
210	X18750210	FLAT WASHER 4MM
211	X18750211	TAP SCREW M4 X 16
212	X18750212	MITER BAR
213	X18750213	MITER BAR GUIDE WASHER
214	X18750214	FLAT HD SCR M6-1 X 10



#### Anti-Kickback Pawls & Blade Guard Ø. 300 -304 303 01 Ø. C Œ G a Ø

REF	PART #	DESCRIPTION
300	X18750300	ANTI-KICKBACK PAWLS ASSEMBLY
301	X18750301	PHLP HD SCR M47 X 10
302	X18750302	PIN
303	X18750303	BUSHING
304	X18750304	ANTI-KICKBACK PAWL
305	X18750305	TORSION SPRING
306	X18750306	RELEASE LEVER
307	X18750307	ANTI-KICKBACK PAWL BODY
308	X18750308	ANTI-KICKBACK PAWL SUPPORT
309	X18750309	TAP SCREW M4 X 10
400	X18750400	BLADE GUARD ASSEMBLY
401	X18750401	PHLP HD SCR M58 X 50

#### **REF PART # DESCRIPTION**

402	X18750402	FENDER WASHER 5MM
403	X18750403	COTTER PIN RETAINING
404	X18750404	LOCK NUT M58
405	X18750405	RIGHT BLADE GUARD
406	X18750406	PIN
407	X18750407	TORSION SPRING
408	X18750408	HEADED PIN 5 X 30MM
409	X18750409	BLADE GUARD SUPPORT
410	X18750410	LOCK HANDLE
411	X18750411	LEFT BLADE GUARD
412	X18750412	BALL BEARING
413	X18750413	PIN 5 X 16MM





REF	PART #	DESCRIPTION
600	X18750600	TABLE ASSEMBLY
601	X18750601	FLAT HD SCR M47 X 12
602	X18750602	HANDLE
603	X18750603	HEX NUT M47
604	X18750604	BLADE GUARD STORAGE BRACKET
605	X18750605	PHLP HD SCR M6-1 X 16
606	X18750606	FENCE RAIL NUT
607	X18750607	FENDER WASHER 5MM
608	X18750608	CAP SCREW M58 X 16
609	X18750609	EXTENSION TABLE
610	X18750610	FRONT RAIL END CAP (RH)
611	X18750611	FRONT RAIL
612	X18750612	CAP SCREW M58 X 10
613	X18750613	FRONT RAIL END CAP (LH)
614	X18750614	REAR RAIL
615	X18750615	REAR RAIL END CAP
616	X18750616	LOCK PAD
617	X18750617	LOCK BLOCK
618	X18750618	COMPRESSION SPRING
619	X18750619	FRONT LOCK BAR
620	X18750620	LOCK LEVER
621	X18750621	REAR LOCK BAR
622	X18750622	CARRIAGE BOLT M6-1 X 40

#### **REF PART # DESCRIPTION**

X18750623	EXTENSION ROD HOLDER
X18750624	FLAT WASHER 6MM
X18750625	LOCK NUT M6-1
X18750626	FLAT HD SCR M6-1 X 12
X18750627	FENCE ROLLER SHOULDER SCREW
X18750628	FENCE ROLLER
X18750629	CAP SCREW M58 X 14
X18750630	CAP SCREW M58 X 30
X18750631	NUT M6-1
X18750632	INDICATOR
X18750633	PHLP HD SCR M47 X 12
X18750634	RAIL GUIDE
X18750635	TABLE
X18750636	ALIGNMENT DISC
X18750650	TABLE INSERT ASSEMBLY
X18750650-1	RIGHT WEAR PLATE
X18750650-2	LEFT WEAR PLATE
X18750650-3	SET SCREW M58 X 6
X18750650-4	TABLE INSERT
X18750650-5	PHLP HD SCR M47 X 10
X18750650-6	SPRING PLATE
X18750650-7	LOCK NUT M47
X18750651	DADO TABLE INSERT
	X18750623 X18750624 X18750625 X18750627 X18750627 X18750628 X18750629 X18750630 X18750630 X18750631 X18750633 X18750633 X18750636 X18750636 X18750650-1 X18750650-2 X18750650-3 X18750650-4 X18750650-4 X18750650-6 X18750650-7 X18750650-7 X18750650-7 X18750651






## Motor & Gear Box Parts List

REF	PART #	DESCRIPTION
701	X18750701	PHLP HD SCR M47 X 12
702	X18750702	DUST COLLECTION COVER
703	X18750703	TAP SCREW M4 X 12
704	X18750704	LOWER BLADE GUARD
705	X18750705	MOTOR BRACKET
706	X18750706	ARBOR
707	X18750707	KEY
708	X18750708	PHLP HD SCR M47 X 16
709	X18750709	GEAR BOX COVER
710	X18750710	BALL BEARING 6003-2RS
711	X18750711	PHLP HD SCR M47 X 10
712	X18750712	BUSHING
713	X18750713	GEAR
714	X18750714	EXT RETAINING RING 5MM
715	X18750715	BALL BEARING 608-2RS
716	X18750716	GEAR BOX
717	X18750717	BALL BEARING 6201-2RS
718	X18750718	FRONT MOTOR SHIELD
719	X18750719	MOTOR STATOR
720	X18750720	TAP SCREW M5 X 60
721	X18750721	MOTOR ARMATURE
722	X18750722	BALL BEARING 6000-2RS
723	X18750723	BEARING SLEEVE
724	X18750724	MOTOR HOUSING
725	X18750725	CARBON BRUSH END CAP
726	X18750726	CARBON BRUSH
727	X18750727	CARBON BRUSH HOLDER
728	X18750728	PHLP HD SCR M58 X 45
729	X18750729	SET SCREW M6-1 X 10
730	X18750730	REAR MOTOR SHIELD
731	X18750731	STRAIN RELIEF TYPE-1 1/16 - 1/8
732	X18750732	MOTOR CORD 14G 2W 15"
733	X18750733	UPPER SHAFT COLLAR
734	X18750734	LOWER SHAFT COLLAR
735	X18750735	ELEVATION SHAFT

REF	PART #	DESCRIPTION
736	X18750736	BEVEL GEAR
737	X18750737	TAP SCREW M4 X 22
738	X18750738	BUSHING
739	X18750739	CAP SCREW M58 X 20
740	X18750740	ELEVATION SHAFT PLATE
741	X18750741	GUARD PLATE
742	X18750742	ROD
743	X18750743	BEVEL GEAR
744	X18750744	DRIVE ROD BUSHING
745	X18750745	DRIVE ROD BRACKET
746	X18750746	DRIVE ROD
747	X18750747	BUTTON HD CAP SCR M6-1 X 20
748	X18750748	ROD COLLAR
749	X18750749	ECCENTRIC SLEEVE
750	X18750750	ROD
751	X18750751	GEAR BOX GUARD PLATE
752	X18750752	RIVING KNIFE ASSEMBLY
752-1	X18750752-1	FLANGE BOLT M6-1 X 30
752-2	X18750752-2	LOCK LEVER
752-3	X18750752-3	TORSION SPRING
752-4	X18750752-4	RIVING KNIFE CLAMP PLATE
752-5	X18750752-5	RIVING KNIFE/SPREADER
752-6	X18750752-6	RIVING KNIFE CLAMP BRACKET
752-7	X18750752-7	FENDER WASHER 6MM
752-8	X18750752-8	LOCK NUT M6-1
753	X18750753	CAP SCREW M6-1 X 20
754	X18750754	FLAT WASHER 8MM
755	X18750755	FLAT WASHER 8MM
756	X18750756	LOCK NUT M8-1.25
757	X18750757	WAVY WASHER 18MM
758	X18750758	SLEEVE
759	X18750759	FENDER WASHER 5MM
760	X18750760	PHLP HD SCR M58 X 25
761	X18750761	MOTOR 2HP 120V 1-PH



### Base



REF	PART #	DESCRIPTION
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800	X18750800	TABLE SAW BASE ASSEMBLY
801	X18750801	ROUND KNOB M8-1.25
802	X18750802	ARBOR WRENCH
803	X18750803	KNOB CLAMP M8-1.25
804	X18750804	CARRIAGE BOLT M6-1 X 28
805	X18750805	CIRCUIT BREAKER 15A TS L2 SERIES
806	X18750806	CIRCUIT BREAKER WIRE
807	X18750807	WIRE CLIP

### **REF PART # DESCRIPTION**

808	X18750808	TAP SCREW 4 X 16
809	X18750809	ANTI-KICKBACK PAWLS STORAGE BRACKET
810	X18750810	CORD STORAGE BRACKET
811	X18750811	CORD CLAMP
812	X18750812	CORD SLEEVE
813	X18750813	BASE
814	X18750814	POWER CORD 14G 2W 80" 5-15P
815	X18750815	PUSH STICK





#### **REF PART # DESCRIPTION**

900	X18750900	MOBILE STAND ASSEMBLY
901	X18750901	TAP SCREW M5 X 10
902	X18750902	FOOT PAD
903	X18750903	RIVET 5MM BLIND
904	X18750904	UPPER STAND
905	X18750905	CARRIAGE BOLT M6-1 X 40
906	X18750906	STAND SPACER
907	X18750907	LOCK NUT M8-1.25
908	X18750908	MIDDLE STAND
909	X18750909	END CAP
910	X18750910	REAR STAND
911	X18750911	WING NUT M10-1.5
912	X18750912	FOOT SHAFT
913	X18750913	FOOT
914	X18750914	FOOT COVER
915	X18750915	PHLP HD SCR M47 X 12

### **REF PART # DESCRIPTION**

916	X18750916	SHOULDER SCREW M6-1 X 15, 8 X 43
917	X18750917	STAND LOCK PLATE
918	X18750918	STAND SPACER
919	X18750919	LOCK PLATE BRACKET
920	X18750920	COMPRESSION SPRING
921	X18750921	FLAT WASHER 6MM
922	X18750922	LOCK NUT M6-1
923	X18750923	END CAP
924	X18750924	FENDER WASHER 8MM
925	X18750925	STAND WHEEL
926	X18750926	FRONT STAND
927	X18750927	RIGHT HANDLE
928	X18750928	GRIP
929	X18750929	HANDLE END CAP
930	X18750930	LEFT HANDLE





REF	PART #	DESCRIPTION
1001	X18751001	FENCE SCALE LABEL
1002	X18751002	MITER GAUGE SCALE LABEL
1003	X18751003	AMPUTATION HAZARD LABEL
1004	X18751004	BLADE GUARD WARNING 1 LABEL
1005	X18751005	BLADE GUARD WARNING 2 LABEL
1006	X18751006	BLADE ANGLE LABEL
1007	X18751007	DISCONNECT 110V BLADE GUARD LABEL
1008	X18751008	TABLE SAW WARNING LABEL

REF PART #	DESCRIPT
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1009	X18751009	READ MANUAL LABEL
1010	X18751010	DISCONNECT 110V LABEL
1011	X18751011	MACHINE ID LABEL
1012	X18751012	EYE EAR LUNG HAZARD LABEL
1013	X18751013	RIVING KNIFE LABEL
1014	X18751014	MODEL NUMBER LABEL
1015	X18751015	ELECTRICITY LABEL
1016	X18751016	TOUCH-UP PAINT, SHOP FOX BLACK

# 

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

# WARRANTY

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

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

This is Woodstock International, Inc.'s sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant that Shop Fox machinery complies with the provisions of any law, acts or electrical codes. We do not reimburse for third party repairs. In no event shall Woodstock International, Inc.'s liability under this limited warranty exceed the purchase price paid for the product, and any legal actions brought against Woodstock International, Inc. shall be tried in the State of Washington, County of Whatcom. We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages arising from the use of our products.

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

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





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