

MODEL W1815 15" DISC SANDER WITH BRAKE



OWNER'S MANUAL (FOR MODELS MANUFACTURED SINCE 10/10)

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

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THE WRITTEN APPROVAL OF WOODSTOCK INTERNATIONAL, INC.

Printed in Taiwan

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.

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are: • Lead from lead-based paints. • Crystalline silica from bricks, cement and other masonry products. • Arsenic and chromium from chemically-treated lumber. Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.



Contents

INTRODUCTION	2 2 3
SAFETY Standard Machinery Safety Instructions Additional Safety for Disc Sanders	6
ELECTRICAL Circuit Requirements	9 10
Inventory	1 1 2 3 4
Operation Overview 1 Attaching Sandpaper 1	7 7 8 9

ACCESSORIES 20	
MAINTENANCE21Schedule21Cleaning21Lubrication21	
SERVICE22General22Table Gap & Parallelism22Miter Gauge Calibration23Table Tilt Calibration24Electrical Safety Instructions25Wiring Diagram26Troubleshooting27	
PARTS 29 Main 29 Machine Labels 30	
WARRANTY	

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

SERVICE

INTRODUCTION

SAFETY

OPERATIONS MAINTENANCE



INTRODUCTION Woodstock Technical Support

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

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

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

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

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

Machine Description

The Model W1815 features a $1^{1/2}$ HP, 220V, 1725 RPM motor equipped with a motor brake and a 15" diameter sanding disc. Includes a miter gauge and a sanding table with X and Y miter slots that make it possible to sand at virtually any angle with precision and control. Includes a built in $2^{1/2}$ " OD dust port. The steel powder-coated cabinet serves as a solid platform for sanding, and has shelves that provide storage for extra sanding discs.







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MODEL W1815 15" DISC SANDER w/BRAKE

Electrical

Required Power Source Switch	
Switch Voltage	
Cord Length	6 ft.
Cord Gauge	
Minimum Circuit Size Plug Included	
Included Plug Type	

Motor

Туре	TEFC Capacitor Start w/Brake
Horsepower	
Voltage	
Phase	Single
Amps	12A
Speed	
C _v cle	
Number Of Speeds	
Power Transfer	
Bearings	Sealed, Permanently Lubricated

Main Specifications

Table & Disc Specifications

Table Tilt Range	+15° to -45°
Sanding Disc Diameter	
Sanding Disc Speed	1725 RPM
Disc Table Length	
Disc Table Width	
Disc Table Thickness	
Miter Gauge Slot Width	
Miter Gauge Slot Height	⁵ / ₁₆ "
Floor to Table Height	

Overall Dimensions

Weight	
Length	
Width	
Height	
Foot Print (Length/Width)	



Shipping Dimensions

Carton 1

Туре	Carboard
Content	Machine
Weight	149 lbs.
Length	
Width	
Height	

Carton 2

Туре	Carboard
Content	
Weight	
Length	
Width	
Height	

Construction Materials

Base	Steel
Disc	
Miter Gauge	
Cabinet Stand	Steel
Table	
Paint	Powder Coated

Other

Number of Dust Ports	
Dust Port Size	
Customer Cleaning and Setup	Fime Approximately 30 Minutes
Made in ISO 9001 Factory	
Warranty	
Country of Origin	
	ID Label on Cabinet
Sound Rating	
Made in ISO 9001 Factory Warranty Country of Origin Serial Number Location	Yes 2 Year Taiwan

Features

Automatic Internal Motor Braking System Table Tilt Range -15° to +45° Accepts 15" PSA Discs Large Tilting Precision-Ground Cast Iron Table X and Y-Axis Miter Slots Steel Base



Controls and Features

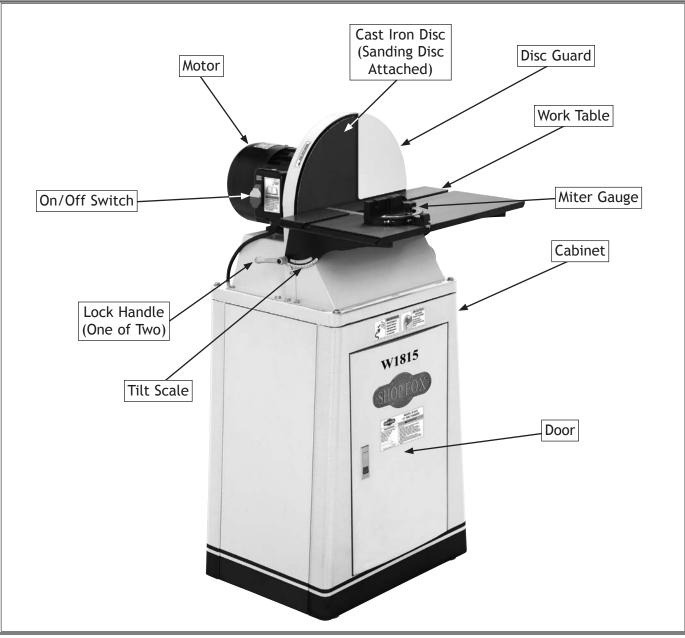


Figure 1. Identification.



SAFETY For Your Own Safety, Read Manual Before Operating Machine

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



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

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

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

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

Standard Machinery Safety Instructions

- **OWNER'S MANUAL.** Read and understand this owner's manual BEFORE using machine. Untrained users can be seriously hurt.
- **EYE PROTECTION.** Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are not approved safety glasses.
- HAZARDOUS DUST. Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with workpiece materials, and always wear a NIOSH-approved respirator to reduce your risk.
- WEARING PROPER APPAREL. Do not wear clothing, apparel, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips which could cause a loss of workpiece control.

- HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.
- **MENTAL ALERTNESS.** Be mentally alert when running machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.
- DISCONNECTING POWER SUPPLY. Always disconnect machine from power supply before servicing, adjusting, or changing cutting tools (bits, blades, cutters, etc.). Make sure switch is in OFF position before reconnecting to avoid an unexpected or unintentional start.
- DANGEROUS ENVIRONMENTS. Do not use machinery in wet or rainy locations, cluttered areas, around flammables, or in poorly-lit areas. Keep work area clean, dry, and welllighted to minimize risk of injury.



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

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



Additional Safety for Disc Sanders

AVOID FINGER INJURIES. Never purposely touch the moving sanding disc. Take care to keep fingers away from sanding disc during operations. If the workpiece is small or difficult to hold, use a workpiece holding fixture. Sanding abrasives can quickly remove large amounts of skin!

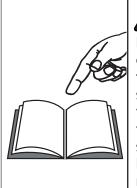
AVOID WORKPIECE GRAB. Support the workpiece on the work table against the rotation direction of the sanding disc. Otherwise, the sanding disc could grab the workpiece and pull your hands into the moving disc.

AVOID KICKBACK. Avoid kickback by sanding in accordance with directional arrows. Always sand on the downward side of the disc—pay close attention to the direction of disc rotation to avoid placing the workpiece against the upward side of the disc. Avoid sanding with excessive force. Always keep the sanding disc guard installed.

ONLY SAND SAFE WORKPIECES. If there is any doubt about stability or integrity of the material to be sanded, do not sand it. Never attempt to sand any sort of cable, chain, or wire. If you do, entanglement can occur and cause serious injury.

DISCONNECT POWER WHEN SERVICING.

Disconnect the machine from power and allow the disc to come to a complete stop before service, maintenance, or adjustments. Avoid pulling cord-connected machinery from the cord—instead, grasp the plug when disconnecting it from power.



WARNING

READ and understand this entire manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. DO NOT risk your safety by not reading! **POSITION TABLE CORRECTLY.** Make sure the gap between the table and sanding disc does not exceed ³/₁₆"-too large of a gap increases the risk of workpiece grab and pinch injuries, while too small of a gap increases the risk of sandpaper damage and restricts the removal of dust during operation.

ONLY USE SAFE SANDPAPER DISCS. Never use sanding discs that are damaged or torn; or if the adhesive is not sticking firmly. If sandpaper rips or comes off of the disc during operation, the workpiece or your hands could become entangled with the moving disc.

AVOID ENTANGLEMENT. Tie back long hair and remove any loose-fitting clothing or jewelry that could be caught up in the sanding disc or other moving machine parts.

BE AWARE OF DUST ALLERGIES. Be aware that certain woods may cause an allergic reaction in people and animals, especially when fine dust is created by sanding. Make sure you know what type of wood dust you will be exposed to in case there is a possibility of an allergic reaction.

PROTECT YOURSELF FROM FINE DUST. This machine puts fine dust particles into the air during operation. Wood dust is harmful to respiratory systems and long term exposure may lead to severe health problems. Reduce your risk by always wearing a NIOSH-approved respirator during machine operation and for a short time after.

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.



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 220V 12 Amps

Circuit Requirements

This machine is prewired to operate on a 220V power supply circuit that has a verified ground and meets the following requirements:

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

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



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

NOTICE

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



Grounding Requirements

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

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

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

For 220V Connection

This machine is equipped with a power cord that has an equipment-grounding wire and NEMA 6-15 grounding plug. The plug must only be inserted into a matching receptacle (see **Figure**) that is properly installed and grounded in accordance with local codes and ordinances.

Extension Cords

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

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

Minimum Gauge Size at 220V	14 AWG
Maximum Length (Shorter is Better)	50 ft.

AWARNING

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

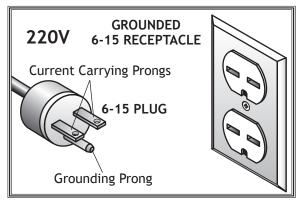


Figure 2. NEMA 6-15 plug & receptacle.

NOTICE

No adapter is available or should be used with this machine. If the machine must be reconnected for use on a different type of electric circuit, the reconnection should be made by qualified service personnel; and after reconnection, the machine must comply with all local codes and ordinances.



SETUP

Unpacking

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

Inventory

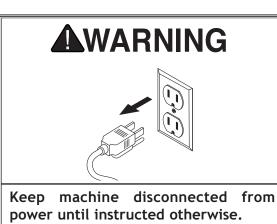
The following is a description of the main components shipped with the Model W1815. Lay the components out to inventory them.

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

Mai	in Inventory (Figure 3)	Qty
Α.	Sander Assembly	1
Β.	Left Side Panel	1
С.	Right Side Panel	1
D.	Upper Shelf 16 ³ / ₄ " x 15 ³ / ₈ "	
Ε.	Lower Shelf 16" x 18 ³ / ₈ "	1
F.	Rear Panel	
G.	Panel and Door Assembly	1
н.	Miter Gauge Assembly	
Ι.	Wrench 10 x 13	1
J.	Bolt Bag	1
	-Flat Washers ⁵ / ₁₆ "	4
	-Hex Bolts M8-1.25 x 45	
	-Hex Nuts ³ / ₈ "-16	4
	–Feet	4
	-Flange Bolts M6-1 x 12	8
	-Carriage Bolts 5/16"-18 x 3/4"	
	-Flange Nuts 5/16"-18	8



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



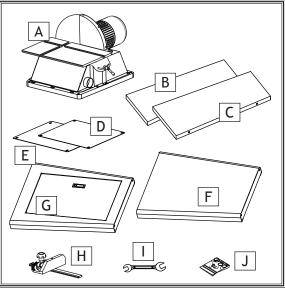


Figure 3. Inventory.



Machine Placement

Weight Load

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

Space Allocation

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



ACAUTION

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

Physical Environment

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

Electrical Installation

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

Lighting

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

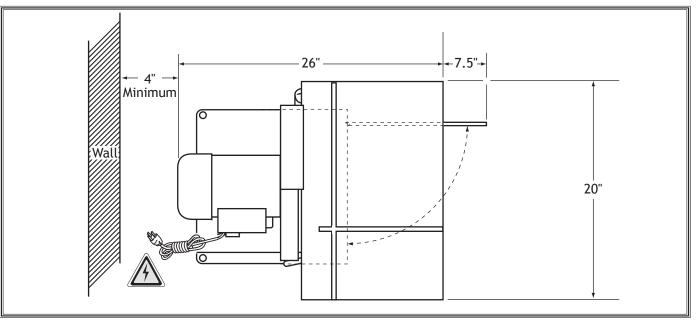


Figure 4. Model W1815 working clearances.



Cleaning Machine

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

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

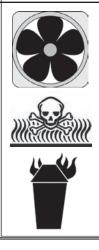
- Cleaner/degreaser designed to remove storage wax and grease
- Safety glasses & disposable gloves
- Solvent brush or paint brush
- Disposable Rags

To remove the rust preventative coating, do these steps:

- 1. DISCONNECT THE MACHINE FROM POWER.
- 2. Put on safety glasses and disposable gloves.
- 3. Using a liberal amount of your cleaner/degreaser, Coat all surfaces that have the coating, and let soak for few minutes.
- 4. Wipe off the surfaces. If your cleaner/degreaser is effective, the coating will wipe off easily.

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

- 5. Repeat the cleaning steps as necessary until all of the compound is removed.
- 6. To prevent rust on the freshly cleaned surfaces, immediately coat with a quality metal protectant.



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

NOTICE

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



Assembly

Before beginning assembly, refer to the inventory list and group all fasteners with their intended components. Doing this will make assembly easier. When assembling this machine, tighten fasteners using hand tools only. Be careful if using air or electric impact tools to assemble this machine because fasteners can easily be overtightened, causing them to dig into the paint, and strip threads

To assemble the cabinet and mount the sander, do these steps:

1. Fasten the left and right panels to the rear panel, as shown in **Figure 5**, using (4) $\frac{5}{16}$ -18 x $\frac{3}{4}$ carriage bolts and (4) $\frac{5}{16}$ -18 flange nuts.

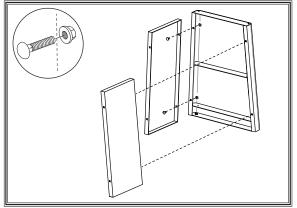


Figure 5. Side and rear panel installation.

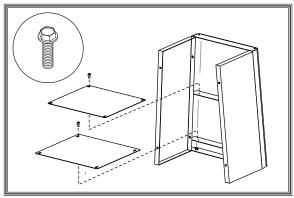


Figure 6. Shelf installation.

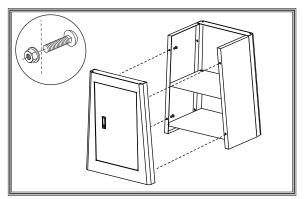


Figure 7. Door w/panel installation.

2. Fasten the upper and lower shelves, as shown in Figure 6, using (8) M6-1 x 12 flange bolts.

3. Fasten the panel and door assembly to the left and right panels, as shown in Figure 7, using (4) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " carriage bolts and (4) $\frac{5}{16}$ "-18 flange nuts.



- Invert the cabinet, thread the (4) hex nuts onto the feet, and install the feet into the base, as shown in Figure 8.
- 5. Adjust the feet to the same height, tighten the hex nuts against the cabinet base to lock the feet in place, then return the cabinet right side up.

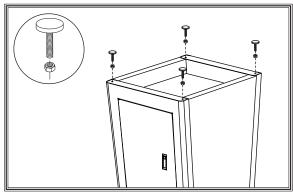


Figure 8. Foot installation.

6. With the help of another person, place the sanding unit onto the top of the cabinet, as shown in Figure 9, and fasten it to the cabinet using (4) M8-1.25 x 45 hex bolts and (4) ⁵/₁₆" flat washers.

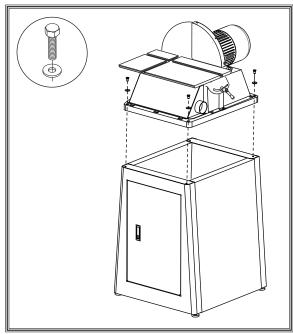


Figure 9. Sander installation.

7. Make sure that all tools and objects used for setup are cleared away from the machine.

The machine is now fully assembled, and ready for the test run procedure.

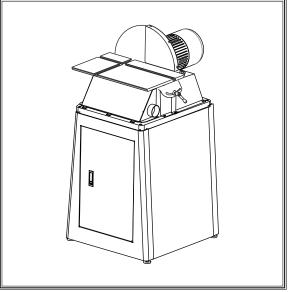


Figure 10. Fully assembled sander.



Test Run

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

The test run consists of verifying the following: 1) The motor powers up and runs correctly, and 2) the safety disabling mechanism on the switch works correctly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting** on **Page 27**. If you still cannot remedy a problem, contact our Tech Support at (360) 734-3482 for assistance.

To test run the machine:

- 1. Make sure you understand the safety instructions at the beginning of the manual, and verify that the machine is set up properly.
- 2. Ensure all tools and objects used during setup are cleared away from the machine.
- 3. Connect the machine to the power source.
- 4. Verify that the machine is operating correctly by turning the machine *ON*.
 - When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.
 - Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.
- 5. Turn the machine OFF.
- 6. Remove the switch disabling key (see Figure 11).
- 7. Try to start the machine with the paddle switch.
 - If the machine does not start, the switch disabling feature is working as designed.
 - If the machine starts, immediately stop the machine. The switch disabling feature is not working correctly. Call Tech Support for help.



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

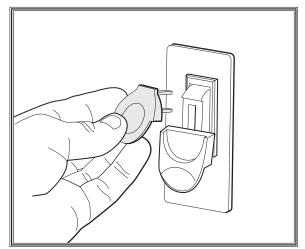


Figure 11. Removing switch key from paddle switch.



OPERATIONS

Operation Overview

The purpose of this overview is to provide the novice machine operator with a basic understanding of how the machine is used during operation, so they can more easily understand the controls discussed later in this manual.

Note: Due to the generic nature of this overview, it is not intended to be an instructional guide for performing actual machine operations. To learn more about specific operations, seek training from people experienced with this type of machine, and do additional research outside of this manual by reading "how-to" books, trade magazines, or websites.

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

- 1. Examines the workpiece to make sure it is suitable for sanding.
- 2. Adjusts the table tilt, if necessary, to the required sanding angle, and locks the table in place.
- 3. If necessary, inserts the miter gauge in either the X-axis or Y-axis miter slots, adjusts the miter gauge to the required sanding angle, and locks it in place.
- 4. Wears safety glasses and a respirator.
- 5. Starts the machine and dust collector.
- 6. Holds the workpiece firmly and flatly against both the table and miter, pushes the workpiece into or along the sanding disc, and moves it to different locations to wear the sandpaper evenly and prevent the sandpaper from overheating.
- 7. Stops the machine.



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

Damage to your eyes and lungs could result from using this machine without proper protective gear. Always wear safety goggles and a respirator when operating this machine.





Attaching Sandpaper

The Model W1815 sander accepts 15" diameter adhesivebacked sanding discs. These are available in a variety of grits.

The sanding disc sticks to the surface of the cast iron disc platen, using the pressure-sensitive adhesive backing (PSA). The sandpaper can be replaced without removing either the table or the dust port.

To attach sandpaper, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Remove the safety guard, peel off the old sandpaper, clean the disc surface with mineral spirits, and wipe it dry.
- 3. Peel back the protective layer on *one-half* of the sandpaper disc and fold it against the remaining half.
- 4. Slip the half with the protective layer between the disc and the table edge (see Figure 12).
- 5. Position the exposed adhesive on the upper half of the disc that extends above the table. Once it is positioned evenly across the disc, press the adhesive onto the surface.
- 6. Rotate the disc so the lower half is above the table. Peel off the other half of the protective paper, and press the remaining sandpaper against the disc so adhesion is complete.
- 7. Re-install the safety guard.



Figure 12. Sandpaper being slipped between the disc and table.



Disc Sanding

The Model W1815 uses dual-axis miter slot design for increased versatility of workpiece control.

Always keep the workpiece on the side of the wheel that is rotating down toward the table. This will keep the workpiece from flying out of your hands if kickback occurs.

To reduce the risk of your fingers getting trapped between the work table and sanding disc, make sure the table is approximately 3/16" away from the sanding disc.

To use the sanding disc, do these steps:

- 1. DISCONNECT SANDER FROM POWER!
- 2. Set the angle of the table and miter gauge for your operation.
- 3. Connect the sander to power, turn it *ON*, and allow it to reach full speed.
- 4. Place the workpiece on the work table and firmly against the miter gauge.
- With light, but firm pressure, push the workpieece into the down-spin side of the rotating disc. See Figures 13–16 for examples of disc sanding.

Note: To prevent burning the workpiece and overloading the sanding disc, move the workpiece slowly back and forth from the left side of the sanding disc to the center.

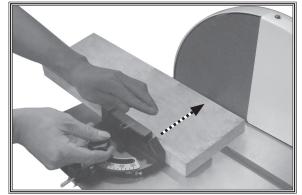


Figure 13. Example of Y-axis sanding.

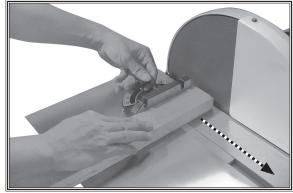


Figure 14. Example of X-axis sanding.



Figure 15. Angle sanding.

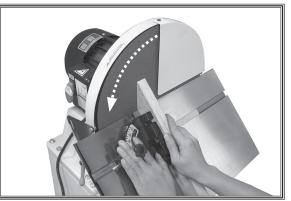


Figure 16. Sanding with table angled.

Accessories

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

The **D2057A** Shop Fox® **Heavy Duty Mobile Base** is designed to give you a stable and mobile platform upon which to mount your Disc Sander. Swivel casters on two corners provide excellent maneuverability. The bolt pattern on the fixed caster side allows orientation of the wheels in either of two directions. The base can be assembled in any of eight configurations providing maximum flexibility of use. The unique two piece retractable feet use rare earth magnets to allow the knob to turn while the foot pad is tight to the floor. Adjusts from 19" x $20^{1}/_{2}$ " to $29^{1}/_{2}$ " x $29^{1}/_{2}$ ". 700 lb. Capacity. Weighs 47 lbs.

The **W1727** Shop Fox® **1 HP Dust Collector** is the perfect companion for the Model W1815. It packs a 1 HP, 110V/220V, single-phase motor and 800 CFM air suction capacity.

The **W1690** Shop Fox® **Deluxe Ceiling Mounted 3-Speed Air Cleaner** is an essential machine for any shop creating dust. You can rest easy knowing that this little machine is filtering out the tiny dust particles that can raise big health concerns. Set the variable length timer to run after you leave the shop and come back to a cleaner, healthier environment.

The **D4264–70** 15" diameter PSA aluminum oxide **Sanding Discs** come in a variety of grits and are sized to fit 15" disc sanders. Sold in a 5 pk. Discs are pre-applied with a top-quality pressure sensitive adhesive.

D4264 (60 Grit) D4265 (80 Grit) D4266 (100 Grit) D4267 (120 Grit) D4268 (150 Grit) D4269 (180 Grit) D4270 (220 Grit)

SHOP FOX











MAINTENANCE

Schedule

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

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

Daily Check:

- Loose mounting bolts.
- Worn, loose, or damaged sanding disc.
- Worn or damaged power cord.
- Any other condition that could hamper the safe operation of this machine.

Weekly Maintenance:

- Wipe off the sawdust build-up from the table surface.
- Vacuum out dust from the motor fan area and from around the base of the machine.

Long-Term Storage:

• Keep unpainted surfaces rust free with heavy-duty rust prevention compound.

Cleaning

Cleaning the Model W1815 is easy. Vacuum excess wood chips and sawdust off of the table and motor, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it. Treat all unpainted cast iron surfaces on the table with a nonstaining lubricant after cleaning, and after ever use.

Lubrication

This machine uses permanently lubricated ball bearings. No bearing maintenance is required.



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



SERVICE

General

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

If you require additional machine service not included in this section, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: <u>tech-support@shopfox.biz</u>.

Table Gap & Parallelism

The miter slot must be parallel with the face of the sanding disc and there should be a 3/16" gap between the edge of the table and sanding disc. This gap should be large enough so that the sandpaper does not rub against the table, but small enough so that the gap is not a pinch hazard.

Tools Needed:

Wrench 10mm	•	1	I
Ruler	•	1	l

To set the table gap and parallelism, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Loosen the six hex bolts that secure the table to the table support brackets.
- Adjust the table so that there is a ³/₁₆" gap (Figure 17) between the disc (with sandpaper installed) and the edge of the table along its full length.
- 4. When the miter slot is parallel with the sanding disc, tighten the hex bolts.
- 5. Spin the disc by hand to check if the sandpaper touches the table.

IMPORTANT: DO NOT turn the disc sander **ON** at this point.

 If the if the sandpaper touches the table at any point in its rotation, re-adjust the table parallelism.



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

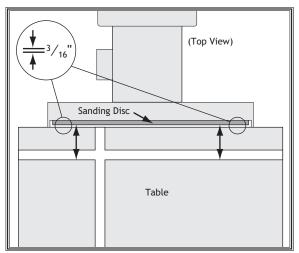


Figure 17. Table parallel with sanding disc.



Miter Gauge Calibration

At 90° the miter gauge should be perpendicular to the face of the wheel when it is mounted in the table slot. If it is not, follow this procedure to recalibrate it.

Tools Needed:

Machinist's Square1 Phillips Head Screwdriver1

To calibrate the miter gauge, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Use a try square or machinist's square with one edge against the face of the miter gauge and the other against the disc face, as shown in Figure 18.
- 3. Loosen the lock knob on the miter gauge and adjust the face of the miter gauge so it is flush with the edge of the square, tighten the gauge lock knob, and verify the setting.
- 4. Loosen the degree scale pointer, position the pointer on 90°, and retighten the screw.
- 5. Recheck the miter scale accuracy with the square.

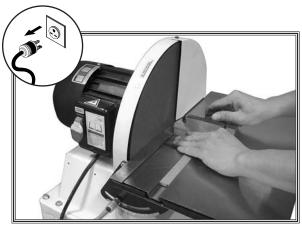


Figure 18. Squaring miter gauge to disc.



Table Tilt Calibration

When the table is perpendicular to the sanding disc, the scale should read 0° . If not, follow this procedure.

Tools Needed:

Machinist's Square1
Phillips Head Screwdriver1

To calibrate the table tilt, do these steps:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Using a try square or machinist's square, set one edge on the table surface and the other against the face of the disc, as shown in **Figure 19**.

Note: This can be done with the sandpaper installed, although it is somewhat more precise without the sandpaper.

- 3. Loosen the lock handles and adjust the table angle until it is perfectly perpendicular to the disc, then tighten the lock handles while holding the table in place.
- 4. Loosen the degree scale pointer, index the pointer on 0°, then retighten the screw.
- 5. Recheck the scale accuracy with the square.

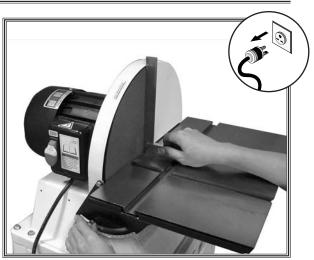


Figure 19. Squaring the table.



Electrical Safety Instructions

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Study this diagram carefully. If you notice differences between your machine and these wiring diagrams, call Woodstock International Technical Support at (360) 734-3482.

- 1. SHOCK HAZARD. Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!
- 2. QUALIFIED ELECTRICIAN. Due to the inherent hazards of electricity, only a qualified electrician should perform wiring tasks on this machine. If you are not a qualified electrician, get help from one before attempting any kind of wiring job.
- 3. WIRE CONNECTIONS. All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.
- 4. WIRE/COMPONENT DAMAGE. Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components before completing the task.

- 5. MOTOR WIRING. The motor wiring shown in these diagrams is current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.
- 6. MODIFICATIONS. Using aftermarket parts or modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire.
- 7. CAPACITORS/INVERTERS. Some capacitors and power inverters store an electrical charge for up to five minutes after being disconnected from the power source. To avoid being shocked, wait at least this long before working on these components.
- 8. ELECTRICAL REQUIREMENTS. You MUST follow the electrical requirements at the beginning of this manual when connecting your machine to a power source.
- **9. EXPERIENCING DIFFICULTIES.** If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (360) 734-3482.

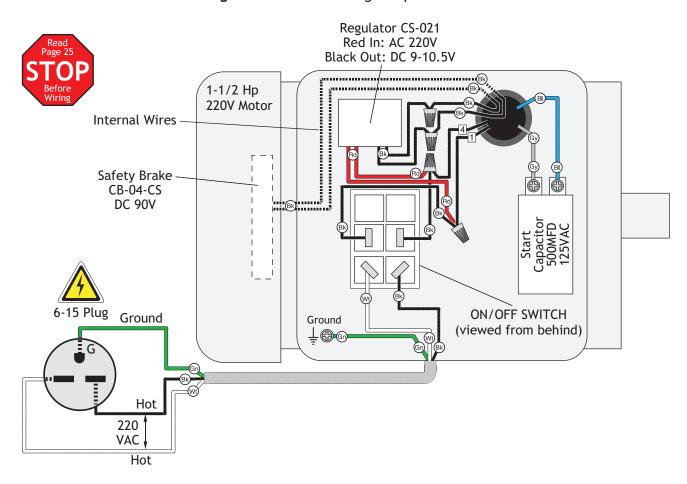
NOTICE	WIRING DIAGRAM COLOR KEY
The photos and diagrams	BLACK BLUE BLUE BLUE VELLOW VI LIGHT
included in this section are best viewed in color. You	WHITE WITH BROWN BROWN BROWN BROWN WHITE WITH BROWN BROWN BROWN BROWN WHITE BROWN WHITE BW
can view these pages in	GREEN GRAY GRAY PURPLE PURPLE
color at www.shopfox.biz.	RED Red ORANGE OF PINK PK QUOISE



SERVICE

<image>

Figure 20. W1815 wiring component locations.



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Troubleshooting

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

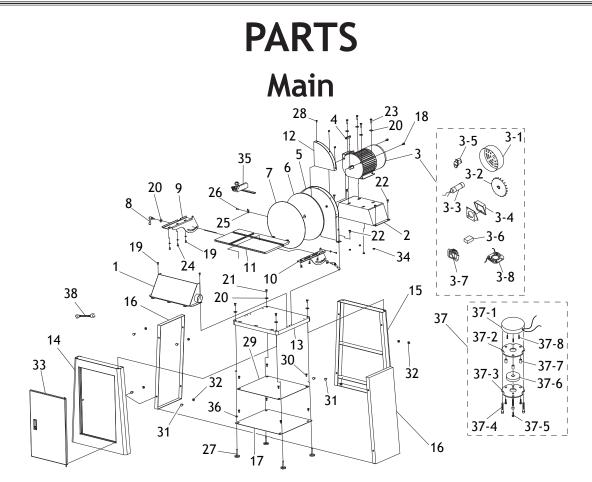


PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
	 Switch disabling key removed. Break or short in wiring, loose 	 Re-install switch disabling key. Trace/replace broken or corroded wires, fix loose
	connections, plug or receptacle is corroded or miswired.	connections, correct wiring.
	 Power supply switched off/has incorrect voltage. 	
	4. Blown fuse/tripped circuit breaker at main panel.	4. Correct the cause of overload, then reset/replace fuse or breaker.
	 Motor connection wired incorrectly. Motor ON/OFF switch at fault 	cover or manual).
	 Motor ON/OFF switch at fault. Motor brake not disengaging. 	 Replace switch. Test to see if disc spins freely. If it drags, replce motor brake and regulator.
	 Start capacitor has blown. Centrifugal switch at fault. 	 Test/replace if at fault. Adjust/replace centrifugal switch.
	10. Motor at fault.	10. Test for shorted windings or bad bearings; repair or replace.
Machine has excessive vibration or noise.	1. Workpiece loose or incorrectly secured.	 Use correct holding fixture and re-clamp workpiece.
	2. Motor fan rubbing on fan cover.	 Fix/replace fan cover; replace loose or damaged fan.
	3. Motor mounting loose.	 Tighten mounting bolts/nuts; use thread locking fluid.
	 Lock lever is loose. Machine incorrectly mounted to cabinet. 	 Tighten the lock lever. Level/shim base; tighten/adjust mounting hardware or feet.
	6. Motor bearings worn or damaged.	6. Replace motor bearings or motor.
Motor overheats.	1. Motor brake not releasing.	 Test to see if sanding disc spins freely. If not, replace motor brake and regulator.
Machine stalls or slows when operating.	1. Too much pressure when feeding workpiece	1. Reduce pressure when feeding workpiece.
	 Workpiece is warped. Workpiece is incorrect for machine. 	 Straighten workpiece or use a different one. Only sand wood and ensure moisture is below 20%.
	 Motor connection wired incorrectly. 	 Review wiring diagram on motor cover; correct wire connections.
	 Motor overheated. Centrifugal switch at fault. 	 Let cool, clean motor, and reduce workload. Adjust/replace centrifugal switch if available.
	7. Motor at fault.	7. Test, repair, or replace motor.
Motor takes longer than 7 seconds to stop sanding disc.	1. Motor brake components at fault.	 Replace motor brake components. Call Tech Support if you need assistance.
Miter bar binds in miter slot.	1. Miter slot dirty or gummed up.	1. Carefully clean miter slot.
Workpiece angle incorrect or out of square.	 Pointer or scale not calibrated correctly. Miter gauge or table not correctly aligned. 	1. Adjust pointer or scale to reflect real path of cut.



PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Sandpaper clogs quickly or burns.	1. Sandpaper grit is too fine for the job.	1. Replace with a coarser grit sandpaper.
	2. Workpiece is too moist.	2. Allow workpiece to dry out.
	3. Sanding depth too aggressive.	3. Reduce sanding depth or install coarser sandpaper.
	4. Paint, varnish, pitch, or other coat- ing is loading up sandpaper.	4. Install a coarse grit sandpaper, or strip coating off before sanding.
	5. Sanding soft workpiece.	5. Use different stock. Or, accept the characteristics of the stock and plan on cleaning/replacing discs frequently.
Glossy spots, burning, or streaks on workpiece.	1. Sandpaper too fine for the desired finish.	1. Use a coarser grit sandpaper.
	 Work held still for too long. Workpiece is too moist. 	 Do not keep workpiece in one place for too long. Allow workpiece to dry out.
	 4. Sanding stock with high residue. 	 Allow workprece to dry out. Use different stock. Or, accept the characteristics of the stock and plan on cleaning/replacing sandpapers frequently.
	5. Worn sandpaper.	5. Replace sandpaper.
	6. Sanding depth too aggressive.	6. Reduce sanding depth or install coarser sandpaper.
Abrasive rubs off the belt easily.	1. Sandpaper has been stored in an incorrect environment.	1. Replace; store sandpaper away from extremely dry, hot, or damp conditions.





REF	PART #	DESCRIPTION
1	X1815001	DUST COLLECTION HOOD
2	X1815002	MOTOR BASE
3	X1815003	MOTOR 1-1/2HP 220V 1PH
3-1	X1815003-1	MOTOR FAN COVER
3-2	X1815003-2	MOTOR FAN
3-3	XPC500	S CAPACITOR 500M 125V
3-4	X1815003-4	MOTOR JUNCTION BOX
3-5	X1815003-5	ON/OFF SWITCH
3-6	X1815003-6	REGULATOR CHE 200-230VAC
3-7	X1815003-7	CENTRIFUGAL SWITCH
3-8	X1815003-8	CONTACT PLATE
4	X1815004	KEY
5	X1815005	DISC COVER
6	X1815006	DISC 15"
7	X1815007	SANDING DISC 15" 80 GRIT PSA
8	X1815008	LOCK HANDLE ASSEMBLY
9	X1815009	LEFT TABLE BRACKET
10	X1815010	RIGHT TABLE BRACKET
11	X1815011	TABLE
12	X1815012	DISC GUARD
13	X1815013	STAND TOP PLATE
14	X1815014	STAND DOOR PANEL
15	X1815015	STAND REAR PANEL
16	X1815016	STAND SIDE PANEL
17	X1815017	STAND LOWER SHELF
18	XPB03M	HEX BOLT M8-1.25 X 16
19	XPB02M	HEX BOLT M6-1 X 12

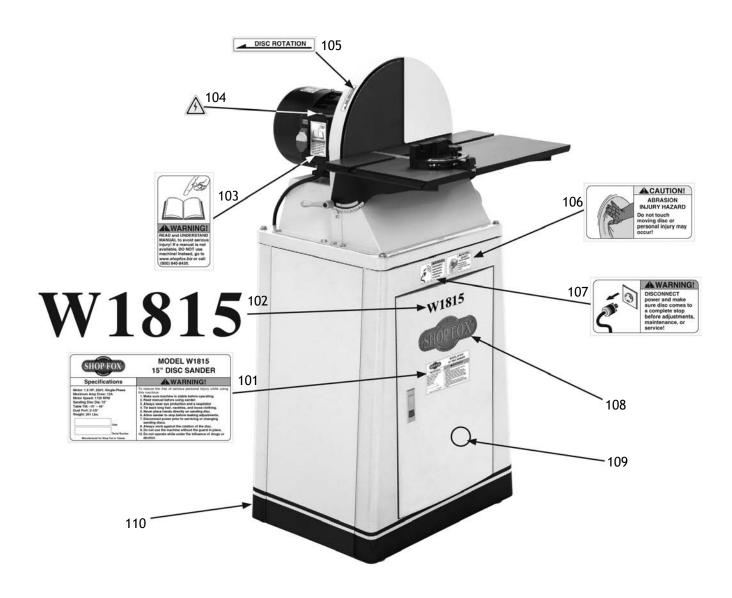
REF	PART #	DESCRIPTION
20	XPW07	FLAT WASHER 5/16
21	XPB118M	HEX BOLT M8-1.25 x 45
22	XPB06M	HEX BOLT M8-1.25 x 12
23	XPB03	HEX BOLT 5/16-18 X 1
24	XPLW03M	LOCK WASHER 6MM
25	X1815025	POINTER
26	XPS38M	PHLP HD SCR M47 X 10
27	X1815027	FOOT 1/2"D 3/8-16 X 1-1/2
28	XPS45M	PHLP HD SCR M58 X 5
29	X1815029	STAND UPPER SHELF
30	XPFB01M	FLANGE BOLT M6-1 x 12
31	XPCB05	CARRIAGE BOLT 5/16-18 X 3/4
32	XPFN02	FLANGE NUT 5/16-18
33	X1815033	DOOR WITH LATCH
34	XPN02	HEX NUT 5/16-18
35	X1815035	MITER GAUGE ASSEMBLY
36	XPN08	HEX NUT 3/8-16
37	X1815037	MOTOR BRAKE ASSEMBLY
37-1	X1815037-1	BRAKE
37-2	X1815037-2	INSIDE PLATE
37-3	X1815037-3	OUTSIDE PLATE
37-4	XPCAP95M	CAP SCREW M58 X 30
37-5	PS22M	PHLP HD SCR M58 X 25
37-6	X1815037-6	BRAKE PAD
37-7	X1815037-7	SPACER
37-8	X1815037-8	COMPRESSION SPRING
38	XPWR1013	WRENCH 10 X 13



Machine Labels

WARNING

Safety labels warn about machine hazards and how to prevent machine damage or injury. The owner of this machine MUST maintain the original location and readability of all labels on this machine. If any label is removed or becomes unreadable, REPLACE that label before allowing the machine to enter service again. Contact Woodstock International, Inc. at (360) 734-3482 or www. shopfoxtools.com to order new labels.



REF	PART #	DESCRIPTION	F
101	X1815101	MACHINE ID LABEL	1
102	X1815102	MODEL NUMBER LABEL	1
103	XLABEL-12	READ MANUAL LABEL	1
104	XLABEL-04	ELECTRICITY LABEL	1
105	X1815105	DISC ROTATION LABEL	1

RE	F	PART #	DESCRIPTION
106	`	X1815106	ABRASION HAZARD LABEL
107	7	XLABEL-07B	DISCONNECT WARNING LABEL
108	}	D3377	SHOP FOX NAMEPLATE
109)	XPPAINT-1	SF WHITE TOUCH-UP PAINT
110)	X1815110	STAND BLACK STRIPE LABEL

-30-

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Warranty Registration

Name			
		tate	
		mail	
Model #	Serial #	Dealer Name	Purchase Date
		a voluntary basis. It will be used for Of course, all information is strict	
Ad	you learn about us? vertisement il Order Catalog	Friend Website	Local Store Other:
		odworker/metalworker? 2-8 Years8-20 Year	rs20+ Years
3. How man0-2	y of your machines or		10+
4. Do you th	ink your machine rep	resents a good value?	Yes No
5. Would yo	u recommend Shop Fo	ox products to a friend?	Yes No
6. What is y 20 50		30-39 60-69	40-49 70+
\$2	our annual household 0,000-\$29,000 0,000-\$59,000	\$30,000-\$39,000	\$40,000-\$49,000 \$70,000+
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WARRANTY

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

Woodstock International, Inc. will repair or replace, at its expense and at its option, the Shop Fox machine or machine part, which in normal use has proven to be defective, provided that the original owner returns the product prepaid to a Shop Fox factory service center with proof of their purchase of the product within two years, and provides Woodstock International, Inc. reasonable opportunity to verify the alleged defect through inspection. If it is determined there is no defect, or that the defect resulted from causes not within the scope of Woodstock International Inc.'s warranty, then the original owner must bear the cost of storing and returning the product.

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

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



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