WOODSTOCK

SHOP FOX®

INTERNATIONAL

MODEL W1826
1HP WALL-MOUNT
DUST COLLECTOR



OWNER'S MANUAL

(FOR MODELS MANUFACTURED AFTER 04/12)

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

C SA US
247569

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

#ST14509 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.

⚠ WARNING!

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

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

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

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INTRODUCTION

Woodstock Technical Support

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

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

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

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

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MACHINE SPECIFICATIONS

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MODEL W1826
SHOP FOX® WALL DUST COLLECTOR

Product Dimensions

Weight..... 51 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 19-1/2 x 18 x 44 in.
Footprint (Length x Width)..... 14 x 14 in.

Shipping Dimensions

Type..... Cardboard
Content..... Machine
Weight..... 55 lbs.
Length x Width x Height..... 18 x 19 x 16 in.

Electrical

Power Requirement..... 120V or 240V, Single-Phase, 60Hz
Prewired Voltage..... 120V
Minimum Circuit Size..... 15A at 120V, 15A at 240V
Switch..... Safety Paddle Switch
Switch Voltage..... 120V
Cord Length..... 6-5/8 ft.
Cord Gauge..... 16 Gauge
Plug Included..... Yes
Included Plug Type..... NEMA 5-15 for 120V
Recommended Plug/Outlet Type..... NEMA 6-15 for 240V

Motors

Main

Type..... TEFC Capacitor Start Induction
Horsepower..... 1 HP
Voltage..... 120V/240V
Phase..... Single-Phase
Amps..... 7A at 120V, 3.5A at 240V
Speed..... 3450 RPM
Cycle..... 60 Hz
Number of Speeds..... 1
Power Transfer ..... Direct Drive
Bearings..... Sealed and Permanently Lubricated

Main Specifications

Operation

Filter Type..... Filter Bag
Airflow Capacity..... 537 CFM
Maximum Static Pressure..... 7.2 in.
Main Inlet Size..... 4 in.
Manifold Included..... No
Machine Collection Capacity At One Time..... 1
Maximum Material Collection Capacity..... 1.5 cu. ft.
Upper Bag Filtration..... 2.5 Micron

Bag Information

No of Lower Bags..... 1
Lower Bag Capacity..... 2 cu. ft.
Lower Bags Total Area..... 2 cu. ft.
Lower Bag Diameter..... 13-1/2 in.
Lower Bag Length..... 24 in.

Impeller Information

Impeller Type..... Radial Fin
Impeller Size..... 10 in.
Impeller Blade Thickness..... 3/32 in.

Construction

Upper Bag..... Fabric
Base..... Fabricated Sheet Metal with Casters
Frame..... Formed Steel
Impeller..... Riveted Steel
Paint..... Powder Coated

Other

ISO 9001 Factory ..... Yes
Country Of Origin ..... Taiwan
Warranty ..... 2 Years
Serial Number Location ..... Machine Label on Motor Capacitor

Features

Steel Base Plate Easily Mounts to Most Walls
Ideal Point-of-Use Dust Collector

Controls & Features



Figure 1. Model W1826 identification.



⚠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!

SAFETY

For Your Own Safety, Read Manual Before Operating Machine

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

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

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

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

NOTICE **This symbol is used to alert the user to useful information about proper operation of the equipment, 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 well-lighted 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 Dust Collectors



⚠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!

⚠CAUTION

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.

MACHINE USE. This dust collector is designed for collecting wood dust and chips from woodworking machines. DO NOT use it to collect metal, dirt, drywall, asbestos, lead paint, silica, liquids, aerosols, biohazards, or explosive materials. Collecting the wrong materials can result in serious inhalation hazards, fire, or machine damage.

WEAR RESPIRATOR. This machine may blow fine dust particles into the air during operation causing a hazard to the lungs. Always wear an approved respirator during machine operation and for a short time after.

SUSPENDED DUST PARTICLES AND IGNITION SOURCES. Do not operate the dust collector in areas where explosion risks are high, such as near pilot lights or open flames.

EMPTYING DUST. When emptying dust from the collection bags or drum, wear a respirator and safety glasses. Empty dust away from ignition sources and into an approved container, then dispose of properly.

SAFE SERVICING. Disconnect the machine from power and allow the impeller to come to a complete stop before servicing, maintenance, or adjustments.

AVOIDING FIRES. Do not allow steel particles to strike the impeller—this may produce a spark. Sparks can smolder in the wood dust for a long time before the fire or flame is detected. If you accidentally collect metal during operation, immediately turn off the dust collector, disconnect it from power, and wait for all moving parts to stop. Remove the collection bags and empty the dust into an approved air tight metal container. Prevent any chance of accidentally collecting metal again before resuming operations.

KEEPING FINGERS SAFE. Do not allow hands, tools, hair or clothing near the open inlet during operation. The powerful suction could easily cause accidental contact with the impeller which will cause serious personal injury or damage to the machine.

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

OPERATIONAL QUESTIONS. If, at any time, you are experiencing difficulties performing the intended operation, stop using the machine! Then contact our Tech Support or ask a qualified expert how the operation should be performed.

ELECTRICAL

Circuit Requirements

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

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

Full-Load Current Rating

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

Full-Load Current Rating at 120V.....7 Amps
Full-Load Current Rating at 240V.....3.5 Amps

Circuit Requirements for 120V

This machine is prewired to operate on a 120V power supply circuit that has a verified ground and meets the following requirements:

Nominal Voltage.....120V
Cycle.....60 Hz
Phase.....Single-Phase
Circuit Rating.....15 Amps
Plug/Receptacle.....NEMA 5-15

Circuit Requirements for 240V

This machine can be converted to operate on a 240V power supply (details about voltage conversion can be found later in this manual). The 240V power supply circuit must have a verified ground and meet the requirements that follow:

Nominal Voltage.....240V
Cycle.....60 Hz
Phase.....Single-Phase
Circuit Rating.....15 Amps
Plug/Receptacle.....NEMA 6-15

⚠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 later in this manual.

⚠WARNING



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

NOTICE

The circuit requirements listed in this manual apply to a dedicated circuit—where only one machine will be running at a time. If this machine will be connected to a shared circuit where multiple machines will be running at the same time, consult 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 equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

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

For 120V Connection (Prewired)

This machine is equipped with a power cord that has an equipment-grounding wire and NEMA 5-15 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.

For 240V Connection (Must be Rewired)

A NEMA 6-15 plug has a grounding prong that must be attached to the equipment-grounding wire inside the included power cord. The plug must only be inserted into a matching receptacle (see Figure) that is properly installed and grounded in accordance with all local codes and ordinances.

Extension Cords

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

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

Minimum Gauge Size (120V).....14 AWG
Minimum Gauge Size (240V).....16 AWG
Maximum Length (Shorter is Better).....50 ft.

⚠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 later in this manual.

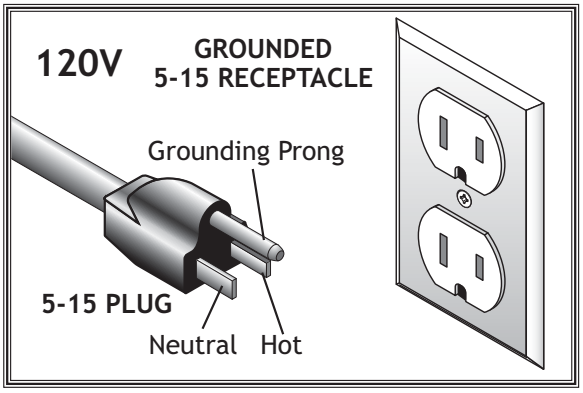
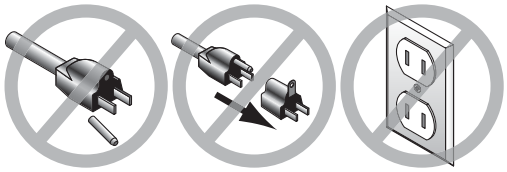


Figure 2. NEMA 5-15 plug & receptacle.

⚠CAUTION



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

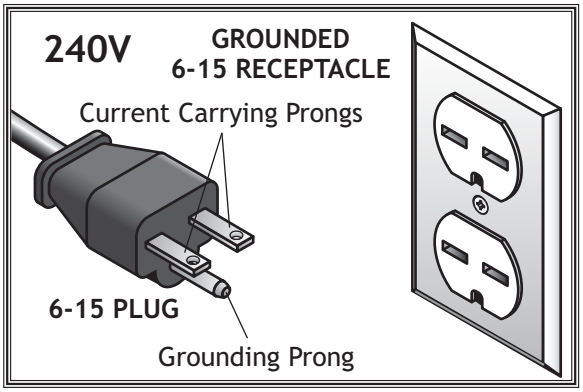


Figure 3. NEMA 6-15 plug & receptacle.

Voltage Conversion to 240V

The voltage conversion MUST be performed by an electrician or qualified service personnel. To perform the voltage conversion, rewire the motor to the new voltage and install the correct plug, according to the provided wiring diagram.

Note: *If the diagram included on the motor conflicts with the one on* ***Page 25*** *in this manual, the motor may have changed since the manual was printed. Use the diagram provided inside the motor wiring junction box.*

Items Needed **Qty**

- Phillips Head Screwdriver #2 1
- Electrical Tape.....As Needed
- Wire Nut (14 AWG x 3).....1
- 6-15 Plug 1

To convert the Model W1826 to 240V, do these steps:

1. DISCONNECT MACHINE FROM POWER!

2. Open the motor junction box, then loosen the wire nuts indicated in **Figure 4.**

3. Use wire nuts to connect the wires as indicated in **Figure 5**. Twist all three wire nuts onto their respective wires and wrap them with electrical tape so they will not come loose.

4. Close and secure the motor junction box.

5. Remove the 5-15 plug from the power cord and install a 6-15 plug according to the manufacturer's instructions.

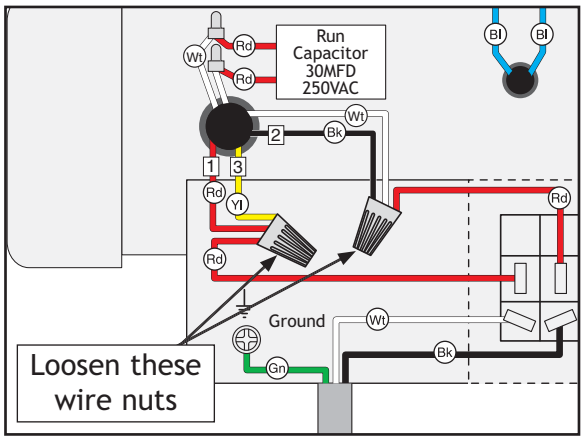


Figure 4. Location of wire nuts to be loosened when converting voltage.

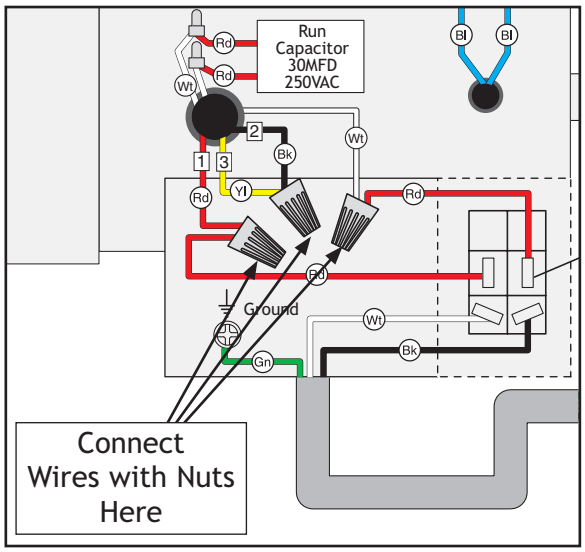


Figure 5. Model W1826 rewired to 240V.

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 W1826. 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.*

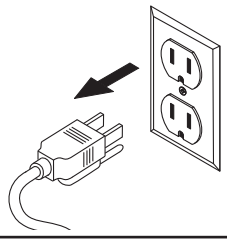
Inventory	**Qty**
A. Collector Body and Fan/Motor Assembly (Not Shown)	1
B. Wall Mounting Bracket	1
C. Motor Bracket	1
D. Dust Collection Bag	1
E. Bag Clamp	1
F. Adhesive Foam Strip 4 x 20 x 430mm	1

Hardware (Not Shown)

- Flange Bolts 1/4"-20 x 1/2" (Fan Motor) 4
- Open End Wrench 10 x 12mm.....1

If any nonproprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.

WARNING



Keep machine disconnected from power until instructed otherwise.

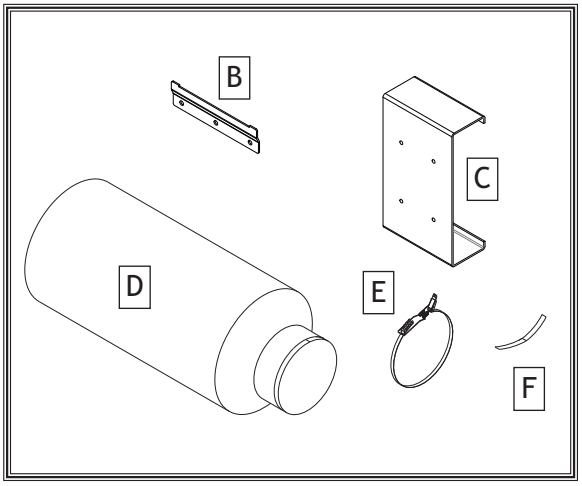


Figure 6. Machine Inventory.

Machine Placement

Weight Load: Refer to the **Machine Data Sheet** for the weight of your machine. Make sure that the surface upon which the machine is placed will bear the weight of the machine and the dust collection bag when full. Additionally, consider the weight of any dynamic loading that may occur when operating the machine.

Space Allocation: Provide enough space around the machine for adequate motor ventilation and the removal/ installation of the collection bag. **See below for required space allocation.**

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.



⚠CAUTION

MAKE your shop "child safe." Ensure that your workplace is inaccessible to children by closing and locking all entrances when you are away. NEVER allow untrained visitors in your shop when assembling, adjusting or operating equipment.

Physical Environment: The physical environment where the machine is operated is important for safe operation and longevity of machine 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, if required.

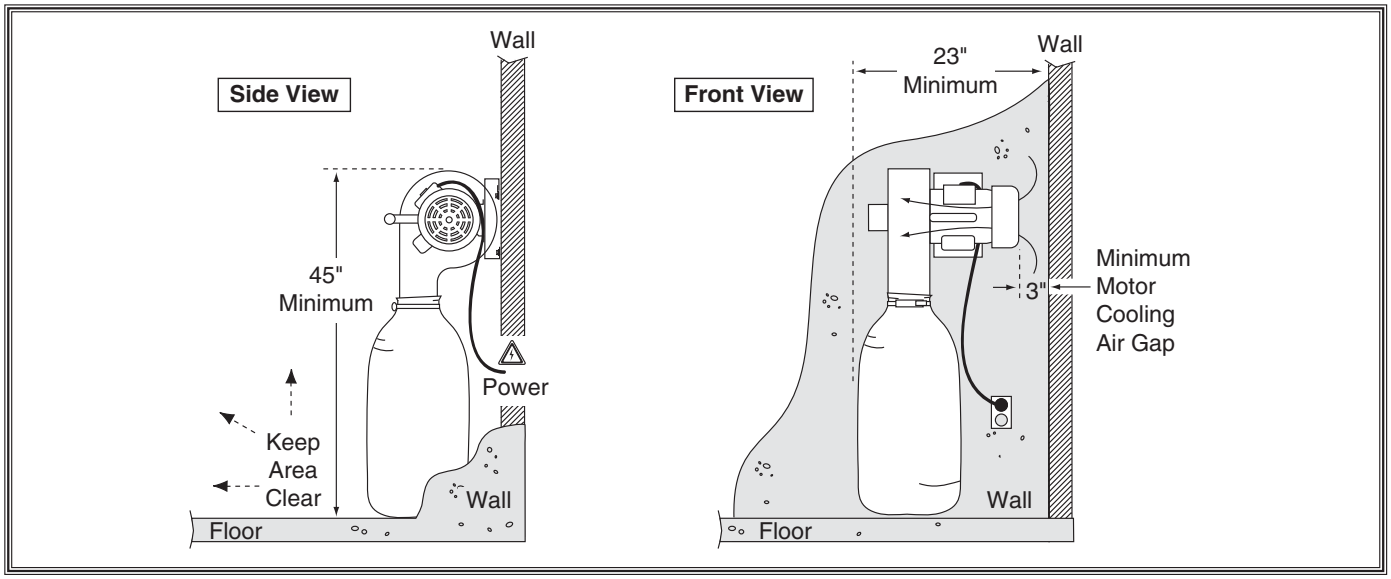


Figure 7. Wall mounting bracket positioning.

Assembly

For adequate motor cooling, the motor fan intake must not be restricted by a wall or cabinet.

To assemble and mount the dust collector:

1. Fasten the motor bracket to the motor base with the four included flange bolts, and install the adhesive foam strip on the dust collector outlet port at the location shown in **Figure 8**.

2. Using the wall mounting bracket as a template, mark the mounting hole location so the bottom of the mounting bracket is a miniumum of 42" from the floor and at least 4½" away from any wall, as shown in **Figure 9**.

   — If mounting to a wood framed wall (with or without drywall), the bracket must be mounted directly to a support board that is wide enough to span and mount onto two wall studs. Mount the support to the wall studs with lag screws, then mount the bracket to the support with appropriate fasteners, as shown in **Figure 10**.

   — If mounting to a concrete or masonry wall, attach the bracket using lag shield anchors with lag screws or anchor studs (see **Figure 11**).

3. After the mounting bracket is installed on the wall, have another person help you hang the dust collector on the bracket.

4. Install the dust collection bag with the bag clamp (see **Figure 8**), then connect the ducting. Refer to **Collection System** on the next page for grounding requirements.

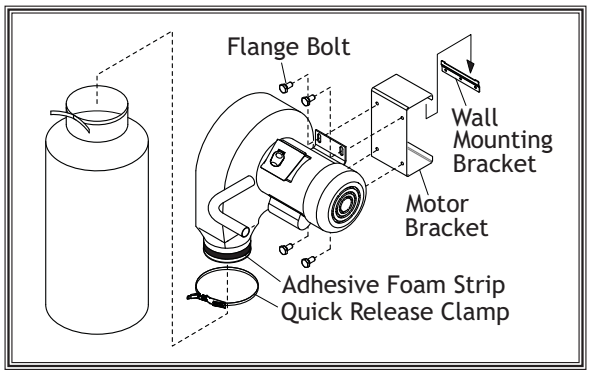


Figure 8. Dust collector assembly diagram.

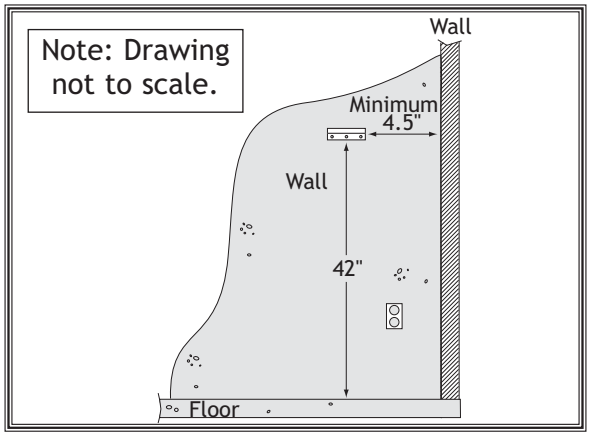


Figure 9. Dust collector mounting.

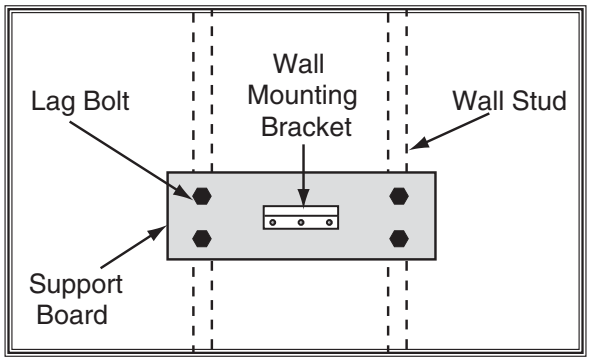


Figure 10. Mounting bracket secured to support board on wall studs.

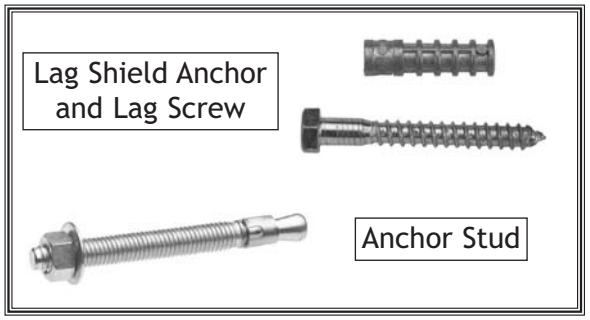


Figure 11. Typical fasteners for mounting dust collector bracket to masonry or concrete walls.

Collection System

Material Selection

You have many choices regarding dust collection ducting, but flexible hose is the most common for this size of machine. However, be aware that there is a fire or explosion hazard if plastic duct material is used for dust collection without being grounded against static electrical charge build-up.

Flexible rubber hose, polyethylene, plastic flex-hose and other flexible ribbed hose is generally used for short runs. There are many different types of flex hose on the market today. These are manufactured from materials such as polyethylene, PVC, cloth hose dipped in rubber and even metal, including steel and aluminum.

If using flex-hose, you should choose one of the many types that are designed specifically for the movement of solid particles, i.e. dust, grains and plastics. However, the cost of specifically designed flexible duct can vary greatly. Shop Fox offers polyethylene and steel flex hose.

Duct Grounding

Plastic flex-hose is an insulator, and dust particles moving against the walls of the hose creates a static electrical build up. This charge will build until it discharges to a ground. If a grounding medium is not available to prevent static electrical build up, the electrical charge will arc to the nearest grounded source. This electrical discharge may cause an explosion and subsequent fire inside the system.

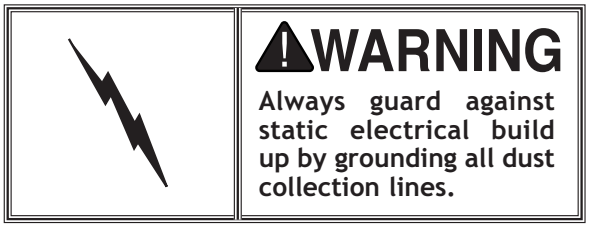
To protect against static electrical build up inside a non-conducting duct, a bare copper wire should be placed inside the duct along its length and grounded to the dust collector. You must also confirm that the dust collector is continuously grounded through the electrical circuit to the electric service panel.

Be sure that you extend the bare copper wire down all branches of the system. Do not forget to connect the wires to each other with wire nuts when two branches meet at a "Y" or "T" connection.

Ensure that the entire system is grounded. If using plastic blast gates to direct air flow, the grounding wire must be jumped (**see Figure 12**) around the blast gate without interruption to the grounding system.

We also recommend wrapping the outside of all plastic ducts with bare copper wire to ground the outside of the system against static electrical build up. Wire connections at Y's and T's should be made with wire nuts.

Attach the bare ground wire to each stationary woodworking machine and attach the dust collector frame with a ground screw, as shown in **Figure 13**. Ensure that each machine is continuously grounded to the grounding terminal in your electric service panel.



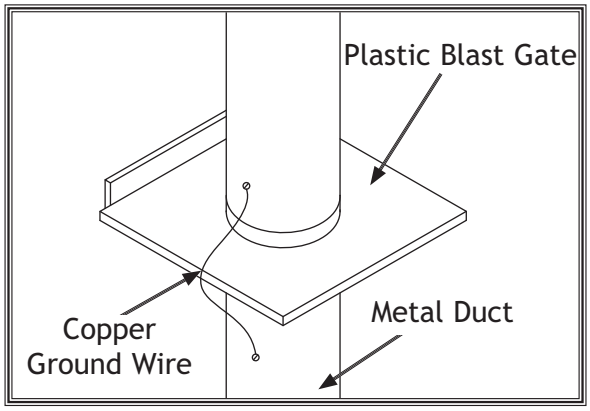


Figure 12. Ground jumper wire when using plastic blast gates or elbows and metal duct.

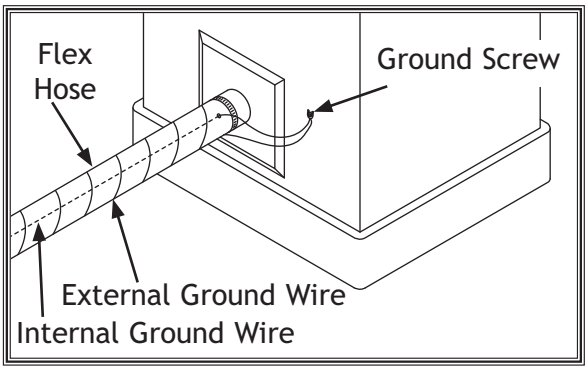


Figure 13. Flex-hose grounded to machine.

Dust Collection

Since each machine produces a different amount of sawdust, the requirements for the minimum amount of CFM to move that sawdust is unique to the machine (for example, a planer produces more sawdust than a table saw). Knowing this required CFM is important to gauging which size of duct to use.

Figure 14 provides a close estimation of the required CFM based on dust port size. A machine that generates large wood chips should be placed as close to the dust collector as possible.

Machine Dust Port Size	Approximate Required CFM
2"	98
2.5"	150
3"	220
4"	395
5"	614
6"	884
7"	1203
8"	1570
9"	1990
10"	2456

Figure 14. Approximate CFM reduction, based on machine dust port size.

If your machine doesn't have a built in dust port, use **Figure 15** to verify which size of ducting to install on your machine.

Machine	Average Dust Port Size
Table Saw	4"
Miter/Radial-Arm Saw	2"
Jointer (6" and smaller)	4"
Jointer (8"-12")	5"
Thickness Planer (13" and smaller)	4"
Thickness Planer (14"-20")	6"
Shaper	4"
Router (mounted to table)	2"
Bandsaw	4"
Lathe	4"
Disc Sander (12" and smaller)	2"
Disc Sander (13-18")	4"
Belt Sander (6" and smaller)	2"
Belt Sander (7"-9")	3"
Edge Sander (6" x 80" and smaller)	4"
Edge Sander (6" x 80" and larger)	5"
Drum Sander (24" and smaller)	2 x 4"
Drum Sander (24" and larger)	4 x 4"
Widebelt Sander (18" and smaller)	5"
Widebelt Sander (24"-37" single head)	2 x 6"
Widebelt Sander (24"-51" double head)	5 x 4"

Figure 15. Typical ducting sizes and port sizes for various machines.

Power Connection

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

To prevent accidental damage to the power cord, make sure it is kept away from potential damage sources at all times—whether connected or not. Potential damage sources include high traffic areas, sharp objects, heat sources, harsh chemicals, water, damp areas, etc.

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

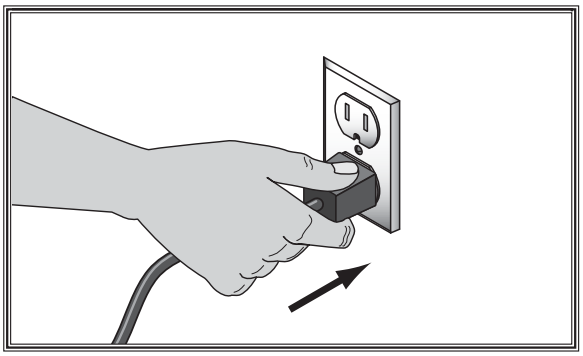


Figure 16. Connecting power.

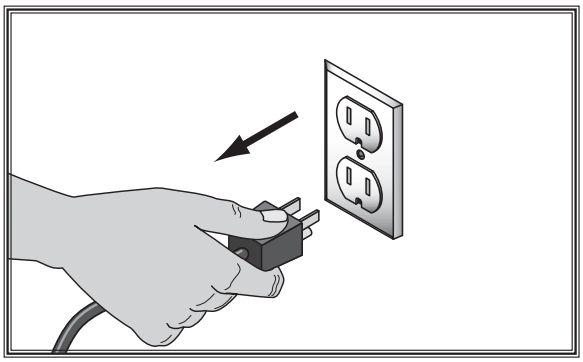


Figure 17. Disconnecting power.

Connecting Power

1. Turn the machine power switch **OFF.**

2. Insert the power cord plug into a matching power supply receptacle. The machine is now connected to the power source.

Disconnecting Power

1. Turn the machine power switch **OFF.**

2. Grasp the molded plug and pull it completely out of the receptacle. Do not pull by the cord as this may damage the wires inside.

Test Run

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

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

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting** on **Page 26**. If you still cannot remedy a problem, contact our Tech Support at (360) 734-3482 for assistance.

To test run the machine do these steps:

1. Make sure you understand the safety instructions at the beginning of the manual, and verify that the machine is setup properly.

2. Ensure all tools and objects used during setup are cleared away from the machine.

3. Verify that the machine is operating correctly by turning it ***ON***.

   — When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.

   — Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.

4. Turn the machine ***OFF***.

5. Remove the switch disabling key (**see Figure 18**).

6. Try to start the machine.

   — If the machine does not start, the switch disabling feature is working as designed.

   — If the machine does start, immediately disconnect machine from power. The switch disabling feature is not working correctly. Call Tech Support for help.

⚠WARNING



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

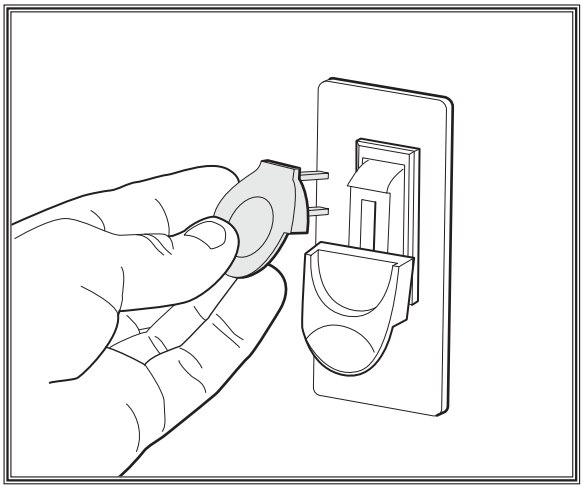


Figure 18. Removing switch key from paddle switch.

OPERATIONS

General

Operating your Model W1826 is simple and straightforward. Position the machine near the dust collector where it will not interfere with the workpiece being processed, connect the ducting, connect the ducting ground, and you are ready to begin.

Keep in mind that the dust collector is intended for single machine use and is not designed to draw dust through long runs and multiple ports simultaneously. We do not recommend using ducting longer than 10 feet. Otherwise, dust collection efficiency will be greatly reduced.

Machine Storage

When the dust collector is not in use, unplug the power cord from the power source. Place the cord away from potential damage sources, such as high traffic areas, sharp objects, heat sources, harsh chemicals, water, damp areas, etc.

⚠WARNING



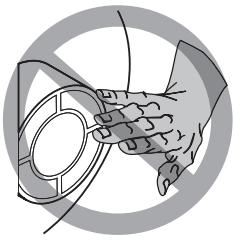
READ and understand this entire instruction manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. DO NOT risk your safety by not reading!

⚠WARNING



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

⚠WARNING



Do NOT put hands or small objects near inlet openings during operation. Objects sucked into the inlet will hit the impeller blade. Failure to heed this warning could result in personal injury or property damage.

NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Woodstock will not be held liable for accidents caused by lack of training.

Accessories

The following dust collector 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 Shop Fox W1054 Dust Collection Kit #1 contains everything needed for a single machine hookup, including simple and concise instructions.



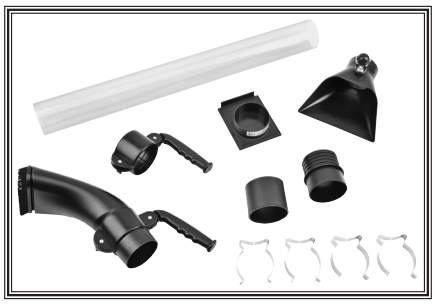
Features:
(1) 4" x 10 ft. Black Plastic Hose
(1) Universal Dust Hood
(2) 4" Wire Hose Clamps

The Shop Fox W1055 Dust Collection Kit #2 takes our dust collection kit concept a step further by providing the necessary hoses, clamps, hoods and fittings to connect two woodworking machines to a dust collector. Air flow to each machine is controlled by a blast gate. Kit comes complete with comprehensive instructions and can be expanded even further using our other dust collection accessories (list enclosed in each box).

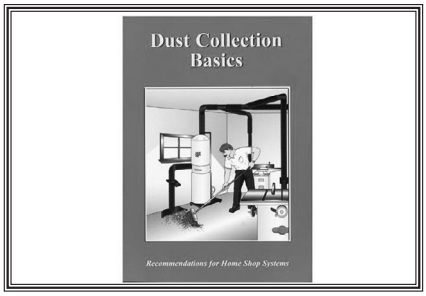


Features:
(2) 4" Blast Gates
(2) 4" x 10 ft. Black Plastic Hose
(1) Tablesaw Dust Hood
(1) Universal Dust Hood
(1) 4" Y-Fitting
(10) 4" Wire Hose Clamps

Pick up free dust in your shop with the Shop Fox D3756 Dust Collection Accessories Kit. This kit features simple connection to your dust collection system with versatile quick connect fittings that make set-up easy. The fittings attach to your 4" flexible dust collection hose. 4" connection hose and hose clamp not included.



Set includes:
4" quick connect blast gate
Bench brush attachment
Floor sweep attachment with swivel caster
Quick connect coupler
Quick connect hose attachment
Two adjustable handles
Four mounting brackets
4" x 3' clear pipe



Many do-it-yourselfers trying to design and set up a central dust collection system lack the information needed to build such a system! **This W1050 Dust Collection Basics book** skillfully guides the woodworker through all the steps necessary in the design and construction of an efficient system and provides tips for easy installation. With sixty pages of concise information, including photographs and illustrations, this handbook is a "must."

Features:
Covers design and construction of an efficient system.
Provides tips for easy installation.
Concise Information
Photographs & Illustrations



The Shop Fox W1746 is one machine that will sit in the shop and gather dust. Fine dust that is. With its three speed fan, automatic shut-off and 0.3 micron filter, this Fine Air Filter circulates shop air and captures the finest dust that otherwise stays suspended. Even with an efficient dust collector, if other machines are making dust, you need the Fine Air Filter. Some of the typical particles that the filter will remove are smoke, dust mites, pollen, mold spores, and general airborne debris.

Features:
Motor: 120V, 60Hz
Filter size: 13¼" x 14¼" x 1¼"
Standard filtration: 0.3 microns
Fan sound rating: 42 dB
Fan speeds: 3
Air movement: 100, 140 & 200 CFM
Automatic timed shut-off
Fan off delay: 4 settings
Approximate shipping weight: 18 lbs.

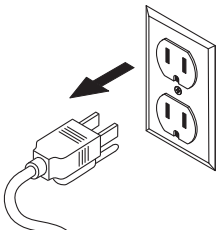
MAINTENANCE

Schedule

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

Daily Check:
- Loose mounting bolts.
- Worn switch.
- Worn or damaged wires.
- Full collection bag.
- Any other unsafe condition.

WARNING



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

Lubrication

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

Bag Cleaning

Always empty the collection bag on a regular basis. Emptying the collection bag allows the machine to operate at a much higher level of efficiency. Always wear the appropriate respirator or dust mask and safety glasses when emptying the collection bag. Small dust particles can escape the bag during emptying, causing them to become airborne and easily inhaled. This microscopic airborne dust is unsafe to breathe and can cause serious health problems.

WARNING



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

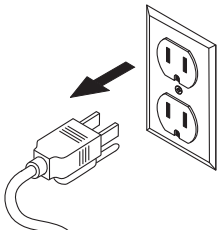
SERVICE

General

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

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

⚠WARNING



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

Impeller Tightening

DISCONNECT DUST COLLECTOR FROM POWER BEFORE ATTEMPTING THIS PROCEDURE!

Periodically check the impeller to make sure it is tight on the motor shaft. Any unusual vibration or noise may be an indication the impeller has loosened. A set screw and a left-hand cap screw secure the impeller to the shaft. These can be accessed through the inlet cover, as shown in **Figure 19.**

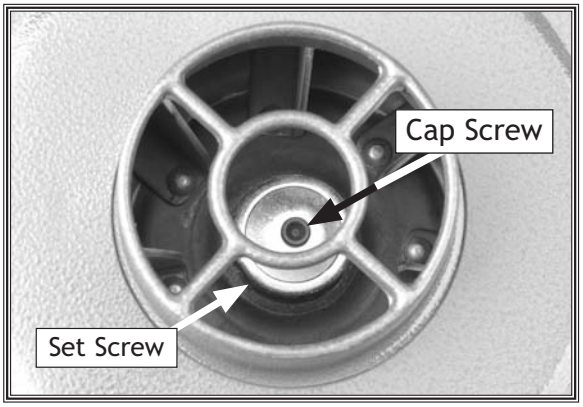


Figure 19. Impeller screw locations.

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.

⚠WARNING

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

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

WIRING DIAGRAM COLOR KEY

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

SERVICE

Wiring Diagram



Figure 22. Start capacitor.

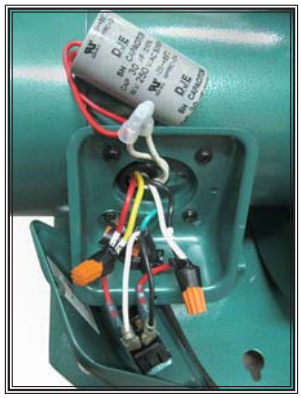


Figure 20. 120V junction box.

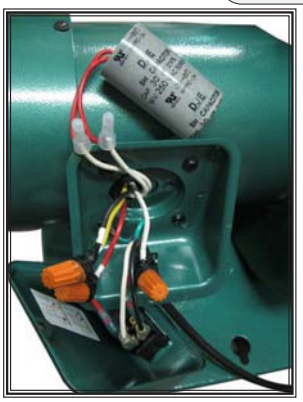
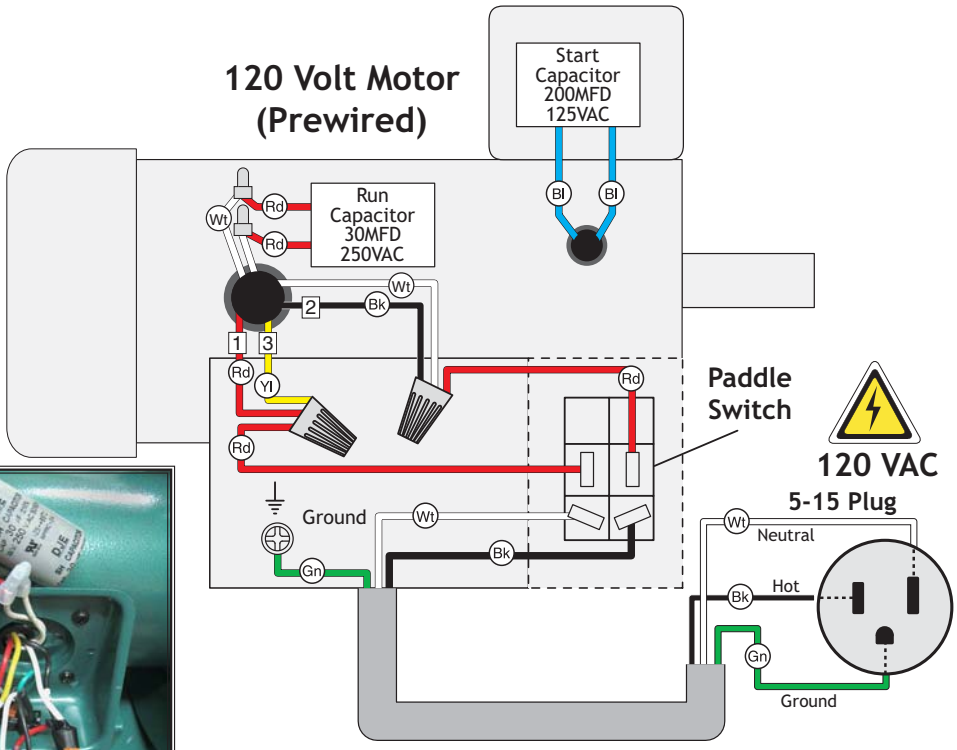
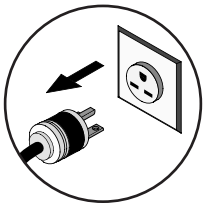


Figure 21. 240V junction box.



Troubleshooting



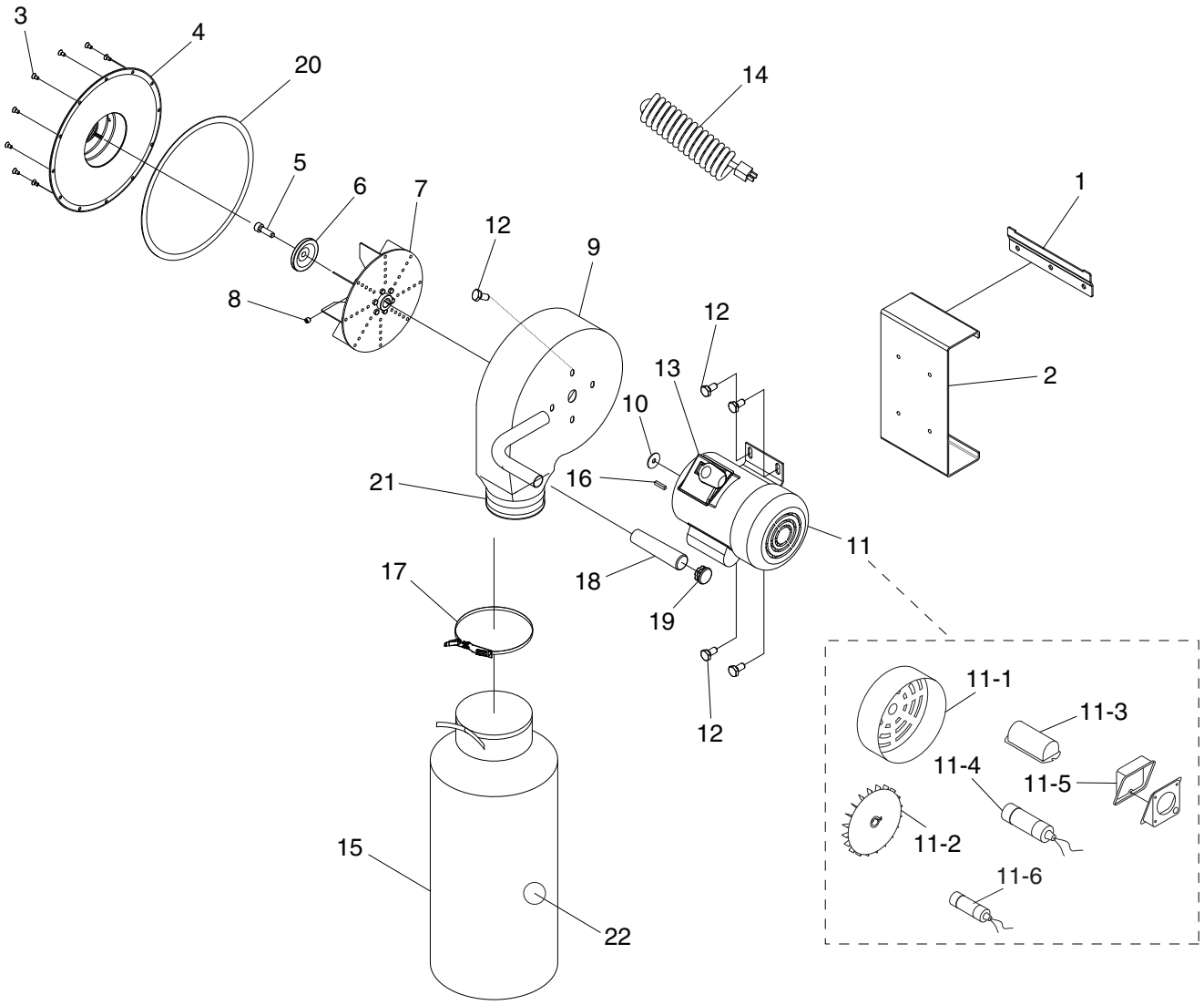
This section covers the most common problems and corrections with this type of machine. **WARNING! DO NOT make any adjustments until power is disconnected and moving parts have come to a complete stop!**

Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	1. Switch disabling key removed. 2. Wall fuse/circuit breaker is blown/tripped. 3. Power supply switched OFF or is at fault. 4. Wiring is open/has high resistance. 5. Motor ON/OFF switch is at fault. 6. Motor is at fault.	1. Install disabling key. 2. Verify that no short exists, and that the circuit size is suitable for this machine; replace fuse/reset breaker. 3. Ensure power supply is switched on; ensure power supply has the correct voltage. 4. Check for broken wires or disconnected/corroded connections, and repair/replace as necessary. 5. Replace faulty ON/OFF switch. 6. Test/repair/replace.
Machine has vibration or noisy operation.	1. Motor or component is loose. 2. Motor mount loose/broken. 3. Machine is incorrectly mounted to wall. 4. Motor fan is rubbing on fan cover. 5. Motor bearings are at fault.	1. Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid. 2. Tighten/replace. 3. Tighten/replace mounting hardware. 4. Replace dented fan cover; replace loose/damaged fan. 5. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.

Symptom	Possible Cause	Possible Solution
Loud, repetitious noise, or excessive vibration coming from dust collector.	1. Dust collector or component is loose. 2. Impeller is damaged and unbalanced. 3. The motor mounting or housing connections are loose. 4. Impeller is loose on the motor shaft. 5. Motor fan cover is dented, causing the motor fan to hit the cover while spinning.	1. Tighten/replace mounting hardware. 2. Disconnect dust collector from power, and inspect the impeller for dents, bends, loose fins. Replace impeller if any damage is found. 3. Make sure all fasteners on the dust collector are tight. 4. Replace the motor and impeller as a set if the motor shaft and the impeller hub are damaged. 5. Replace motor fan cover.
Dust collector does not adequately collect dust or chips; poor performance.	1. Dust collection bag is full. 2. There is a restriction in the duct line. 3. The dust collector is too far away from the point of suction, or there are too many sharp bends in the ducting. 4. The lumber is wet and dust is not flowing through the ducting smoothly. 5. There is a leak in the ducting, or a series of small leaks, or too many open ports. 6. The ducting and ports are incorrectly sized. 7. The machine dust collection design is inadequate. 8. The dust collector is too small for the dust collection system.	1. Empty collection bag. 2. Remove dust line from dust collector inlet and unblock the restriction in the duct line. A plumbing snake may be necessary. 3. Relocate the dust collector closer to the point of suction, and rework ducting without sharp bends. Refer to **Collection System**, beginning on **Page 16**. 4. Process lumber with less than 20% moisture content. 5. Rework the ducting to eliminate all leaks. Close dust ports for lines not being used. 6. Reinstall correctly sized ducts and fittings. Refer to **Collection System** beginning on **Page 16** for more solutions. 7. Use a dust collection nozzle on a stand, or upgrade dust collection system. 8. Install a larger dust collector to power your dust collection system.
Sawdust being blown into the air from the dust collector.	1. Duct clamps or dust collection bag is not properly clamped and secured. 2. Dust is extremely fine.	1. Re-secure ducts and dust collection bag, making sure duct and bag clamps are tight and completely over the ducts and bag. 2. Replace filter bag with Shop Fox Model D3632 0.3 micron type. Install one or more Shop Fox Model W1690 Deluxe Ceiling Mounted 3 Speed Air Cleaners.

PARTS
System



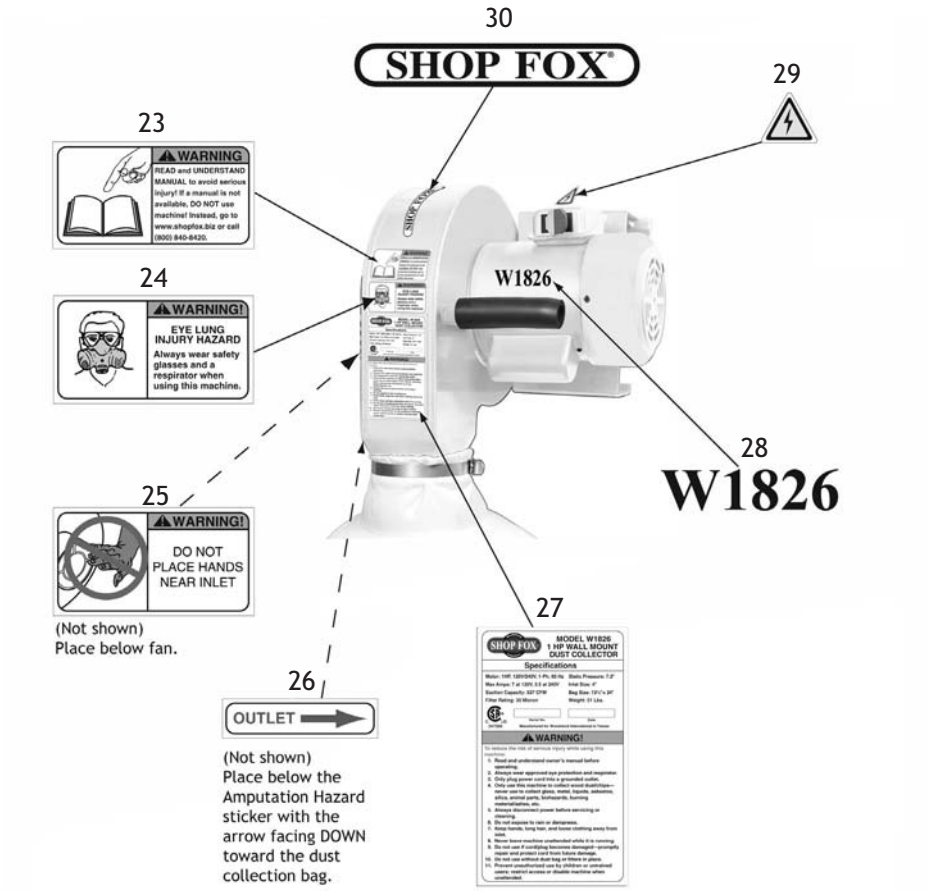
REF	PART #	DESCRIPTION
1	X1826001	WALL BRACKET
2	X1826002	MOTOR MOUNT BRACKET
3	XPS09M	PHLP HD SCR M5-.8 X 10
4	X1826004	INLET COVER 11"
5	XPCAP121M	CAP SCREW M6-1 X 20 LH
6	X1826006	IMPELLER WASHER 6MM
7	X1826007	IMPELLER 10"
8	XPSS02	SET SCREW 5/16-18 X 3/8
9	X1826009	COLLECTOR BODY W/HANDLE
10	X1826010	MOTOR SHAFT SPACER
11	X1826011	MOTOR 1HP 110V/220V 1-PH
11-1	X1826011-1	FAN COVER
11-2	X1826011-2	MOTOR FAN
11-3	X1826011-3	CAPACITOR COVER

REF	PART #	DESCRIPTION
11-4	XPC200	S CAPACITOR 200M 125V 1-1/4" X 3-3/8"
11-5	X1826011-5	JUNCTION BOX
11-6	X1826011-6	R CAPACITOR 30M 250V 1-1/4" X 3-3/8"
12	XPFB03	FLANGE BOLT 1/4-20 X 1/2
13	X1826013	PADDLE SWITCH W/KEY
14	X1826014	POWER CORD 16AWG 3C 5-15
15	X1826015	COLLECTION BAG 13-1/2" X 24"
16	XPK23M	KEY 5 X 5 X 25
17	X1826017	QUICK RELEASE BAG CLAMP
18	X1826018	HANDLE COVER
19	X1826019	HANDLE END CAP
20	X1826020	INLET COVER GASKET
21	X1826021	OUTLET GASKET
22	XPPAINT-1	SHOP FOX WHITE (M1006)

Label Placement

⚠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
23	XLABEL-08H	READ MANUAL 3.8H X 2H
24	XLABEL-06B	RESPIRATOR/GLASSES 3.8W X 2H
25	X1826025	HAND INLET WARNING LABEL
26	X1826026	OUTLET DIRECTION LABEL

REF	PART #	DESCRIPTION
27	X1826027	MACHINE ID LABEL
28	X1826028	MODEL NUMBER LABEL
29	XLABEL-04	ELECTRICITY LABEL 1.4W X 1.2H
30	X1826030	SHOP FOX LABEL

Warranty Registration

Name_____

Street _____

City _____ State_____ Zip_____

Phone #_____ Email_____ Invoice #_____

Model #_____ Serial #_____ Dealer Name_____ Purchase Date_____

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

1. How did you learn about us?

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

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

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

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

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

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

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

6. What is your age group?

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

7. What is your annual household income?

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

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

____ Cabinet Maker
____ Family Handyman
____ Hand Loader
____ Handy
____ Home Shop Machinist
____ Journal of Light Cont.
____ Live Steam
____ Model Airplane News
____ Modeltec
____ Old House Journal
____ Popular Mechanics
____ Popular Science
____ Popular Woodworking
____ Practical Homeowner
____ Precision Shooter
____ Projects in Metal
____ RC Modeler
____ Rifle
____ Shop Notes
____ Shotgun News
____ Today's Homeowner
____ Wood
____ Wooden Boat
____ Woodshop News
____ Woodsmith
____ Woodwork
____ Woodworker West
____ Woodworker's Journal
____ Other:

9. Comments:_____

_____

_____

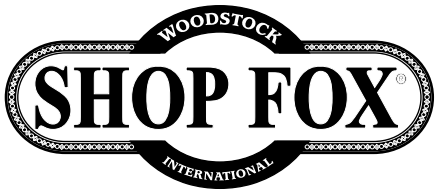
_____

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CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE

Place
Stamp
Here



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

FOLD ALONG DOTTED LINE

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY

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

Woodstock International, Inc. will repair 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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ACCU-SHARP®

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JOINTER PAL®

DURASTICK®

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STEELEX® FINE TOOLS

STEELEX® PLUS

Rotacator®

Gutmann®

Junglee®

PARROT VISE®

PRO-STIK® ABRASIVE BELT & DISC CLEANER

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