# **READ THIS FIRST**

# Model W1763 \*\*\*IMPORTANT UPDATE\*\*\*

Applies to Models Mfg. Since 7/12 and Owner's Manual April, 2010



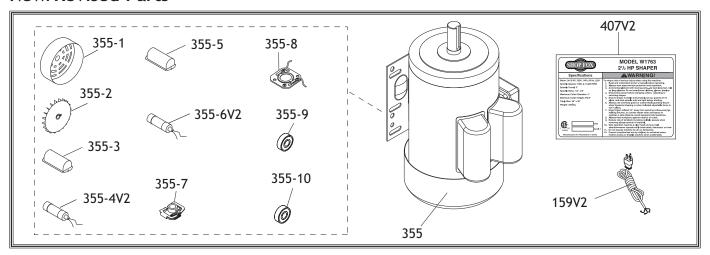
Phone #: (360) 734-3482 • Tech Support: tech-support@shopfox.biz • Web: www.shopfox.biz

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

- Now certified to meet CSA 22.2 #71.2-08 and UL 987-7th standards.
- Added a power cord with a plug.

This document provides relevant updates to portions of the owner's manual that no longer apply and additional information required by CSA—aside from this information, all other content in the owner's manual applies and MUST be read and understood for your own safety. **IMPORTANT: Keep this update with the owner's manual for future reference**. If you have any further questions, contact our Technical Support.

#### **New/Revised Parts**



REF	PART #	DESCRIPTION
159V2	X1763159V2	PWR CORD 14G 3W 72" 6-15P V2.07.12
355	X1763355	MOTOR 2-1/2HP 220V 1-PH
355-1	X1763355-1	MOTOR FAN COVER
355-2	X1763355-2	MOTOR FAN
355-3	X1763355-3	CAPACITOR COVER
355-4V2	X1763355-4V2	S CAPACITOR 200M 250V V2.08.07
355-5	X1763355-5	CAPACITOR COVER

REF	PART #	DESCRIPTION
355-6V2	X1763355-6V2	R CAPACITOR 50M 400V V2.08.07
355-7	X1763355-7	CENTRIFUGAL SWITCH 16MM 3450
355-8	X1763355-8	CONTACT PLATE 16MM
355-9	XP6205ZZ	BALL BEARING 6205ZZ
355-10	XP6203ZZ	BALL BEARING 6203ZZ
407V2	X1763407V2	MACHINE ID LABEL CSA V2.07.12





# **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!

# **A**DANGER

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

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

# **ACAUTION**

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

# **NOTICE**

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

# Standard Machinery Safety Instructions

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

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

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

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

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

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

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



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

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



# **Additional Safety for Shapers**

- GUARDING FROM CUTTER EXPOSURE. When setting up cuts, take every possible step to reduce operator exposure to the cutter to prevent laceration or amputation injuries. These steps include but are not limited to: Keeping the unused portion of the cutter below the table, using the smallest table insert allowed by cutter, adjusting fences as close as practical to the cutter on both sides, using a properly installed box guard, and securing the guard as close to the workpiece as possible. Keep the provided guard or other protective devices between your hands and the cutter at all times!
- KEEPING HANDS SAFE. Never pass your hands near, directly over, or in front of the cutter. As one hand approaches the 6-inch radius point, move it in an arc motion away from the cutter to the outfeed side and reposition that hand more than 6 inches beyond the cutter. Do not use awkward hand positions.
- SMALL WORKPIECES. There is a risk when shaping a small workpiece that it will slip between the fence boards and draw the operator's hand into the spinning cutter. Keep fingers away from revolving cutter—use fixtures when necessary. Where practical, shape longer stock and cut to size.
- TESTING FOR CLEARANCE. If the spinning cutter should contact the fence, guard, or insert, the resulting flying debris presents injury hazards. Unplug the shaper, and always rotate the spindle by hand to test any new setup for proper cutter clearance before starting the shaper.
- safe cutter installation: A properly tightened spindle nut reduces the risk of the cutter or rub collars flying off during operation. Always make sure the quill key and spindle keyway are aligned. Always use both spindle nuts and make sure they are tight.
- cut from the underside of the workpiece whenever possible to reduce operator exposure to the moving cutter.

- FEEDING DIRECTION. Always make sure the cutter is rotating in the correct direction before starting shaper, and always feed the workpiece against the rotation of the cutter. Moving the workpiece into the cutter in the same direction as it is rotating will aggressively pull the workpiece from your hands and could draw them into the cutter.
- PREPARING A WORKPIECE. Always "square up" a workpiece before you run it through the shaper. A warped workpiece is difficult to process and increases the risk of an accident. Always inspect the workpiece before shaping. The danger of kickback is increased when the stock has knots, holes, or foreign objects in it.
- AVOIDING AN OVERLOAD. Removing too much material in one pass increases the risk of the workpiece kicking back toward the operator. Never attempt to remove too much material in one pass. Several light passes are safer and give a cleaner finish.
- SAFELY FEEDING A WORKPIECE. We recommend using some type of fixture, jig, or hold-down device to safely support the workpiece when feeding. ALWAYS use a push stick when shaping small or narrow workpieces. Use an outfeed support table if shaping long workpieces to make sure that they remain supported during the entire cutting procedure.
- SAFETY GUARDS. To reduce the risk of unintentional contact with the rotating cutter, always make sure the cutter safety guard and a properly dimensioned box guard are correctly installed before beginning operation.
- contour shaping. When shaping contoured work and using a rub collar, NEVER start shaping at a corner. See the rub collar section in the manual. Use the overhead safety guard when the adjustable fence is not in place.



# **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 220V ...... 9.5 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, 60 Hz, Single-Phase
Circuit Size	15 Amps
Plug/Receptacle	NEMA 6-15

# **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.



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.

Note: 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 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:

# **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 so later in this manual.

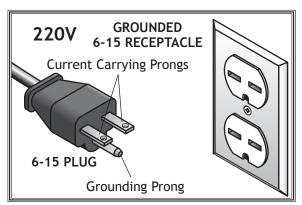


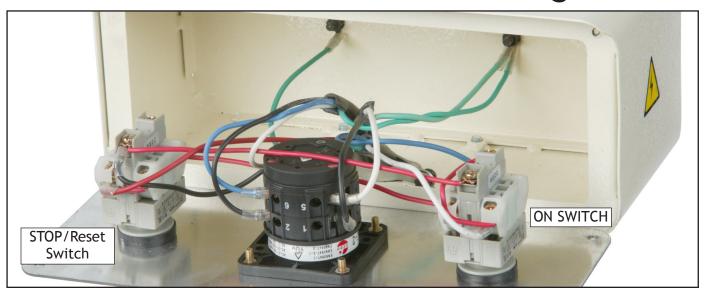
Figure 1. NEMA 6-15 plug & receptacle.

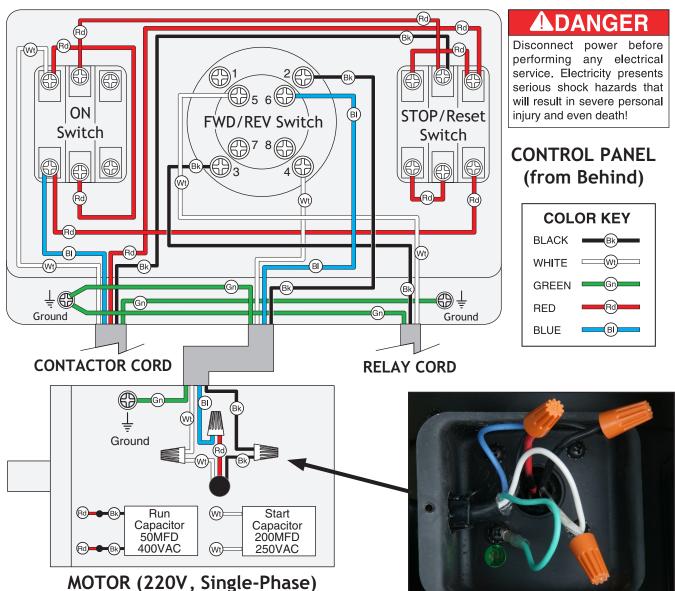


No adapter should be used with the required plug. If the plug does not fit the available receptacle or the machine must be reconnected to a different type of circuit, the reconnection must be made by an electrician or qualified service personnel and it must comply with all local codes and ordinances.



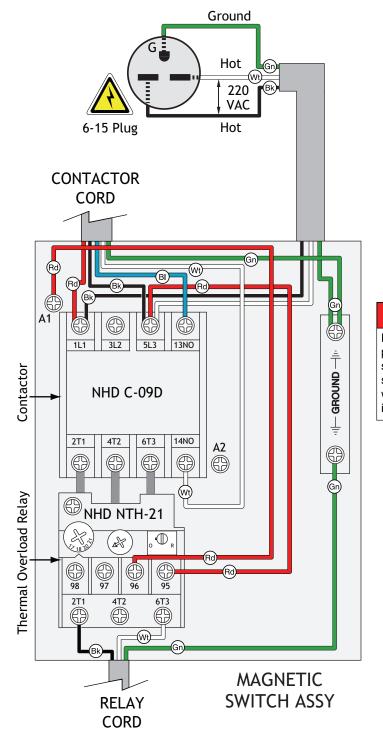
# Control Panel & Motor Wiring





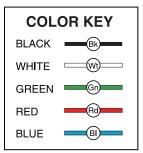


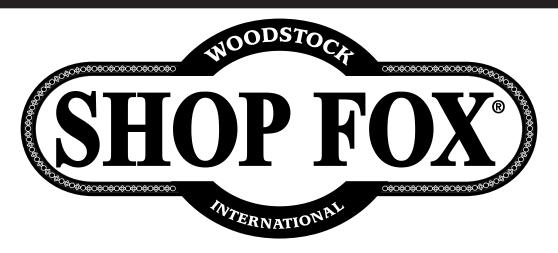
# Wiring Diagram



#### **ADANGER**

Disconnect power before performing any electrical service. Electricity presents serious shock hazards that will result in severe personal injury and even death!





# MODEL W1763 2.5 HP SHAPER



# **OWNER'S MANUAL**

(FOR MODELS MANUFACTURED AFTER 4/07)

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

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Printed in China

#9222TR



This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

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

The owner of this machine/equipment 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, blade/cutter 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	
Machine Specifications	
SAFETYStandard Safety Instructions	
Additional Safety Instructions for Shapers.	
ELECTRICAL	9
Extension Cords	
SETUP Unpacking Inventory Machine Placement Cleaning Machine Assembly & Setup Dust Collection Test Run	10 10 11 11 12 14
OPERATIONS. General Cutters vs. Router Bits Controls. Belt Speed Adjustment Cutter Installation Router Bit Installation Table Inserts Fence Positioning. Straight Shaping Freehand Shaping Templates Zero Clearance Fence Box Guard Feather Boards Shaper Accessories	16 16 17 18 19 21 22 22 23 24 26 27 28 28



# INTRODUCTION **Woodstock Technical Support**

Your new Shop Fox 2.5 HP Shaper 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 <a href="http://www.shopfox.biz">http://www.shopfox.biz</a>. 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

Motor



# MACHINE SPECIFICATIONS



Phone #: (360) 734-3482 • Online Tech Support: tech-support@shopfox.biz • Web: www.shopfox.biz

# MODEL W1763 2.5 HP SHAPER

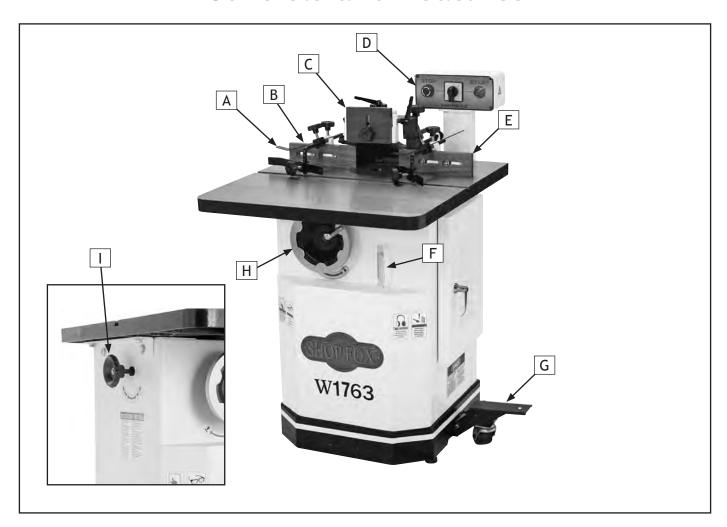
Type
Main Specifications
Spindle Specifications
Max Cutter Height. 23/4"  Max Cutter Diameter 5"  Spindle Sizes 1/2" and 3/4"  Exposed Spindle Length 23/4"  Spindle Travel 3"  Spindle Speeds 7,000 and 10,000
Table Specifications
Table Counterbore Diameter
Overall Dimensions



Ship	ping Dimensions
	Weight       426 lbs.         Length       36'         Width       30'         Height       39'
Elec	crical
	Switch Switch Voltage
Cons	truction Materials
	Cabinet Steel Fence Precision Ground Cast Iron Miter Gauge Aluminum and Steel Table Precision Ground Cast Iron Guard Cast Iron Paint Powder Coated
Othe	r
	Number of Dust Ports



# **Controls and Features**



- A. Hold Down Assembly
- B. Outfeed Fence
- C. Guard Assembly
- D. Control Panel
- E. Infeed Fence
- F. Scale
- G. Mobile Base Pedal
- H. Spindle Height Handwheel
- I. Spindle Lock Knob



# **SAFETY**

# READ MANUAL BEFORE OPERATING MACHINE. FAILURE TO FOLLOW INSTRUCTIONS BELOW WILL RESULT IN PERSONAL INJURY.

# **A**DANGER

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.

# **A**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 Safety Instructions**

- 1. **READ THROUGH THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.
- 2. ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY. Everyday eye-glasses only have impact resistant lenses—they are NOT safety glasses.
- 3. ALWAYS WEAR AN NIOSH APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST. Wood dust is a carcinogen and can cause cancer and severe respiratory illnesses.
- 4. ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY. Machinery noise can cause permanent hearing damage.
- 5. WEAR PROPER APPAREL. DO NOT wear loose clothing, gloves, neckties, rings, or jewelry which may get caught in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
- 6. NEVER OPERATE MACHINERY WHEN TIRED, OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL. Be mentally alert at all times when running machinery.
- 7. ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY. Make sure operation instructions are safe and clearly understood.
- **8. KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.
- 9. MAKE WORKSHOP CHILD PROOF. Use padlocks, master switches, and remove start switch keys.



- **10. NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power off and allow all moving parts to come to a complete stop before leaving machine unattended.
- **11. DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.
- 12. KEEP WORK AREA CLEAN AND WELL LIT. Clutter and dark shadows may cause accidents.
- 13. USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE. Undersized cords overheat and lose power. Replace extension cords if they become damaged. DO NOT use extension cords for 220V machinery.
- 14. ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY. Make sure switch is in OFF position before reconnecting.
- **15. MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 16. MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.
- 17. REMOVE ADJUSTING KEYS AND WRENCHES. Make a habit of checking for keys and adjusting wrenches before turning machinery *ON*.
- **18. CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding and alignment of parts, broken parts, part mounting, loose bolts, and any other conditions that may affect machine operation. Repair or replace damaged parts.
- **19. USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury.
- 20. DO NOT FORCE MACHINERY. Work at the speed for which the machine or accessory was designed.
- **21. SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.
- 22. DO NOT OVERREACH. Keep proper footing and balance at all times.
- 23. MANY MACHINES WILL EJECT THE WORKPIECE TOWARD THE OPERATOR. Know and avoid conditions that cause the workpiece to "kickback."
- 24. ALWAYS LOCK MOBILE BASE BEFORE OPERATING MACHINERY.
- 25. BE AWARE THAT CERTAIN DUST MAY BE HAZARDOUS to the respiratory systems of people and animals, especially fine dust. Make sure you know the hazards associated with the type of dust you will be exposed to and always wear a respirator approved for that type of dust.



# Additional Safety Instructions for Shapers



# **AWARNING**

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!

# **A**CAUTION

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

- 1. **KEEPING HANDS SAFE:** Never pass your hands near or directly over or in front of the cutter. As one hand approaches the 6-inch radius point, move it in an arc motion away from the cutter to the outfeed side and reposition that hand more than 6 inches beyond the cutter.
- 2. SMALL WORKPIECES: DO NOT shape small workpieces without special fixtures or jigs. Where practical, shape longer stock and cut to size.
- **3. CUTTER POSITIONING:** Keep the cutters on the underside of the workpiece whenever possible to reduce operator exposure to the moving cutter.
- **4. TESTING FOR CLEARANCE:** Unplug the shaper, and always rotate the spindle by hand to test any new setup for proper cutter clearance before starting the shaper.
- 5. SAFELY STARTING AND FEEDING WORKPIECE: When shaping contoured work and using a rub collar, NEVER start shaping at a corner. See the rub collar section in the manual. The danger of kickback is increased when the stock has knots, holes, or foreign objects in it.
- **6. PREPARING A WORKPIECE:** Always "square up" a workpiece before you run it through the shaper. A warped workpiece is difficult to process and increases the risk of an accident.
- 7. GUARDING FROM CUTTER EXPOSURE: When setting up cuts, take every step practical to reduce operator exposure to the cutter. These steps include but are not limited to: Keeping the unused portion of the cutter below the table, using the smallest table insert allowed by cutter, adjusting fences as close as practical to the cutter on both sides, and securing the guard as close to the workpiece as possible. Keep a guard or other protective device between your hands and the cutter at all times!
- **8. AVOIDING AN OVERLOAD:** Never attempt to remove too much material in one pass. Several light passes are safer and give a cleaner finish.
- 9. SAFELY FEEDING A WORKPIECE: We recommend using some type of fixture, jig, or hold-down device to safely support the workpiece when feeding. ALWAYS use a push stick when shaping small or narrow workpieces. Use an outfeed support table if shaping long workpieces to make sure that they remain supported during the entire cutting procedure.
- **10. AVOIDING CUTTER AND WORKPIECE GRAB:** Always make sure cutter is positioned in the correct direction before starting shaper, and always feed against the rotation of the cutter.
- **11. SAFE CUTTER INSTALLATION:** Never operate the shaper without verifying that the spindle nut is tight. A tight spindle nut reduces the risk of the cutter or rub collars flying off during operation.



# **ELECTRICAL**

# 220V Operation

The Model W1763 is wired for 220V single-phase operation. We recommend connecting this machine to a dedicated circuit with a verified ground, using the circuit size given below. Never replace a circuit breaker with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes.

A plug is not supplied with this machine. See below for the recommended plug type.

If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, you may create a fire or circuit overload hazard—consult a qualified electrician to reduce this risk.

# **Extension Cords**

We do not recommend using an extension cord; however, if you have no alternative, use the following guidelines:

- Use a cord rated for Standard Service (S).
- Do not use a cord longer than 50 feet.
- Ensure that the cord has a ground wire and pin.
- Use the gauge size listed below as a minimum.

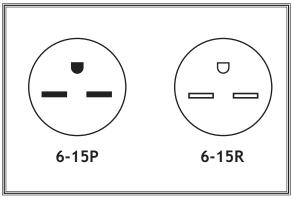


Figure 1. 6-15 plug and receptacle.



DO NOT work on your electrical system if you are unsure about electrical codes and wiring! Seek assistance from a qualified electrician. Ignoring this warning can cause electrocution, fire, or machine damage.

# **Electrical Specifications**

Operating Voltage	Amp Draw	Min. Circuit Size	Plug/Receptacle	Extension Cord
220V Single-Phase	9.5 Amps	15A	NEMA 6-15 (not incl.)	14 Gauge



# **SETUP**

# Unpacking

The Shop Fox Model W1763 has been carefully packaged for safe transporting. If you notice the machine has been damaged during shipping, please contact your authorized Shop Fox dealer immediately.

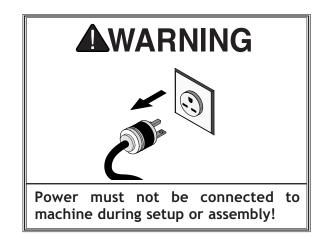
# **Inventory**

The following is a description of the main components shipped with the Shop Fox Model W1763. 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.

Car	mponent Inventory (Figure 2)	Qty
A.	Caster Assembly	
	· · · · · · · · · · · · · · · · · · ·	
Β.	Fence Assembly	
<b>C</b> .	Hold Down Mounting Brackets	
D.	Hold Down Mounting Bars	
Ε.	Fence Knobs	6
F.	Long Knobs	2
G.	Hold Down Plates	4
Н.	Spindle Wrench	
I.	Drawbar	1
J.	Miter Gauge	1
K.	Spindles <sup>1</sup> / <sub>2</sub> ", <sup>3</sup> / <sub>4</sub> "	
L.	Handwheel Handle	
M.	Router Bit Collets, 1/4", 1/2"	1 each
N.	Wrench 14/17mm	1
0.	Hex Wrench 4mm	
Hai	rdware and Tools	
•	Hex Bolts M10-1.5 x 35 (Extension Table)	3
	Flat Washers 10mm (Extension Table)	
•	,	
•	Lock Washers 10mm (Extension Table)	3

Set Screws M8-1.25 x 16 (Extension Table)............3



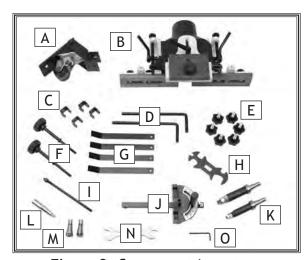
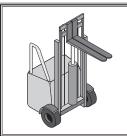


Figure 2. Component inventory.



# Machine Placement

- Floor Load: This machine distributes a heavy load in a small footprint. Some residential floors may require additional bracing to support both machine and operator.
- Working Clearances: Consider existing and anticipated needs, size of material to be processed through the machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your machine.
- **Lighting:** Lighting should be bright enough to eliminate shadow and prevent eye strain.
- dedicated or large enough to handle amperage requirements. Outlets must be located near each machine, so power or extension cords are clear of high-traffic areas. Follow local electrical codes for proper installation of new lighting, outlets, or circuits.



# WARNING

Use helpers or power lifting equipment to lift this 2.5 HP Shaper. Otherwise, serious personal injury may occur.



# **A**CAUTION

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

# Cleaning Machine

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



# **AWARNING**

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





# **A**CAUTION

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



# **Assembly & Setup**

To assemble the shaper, do these steps:

- 1. Carefully prop the cabinet up on a large block of wood, so you can access the underside of the stand to install the caster assembly.
- 2. Use the M8-1.25 x 50 hex bolt and 8mm flat washer to bolt the wheel assembly to the stand, as shown in Figure 3.
- 3. Use the two M10-1.5 x 55 hex bolts, 10mm flat washers, and M10-1.5 hex nuts to further secure the wheel assembly to the stand, as shown in **Figure 4**.
- 4. Remove the block of wood from under the cabinet.
- **5.** Place the fence assembly on the shaper table and secure it with the two long knobs shown in **Figure 5**.



Figure 3. Installing caster (A).



Figure 4. Installing caster (B).

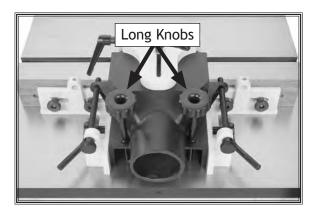


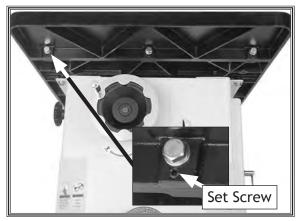
Figure 5. Fence installed.



- 6. Unbolt the control panel pedestal arm from the cabinet, turn it rightside up, then secure it to the cabinet with the bolts.
- 7. Install the extension table on the main table, using the three M10-1.5 x 35 hex bolts, 10mm lock washers, and 10mm flat washers (**Figure 6**). Make sure the edge of the extension table is flush with the edge of the main table.
- 8. Install the three M8-1.25 x 16 set screws in the extension table. The set screw holes are located near the hex bolts used to attach the extension table to the main table.
- 9. Place a straightedge across the extension table and the main table (Figure 7), then adjust the three set screws as needed to level the extension table with the main table.
- **10.** Thread the handle into the handwheel and tighten it with a wrench, as shown in **Figure 8**.
- 11. Install and assemble the hold down components as shown in Figure 9. This step is optional, depending on your anticipated use.



All guards MUST be installed on your shaper before operating it. Shapers can quickly cause serious injury if some kind of guard is not used. To reduce your risk of injury, read and follow the entire instruction manual carefully and do additional research on shop made guards and safety jigs.



**Figure 6.** Table extension installation and leveling hardware.



**Figure 7.** Checking overall table flatness with a straightedge.



Figure 8. Handle installed in handwheel.

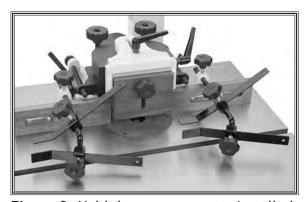


Figure 9. Hold down components installed.

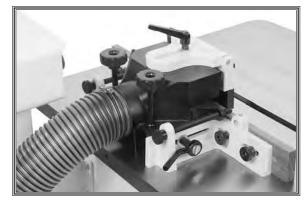


# **Dust Collection**

Attach the machine to a dust collector, using a 4" hose and hose clamp, as shown in **Figure 10**.

Recommended CFM at Dust Port: ..... 400 CFM

Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must take into account many variables, including the CFM rating of the dust collector, the length of hose between the dust collector and the machine, the amount of branches or Y's, and the amount of other open lines throughout the system. Explaining this calculation is beyond the scope of this manual. If you are unsure of your system, consult an expert or purchase a good dust collection "how-to" book.



**Figure 10.** Dust hose attached to dust collector.

# **ACAUTION**

DO NOT operate the Model W1763 without an adequate dust collection system. This machine creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.



### Test Run

Once the setup and assembly are 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 35**. 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 that the machine is setup properly.
- 2. Make sure all tools and objects used during setup are cleared away from the machine.
- **3.** Connect the machine to the power source.
- 4. Push the STOP button in, then twist it clockwise so it pops out. When the STOP button pops out, the switch is reset and ready for operation (see Figure 11).
- 5. Turn the spindle direction switch to the "L" position.
- **6.** Push the START button to verify the machine operates correctly.
  - 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.
- 7. Press the STOP button to turn the machine OFF.





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



To Reset Switch...

Twist Button Clockwise

Figure 11. Resetting the switch.

- **8.** Without resetting the STOP switch, press the START button. The machine should not start.
  - If the machine does not start, the STOP button safety feature is working correctly.
  - If the machine does start (with the stop button pushed in), immediately disconnect power to the machine.
     The OFF button safety feature is not working correctly. This safety feature must work properly before proceeding with regular operations.
     Call Tech Support for help.



# **OPERATIONS**

## General

The Model W1763 will perform many types of operations that are beyond the scope of this manual. Many of these operations can be dangerous or deadly if performed incorrectly.

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

If you are an inexperienced operator, we strongly recommend that you read books, trade articles, or seek training from an experienced *shaper* operator before performing any unfamiliar operations. Above all, your safety should come first!

# **Cutters vs. Router Bits**

The Model W1763 is capable of using both shaper cutters and router bits. Each has its own advantages and disadvantages. Use the best one for your application.

#### Shaper Cutters

**Pros**—Shaper cutters are larger, more durable and generally last longer than router bits. If you plan on cutting many linear feet of a certain profile, then shaper cutters are the best choice.

**Cons**—Shaper cutters are much more expensive than router bits and they are typically too large for small projects.

#### **Router Bits**

**Pros**—Router bits are cheaper than shaper cutters and come in a wider range of profiles and sizes. If you plan on making small projects that do not require many linear feet of cutting, then router bits are the best choice.

**Cons**—Router bits are not as durable as shaper cutters, and they work best at the high speeds generated by a handheld router.

# AWARNING

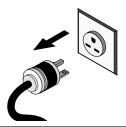
READ and understand this entire instruction manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. DO NOT risk your safety by not reading!

# **AWARNING**



Always wear safety glasses when operating this machine. Failure to comply may result in serious personal injury.

# **AWARNING**



DO NOT investigate problems or adjust this machine while it is running. Wait until the machine is turned *OFF*, unplugged and all working parts have come to a complete stop before proceeding!



# **Controls**

#### Motor Operation (Figure 12)

The STOP switch features a reset mechanism that disables the START switch until reset. To reset the STOP switch, twist it clockwise until it pops out. The START switch is now enabled, and when pushed, will start the motor.

#### Spindle Direction (Figure 12)

The spindle direction switch features three selections: The "0" selection is neutral. The "L" selection rotates the spindle counterclockwise. The "R" selection rotates the spindle clockwise. ALWAYS STOP THE MACHINE BEFORE CHANGING DIRECTIONS.

It is very important that the workpiece be fed against the direction of the cutter rotation. This will prevent a climb cut and maintains a safe cutting procedure for the operator.

Most operations are done with the switch in the "L" position. However, there will be times when it is necessary to flip the shaper cutter over and run the spindle in the opposite direction.

#### Fence Positioning (Figure 13)

The lock handle secures the fence alignment for operations or loosens the fence for adjustments. The fence alignment knob allows you to align or offset the two fences, depending on the required operation. The fence lock knobs allow you to adjust the fence distance from the cutter.

#### Guard Positioning (Figure 14)

The lateral guard adjustment allows you to move the guard laterally, depending on the size of the cutter. The vertical guard adjustment allows you to control the height of the guard to minimize space between the workpiece and the guard for safer operation.

#### Spindle Height (Figure 15)

The *spindle height handwheel* moves the spindle up and down to correctly position the cutter with the workpiece. The *spindle height scale* shows the cutter elevation above the table. The *spindle lock* secures the spindle in place once the spindle is positioned where desired.

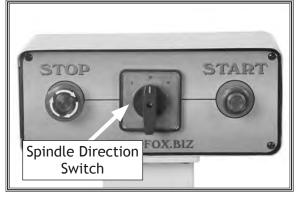


Figure 12. Motor controls.

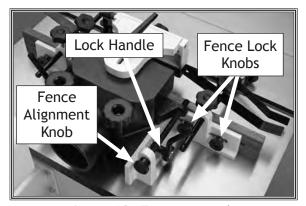


Figure 13. Fence controls.

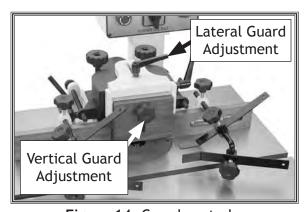


Figure 14. Guard controls.

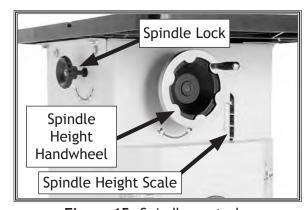


Figure 15. Spindle controls.



# **Belt Speed Adjustment**

The spindle speed is controlled by the position of the V-belt on the pulleys, as shown in **Figure 16**. The faster speed is typically used with router bits and the slower speed is typically used with shaper cutters.

#### To change belt speeds, do these steps:

- 1. DISCONNECT SHAPER FROM POWER SOURCE!
- 2. Loosen the belt tension lock (Figure 17).
- 3. Move the belt to the pulleys that will yield the desired speed.
- 4. Push on the tension handle with one hand and tighten the belt tension lock with the other hand.

**Note:** The belt is properly tensioned when there is approximately <sup>1</sup>/<sub>4</sub>" deflection when you push on the belt with moderate force, as shown in **Figure 18**.

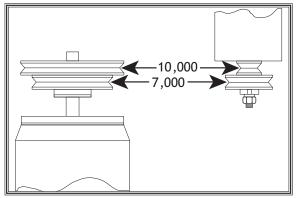
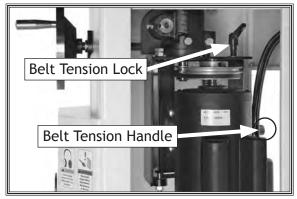


Figure 16. Pulley speed positions.



**Figure 17.** Belt speed and tension controls.

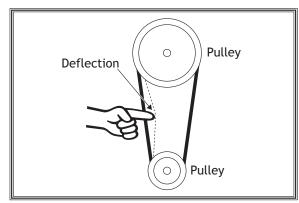


Figure 18. Belt deflection.



# **Cutter Installation**

The Model W1763 comes with  $^{1}/_{2}$ " and  $^{3}/_{4}$ " spindles for use with similarly sized shaper cutters. The shaper operates at 7,000 RPM and 10,000 RPM. Typically, the faster speed is used when cutting with router bits and the slower speed is used when cutting with shaper cutters. Always check the rated speed for any cutter before installing it. If the spindle speed is faster than the rated speed of the cutter, then the cutter may fly apart during operation and cause an injury.

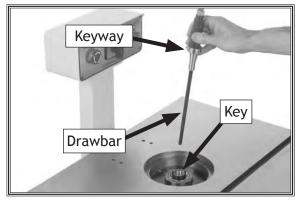


# AWARNING

ACCIDENTAL INJURY HAZARD! Always disconnect machine before installing or removing any cutting equipment. Performing these procedures while machine is connected to power greatly increases risk of serious injury!

#### Spindle Installation

- DISCONNECT SHAPER FROM POWER SOURCE!
- 2. Remove the fence assembly and table inserts.
- 3. Thread the end of the drawbar with the shortest threads into the spindle until hand tight.
- 4. Insert the spindle assembly into the arbor, drawbar side down, making sure that the arbor keys fit into the spindle keyways (Figure 19).
- 5. Thread the drawbar nut, tapered side up, onto the drawbar threads located underneath the table below the arbor (Figure 20).
- **6.** Tighten the drawbar nut with a wrench while holding the top of the spindle with another wrench to ensure that the nut is tight (**Figure 21**).



**Figure 19.** Inserting spindle assembly into arbor.



**Figure 20.** Tightening drawbar nut, taper side up.



**Figure 21.** Final tightening drawbar nut and spindle.



# **AWARNING**

#### **CUTTER FLY-APART HAZARD!**

Using cutters rated lower than the spindle speed greatly increases the risk that the cutter will fly apart during operation, which may cause very serious injury to the operator and bystanders.

#### **Cutter Installation**

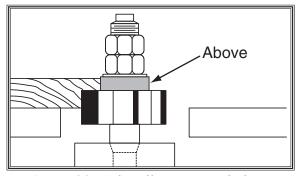
Before installing cutters, you must plan the configuration of rub collars and cutters required for the intended application. No matter how the rub collars are configured on the spindle, they must allow the hex nuts to tightly fasten down to prevent the rub collars and cutter from being loose on the spindle.

#### There are three setup positions for rub collars:

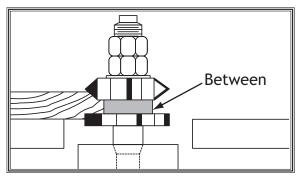
- ABOVE THE CUTTER as shown in Figure 22. This setup is the safest and produces the most consistent results.
- BETWEEN TWO CUTTERS as shown in Figure 23. This setup has the advantage of making two profile cuts in a single pass.
- setup allows the cut to be viewed by the operator; however, it is also the most dangerous because the operator is exposed to the moving cutter. WE DO NOT RECOMMEND SHAPING WITH A RUB COLLAR BELOW THE CUTTER!

#### To install cutters and rub collars, do these steps:

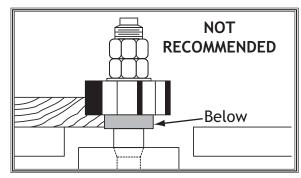
- DISCONNECT SHAPER FROM POWER SOURCE!
- 2. Slide the cutter(s) and rub collars onto the spindle in the correct orientation for your intended cut.
- **3.** Thread on and tighten down both spindle nuts with the included wrenches.
- 4. Make sure the cutter rotates freely in the correct direction needed for the cut (in most cases this is the L direction on the FWD/REV switch, which rotates the spindle counterclockwise).
- 5. Install as many table inserts as will fit and still provide clearance for the router bit to spin.
- **6.** Reinstall the fence assembly and guard.



**Figure 22.** Rub collar mounted above cutter.



**Figure 23.** Rub collar mounted between two cutters.



**Figure 24.** Rub collar mounted below cutter.



Figure 25. Tightening spindle nut.



# Router Bit Installation

The Model W1763 comes with  $^{1}/_{4}$ " and  $^{1}/_{2}$ " collets for use with similarly sized router bits. The shaper operates at 7,000 RPM and 10,000 RPM. Typically the faster speed is used when cutting with router bits and the slower speed is used when cutting with shaper cutters. Always check the rated speed for any router bit before installing it. If the spindle speed is faster than the rated speed of the router bit, then the router bit may fly apart during operation and cause an injury.

#### To install a router bit, do these steps:

- 1. DISCONNECT SHAPER FROM POWER SOURCE!
- 2. Remove the fence assembly and table inserts.
- 3. Thread the end of the drawbar with the shortest threads into the collet until hand tight.
- 4. Insert the collet assembly into the arbor, drawbar side down, making sure that the collet taper fits uniformly into the taper of the arbor (Figure 26).
- 5. Insert the router bit into the collet.
- **6.** Thread the drawbar nut, tapered side up, onto the drawbar threads located underneath the table below the arbor (**Figure 27**).
- 7. Tighten the drawbar nut with a wrench while holding the top of the collet with another wrench to ensure that the nut is tight (Figure 28).
- **8.** Place a rag over the router bit to protect your hands and check that the router bit is tightly held in the collet. The router bit should not move when pulled upward with moderate force.
  - If the router bit slips in the collet, reinstall it and repeat Steps 6-8.
- **9.** Install as many table inserts as will fit and still provide clearance for the router bit to spin.
- 10. Reinstall the fence assembly and guard.



**Figure 26.** Inserting collet assembly into spindle cartridge.



**Figure 27.** Tightening drawbar nut, taper side up.



**Figure 28.** Final tightening drawbar nut and collet.



# Table Inserts

Two inserts (**Figure 29**) are provided, allowing for three different opening sizes to be achieved. Use the smallest-size opening for a cutter to reduce wood chips falling into the machine. Using the smallest-size opening also covers any unused portion of the cutter below the surface of the table, thus reducing the chance of operator injury.

# **Fence Positioning**

The type of cut dictates the position of the fence pieces during operation. There are three basic types of cuts when straight shaping—full face, partial face, and plunge cuts.

Full Face Cut.......Fence Pieces Offset Full face cutting is similar to a jointer cut where the entire edge of the workpiece is removed. These cuts are most often performed with straight, tongue-and-groove, crown moulding bits, etc. The outfeed fence must be set forward from the infeed fence when full face cutting, so the workpiece is supported by the outfeed fence after it has been cut (Figure 30).

The distance that the outfeed fence is set forward from the infeed fence will dictate the depth of cut. Keep in mind that removing too much material at one time increases the risk of kickback. Instead, make multiple passes if you need to remove a large amount of material.

Plunge Cuts......Fence Pieces Aligned Plunge cutting is when the workpiece is fed over the top of the cutter or bit. This type of cut is typically used for slots, dovetails, T-slots, etc. The fence pieces must be aligned when plunge cutting to provide a single plane for the workpiece to slide against (Figure 32).

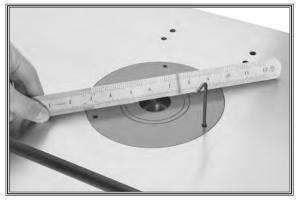


Figure 29. Leveling table insert.

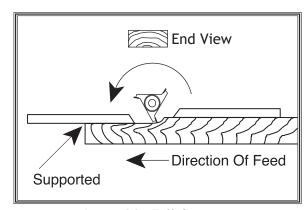


Figure 30. Full face cut.

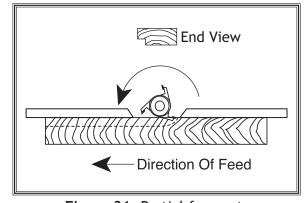


Figure 31. Partial face cut.

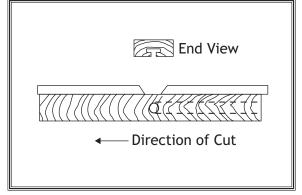


Figure 32. Plunge cut.



# Straight Shaping

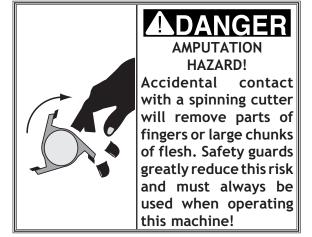
Because the shaper fence is independently adjustable, you can set up the shaper to cut part or all of the workpiece edge.

To set up the fence for cutting material from the whole edge of the workpiece, do these steps:

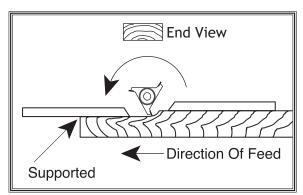
- 1. Loosen the infeed fence lock handle shown in **Figure** 13.
- Turn the alignment knob located on the back of the fence mount and adjust the infeed fence until the workpiece contacts the cutter at the desired location.
- **3.** Tighten the infeed lock handle to secure the fence into position.
- **4.** Adjust the outfeed fence even with the infeed fence.
- **5.** Turn the shaper *ON*.
- 6. Using a piece of scrap wood, advance the workpiece 8" into the cutters, and turn the machine OFF. DO NOT remove the workpiece from the infeed fence face.
- 7. Once the cutter has come to a complete stop, adjust the outfeed fence so that it just touches the newly cut edge as shown in Figure 33.
- 8. Tighten the outfeed fence lock handle.

To set up the fence for partial edge removal, do these steps:

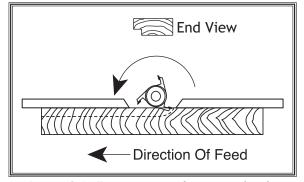
- 1. Loosen the lock handle on the side of the fence mount.
- 2. Turn the alignment knob and adjust the infeed fence until the workpiece contacts the cutter at the desired location.
- **3.** Tighten the lock handle to lock the fence into position.
- **4.** Align the outfeed fence with the infeed fence as shown in **Figure 34.**







**Figure 33.** Fence setup for jointing-type operations (Guard Not Shown For Clarity).



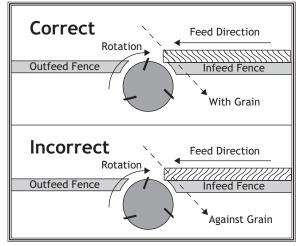
**Figure 34.** Fence setup for partial-edge removal (Guard Removed For Clarity).



- **5.** Now place a straightedge against both faces of the fence to check alignment.
- **6.** Once both fence pieces are aligned, tighten the lock handles.

Always feed the wood with the grain and against the rotation of the cutter, as shown in **Figure 35.** Another way to conceptualize this is to always feed the wood into the cutter so that the cutter is pushing against the direction of feed. Never feed wood in the same direction as the cutter rotation. This is called a "climb cut" and is extremely dangerous.

Also, examine the grain on the side edge of the board. Whenever possible, run the board so the shaper cutters are cutting with the grain as shown in **Figure 35**. This will minimize the chance of tear out.



**Figure 35.** Feeding the workpiece with the grain, against cutter rotation.



# **AWARNING**

AMPUTATION HAZARD!
Cutting small or narrow workpieces greatly increases the risk of cutter contact during operation. Use jigs or holding devices when cutting to reduce this risk.

# Freehand Shaping

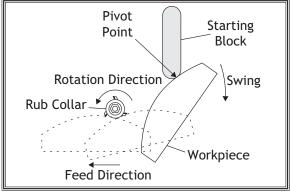
Freehand shaping is shaping without using the fence. A rub collar is used to control the depth of cut and support the workpiece while cutting. A piece of wood is clamped to the table to be used as a "starting block." The block supports the workpiece while you slowly pivot the workpiece into the cutter at the beginning of the cut (see **Figure 36**). It is important to never start cutting at the corner of workpiece or kickback may occur—even with the support of a starting block.

To set up the shaper for freehand shaping, do these steps:

- DISCONNECT SHAPER FROM POWER SOURCE!
- 2. Remove the fence assembly from the shaper.
- 3. Clamp the starting block to the table in a position that allows you to feed the workpiece into and against the rotation of the cutter.

# WARNING

Freehand shaping can only be done when a rub collar is used in the cutting setup. Without a rub collar, there is no way to support the workpiece during the cut.



**Figure 36.** Feeding technique when using a starting pin.

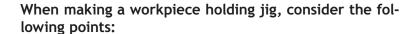


- 4. Install the cutter so it will cut in the correct direction, and adjust the spindle height.
- 5. Use a workpiece holding jig to guide the workpiece and protect your hands (see Figure 37). Read the tips below when building a workpiece holding jig.
- **6.** Place the workpiece/jig against the starting block.
- 7. Slowly pivot and feed the workpiece into the cutter. Avoid starting the cut on the corner of the workpiece as kickback could occur. Once the cut is started, the workpiece should be pulled away from the starting block.

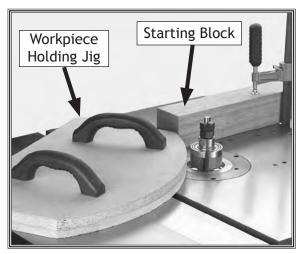


# **AWARNING**AMPUTATION HAZARD!

Freehand shaping increases the risk of injury because the cutter is more exposed than usual. To reduce this risk, ALWAYS feed the workpiece with a hold-down jig to keep your hands at a safe distance from the cutter during the entire operation.



- Secure your workpiece on the three sides that will not be cut; use toggle clamps or fasten the workpiece to the jig with wood screws.
- Make the jig stable and sturdy. Fasten the hand holds so hands will remain at least 6" away from the cutter during the entire operation.
- Ensure that clamps and hidden screws will not come into contact with the cutter.
- Design your fixture so that all cutting occurs underneath the workpiece.
- Make sure the workpiece rests flat on the table, not on the fixture.
- Remember, there is tremendous cutting force on the workpiece. The workpiece holding jig must be solid and stable, and the workpiece must be firmly secured.



**Figure 37.** Using a holding jig on a starting block.

# **AWARNING**

ALWAYS use a starting block when freehand shaping and DO NOT start a cut on the workpiece corner.

# **A**CAUTION

DESIGN holding jigs so screws and clamps DO NOT contact the cutter and the workpiece is held securely to the jig. The jig must be stable on the shaper table. Failure to do so could result in serious personal injury.

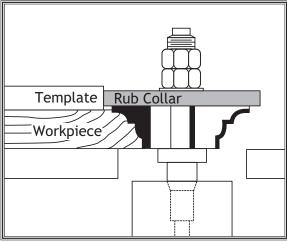


# **Templates**

A template is a workpiece holding jig with a shape or pattern that rides against the rub collar during operation as the cutter cuts the matching profile on the workpiece edge (see **Figure 39**). Using templates allows identical parts to be cut with speed and accuracy.

When making a templates, consider the following points:

- Use a material that will smoothly follow the rub collar or fence.
- Always consider the cutting circle and rub collar diameter for the correct depth of cut when designing your pattern.



**Figure 39.** Template setup against the rub collar.



### Zero Clearance Fence

A shop-made zero-clearance fence (**Figure 40**) provides more support than a standard fence and reduces tearout on narrow or fragile stock. Using a zero-clearance fence is the best way to reduce the risk associated with shaping inherently dangerous small stock.

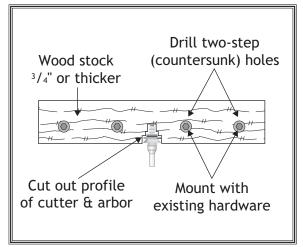
#### To make a zero-clearance fence, do these steps:

- DISCONNECT SHAPER FROM POWER SOURCE!
- 2. Remove the wood facing and fasteners on the split fence.
- 3. Place a 1x4 board over the fence mounts, and mark and drill four holes for securing the board to the mounts.

Note: Drilling the holes is a two step process. Drill the first holes all the way through the board with a diameter a little larger than the shaft of the mounting screw. Drill the second holes halfway through the boards with a diameter a little larger than the screw head. Drill these second holes deep enough that the screw heads will be well below the surface of the board.

- **4.** Transpose an outline of the spindle, cutter, and related components onto the board, leaving room for the moving parts so they will not hit the board.
- **5.** Use a bandsaw, scroll saw, or jig saw to cut out the outline.
- **6.** If necessary, cut out notches in the top of the board for attaching the hold downs.
- 7. Make sure the fence mounts are aligned, and secure the board to the fence mounts with the fasteners removed in **Step 2**.

**Note:** For a totally flat fence face, pass the mounted board across a jointer, taking care not to cut deep enough that the cutter hits the mounting screws. Refer to **Resurfacing Fence** on **Page 32**.



**Figure 40.** Example of zero clearance fence.

## **ACAUTION**

In addition to push sticks, always use hold downs or featherboards when shaping small or narrow stock. These devices will keep your hands away from the spinning cutterhead and support the stock sufficiently to allow a safe and effective cut. Failure to follow this warning may lead to severe personal injury.



### **Box Guard**

Shop-made box guards are an excellent way to enclose the cutter to virutally eliminate accidental contact with the cutter during operation. Having the cutter enclosed also helps increase the efficiency of dust collection. The drawback to box guards is that one size does not fit all. Often, professional woodworkers who use box guards make multiple guards that are different sizes.

Figure 41 shows one way to make and attach a box guard to the Model W1763. This guard replaces the vertical wood guard that is included with the shaper. For durability and strength, use a hardwood when making box guards. When installing the box guard, adjust the box guard approximately 1/4" above the stock you will shape and use hold downs on both sides.

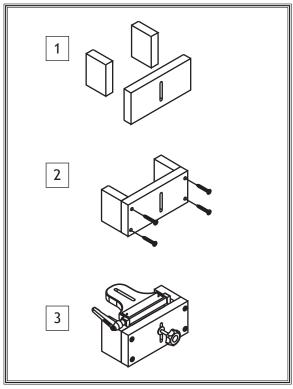
**Note:** DO NOT use the box guard as a hold down; instead, use the provided hold-downs or a feather board that has the ability to flex with the minor height variations of your stock.

### Feather Boards

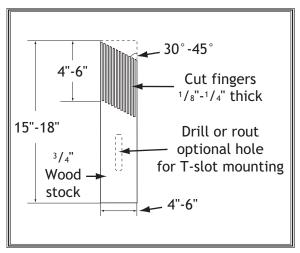
Feather boards work similarly to the hold-downs provided with the shaper in the way they hold stock tightly against the fence and the table, while flexing with minor height or width variations from stock as it passes through. Because of the consistent pressure featherboards place on the stock, cuts are more consistent, the risk of kickback is greatly reduced, and the operator's hands do not need to get near the cutter to maintain feeding pressure. If a kickback does occur, featherboards will also slow down or stop the workpiece.

A shop made featherboard can be made to accomodate sizes of stock that the included hold-downs can't reach. Figure 42 shows the dimensions of a basic featherboard. The ultimate size is flexible and should be built around the size of stock you are shaping. The fingers can be cut with a bandsaw or table saw.

To install a featherboard, feed a piece of stock halfway through the machine, then turn the machine *OFF*. Place the featherboard against the stock so all the fingers touch the edge of the stock, then clamp the featherboard to the fence or table. For best results, place featherboards just before and just after the cutter. An alternative mounting method for tables is to rout a slot in the featherboard and use T-slot mounting hardware to secure the featherboard.



**Figure 41.** Example demonstrating one way to build a box guard.



**Figure 42.** Basic featherboard construction.



## **Shaper Accessories**

The following 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.

#### Model D2273 Single Roller Stand

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

#### Model D2274 5 Roller Stand

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



Figure 43. Models D2273 and D2274 Shop Fox roller stands.

#### Model W1104 Yellow Board Buddy Pair

Feature clockwise turning wheels to maintain constant, even feeding pressure. If a kickback occurs, the wheels lock up and function as anti-kickback devices.

#### Model W1105 Green Board Buddy Pair

Feature wheels that turn in both directions to function as bidirectional hold-downs.

#### Model W1104 Orange Board Buddy Pair

Feature counterclockwise turning wheels to maintain constant, even feeding pressure. If a kickback occurs, the wheels lock up and function as anti-kickback devices.

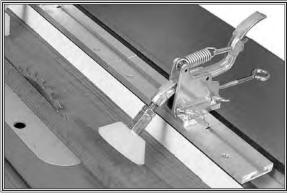


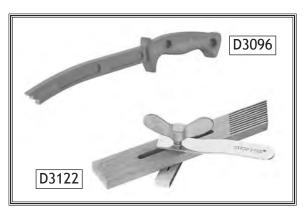
Figure 44. Board Buddy in action.

#### Model D3096 Shop Fox Featherboard

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

#### Model D3122 Shop Fox Push Stick

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



**Figure 45.** Shop Fox featherboard and push stick.



## **MAINTENANCE**

### General

Regular periodic maintenance on your Model W1763 will ensure optimum performance. Make a habit of inspecting your shaper each time you use it.

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

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

### Table & Base

Cleaning the Model W1763 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it.

Protect the unpainted cast iron surfaces on the table by wiping the table clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces.

Keep tables rust-free with regular applications of a quality metal protectant.

## Lubrication

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

For other items on this machine, an occasional application of light machine oil is all that is necessary. Before applying lubricant, clean off sawdust.

Your goal is to achieve adequate lubrication. Too much lubrication will attract dirt and sawdust. Various parts of your machine could lose their freedom of movement as a result.



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

## Maintenance Schedule

#### Daily:

- Vacuum all dust on and around the machine.
- Wipe down tables and all other unpainted cast iron with a metal protectant.

#### **Every Month:**

- V-belt tension, damage, or wear.
- Clean/vacuum dust buildup from inside cabinet and off of motor.



## **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.

## **Pulley Alignment**

Improper pulley alignment sharply reduces the effectiveness of power transmission and belt life expectancy.

#### To align the pulleys, do these steps:

- DISCONNECT SHAPER FROM POWER SOURCE!
- 2. Open the stand door.
- 3. Visually check the alignment of the belt while moving the spindle elevation through its full range of motion. If the motor pulley is in proper alignment with the spindle pulley, the belt should never move higher or lower than the upper and lower limits of the motor pulley. If you don't trust your eye, a straightedge can be used against the pulleys, as shown in Figure 46, to check for alignment.
  - If the belt does move higher or lower than the upper or lower limits of the motor pulley, then the motor pulley must be adjusted.
- **4.** Remove the belt by loosening it then rolling it off the pulleys (rolling it off the small pulley first is easiest).
- **5.** Align the motor pulley by loosening the pulley set screw and tapping the pulley into the desired position with a dead blow hammer.
- **6.** Tighten the set screw after the pulley is aligned.
- 7. Replace the belt and properly tension the belt (tensioning instructions provided on Page 18).
- 8. Close the stand door.



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



Figure 46. Inspecting pulley alignment.



## Spindle Bearings

The spindle cartridge assembly equipped with the Model W1763 features factory-sealed bearings, which require no lubrication during their lifetime.

In the rare event that a bearing fails, your shaper will probably develop a noticeable rumble that will increase when the machine is put under load. If allowed to get worse, overheating of the journal containing the bad bearing could occur. If the bad bearing is not replaced, it will eventually seize—doing damage to other parts of the machine.

Bearings are standard sizes and can be found through any regular bearing supply store or by ordering through Woodstock International. However, it is much easier to just replace the entire spindle cartridge assembly as one unit (part #X1763333A, see Figure 47).

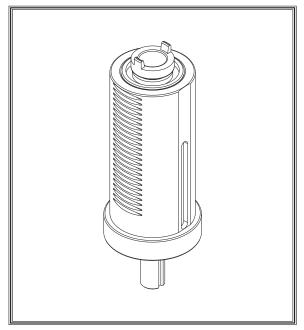


Figure 47. Spindle cartridge assembly.

## Resurfacing Fence

The fence can be resurfaced or made flat with a jointer to correct any warping. This procedure should only be done if the fences will not align with each other after careful adjustment or they are warped.

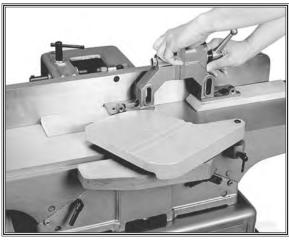
#### To resurface the fence, do these steps:

1. Make sure the fence face mounting screws are far enough below the surface of the fence that they will not contact the jointer knives during operation.

**Note:** New fence faces can easily be made out of a hardwood and resurfaced by using this same procedure.

- 2. Align both fence faces as straight as possible, using a straightedge or your jointer table as an alignment guide.
- 3. Resurface the fences on the jointer, as shown in Figure 48.

**Note:** Make sure the screws are countersunk deep enough so the workpiece will not come in contact with screw heads.

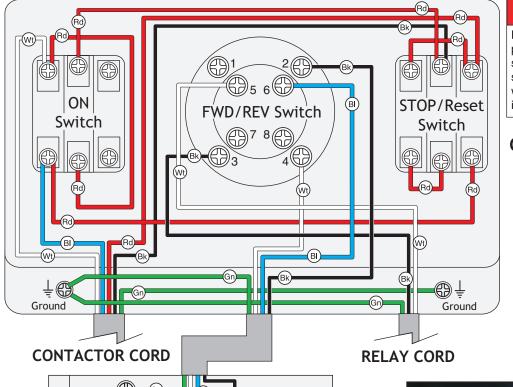


**Figure 48.** Resurfacing a shaper fence on a jointer.



## Control Panel & Motor Wiring

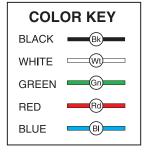


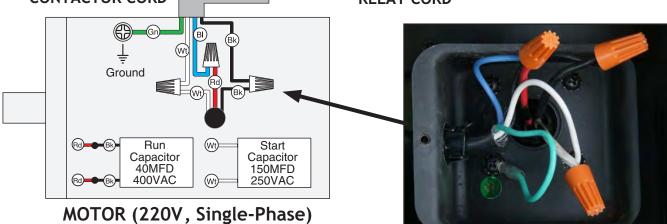


#### **ADANGER**

Disconnect power before performing any electrical service. Electricity presents serious shock hazards that will result in severe personal injury and even death!

## (from Behind)



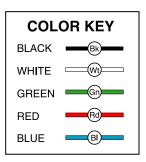




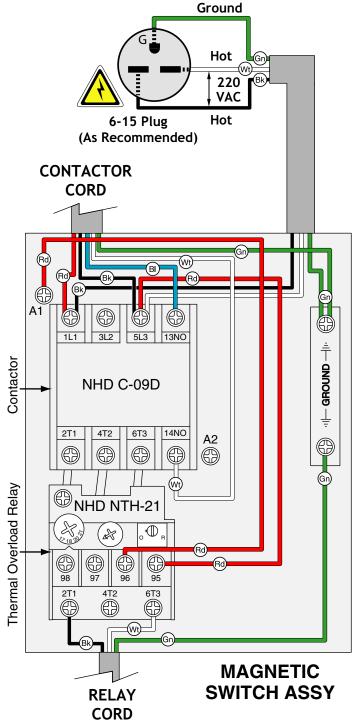
## Magnetic Switch Wiring

#### **▲**DANGER

Disconnect power before performing any electrical service. Electricity presents serious shock hazards that will result in severe personal injury and even death!









## **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 Operations**

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Machine does not	1. Emergency stop push-button engaged.	Rotate clockwise slightly until it pops out/replace it.
start or a breaker	2. Power supply switched <i>OFF</i> or at	2. Ensure power supply is <b>ON</b> ; ensure power supply has
trips.	fault. 3. Plug/receptacle is at fault or wired	the correct voltage.  3. Test for good contacts; correct the wiring.
	incorrectly.	5. Test for good contacts, correct the wiring.
	4. Start capacitor is at fault.	4. Test/replace if faulty.
	5. Motor connection wired incorrectly.	5. Correct motor wiring connections.
	6. Thermal overload relay has tripped.	6. Turn cut-out dial to increase working amps; push the
	7. Contactor not getting energized.	reset pin. Replace if continues tripping (weak relay).  7. Test for power on all legs and contactor operation.
	8. Wiring is open/has high resistance.	Replace unit if faulty.  8. Check for broken wires or disconnected/corroded
	O ON hosters on OFF quitals in at fault	connections, and repair/replace as necessary.
	9. ON button or OFF switch is at fault. 10. Spindle rotation switch is at fault.	9. Replace faulty ON button or OFF switch.  10. Turn switch to FWD/REV; replace bad switch.
	11. Motor is at fault.	11. Test/repair/replace.
Machine stalls or is	1. Feed rate too fast for task.	1. Decrease feed rate/cutting speed.
underpowered.	2. Workpiece material is not suitable for	2. Only cut wood products; make sure moisture content
	this machine.	is below 20% and there are no foreign materials in the workpiece.
	3. Run capacitor is at fault.	3. Test/repair/replace.
	4. V-belt slipping.	4. Replace bad V-belt, align pulleys, and re-tension.
	5. Motor connection is wired incorrectly.	5. Correct motor wiring connections.
	6. Plug/receptacle is at fault.	6. Test for good contacts; correct the wiring.
	7. Pulley/sprocket slipping on shaft. 8. Motor bearings are at fault.	7. Replace loose pulley/shaft. 8. Test by rotating shaft; rotational grinding/loose shaft
	o. Motor bearings are at raute.	requires bearing replacement.
	9. Contactor not getting energized or has	9. Test for power on all legs and contactor operation.
	poor contacts.	Replace if faulty.
	10. Motor has overheated.	10. Clean off motor, let cool, and reduce workload.
	11. Spindle rotation switch at fault. 12. Motor is at fault.	11. Turn switch to FWD/REV; replace bad switch.
Machine has	Motor or component is loose.	<ul><li>12. Test/repair/replace.</li><li>1. Inspect/replace stripped or damaged bolts/nuts, and</li></ul>
vibration or noisy	i. Motor of component is toose.	re-tighten with thread locking fluid.
operation.	2. V-belt(s) worn or loose.	2. Inspect/replace V-belt.
	3. Shaper bit or spindle is at fault.	3. Replace cutter; tighten loose spindle; replace defective
		spindle or spindle cartridge.
	4. Elevation housing is loose.	4. Tighten the elevation housing gibs; replace cracked elevation housing.
	5. Pulley is loose.	5. Realign/replace shaft, pulley, setscrew, and key as required.  7. Realign/replace shaft, pulley, setscrew, and key as required.
	6. Motor mount loose/broken.	6. Tighten/replace.
	7. Machine sits unevenly.	7. Relocate/shim machine.
	8. Motor fan is rubbing on fan cover.	8. Replace dented fan cover; replace loose/damaged fan.
	9. Motor bearings are at fault.	9. Test by rotating shaft; rotational grinding/loose shaft
		requires bearing replacement.

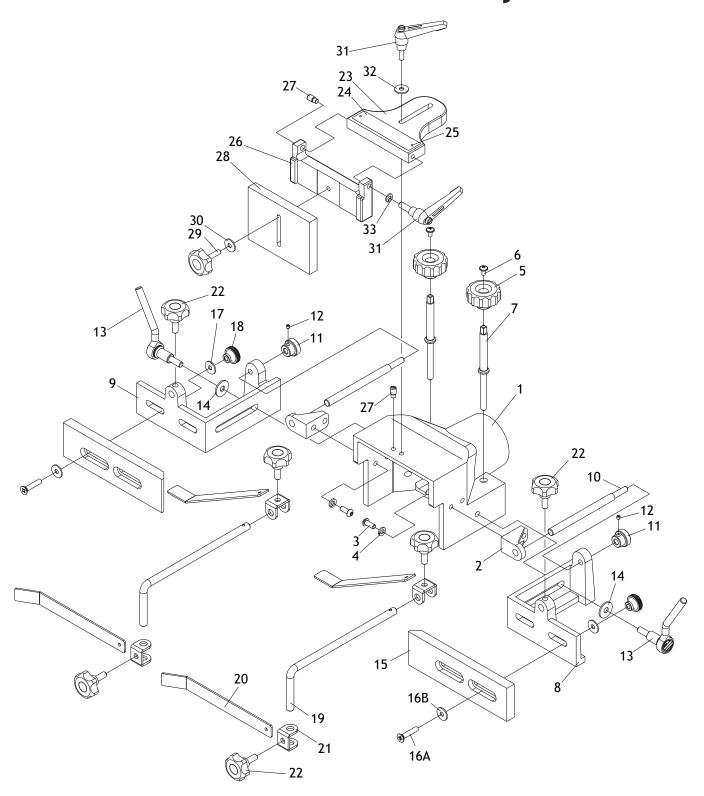


### **Cutting Operations**

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Spindle does not raise or lower easily.	1. Elevation gear shaft is clogged with sawdust.	Clean the elevation gear shaft and lubricate it.
Workpiece is burned	1. Dull cutter.	1. Replace cutter or have it professionally sharpened.
when cut.	2. Too slow of a feed rate.	2. Increase feed speed.
	3. Pitch build-up on cutter.	3. Clean cutter with a blade and bit cleaning solution.
	4. Cutter rotating in the wrong direction.	4. Reverse the direction of the cutter rotation.
	5. Taking too deep of a cut.	5. Make several passes of light cuts.
Fuzzy grain.	1. Wood may have high moisture content	1. Check moisture content and allow to dry if moisture
	or surface wetness.	is too high (over 20%).
	2. Dull cutter.	2. Replace the cutter or have it professionally sharp-
		ened.
Chipping.	1. Knots or conflicting grain direction in	1. Inspect workpiece for knots and grain direction; only
	wood.	use clean stock.
	2. Nicked or chipped cutter.	2. Replace the affected cutter, or have it profession-
		ally sharpened.
	3. Feeding workpiece too fast.	3. Slow down the feed rate.
	4. Taking too deep of a cut.	4. Take a smaller depth of cut. (Always reduce cutting
		depth when surface planing or working with hard
		woods.)
	5. Cutting against the grain of the wood.	5. Cut with the grain of the wood.
Divots in the edge of	1. Inconsistant feed speed.	1. Move smoothly or use a powerfeeder.
the cut.	2. Inconsistant pressure against the fence	2. Apply constant pressure.
	and rub collar.	
	3. Fence not adjusted correctly.	3. Adjust fence.



# PARTS Fence/Guard Assembly





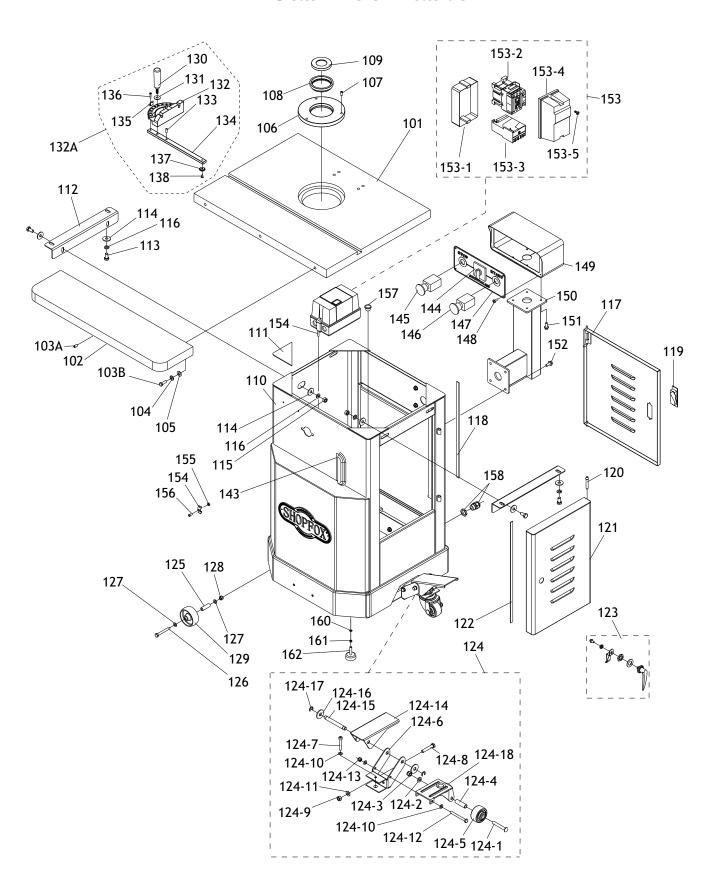
## Fence/Guard Assembly Parts List

REF	PART #	DESCRIPTION
1	X1763001	SAFETY GUARD
2	X1763002	ADJUST THREADED SHAFT BRACKET
3	XPSBS23M	BUTTON HD CAP SCR M8-1.25 X 25
4	XPLW04M	LOCK WASHER 8MM
5	X1763005	KNOB
6	X1763006	CAPTURED SCREW M6-1 X 12
7	X1763007	SPECIAL BOLT
8	X1763008	FENCE MOUNT BRACKET (LEFT)
9	X1763009	FENCE MOUNT BRACKET (RIGHT)
10	X1763010	FENCE ADJUST THREADED SHAFT
11	X1763011	KNOB
12	XPSS02M	SET SCREW M6-1 X 6
13	X1763013	LOCK HANDLE
14	XPW04M	FLAT WASHER 10MM
15	X1763015	WOODEN FENCE
16A	XPFH42M	FLAT HD SCR M8-1.25 X 40
16B	XPW01M	FLAT WASHER 8MM

REF	PART #	DESCRIPTION
17	XPW01M	FLAT WASHER 8MM
18	X1763018	KNOB NUT
19	X1763019	HOLD DOWN ROD
20	X1763020	HOLD DOWN BAR
21	X1763021	HOLD DOWN BRACKET
22	X1763022	KNOB
23	X1763023	SLIDING BLOCK
24	X1763024	LABEL
25	X1763025	RIVET 2 X 4
26	X1763026	GUARD BRACKET
27	X1763027	SPECIAL BOLT
28	X1763028	WOODEN EDGE
29	X1763029	KNOB
30	XPW01M	FLAT WASHER 8MM
31	X1763031	LOCK HANDLE
32	XPW01M	FLAT WASHER 8MM
33	XPLW04M	LOCK WASHER 8MM



## Cabinet/Table





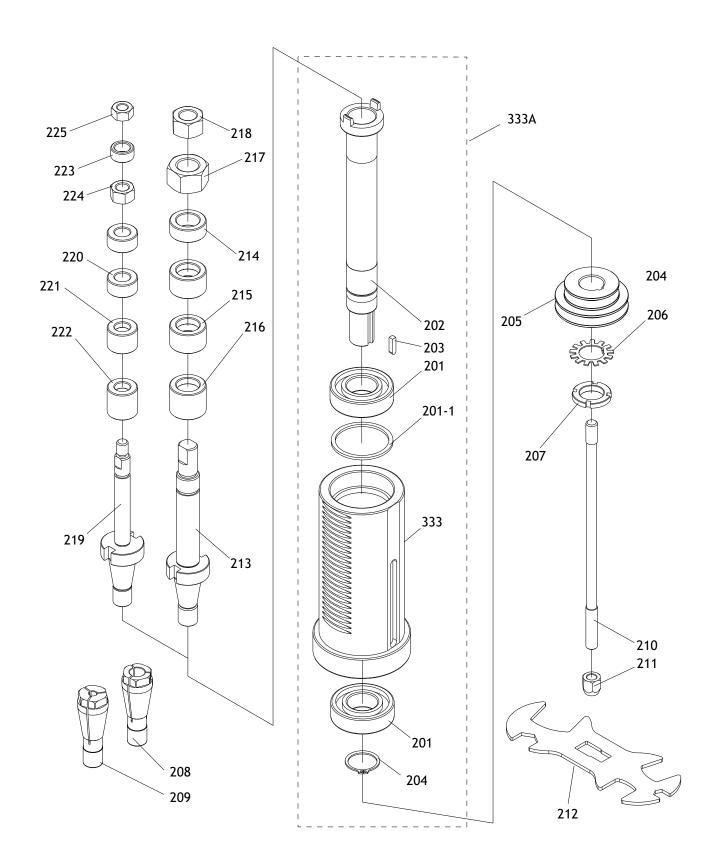
## Cabinet/Table Parts List

REF	PART #	DESCRIPTION
101	X1763101	TABLE
102	X1763102	TABLE EXTENSION
103A	XPSS06M	SET SCREW M8-1.25 X 16
103B	XPSBS19M	BUTTON HD CAP SCR M10-1.5 X 30
104	XPLW06M	LOCK WASHER 10MM
105	XPW04M	FLAT WASHER 10MM
106	X1763106	TABLE INSERT(LARGE)
107	XPSS06M	SET SCREW M8-1.25 X 16
108	X1763108	THREADED INSERT
109	X1763109	TABLE INSERT(SMALL)
110	X1763110	CABINET STAND(SPECIAL ORDER)
111	X1763111	UPPER CABINET RUBBER CUSHION
112	X1763112	ANGLE BAR
113	XPB74M	HEX BOLT M10-1.5 X 20
114	XPW04M	FLAT WASHER 10MM
115	XPLW06M	LOCK WASHER 10MM
116	XPN02M	HEX NUT M10-1.5
117	X1763117	REAR DOOR
118	X1763118	REAR DOOR RUBBER CUSHION
119	X1763119	REAR DOOR LOCK
120	X1763120	PIN
121	X1763121	SIDE DOOR
122	X1763122	SIDE DOOR RUBBER CUSHION
123	X1763123	SIDE DOOR LOCK
124	X1763124	CASTER ASSEMBLY
124-1	X1763124-1	SPECIAL BOLT
124-2	XPW04M	FLAT WASHER 10MM
124-3	XPLN05M	LOCK NUT M10-1.5
124-4	X1763124-4	SLEEVE
124-5	X1763124-5	CASTER WHEEL
124-6	X1763124-6	BRACKET
124-7	XPSB05M	CAP SCREW M8-1.25 X 50
124-8	XPB144M	HEX BOLT M10-1.5 X 55
124-9	XPN02M	HEX NUT M10-1.5
124-10	XPW01M	FLAT WASHER 8MM
124-11	XPW04M	FLAT WASHER 10MM
124-12	XPB45M	HEX BOLT M8-1.25 X 100
124-13	XPLN04M	LOCK NUT M8-1.25
124-14	X1763124-14	PEDAL
124-15	X1763124-15	SHAFT
124-16	XPW06M	FLAT WASHER 12MM
124-17	XPR16M	EXT RETAINING RING 9MM

REF	PART #	DESCRIPTION
124-18	X1763124-18	CASTER BRACKET
125	X1763125	SLEEVE
126	XPB86M	HEX BOLT M8-1.25 X 65
127	XPW01M	FLAT WASHER 8MM
128	XPN03M	HEX NUT M8-1.25
129	X1763129	UNIVERSAL PULLEY
130	X1763130	HANDLE
131	XPW01M	FLAT WASHER 8MM
132	X1763132	MITER GAUGE BODY
132A	X1763132A	COMPLETE MITER GAUGE ASSY
133	X1763133	SUPPORT POLE
134	X1763134	MITER BAR
135	X1763135	POINTER
136	X1763136	CAPTURED SCREW M58 X 8
137	X1763137	SPECIAL WASHER
138	XPFH07M	FLAT HD SCR M58 X 10
143	X1763143	SCALE
144	X1763144	FWD/REV SWITCH SELECTOR
145	X1763145	STOP BUTTON
146	X1763146	START BUTTON
147	X1763147	BUTTON PLATE
148	XPHTEK4M	TAP SCREW M4 X 8
149	X1763149	SWITCH BOX
150	X1763150	SWITCH BOX BRACKET
151	XPFS14M	FLANGE SCREW M6-1 X 16
152	XPFS19M	FLANGE SCREW M8-1.25 X 20
153	X1763153	MAGNETIC SWITCH ASSEMBLY
153-1	X1763153-1	MAG SWITCH COVER ASSEMBLY
153-2	X1741035-2	CONTACTOR NHD C-09D 230V
153-3	X1741035-3	OL RELAY NHD NTH-21 17-21A
153-4	X1763153-1	MAG SWITCH COVER ASSEMBLY
153-5	XPSW01-1	SWITCH COVER SCREW
154	XPN06M	HEX NUT M58
155	X1763155	CORD CLAMP
156	XPS06M	PHLP HD SCR M58 X 20
157	X1763157	STRAIN RELIEF
158	X1763158	BALL STRAIN RELIEF
159	X1763159	POWER CORD 14G 3W 72" 6-15P
160	X1763160	FLAT WASHER
161	X1763161	HEX NUT
162	X1763162	LEVELING FOOT



## Spindle





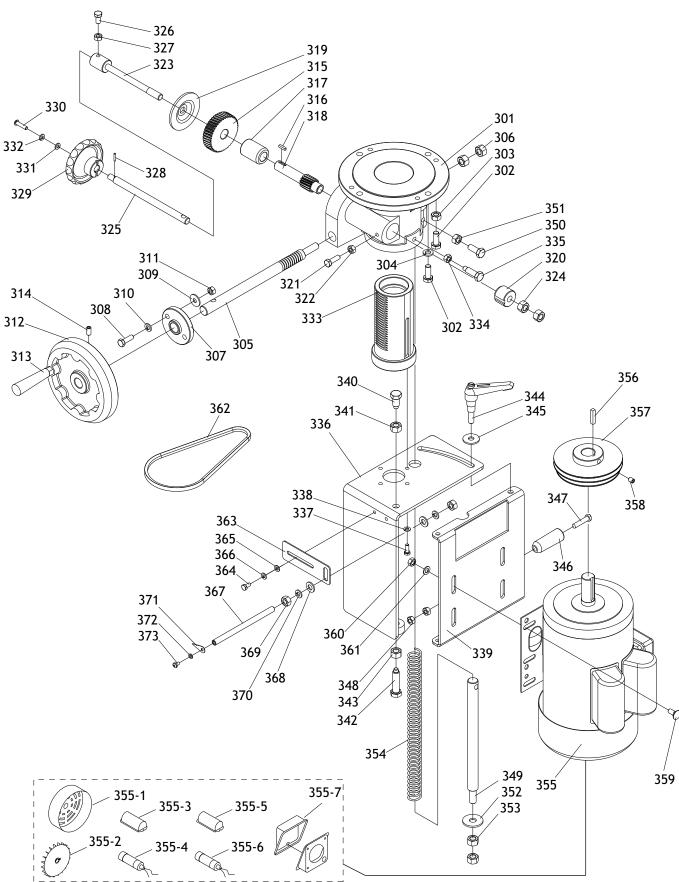
## **Spindle Parts List**

REF	PART #	DESCRIPTION
201	XP6205	BALL BEARING 6205ZZ
201-1	X1763201-1	WAVE WASHER 52MM
202	X1763202	SPINDLE QUILL
203	XPK20M	KEY 5 X 5 X 15
204	X1763204	RETAINING RING/SHAFT 25
205	X1763205	SPINDLE PULLEY
206	XPLW06M	LOCK WASHER 10MM
207	X1763207	SPANNER NUT 10MM
208	X1763208	1/2" ROUTER BIT COLLET
209	X1763209	1/4" ROUTER BIT COLLET
210	X1763210	DRAW BAR
211	X1763211	SPECIAL NUT
212	X1763212	SPECIAL WRENCH
213	X1763213	3/4" SPINDLE

REF	PART #	DESCRIPTION
214	X1763214	3/4" ID X 1/2" TH.SPACER
215	X1763215	3/4" ID X 3/4" TH.SPACER
216	X1763216	3/4" ID X 3/4" TH.SPACER
217	XPN03	HEX NUT 3/4-16
218	X1763218	SPECIAL NUT 5/8-18
219	X1763219	1/2" SPINDLE
220	X1763220	1/2"ID X 1/2"SPACER
221	X1763221	1/2"ID X 3/4"SPACER
222	X1763222	1/2"ID X 1"SPACER
223	X1763223	1/2"ID X 3/8"SPACER
224	XPN01	HEX NUT 1/2-20
225	X1763225	SPECIAL NUT 3/8-16
333	X1763333	SPINDLE CARTRIDGE
333A	X1763333A	SPINDLE CARTRIDGE ASSEMBLY



## Cabinet/Table Parts List





REF	PART #	DESCRIPTION
301	X1763301	SPINDLE BASE
302	XPB32M	HEX BOLT M10-1.5 X 25
303	XPN02M	HEX NUT M10-1.5
304	XPLW06M	LOCK WASHER 10MM
305	X1763305	HANDLE SHAFT
306	XPN09M	HEX NUT M12-1.75
307	X1763307	HANDWHEEL FLANGE
308	XPB07M	HEX BOLT M8-1.25 X 25
309	XPW01M	FLAT WASHER 8MM
310	XPLW04M	LOCK WASHER 8MM
311	XPN03M	HEX NUT M8-1.25
312	X1763312	HANDWHEEL
313	X1763313	HANDLE ASSEMBLY
314	XPSS06M	SET SCREW M8-1.25 X 16
315	X1763315	GEAR
316	XPK37M	KEY 4 X 4 X 16
317	X1763317	COLLAR
318	X1763318	GEAR SHAFT
319	X1763319	FLANGE
320	X1763320	COLLAR
321	XPB07M	HEX BOLT M8-1.25 X 25
322	X1763322	KNOB NUT M8-1.25
323	X1763323	LOCKING SCREW
324	XPN09M	HEX NUT M12-1.75
325	X1763325	LOCK BAR
326	XPB85M	HEX BOLT M8-1.25 X 18
327	XPN03M	HEX NUT M8-1.25
328	XPRP02M	ROLL PIN 3 X 16
329	X1763329	HANDWHEEL
330	XPSBS21M	BUTTON HD CAP SCR M6-1 X 25
331	XPW03M	FLAT WASHER 6MM
332	XPLW03M	LOCK WASHER 6MM
333	X1763333	SPINDLE CARTRIDGE
333A	X1763333A	SPINDLE CARTRIDGE ASSEMBLY
334	XPN03M	HEX NUT M8-1.25
335	X1763335	SPECIAL SCREW
336	X1763336	MOTOR ANGLE PLATE
337	XPB83M	HEX BOLT M6-1 X 16
338	XPLW03M	LOCK WASHER 6MM
339	X1763339	MOTOR MOUNT PLATE

REF	PART #	DESCRIPTION
340	X1763340	SHOULDER SCREW
341	XPN09M	HEX NUT M12-1.75
342	X1763342	SPECIAL BOLT
343	XPN09M	HEX NUT M12-1.75
344	X1763344	HANDLE
345	XPLW06M	LOCK WASHER 10MM
346	X1763346	KNOB
347	X1763347	SPECIAL BOLT M8-1.25 X 35
348	XPN03M	HEX NUT M8-1.25
349	X1763349	SPRING SHAFT
350	XPB32M	HEX BOLT M10-1.5 X 25
351	XPN02M	HEX NUT M10-1.5
352	XPW06M	FLAT WASHER 12MM
353	XPN09M	HEX NUT M12-1.75
354	X1763354	COMPRESSION SPRING
355	X1763355	2.5HP, 220V, 1-PHASE MOTOR
355-1	X1763355-1	MOTOR FAN COVER
355-2	X1763355-2	MOTOR FAN
355-3	X1763355-3	CAPACITOR COVER
355-4	X1763355-4	S. CAPACITOR 150M 250V
355-5	X1763355-5	CAPACITOR COVER
355-6	X1763355-6	R. CAPACITOR 40M 400V
356	XPK42M	KEY 6 X 6 X 30
357	X1763357	MOTOR PULLEY
358	XPSS16M	SET SCREW M8-1.25 X 10
359	X1763359	HEX CARRIAGE BOLT
360	X1763360	MOTOR CARRIAGE NUT
361	XPW01M	FLAT WASHER 8MM
362	XPVM23	V-BELT M23 3L230
363	X1763363	PLATE
364	XPB02M	HEX BOLT M6-1 X 12
365	XPW03M	FLAT WASHER 6MM
366	XPLW03M	LOCK WASHER 6MM
367	X1763367	SCALE SHAFT
368	XPW04M	FLAT WASHER 10MM
369	XPN02M	HEX NUT M10-1.5
370	XPLW06M	LOCK WASHER 10MM
371	X1763371	POINTER
372	XPLW01M	LOCK WASHER 5MM
373	XPS05M	PHLP HD SCR M58 X 8



## Label Placement

## **AWARNING**

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
401	XPPAINT-7	BLACK TOUCH UP PAINT
402	X1763402	SPINDLE LOCK LABEL
403	X1763403	SPINDLE ELEVATION LABEL
404	XLABEL-08	READ MANUAL LABEL
405	XLABEL-06	GLASSES/RESPIRATOR LABEL
406	X1763406	SHOP FOX NAMEPLATE
407	X1763407	MACHINE ID LABEL
408	X1763408	LARGE BLACK STRIPE
409	X1763409	MODEL NUMBER LABEL

REF	PART #	DESCRIPTION
410	X1763410	SMALL BLACK STRIPE
411	XLABEL-02	UNPLUG POWER LABEL
412	X1763412	HEARING PROTECTION LABEL
413	XPPAINT-2	WHITE TOUCH UP PAINT
414	XLABEL-03	KEEP DOOR CLOSED LABEL
415	X1763415	SPINDLE HEIGHT SCALE LABEL
416	X1763416	CONTROL PANEL FACEPLATE
417	XLABEL-04	ELECTRICITY LABEL
-		



## **Warranty Registration**

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			0 Years	20+ Years
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FOLD ALONG DOTTED LINE		<del></del>	
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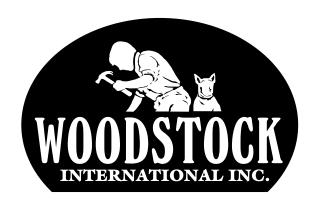
## WARRANTY

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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