



# MODEL W1740 12" DRUM SANDER



## OWNER'S MANUAL (FOR MODELS MANUFACTURED SINCE 1/13)

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

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WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT

THE WRITTEN APPROVAL OF WOODSTOCK INTERNATIONAL, INC.

#7848CR Printed in Taiwan



## **WARNING!**

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

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

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

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



## **WARNING!**

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

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

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

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# INTRODUCTION

## Woodstock Technical Support

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.

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](mailto:tech-support@shopfox.biz). Our knowledgeable staff will help you troubleshoot problems or process warranty claims.

If you need the latest edition of this manual, you can download it from <http://www.shopfox.biz>.

If you have comments about this manual, please contact us at:

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



# MACHINE SPECIFICATIONS



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## MODEL W1740 SHOP FOX® 12" DRUM SANDER

### Product Dimensions

Weight..... 149 lbs.  
 Width (side-to-side) x Depth (front-to-back) x Height..... 24 x 27-1/4 x 25-7/8 in.  
 Footprint (Length x Width)..... 22-1/4 x 13-1/2 in.

### Shipping Dimensions

Type..... Cardboard Box  
 Content..... Machine  
 Weight..... 160 lbs.  
 Length x Width x Height..... 27 x 26 x 26 in.  
 Must Ship Upright..... Yes

### Electrical

Power Requirement..... 115V, Single-Phase, 60 Hz  
 Prewired Voltage..... 115V  
 Full-Load Current Rating..... 13.3A  
 Minimum Circuit Size..... 15A  
 Connection Type..... Cord & Plug  
 Power Cord Included..... Yes  
 Power Cord Length..... 11 ft.  
 Power Cord Gauge..... 14 AWG  
 Plug Included..... Yes  
 Included Plug Type..... 5-15  
 Switch Type..... ON/OFF Push Button Switch

### Motors

#### Main

Type..... TEFC Capacitor-Start Induction  
 Horsepower..... 1.5 HP  
 Phase..... Single-Phase  
 Amps..... 13A  
 Speed..... 3450 RPM  
 Power Transfer ..... V-Belt Drive  
 Bearings..... Sealed & Permanently Lubricated

#### Feed

Type..... DC Variable Speed  
 Horsepower..... 1/8 HP  
 Phase..... Single-Phase  
 Amps..... 0.3A  
 Speed..... 5 - 55 RPM  
 Power Transfer ..... Direct Drive  
 Bearings..... Sealed & Permanently Lubricated



**Main Specifications**

**Operation Information**

No Of Sanding Heads.....	1
Maximum Board Width.....	12 in.
Minimum Board Width.....	2 in.
Maximum Board Thickness.....	3-1/2 in.
Minimum Board Thickness.....	1/8 in.
Minimum Board Length.....	8 in.
Sandpaper Speed.....	2127 FPM
Conveyor Feed Rate.....	2.47 - 17.3 FPM
Sandpaper Length.....	70 in.
Sandpaper Width.....	3 in.

**Drum Information**

Infeed Sanding Drum Type.....	Aluminum
Infeed Sanding Drum Size.....	4 in.

**Construction**

Conveyor Belt.....	Rubber
Body.....	Steel
Paint.....	Powder Coated

**Other Related Information**

Sanding Belt Tension.....	Hook & Loop
No Of Pressure Rollers.....	2
Pressure Roller Type.....	Rubber
Pressure Roller Size.....	1-3/8 in.
Conveyor Belt Length.....	49-3/4 in.
Conveyor Belt Width.....	12-1/4 in.
No Of Dust Ports.....	1
Dust Port Size.....	2-1/2 in.

**Other**

Country Of Origin .....	Taiwan
Warranty .....	2 Years
Approximate Assembly & Setup Time .....	15 Minutes
Serial Number Location .....	ID Label
ISO 9001 Factory .....	No
CSA Certified .....	Yes

**Features**

- Variable Speed Conveyor
- Steel Dust Scoop Maximizes Dust Collection Efficiency
- Two Adjustable Pressure Rollers
- Thickness Scale
- Welded Steel Construction
- Industrial-Duty Conveyor Belt
- Side Handles for Portability
- Uses Hook and Loop Style Sandpaper

# Controls and Features

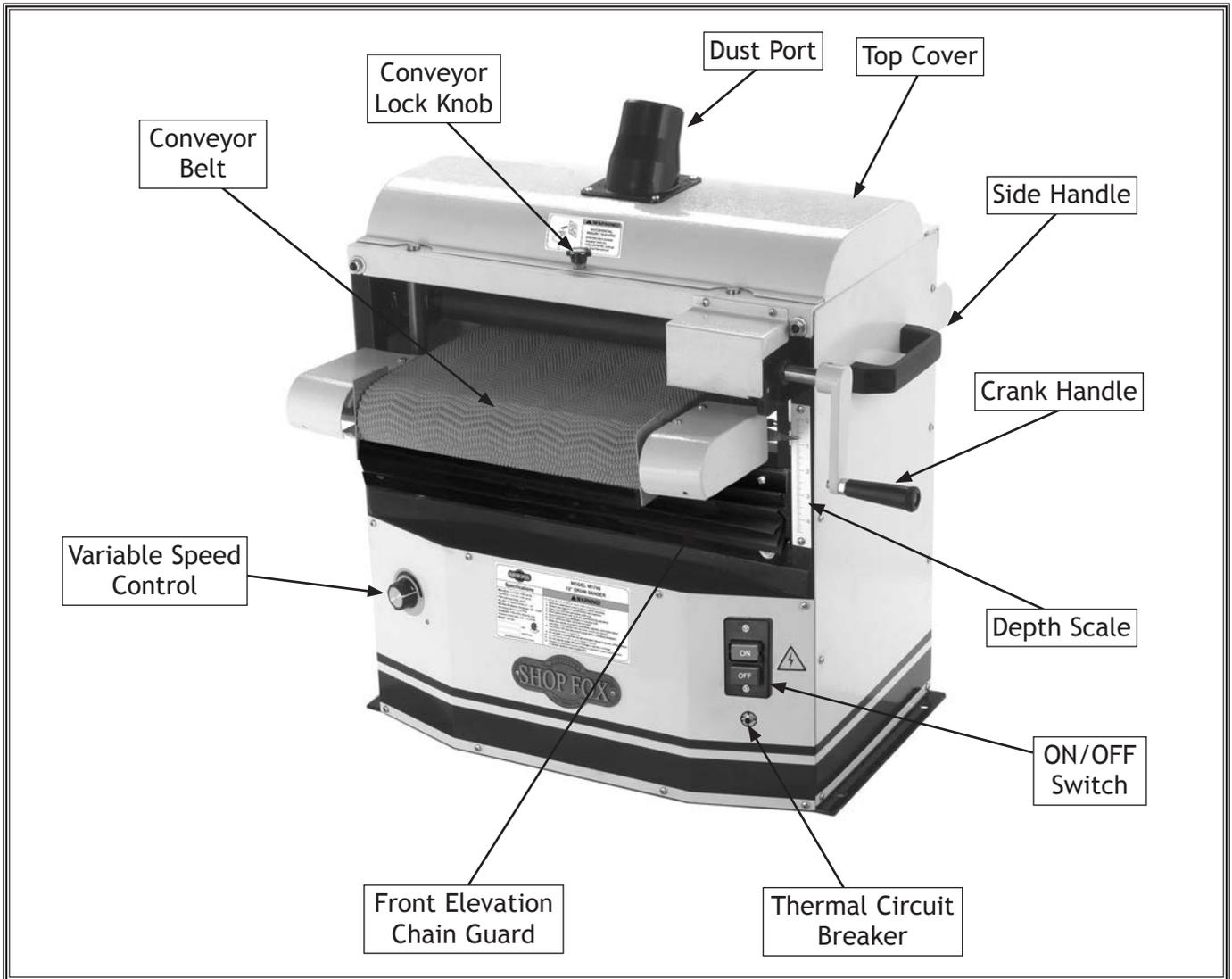


Figure 1. Controls and features.

	<p><b>!WARNING</b> To reduce the risk of serious injury when using this machine, read and understand this entire manual before beginning any operations.</p>
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# SAFETY

## For Your Own Safety, Read Manual Before Operating Machine

SAFETY

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



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



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



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

### **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!

**INTENDED USAGE.** Only use machine for 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.

**EXPERIENCING DIFFICULTIES.** If at any time you experience difficulties performing the intended operation, stop using the machine! Contact Technical Support at (360) 734-3482.

# Additional Safety for Drum Sanders

SAFETY

**FEEDING STOCK.** Do not stand in the direct path of a workpiece at the infeed end when feeding your stock. Never sand more than one piece of stock at a time. **DO NOT** jam the workpiece into the machine during operation. Firmly grasp the workpiece in both hands and ease it into the machine using light pressure.

**MINIMUM STOCK DIMENSIONS.** Do not sand any stock thinner than 1/8", narrower than 2", or shorter than 8". Do not sand thin stock by using a "dummy" board under your workpiece.

**SAFETY COVERS.** All covers must be closed and in place before starting machine.

**CLOTHING.** Do not wear loose clothing while operating this machine. Roll up or button long sleeves at the cuff.

**HAND PROTECTION.** Do not place hands near, or in contact with, sanding drum during operation. **DO NOT** allow fingers to get pinched between board and conveyor belt during operation. This may pull the operator's hand into the machine and cause serious injury!

**DUST COLLECTION SYSTEM.** Never operate the sander without an adequate dust collection system in place and running.

**INSPECTING WORKPIECES.** Always inspect every workpiece for nails, staples, knots, and other imperfections that could be dislodged and thrown from the machine during sanding operations. Do not use workpieces with these defects.

**EXPERIENCING DIFFICULTIES.** Any problem, with the exception of conveyor belt tracking, that is concerned with any moving parts or accessories, must be investigated and corrected with the power disconnected, and after all moving parts have come to a complete stop.

**MAINTENANCE AND ADJUSTMENTS.** Never attempt to adjust conveyor belt tracking when the sanding drum is running. Perform machine inspections and maintenance service promptly when called for. Disconnect power before performing maintenance or adjustments to the sander.

**RESPIRATOR AND SAFETY GLASSES.** Always wear a respirator and safety glasses while operating the machine. Dust and chips are created when sanding. Some debris will be ejected, becoming hazards to the eyes and lungs.

	<p><b>⚠ WARNING</b></p> <p>READ and understand this entire manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. <b>DO NOT</b> risk your safety by not reading!</p>
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<p><b>CAUTION</b></p>	<p>USE this and other machinery with caution and respect. Always consider safety first, as it applies to your individual working conditions. No list of safety guidelines can be complete—every shop environment is different. Failure to follow guidelines could result in serious personal injury, damage to equipment or poor work results.</p>
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# 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 115V ..... 13.3 Amps

### Circuit Requirements for 115V

This machine is prewired to operate on a 115V power supply circuit that has a verified ground and meets the following requirements:

Circuit Type ..... 115V, 60 Hz, Single-Phase  
Circuit Size ..... 15 Amps  
Plug/Receptacle ..... NEMA 5-15

**⚠ WARNING**

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

**⚠ WARNING**



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

**NOTICE**

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

ELECTRICAL

# 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 115V Connection

This machine is equipped with a power cord that has an equipment-grounding wire and NEMA 5-15 grounding plug. The plug must only be inserted into a matching receptacle (see **Figure**) that is properly installed and grounded in accordance with local codes and ordinances.

## Extension Cords

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

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

- Minimum Gauge Size at 115V ..... 14 AWG
- Maximum Length (Shorter is Better) ..... 50 ft.

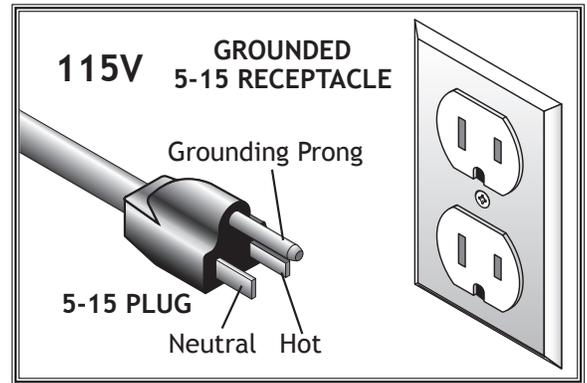
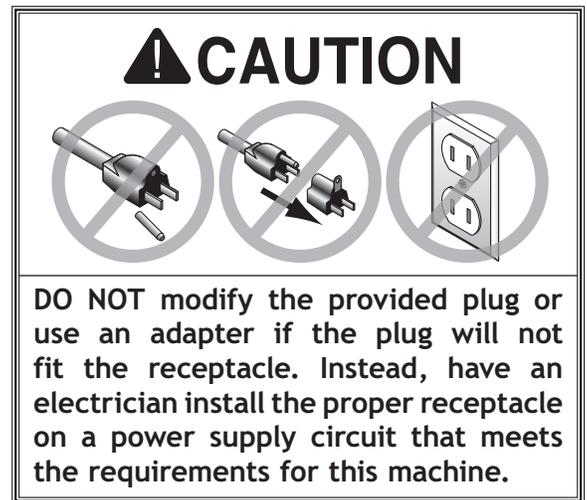


Figure 2. NEMA 5-15 plug & receptacle.



ELECTRICAL

# SETUP

## Unpacking

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

## Items Needed for Setup

The following items are needed, but not included, to setup your machine:

Description .....	Qty
• Safety Glasses .....	1
• Additional People .....	1
• Screwdriver Phillips #2 .....	1
• Dust Collection System.....	1
• Dust Hose 2 1/2" .....	1
• Hose Clamps 2 1/2".....	2
• Lag Bolts 5/16"-18 x 40 (Not Included) .....	4
• Open End Wrench or Socket 1/2".....	1
• Drill .....	1
• Drill Bit 1/4" .....	1

## Inventory

The following is a description of the main components shipped with the Model W1740. 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.

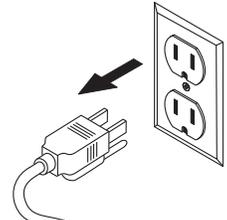
Box Inventory (Figure 3)	Qty
A. Drum Sander.....	1
B. Dust Port and Screws .....	1
C. Hex Wrench 3mm.....	1
D. Handcrank .....	1



**⚠ WARNING**

This machine and its components are very heavy. Get lifting help or use power lifting equipment such as a forklift to move heavy items.

**⚠ WARNING**



Keep machine disconnected from power until instructed otherwise.

**⚠ WARNING**



Wear safety glasses during the entire setup process!

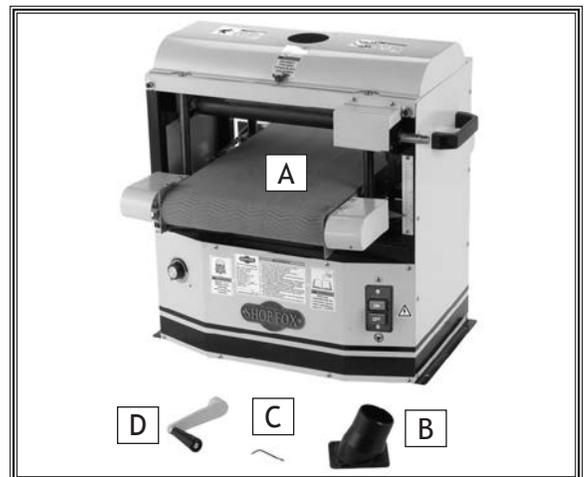


Figure 3. Inventory.

SETUP

# 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 Type.
- **Lighting:** Lighting should be bright enough to eliminate shadow and prevent eye strain.
- **Electrical:** Electrical circuits must be 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.

# Cleaning Machine

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

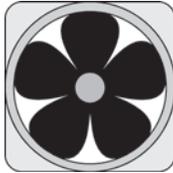
SETUP



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



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





**⚠ 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.

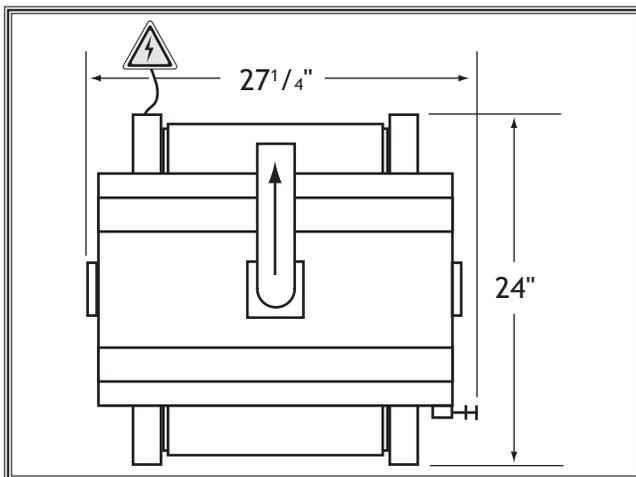


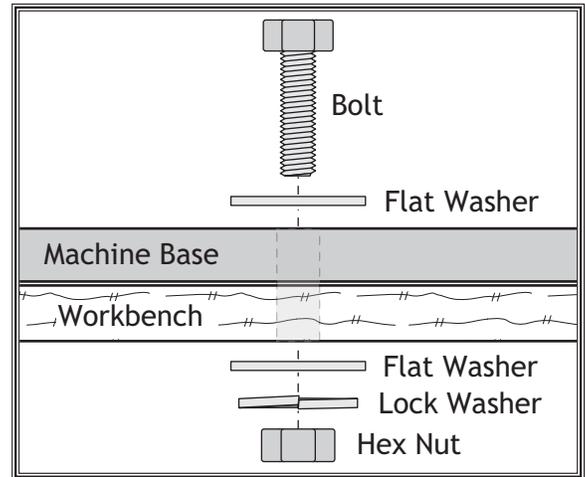
Figure 4. Working clearances.

# Bench Mounting

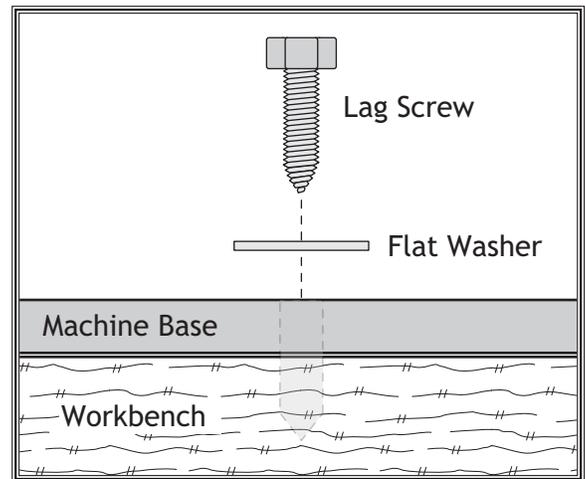
The base of this machine has holes that allow it to be mounted to a workbench. We strongly recommend that you mount your machine to a workbench to prevent it from moving during operation. An unexpected movement could result in an injury or property damage.

The strongest mounting option is a "Through Mount" where holes are drilled all the way through the workbench, and hex bolts, washers, and hex nuts are used to secure the drum sander to the workbench (see **Figure 5**).

Another option for mounting is a "Direct Mount" where the machine is simply secured to the workbench with a lag screw (see **Figure 6**).



**Figure 5.** Example of a through mount.



**Figure 6.** Example of a direct mount.

SETUP

# Handcrank Installation

The handcrank is installed on the front right lift screw shaft, and is held in place with two set screws already threaded into the handle.

To mount the handcrank, place the handcrank over the shaft shown in **Figure 7** and, using a 3mm hex wrench, secure the handle with the two set screws.

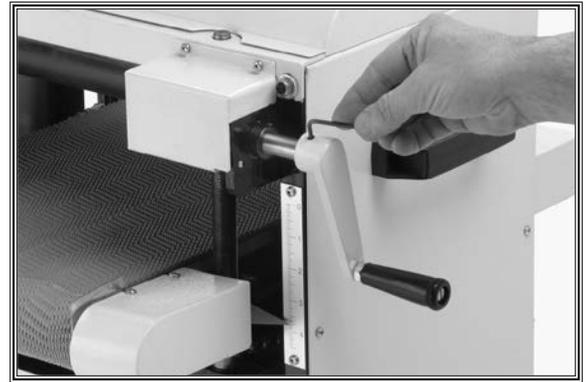


Figure 7. Handcrank installation.

# Dust Collection

Recommended CFM at Dust Port: ..... 150 CFM

Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must 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.

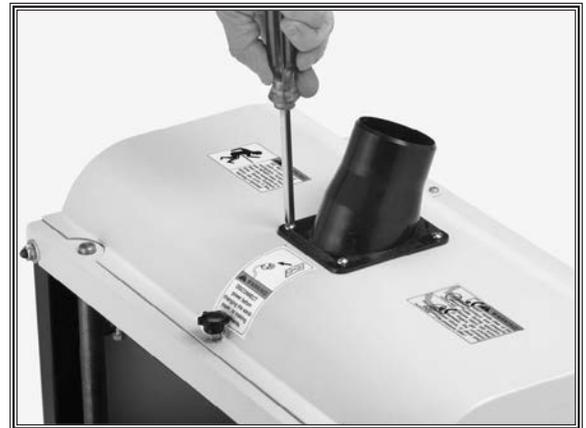


Figure 8. Dust port installation.

## CAUTION

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

To install the dust port, do these steps:

1. Remove the four Phillips head screws at the dust port hole.
2. Place the 2 1/2" dust port over the top cover mounting holes and secure with the Phillips head screws removed in **Step 1**, as shown in **Figure 8**.
3. Attach a 2 1/2" dust hose to the dust port and secure with a hose clamp. **Note:** A tight fit is necessary for proper performance. Also, a fine layer of dust will always be present on workpieces as they come out of the sander—this is normal.

SETUP

## Test Run

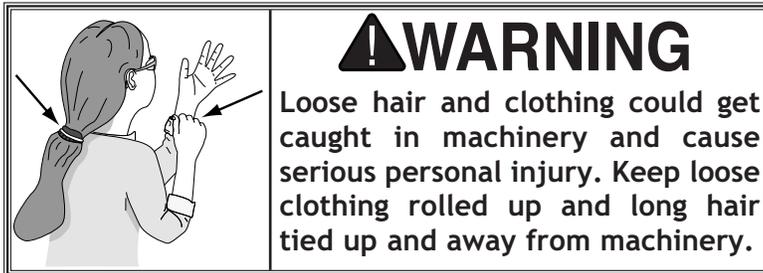
Once the assembly is complete, test run your machine to make sure it runs properly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review the **Troubleshooting** on Page 43.

If you still cannot remedy a problem, contact our Tech Support at (360) 734-3482 for assistance.

To test run the machine, do these steps:

1. Make sure you understand the safety instructions at the beginning of the manual, and verify that the machine is setup properly.
2. Ensure all tools and objects used during set up are cleared away from the machine.



3. Connect the machine to the power source.
4. Press the ON button, then rotate the variable speed knob clockwise to start the conveyor belt.
5. Listen to and watch for abnormal noises or actions. The machine should run smoothly with little or no vibration or rubbing noises.
  - Strange or unusual noises should be investigated and corrected before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.
6. Press the OFF button to stop the machine.



## Recommended Adjustments

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

However, because of the many variables involved with shipping, some of these adjustments may need to be repeated to ensure optimum results. Keep this in mind as you start to use your new drum sander.

**Step-by-step instructions for these adjustments can be found in SECTION 7: SERVICE ADJUSTMENTS.**

1. V-Belt Service (Page 25). Perform after the first 16 hours.
2. Conveyor Tensioning & Tracking (Pages 27-28).
3. Drum-to-Table Parallelism & Drum-to-Conveyor Tracking (Pages 29-31).
4. Pressure Roller Height (Page 33).

# OPERATIONS

## General

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

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

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

**⚠ WARNING**

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

## Disabling Switch

**⚠ WARNING**

Children or untrained people can be killed or seriously injured by this machine. This risk increases with unsupervised operation. To help prevent unsupervised operation, disable and lock the switch before leaving machine unattended! Place key in a well-hidden or secure location.

The ON/OFF switch can be disabled and locked by inserting a padlock through the ON button, as shown. Locking the switch in this manner can prevent unauthorized operation of the machine, which is especially important if the machine is not stored inside an access-restricted building.

**IMPORTANT:** Locking the switch with a padlock only restricts its function. It is not a substitute for disconnecting power from the machine when adjusting or servicing.

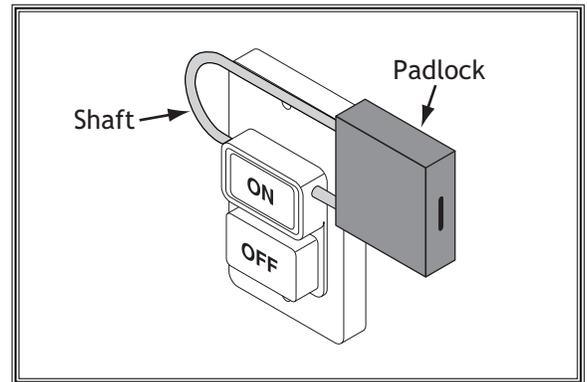


Figure 9. Switch disabled by padlock.

**NOTICE**

The padlock shaft diameter is important to the disabling function of the switch. With any padlock used to lock the switch, test the switch after installation to ensure that it is properly disabled.

## Sanding Tips

- Replace the sandpaper with a higher grit to achieve a finer finish.
- Raise the table with a maximum of  $\frac{1}{4}$  turn of the crank handle until the workpiece is the desired thickness.
- Reduce snipe when sanding more than one board of the same thickness by feeding them into the sander with the front end of the second board touching the back end of the first board.
- Feed boards into the sander at different points on the conveyor to maximize sandpaper life and prevent uneven conveyor belt wear.
- DO NOT sand boards less than 8" long or less than  $\frac{1}{8}$ " thick to prevent damage to the workpiece and the drum sander.
- Extend the life of the sandpaper by regularly using a sandpaper cleaning pad (refer to **Page 22**).
- When sanding workpieces with irregular surfaces, such as cabinet doors, take very light sanding passes to prevent gouges. When the drum moves from sanding a wide surface to sanding a narrow surface, the load on the motor will be reduced, and the drum will speed up, causing a gouge.
- DO NOT edge sand boards. This can cause boards to kickback, causing serious personal injury. Edge sanding boards also can cause damage to the conveyor belt and sandpaper.
- When sanding workpieces with a bow or crown, place the high point up (prevents the workpiece from rocking) and take very light passes.
- Feed the workpiece at an angle to maximize stock removal and sandpaper effectiveness, but feed the workpiece straight to reduce sandpaper grit scratches for the finish passes.

# Stock Inspection & Requirements

Some workpieces are not safe or may require modification before they are safe to sand. Before sanding, inspect all workpieces for the following:

- **Material Type:** This machine is intended for ONLY sanding natural and man-made wood products. This machine is NOT designed to sand metal, glass, stone, tile, drywall or cementitious backerboard.
- **Foreign Objects:** Nails, staples, dirt, rocks and other foreign objects are often embedded in wood. While sanding, these objects can become dislodged and tear the sandpaper. Always visually inspect your workpiece for these items. If they can't be removed, DO NOT sand the workpiece.
- **Excessive glue or finish:** Sanding workpieces with excess glue or finish will load up the abrasive, reducing its usefulness and lifespan.
- **Workpiece Dimensions:** DO NOT sand boards less than 8" long, 2" wide, or 1/8" thick. Doing so will increase the risk of damaging the workpiece or the sander (see Figure 10).

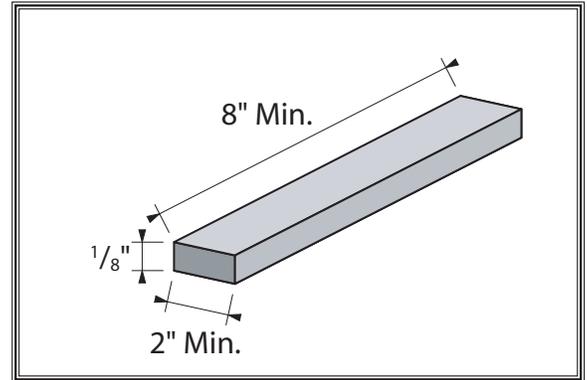


Figure 10. Minimum dimensions for sanding.

## Depth of Cut

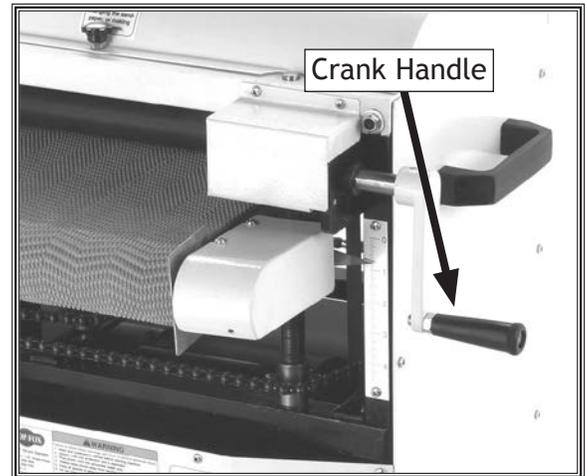
The optimum depth of cut will vary based on the type of wood, feed rate, and sandpaper grit. Under most sanding conditions, the depth should not exceed 0.006" (0.15 mm) (approx. 1/4 turn of the handwheel). Each full turn of the crank handle raises the conveyor table approximately 0.025" (0.64 mm). Attempts to remove too much material can cause jamming, wood burning, rapid paper wear or tearing, poor finish, belt slippage, and motor damage.

To set the depth of cut, do these steps:

1. Rotate the crank handle (see **Figure 11**) until the conveyor table is well below the sanding drum, place the workpiece on the table, then raise the table, until the front pressure roller just touches the top of the workpiece.

**Note:** When adjusting the table to sand a thicker workpiece, lower and then raise the table to remove backlash from the adjustment mechanism.

2. Turn the sander **ON**, start the conveyor (see **Variable Speed on Page 20**), and feed the workpiece into the sander. **SLOWLY** raise the conveyor table until the workpiece makes light contact with the sanding drum. This is the correct height to begin sanding the workpiece.



**Figure 11.** Handcrank location.

### **NOTICE**

**THIS MACHINE NOT WARRANTED AGAINST ABUSE!** Avoid overloading the drum sander motor. If the motor is overloaded, it will noticeably lose RPM, then the start capacitor will engage and could overheat and burn out. If you notice the motor overloading, immediately lower the table to reduce the load on the motor.

## Variable Speed

The variable speed knob allows you to increase the feed rate from 2.47-17.3 FPM. The correct speed to use depends on the type of stock you are using (hardwood vs. softwood) and the stage of finish you are at with that workpiece.

As a general rule, a slower feed rate sands the surface smoother, but runs the risk of burning the wood; a faster feed rate removes material faster, but runs the risk of overloading the motor.

Use trial-and-error to determine the best settings for your specific applications.

To adjust the conveyor speed, do these steps:

1. Start the conveyor.
2. Rotate the variable speed knob (see **Figure 12**) clockwise to increase the feed speed, or counterclockwise to decrease the feed speed.



Figure 12. Variable speed knob.

## Sanding

### **WARNING**

DO NOT sand more than one board at a time. Minor variations in thickness can cause one board to be propelled by the rapidly spinning sanding drum and ejected from the machine. NEVER stand directly in front of the infeed area of the sander—ALWAYS stand out of the way of potential workpiece kickback.

To sand a workpiece, do these steps:

1. Adjust the table height according to the instructions in **Depth of Cut** on **Page 19**.
2. Start the dust collector, turn the sander *ON*, and start the conveyor.
3. While standing to the side of the sander, feed the workpiece through the sander and retrieve it at the outfeed end.
4. Run wide stock through two or three times without adjusting the table height. Turn the stock 180° between passes to ensure an even cut.

# Sandpaper Selection

We recommend aluminum oxide for general workshop environments. The chart below groups abrasives into different classes and shows which grits fall into each class.

GRIT	CLASS	USAGE
36	Extra Coarse	Rough sawn boards, thickness sanding, and glue removal.
60	Coarse	Thickness sanding and glue removal.
80-100	Medium	Removing planer marks and initial finish sanding.
120-180	Fine	Finish sanding.

The general rule is to sand a workpiece with progressively higher grit sandpaper, with no one grit increase of more than 50. Avoid skipping grits; the larger the grit increase, the harder it will be to remove the scratches from the previous grit. Ultimately, the type of wood you use and your stage of finish will determine the best grit types to install on your sander.

# Sandpaper Replacement

The Model W1740 is designed for 3" wide x 70" long hook-and-loop sandpaper cut at a 15° (see Figure 13). To use other widths of sandpaper, use the formula in Figure 14 to find the angle to cut the sandpaper.

To change sandpaper, do these steps:

1. DISCONNECT SANDER FROM POWER!
2. Open the top cover to expose the drum.
3. Unwind the old sandpaper and notice the direction that it was wrapped around the drum.
4. Use the old sandpaper as a pattern to cut out the new sandpaper, or use the three steps in Figure 14, to cut a different width sandpaper.
5. Wrap the sanding drum with the new sandpaper. Make sure to wrap the sandpaper tight and try to keep the gaps to a minimum.
6. Tape both ends with  $\frac{3}{4}$ " strapping tape (see Figure 15), making at least two complete passes so that the second layer is directly on top of the first.

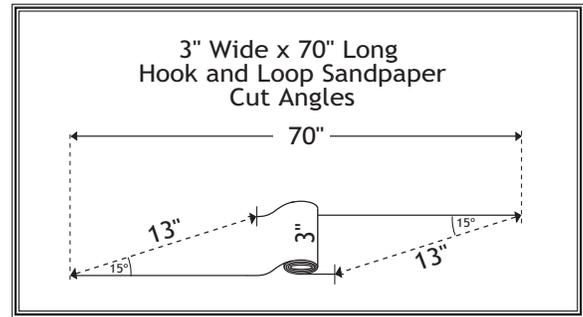


Figure 13. 3" wide x 70" long hook-and-loop sandpaper cut at a 15°.

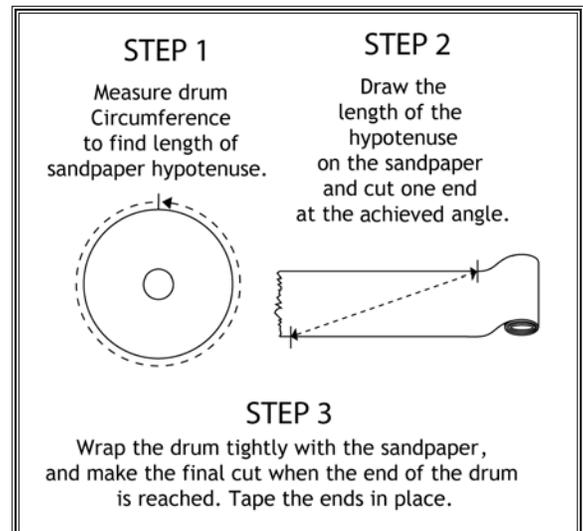


Figure 14. Procedure for finding the angle of cut for wider or narrower sandpaper for any size sanding drum.

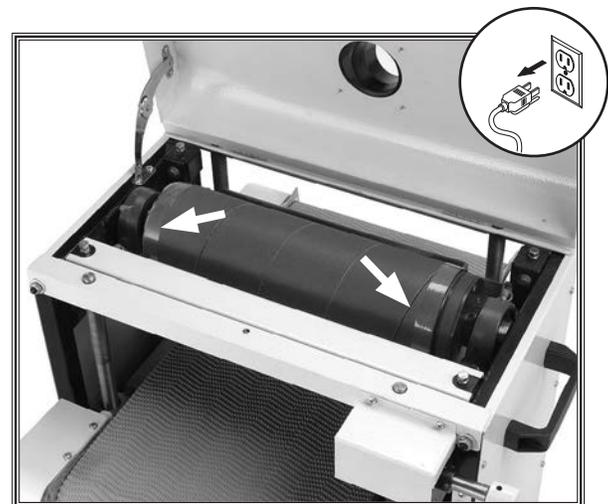


Figure 15. Sandpaper wrapped with strapping tape at both ends of drum.

OPERATIONS

# ACCESSORIES

## Drum Sander Accessories

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

The **D2275 Tool Stand** is a sturdy 24" tall, universal tool stand. It measures 27<sup>1</sup>/<sub>2</sub>" x 31<sup>1</sup>/<sub>2</sub>" at the base and 17<sup>3</sup>/<sub>4</sub>" x 22" at the top. Includes non-slip rubber feet. 1000 lb. capacity!



The **D3378 12" x 15" x 3/4" Sandpaper Cleaning Pad** is the perfect accessory for cleaning sandpaper on a drum sander. Just set your table and feed this cleaning pad through for longer lasting abrasive belts. Pad measures 12" x 15" x 3/4" high.



**Shop Fox 3" x 50' Sanding Rolls** are perfect for everything from detailed handwork to drum sanders. These abrasive rolls provide superior performance and added flexibility. Simply tear off the size needed for excellent results.



OPERATIONS

ITEM	GRIT
D3162	60 Grit
D3546	80 Grit
D3163	100 Grit
D3547	120 Grit
D3164	150 Grit
D3997	180 Grit
D3998	220 Grit

# MAINTENANCE

## Schedule

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

### Daily

- Loose mounting bolts.
- Worn switch.
- Worn or damaged cords or plugs.
- Damaged or worn sandpaper
- Damaged or worn V-Belt
- Any other unusual condition.

### Weekly

- Lubricate pillow block bearings (Page 24).

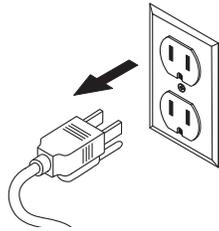
### Monthly

- Lubricate lift screws (Page 24)
- Lubricate drive chain (Page 24)

### Semi-Annual

- Lubricate helical gears (Page 24).

**! WARNING**



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

**! WARNING**

**DO NOT** attempt to investigate or adjust any features of the machine while it is running. Wait until the machine is turned OFF, unplugged, and all working parts have come to a rest before you do anything!

**! WARNING**

Failure to routinely inspect your drum sander for damage and wear could result in unsatisfactory work results, premature component or machinery failure, or operator injury. We recommend you create a checklist for routine inspection and maintenance, or use the one above as a starting point. Remember to always disconnect the drum sander from its power source before attempting to inspect, adjust, or repair this machine!

## Cleaning

Cleaning the Model W1740 is relatively easy. From time to time, vacuum wood dust off of the internal components, especially the motor.

# Lubrication

An essential part of lubrication is cleaning the components before lubricating them. This step is critical because dust and chips build up on lubricated components, which makes them hard to move. Simply adding more grease to built-up grime will not result in smooth moving parts. Motor bearings need no lubrication.

**DISCONNECT SANDER FROM POWER BEFORE PERFORMING LUBRICATION!**

## Pillow Block Bearings

Lubricate every 20 hours of operation. Open the top cover, and use a grease gun to pump one or two shots of a high-quality white lithium grease into each grease fitting (see Figure 16), located on the top of each pillow block bearing.

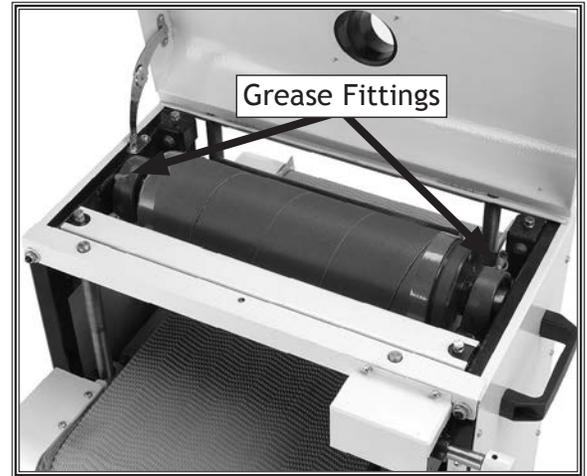


Figure 16. Pillow bearing lubrication.

## Lift Screws

These should be lubricated with lithium grease every six months. Use mineral spirits and a stiff brush to clean the lift screw (see Figure 17), then paint lithium grease onto the threads. Move the table up or down to spread the grease thoroughly over the threads.

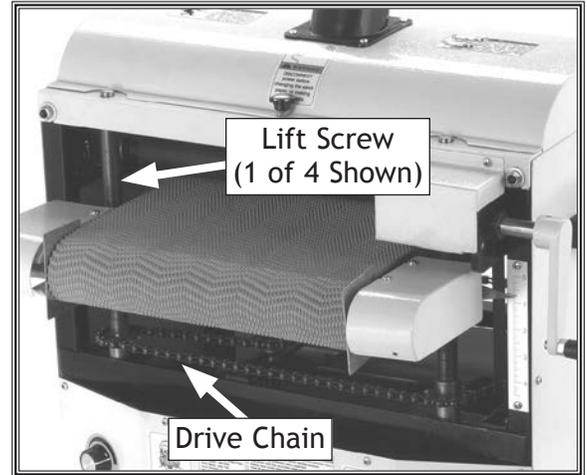


Figure 17. Sprocket, lift screw, and chain lubrication.

## Drive Chain

Inspect and lubricate monthly. Remove the front chain cover to access. Check the sprockets, the chain (see Figure 17), and the master links during inspection. Clean the chain with mineral spirits and a brush or rag, then apply light machine oil to the chain. Turn the hand crank to move the conveyor up or down to distribute the oil. Do not apply too much oil, as it will attract dirt and sawdust that will clog the chain mechanism.

## Helical Gears

Lubricate every six months. Remove the dust cover to access the gears. Use mineral spirits and a stiff brush to clean these gears (see Figure 18). Paint lithium grease onto the threads.

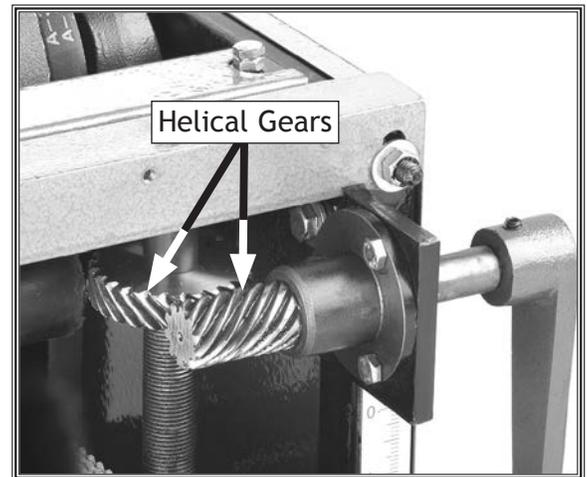


Figure 18. Helical gear lubrication.

# 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](mailto:tech-support@shopfox.biz).

## V-Belt Service

A new V-belt can stretch and loosen during the first 16 hours of use. Check and re-tension belt if it is loose. Proper tension is important for optimum power transfer. However, too much tension may cause premature bearing failure. Replace the V-belt if you notice fraying, cracking, glazing, or any other damage.

### Tensioning

1. DISCONNECT SANDER FROM POWER!
2. Remove the right handle and side panel.
3. Using a straightedge and ruler (Figure 19), push on the middle of the V-belt.

The V-belt is correctly tensioned when there is approximately  $\frac{1}{2}$ "- $\frac{3}{4}$ " deflection when it is pushed with moderate pressure.

– If there is more than  $\frac{1}{2}$ "- $\frac{3}{4}$ " deflection, loosen the motor mount bolts (see Figure 20) and adjust the motor bracket, to achieve the correct tension.

4. Tighten the motor mount bolts, and re-install the panel.

### Replacing

1. DISCONNECT SANDER FROM POWER!
2. Remove the right handle and side panel.
3. Loosen the motor mount bolts, adjust the motor bracket and roll the V-belt off of the pulleys.
4. Replace the V-belt, then follow Steps 3-4 in Tensioning.

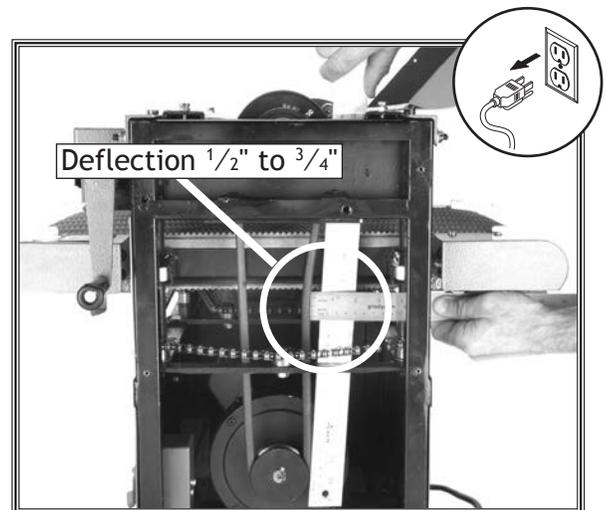
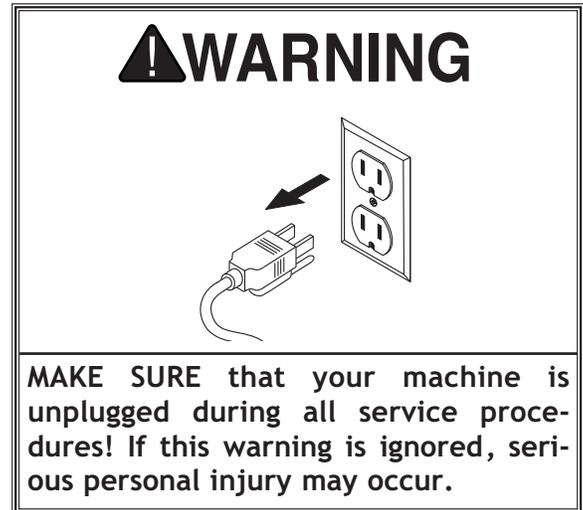


Figure 19. Belt tension check.

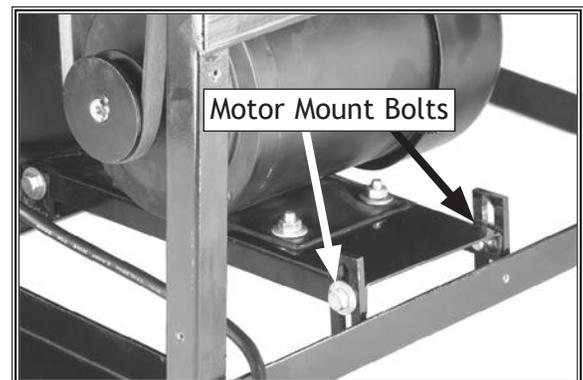


Figure 20. Belt tension adjustment. (Note: All panels removed for clarity.)

# Pulley Alignment

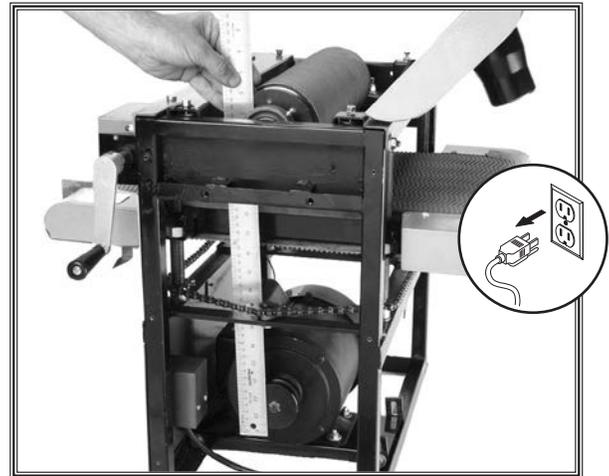
When replacing a V-belt, align pulleys if required.

To check and align the pulleys, do these steps:

1. DISCONNECT SANDER FROM POWER!
2. Remove the side panel, and loosen the four bolts that secure the motor to the motor mounting plate.
3. Slide the motor as needed to align the pulleys to the straightedge shown in **Figure 21**.

**Note:** You can also loosen the set screws on the motor pulley to fine tune any pulley adjustments.

4. When the pulleys are aligned, tighten the four motor mount bolts.
5. Tension the V-belt (refer to **Tensioning on Page 25**) and replace the belt cover.



**Figure 21.** Pulley alignment.  
(Note: All panels removed for clarity.)

# Conveyor Tensioning

The conveyor may slightly stretch with continued use and will eventually need to be retensioned. If a loose conveyor belt is ignored, it will slip and heat up the drive roller damaging the roller, conveyor belt, and causing a wash-board effect on the workpiece surface.

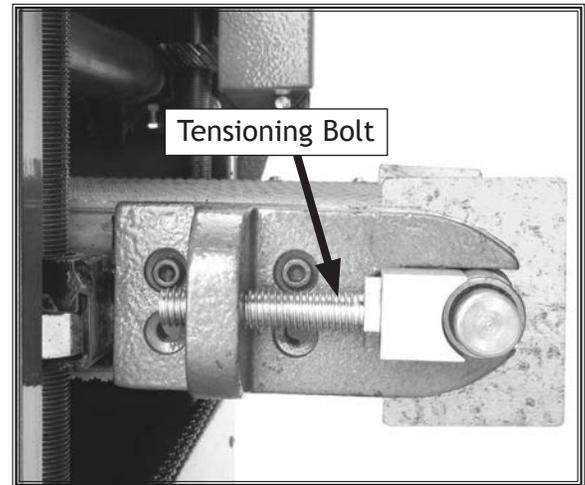
When you tension the conveyor, focus on tensioning the adjustment bolts in equal increments. Tensioning one side more than the other will cause tracking problems, which will require you to take additional steps to get the sander operating correctly.

To tension the conveyor belt, do these steps:

1. Use a magic marker, correction fluid, or fingernail polish to mark the front of the conveyor tensioning bolt on both sides (see **Figure 22**). This step will aid you in keeping track of the rotations as you turn the bolts, so they remain as equal as possible.

**Note:** *Removing the front right and left roller guard covers makes it easier to access the adjustment bolts. Be sure to re-install the guards when adjustments are complete.*

2. Turn both of the conveyor adjustment bolts counter-clockwise one full turn at a time until the conveyor belt no longer slips during operation.
  - If the conveyor starts tracking to one side, immediately turn the drum sander **OFF** and perform the tracking instructions.



**Figure 22.** Conveyor belt tension adjustment.

# Conveyor Tracking

If the conveyor tracks to either side and is ignored, the edge of the conveyor belt will wear and break apart (see **Figure 23**). Then the conveyor belt must be replaced and the tracking corrected.

Replacing a damaged conveyor is a big job. Always be careful to make sure that the belt does not travel too far to one side or the other.

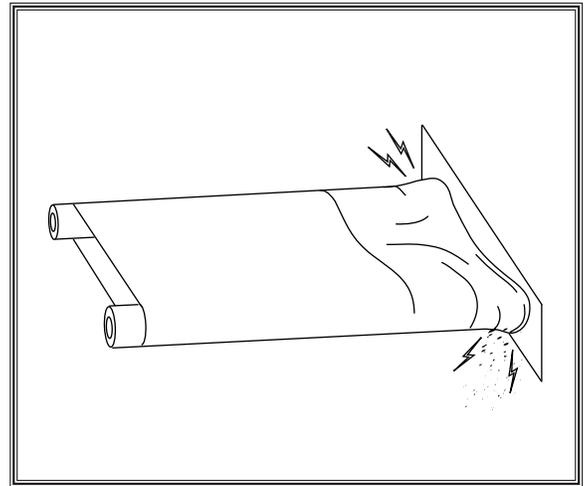
Tracking the conveyor is a balancing process that takes patience and a small degree of trial-and-error. Usually you must over-tighten the loose side (the side the belt is tracking towards) to make the conveyor move to the middle of the rollers, then loosen that same side to make the conveyor stay in position. If you adjust the bolt too much either way, then you have to repeat the process until the conveyor rides in the middle and stays there during continuous operation.

To set the conveyor tracking, do these steps:

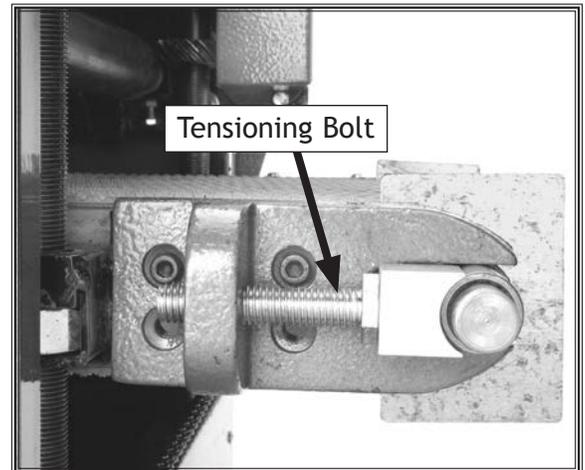
1. Turn the conveyor **ON**, set conveyor speed to high, and watch the belt track.
2. Determine which side the conveyor is tracking towards (the loose side) and tension the adjustment bolt (see **Figure 24**) on that side until the conveyor tracks in the opposite direction.

**Note:** *Tracking changes may take up to three minutes before they are noticeable.*

3. When the conveyor is near the middle of the rollers or table, loosen the adjustment bolt until the conveyor stops moving and tracks straight.
  - If the conveyor tracks too far to the other side, then adjust the bolt as necessary to bring it back and repeat **Steps 2 & 3** until the tracking is correct.



**Figure 23.** Bad conveyor belt tracking.



**Figure 24.** Conveyor belt tracking adjustment.



**Figure 25.** Gauge boards.

## Gauge Boards

For the adjustments in this section, you will need to make two 24" gauge boards that are identical in thickness (see **Figure 25**). The quality of your gauge boards will have direct bearing on the quality of your adjustments on your drum sander.

# Drum-to-Table Parallelism

The drums can be adjusted in fine increments at the pillow block bearings and in larger increments by using the table lift screws.

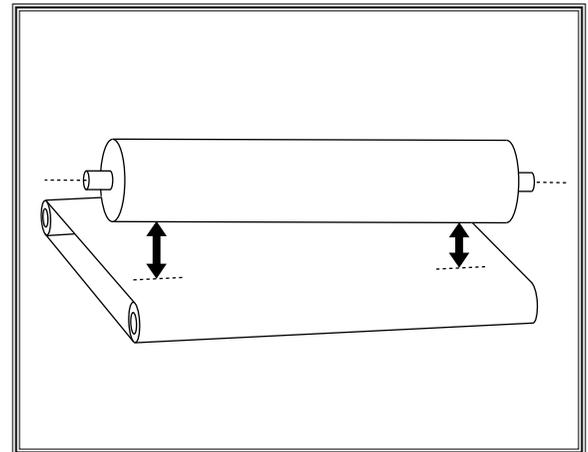
While adjusting the drum, keep in mind that having the drum parallel to the conveyor belt (see **Figure 26**) is critical to the sanding operation. Care should be taken to make the tolerances as close as possible (within 0.002" from one side to the other) when adjusting the drum height.

To adjust the sanding drum parallel with the conveyor belt, do these steps:

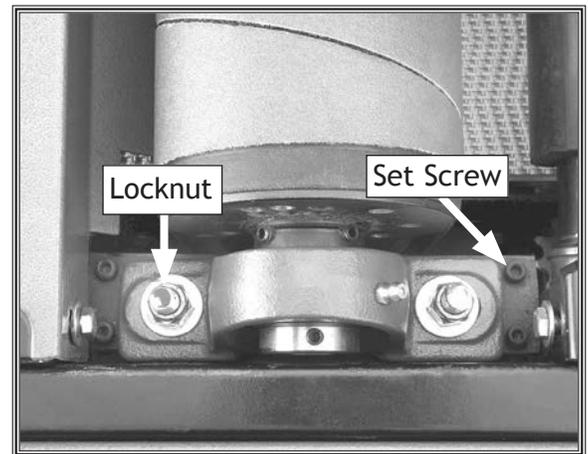
1. DISCONNECT SANDER FROM POWER!
2. Open the top cover.
3. Loosen the lock nuts (see **Figure 27**) on the drum pillow block bearing housing.
4. Place the gauge boards on the conveyor table and position them under the pressure rollers (see **Figure 38**).
5. Raise the table until the gauge boards just touch the bottom of the sanding drum.

*Note: A good way to know when they are touching is to rock the sanding drum back and forth while raising the table until you hear or feel contact with the gauge boards.*

6. Lower the table one full turn of the handcrank handle. Wait until the chain starts moving before starting to count the handcrank handle rotation.
7. Starting at one end, place a 0.002" feeler gauge between the sanding drum and the gauge board. (The feeler gauge should slide with moderate resistance, without forcing the drum to roll.)
8. Repeat **Step 7** at the other end of the drum.
  - If the difference between the two sides is 0.002" or less, skip to the subsection that covers how to adjust the drum-to-conveyor tracking on **Page 31**.
  - If the difference between the two sides is more than 0.002", then one side must be adjusted to within 0.002" of the other (with the ultimate goal of making them dead even). Continue to the next step.



**Figure 26.** Drum not parallel with belt.



**Figure 27.** Pillow bearing housing.



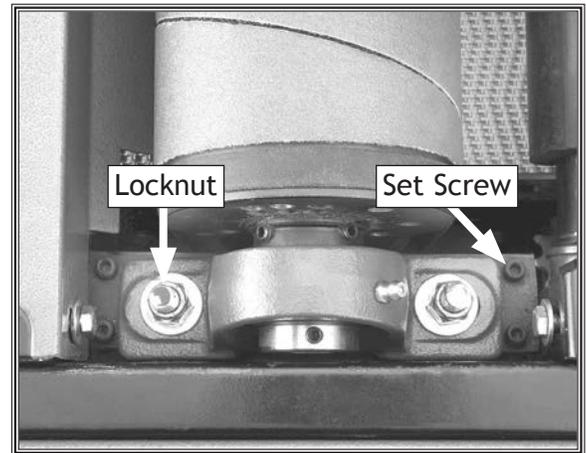
**Figure 28.** Gauge boards in position.

**SERVICE**

9. Loosen the lock nuts (see **Figure 29**) on the pillow block bearing that requires adjustment.
10. Rotate the four set screws  $\frac{1}{8}$  of a turn clockwise to raise the pillow block bearing.

**Note:** Turn all set screw sets an equal amount.

11. Tighten the lock nuts and recheck the alignment, using the gauge boards and repeating **Steps 1-8** from the previous subsection. Tightening the lock nuts will pull the drum downward slightly. Be sure to adjust to compensate for this movement. **Do not over tighten the lock nuts. The pillow block bearings can break if over tightened.**



**Figure 29.** Pillow bearing housing.

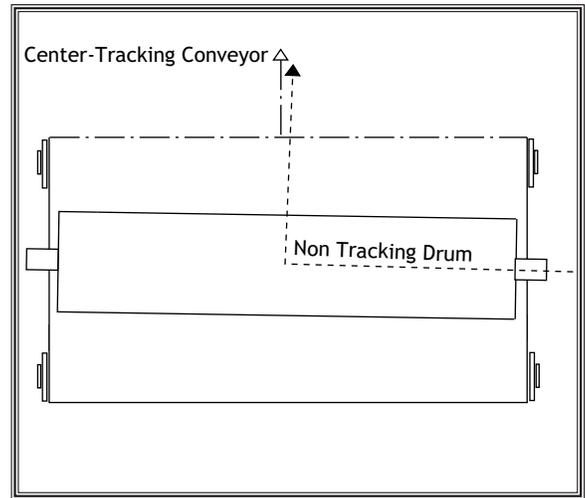
# Drum-to-Conveyor Tracking

If the drum-to-conveyor tracking (see **Figure 30**) is off track by more than  $\frac{1}{8}$ ", you will have to adjust the tracking.

To check and adjust the drum-to-conveyor tracking, do these steps:

1. DISCONNECT SANDER FROM POWER!
2. First measure the distance between the outside of the drum and the inside of the dust scoop (see **Figure 31**). The distances should be within  $\frac{1}{8}$ " of each other at each end of the drum.
3. If the measurements are not within  $\frac{1}{8}$ ", the drum can be moved by loosening the lock nuts on the pillow block bearings (see **Figure 32**) and moving one end of the drum forward or backward as necessary in the slotted holes.

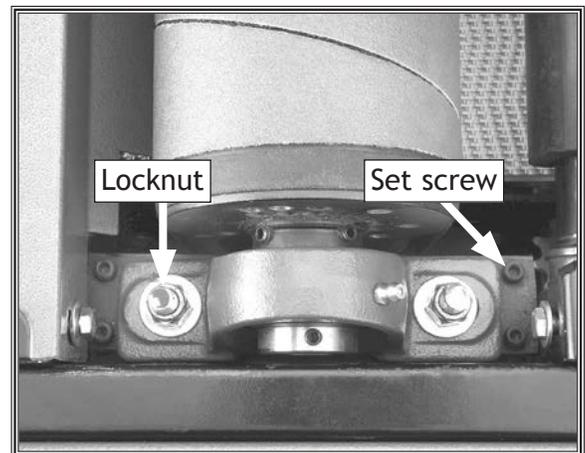
**Note:** After you have adjusted the drum, tighten the lock nuts and recheck the alignment by repeating Steps 1-3.



**Figure 30.** A non-tracking drum.



**Figure 31.** Measuring drum alignment.



**Figure 32.** Pillow bearing housing.

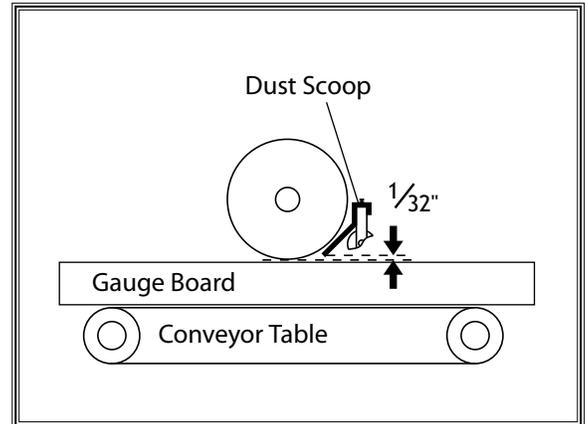
**SERVICE**

# Dust Scoop Gap

For this adjustment, you will adjust the dust scoop up or down to focus dust collection suction where the most dust is created (see **Figure 33**).

To adjust the dust scoop gap, do these steps:

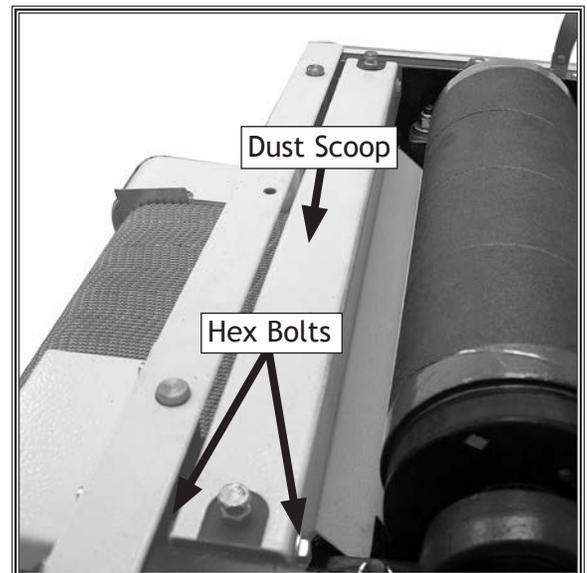
1. DISCONNECT SANDER FROM POWER!
2. Open the top cover.
3. Insert two gauge boards under the sanding drum and dust scoop (see **Figure 34**).
4. Raise the table until the drum just touches the gauge blocks.
5. Loosen the dust scoop mounting bolts (see **Figure 35**) and slide the scoop up or down until it is  $\frac{1}{32}$ " above the gauge blocks (see **Figure 33**). You may have to bend the lip of the dust scoop to get the appropriate gap.
6. Tighten the dust scoop mounting bolts.
7. Close the top cover and secure it shut.



**Figure 33.** Dust scoop gap.



**Figure 34.** Gauge boards in position.



**Figure 35.** Dust scoop.

# Pressure Roller Height & Tension

The pressure rollers are factory set at 0.080" (2mm) below the bottom of the sanding drum and are fully adjustable either up/down with the lower adjustment bolts (see **Figures 36** and **37**). After the adjustment has been made, always lock the jam nuts against the bottom to prevent them from moving.

Proper pressure on the workpiece helps avoid kickback and keeps the workpiece from slipping. However, as pressure increases on the workpiece, snipe also increases (some degree of snipe is normal with all drum sanders).

If snipe becomes a problem, you can minimize it by reducing pressure. To lower pressure, turn the lower adjustment bolts counterclockwise to raise the pressure roller height. To increase pressure, turn the lower adjustment bolts clockwise (lowering pressure rollers).

However, you can only minimize snipe so much before the workpiece will slip or kick out, causing a hazard to the operator. If this happens, you have raised the pressure rollers too high for them to function as intended—the pressure rollers **MUST** be lowered to prevent injury.

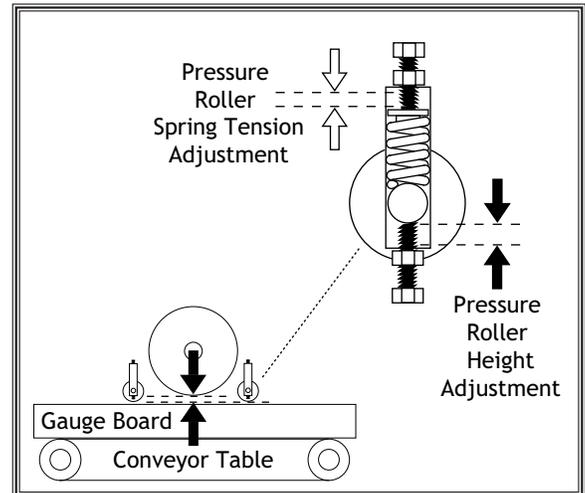
These instructions will restore the pressure rollers to the factory setting.

## **WARNING**

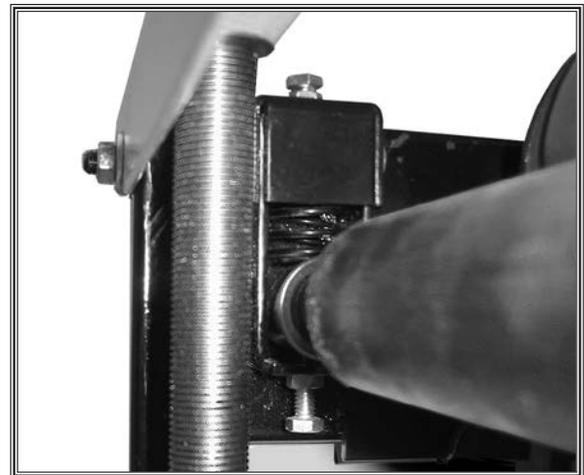
Raising the pressure rollers too high to minimize snipe will cause the workpiece to slip or kick out, causing a hazard to the operator. You **MUST** lower the pressure rollers to prevent injury!

To adjust the pressure rollers to the factory setting, do these steps:

1. DISCONNECT SANDER FROM POWER!
2. Open the top cover.
3. Place the gauge boards on the conveyor table and position them under all the pressure rollers (see **Figure 38**).
4. Raise the table so the gauge boards touch the bottom of the sanding drum, as shown in **Figure 38**.



**Figure 36.** Pressure roller adjustments.



**Figure 37.** Pressure roller adjustment location.



**Figure 38.** Gauge boards in position.

5. Lower the table three full turns of the handcrank.
6. Turn the adjustment bolt (Figure 39) as required so the roller just touches the gauge board (see Figure 40).

*Note: To gain better access for the following adjustments, you can open the side covers.*

7. Repeat Step 6 for the opposite side of the same pressure roller.
8. Repeat Steps 6-7 with the second pressure roller. Each pressure roller should look like Figure 40 when properly adjusted.
9. Tighten the jam nuts on the adjustment bolts (see Figure 39) to lock the adjustment.

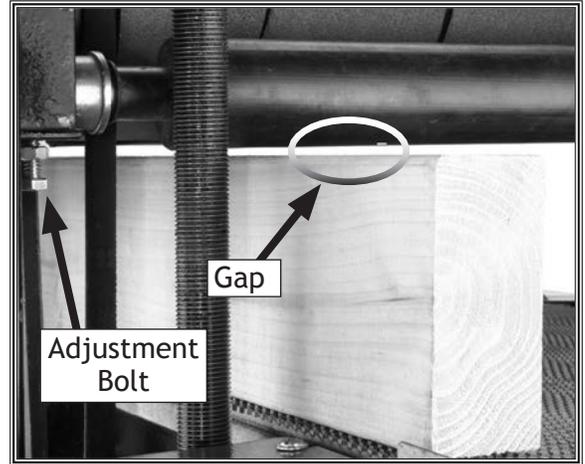


Figure 39. Gauge boards below rollers.

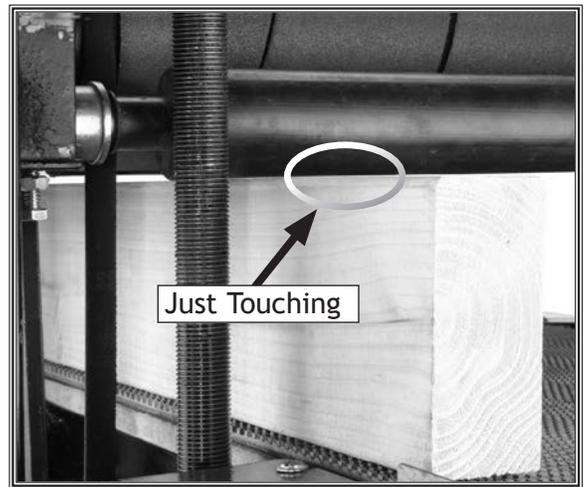


Figure 40. Gauge boards touching rollers.

## Scale Pointer Calibration

In order for the scale pointer to be accurate, it must be calibrated.

We recommend calibrating your scale pointer any time you adjust the drum height or table lift screws.

To calibrate the scale pointer, do these steps:

1. Sand a workpiece (see Figure 41) with the drum sander and measure the thickness of the sanded workpiece.
2. Loosen the screw that secures the scale pointer and adjust it to the thickness of the workpiece.

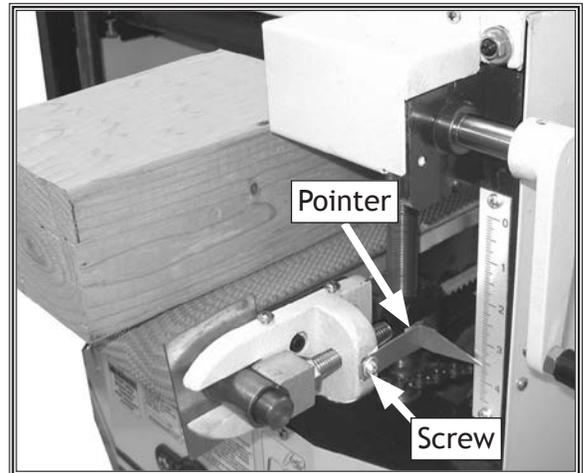


Figure 41. Pointer calibration.

# Table Adjustment

The table lift screws are connected by a chain and driven by the handcrank handle. (When the chain is removed from a sprocket on one of the lift screws, that lift screw can adjust that portion of the table up/down independently to assist in setting the table parallel to the drum). Each complete tooth rotation on a sprocket moves that corner of the table 0.007" or 0.18mm.

Adjusting the table lift screws will only be necessary if you need to adjust the drum height more than allowed at the pillow block bearing. If you have removed the table or chain (see **Page 39**) during a service procedure, you must reset the drum parallel to the table.

To adjust the table lift screws, do these steps:

1. DISCONNECT SANDER FROM POWER!
2. Open the right side and front panels.
3. Raise the table up to at least the 1" mark on the height scale.
4. At the lift screw that needs to be adjusted, mark the end of a sprocket tooth and the chain hole where that tooth is meshed, as shown in **Figure 42**.
5. Loosen the chain by loosening the hex nut on the bottom of the idler roller sprocket shown in **Figure 43**.
6. Carefully move the chain off only the marked sprocket.
7. Keep track of the marked chain hole and rotate the sprocket the necessary number of teeth away from the marked one to meet the difference in height needed.
8. Fit the chain back over the sprocket, making sure the new sprocket tooth is inserted into the marked chain hole.
9. Re-tension the chain and check the new height setting.
10. Repeat **Steps 5-9** as needed until the table height is parallel to the drums in all four corners, then tighten the idler sprocket and calibrate the scale pointer.

## NOTICE

Marking the chain and sprocket locations will save you a substantial amount of time when you re-install the chain. Make sure you have done this before removing the chain.

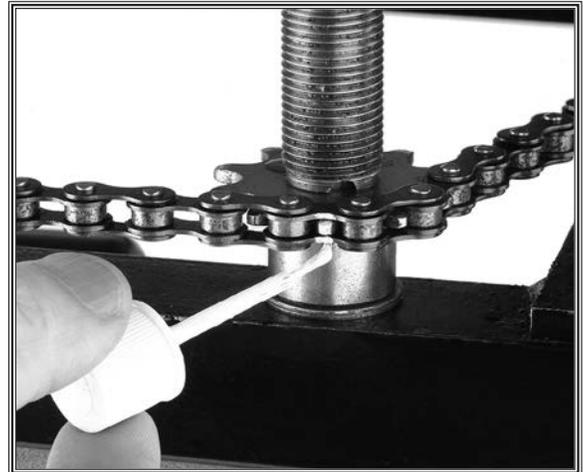


Figure 42. Marking sprocket and lift screw timing.

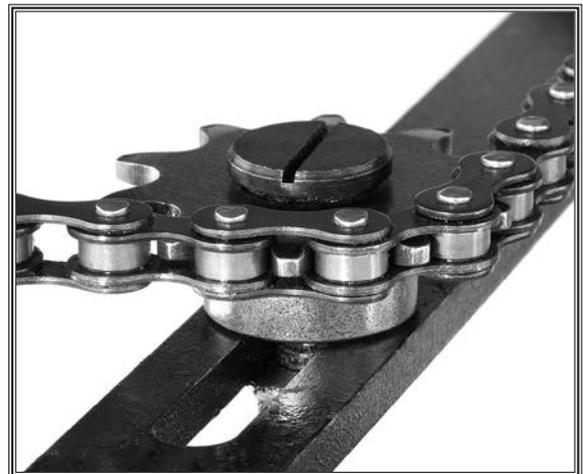


Figure 43. Chain tensioner sprocket.

# Conveyor Replacement

Replacing the conveyor belt is a big job and requires moderate mechanical skill and a fair amount of patience. For planning purposes, expect to have your machine out of operation for at least a few hours.

As you remove hardware to complete these instructions, we recommend putting all the bolts, screws, washers, etc. back into the holes from which they came. This simple habit will take slightly longer when disassembling the machine, but it will save you a lot of time and reduce frustration during reassembly.

To replace the conveyor belt, do these steps:

1. DISCONNECT SANDER FROM POWER!
2. Remove the top cover by loosening the hex bolts and removing the Phillips head screws (see **Figure 44**) securing the top cover support.
3. Remove the right handle and side panel (two cap screws and six tap screws).
4. Remove the gear cover (two Phillips head screws) and loosen the two hex nuts securing the brace and remove it.
5. Remove the dust scoop (four hex bolts and four flat washers), compression springs and spring plates (see **Figure 45**) from the front pressure roller and set the roller aside.
6. Remove the rear pressure roller (four hex bolts and four flat washers) along with the brackets, compression springs, and spring plates shown in **Figure 46**.

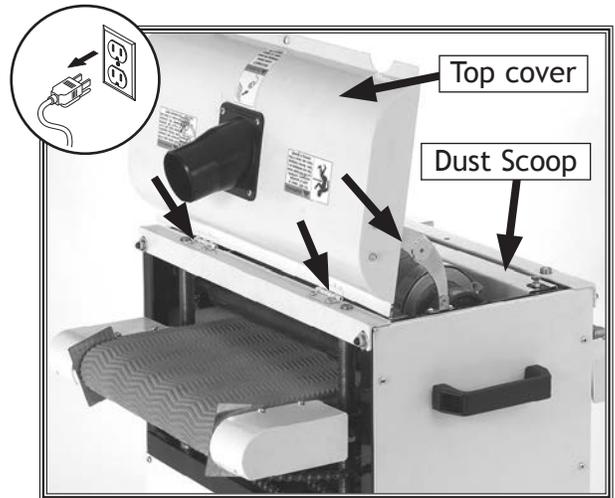


Figure 44. Top cover mounting hardware.

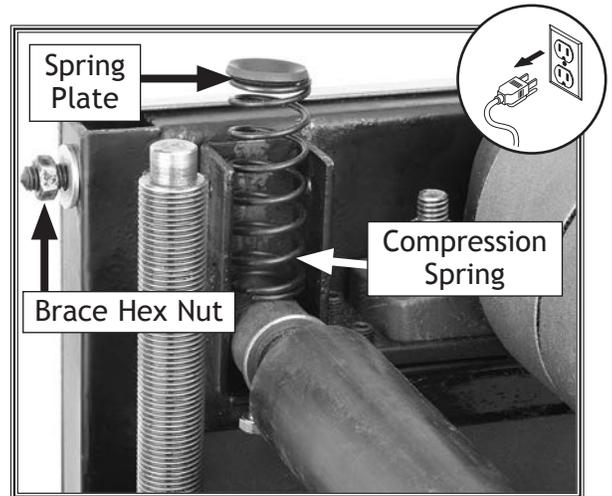


Figure 45. Front pressure roller components.

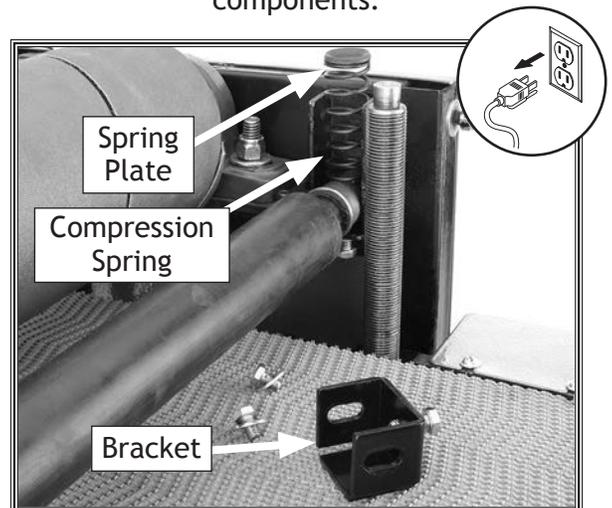
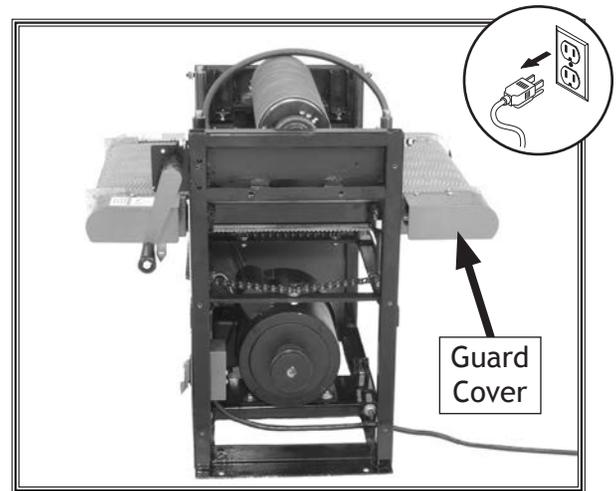
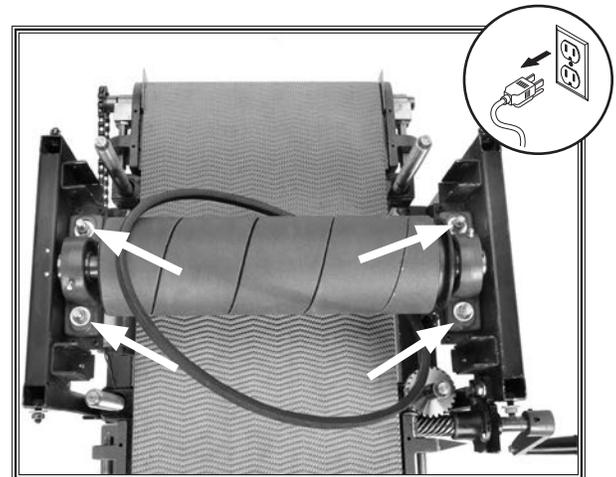


Figure 46. Rear pressure roller components.

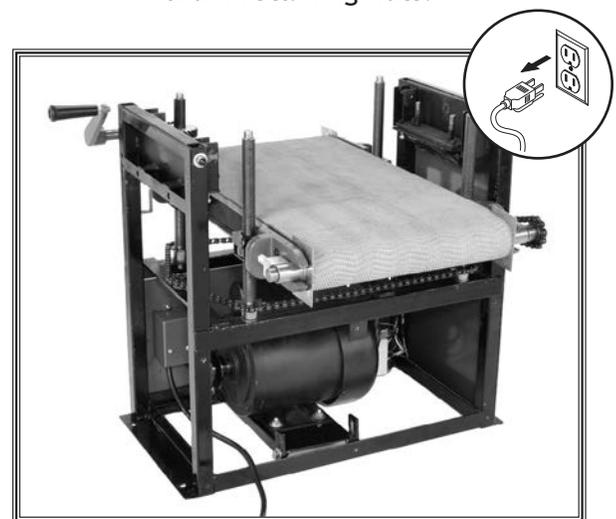
7. Remove the rear panel (six tap screws).
8. Loosen the hex bolts securing the motor bracket to the frame, raise the motor and remove the V-belt from the motor pulley. The drum sander should now look similar to **Figure 47**.
9. Remove the sanding drum (four lock nuts and four flat washers) and V-belt (see **Figure 48**).
10. Remove the guard covers for the conveyor front and rear rollers (eight Phillip head screws). The drum sander should now look similar to **Figure 49**.



**Figure 47.** Drum sander disassembled to Step 8.



**Figure 48.** Locations to remove sanding drum retaining nuts.

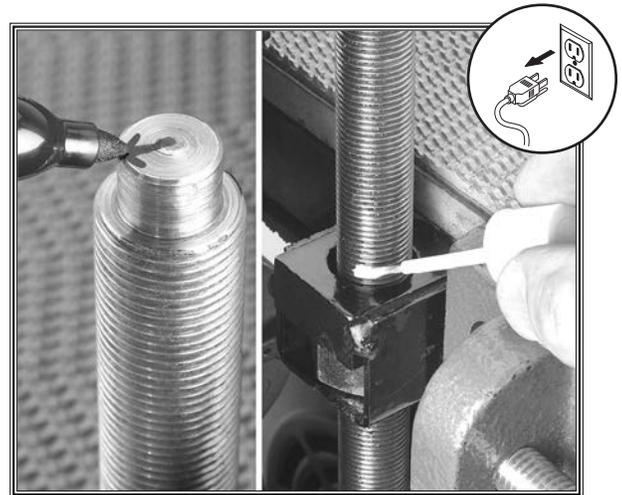


**Figure 49.** Drum sander disassembled to Step 10.

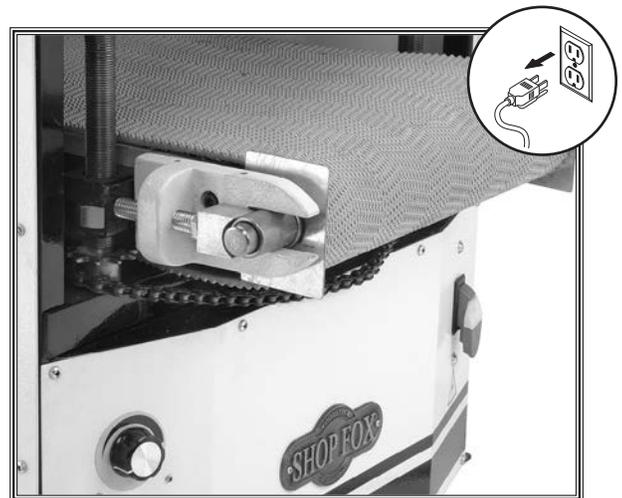
11. Mark the top of the table lift screws with arrows (all pointing in same direction) and mark the screws with liquid correction fluid above the mounting bracket (**Figure 50**). Later, when you reassemble the conveyor table, you can use these marks to reset the table height close to the current position.
12. Mark the chain and sprockets with correction fluid.
13. Loosen the chain tension sprocket, carefully pull the chain off of all the sprockets, and remove it from the cabinet.
14. Keeping track of the number of turns for later reassembly, loosen the conveyor belt at the front adjustment bolts, as shown in **Figure 51**.
15. Disconnect the conveyor feed motor wires from the circuit board.
16. Remove the scale pointer.

*Before removing the table, note the number and location of brass shims (**Figure 52**) under the table lift screws. Knowing their correct position will help you align the conveyor table during reassembly.*

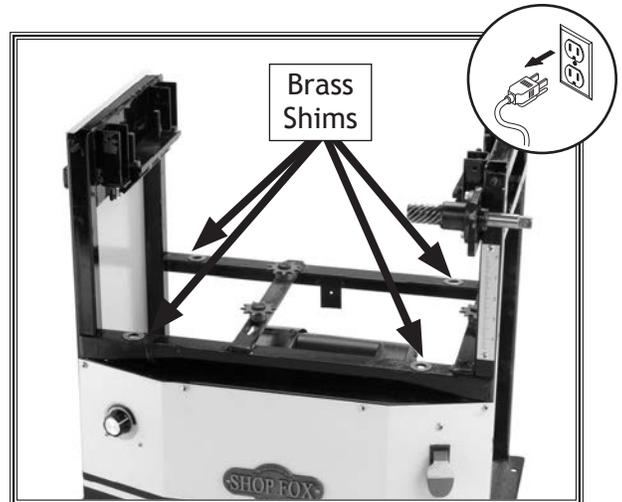
Continued on next page



**Figure 50.** Locations to mark lift screws.

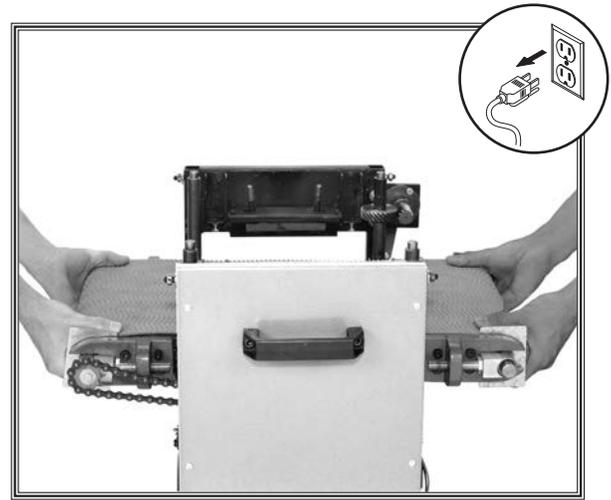


**Figure 51.** Conveyor belt loosened at the front adjustment bolts.

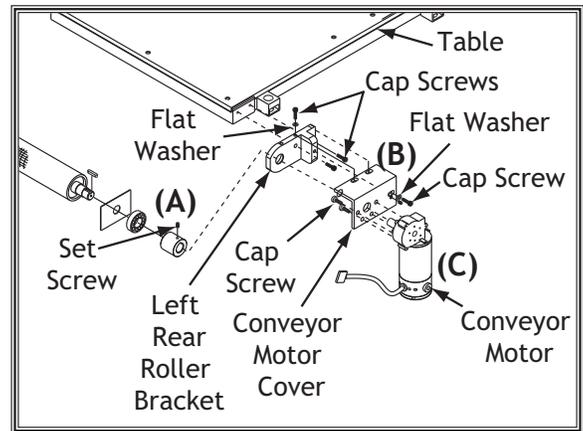


**Figure 52.** Brass shim locations.

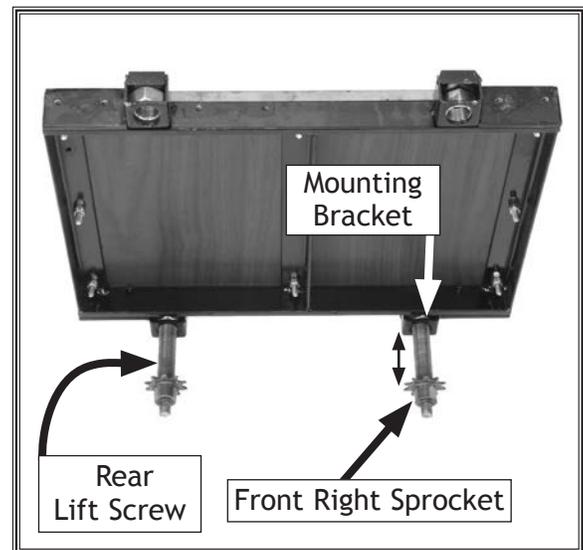
17. With the help of an assistant, carefully lift the table off the drum sander cabinet, as shown in **Figure 53**.
18. Lay the conveyor table on the edge of a workbench so the conveyor motor can hang freely.
19. (A) Remove the set screw shown in **Figure 54**, (B) remove the conveyor motor cover from the left rear roller bracket (3 cap screws and 3 flat washers), then (C) remove the conveyor motor (4 cap screws) from the conveyor motor cover (see **Figure 54**).
20. Remove the rear left roller bracket (2 cap screws).
21. Remove the rear roller.
22. Remove the front left roller bracket (two cap screws) and the front roller.
23. Remove the front right and rear roller brackets (four cap screws).
24. Place the right side of the conveyor on a flat surface, then unthread and remove the front and rear table lift screws.
25. Remove the belt to expose the table, as shown in **Figure 55**.
26. Measure the distance between the front right table lift screw sprocket and the mounting bracket. If necessary, rotate the rear shaft so the sprocket-bracket distance is the same as the front right table lift screw.
27. Install the new conveyor belt.
28. Re-install the front left and rear left table lift screws to match the front right lift screw height.
29. Reassemble the drum sander by reversing the disassembly steps.
30. After reassembly, adjust the drums and pressure rollers to their proper settings as outlined in this manual.
31. After you have re-installed the conveyor table, make sure the four lower pressure roller adjustment bolts are threaded the same distance into the roller mount brackets (see **Figure 55**).
32. After re-installing the top cover and brace, tighten the mounting bolts.



**Figure 53.** Lifting the table off safely.



**Figure 54.** Removing conveyor motor and rear roller bracket (not all components shown for clarity).

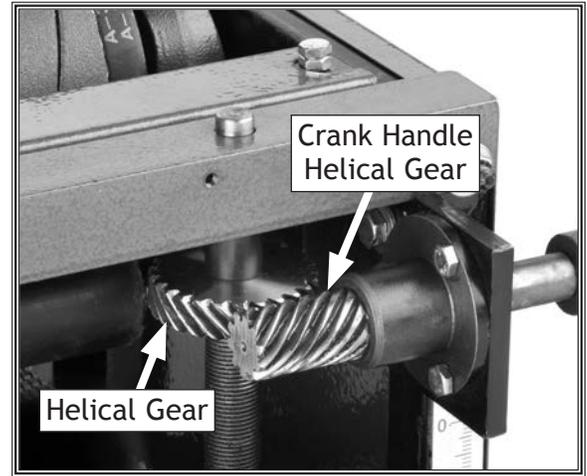


**Figure 55.** Conveyor belt removed from table.

33. Before re-installing the pinion and side gear dust cover, try raising and lowering the conveyor table with the handcrank handle. If the helical gear and crank handle helical gear teeth (see **Figure 56**) are not meshed, the handcrank handle will not raise the table.

If this happens, loosen the crank handle mounting bolts, and move the helical gear around until the teeth mesh with the crank handle helical gear, then secure the crank handle.

- 34. Re-install and secure the brace.
- 35. Try moving the conveyor table up and down.
- 36. Continue adjusting the helical gear and crank handle helical gear until the crank handle raises and lowers the conveyor table.



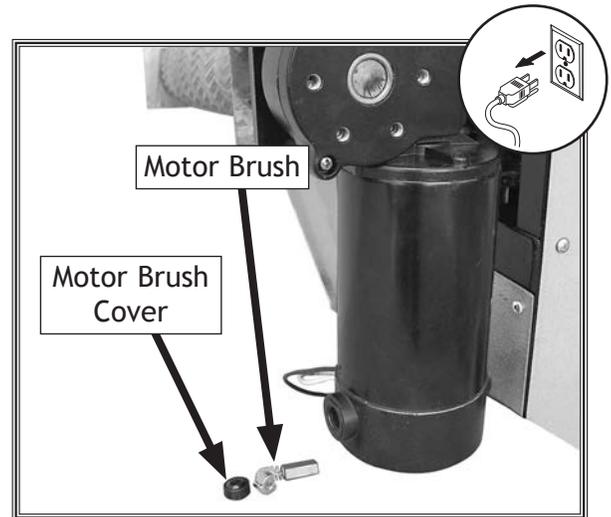
**Figure 56.** Helical gears meshed.

## Changing Motor Brushes

If the motor fails to develop full power or otherwise appears to run sluggishly, the motor brushes may need to be replaced.

To replace the motor brushes, do these steps:

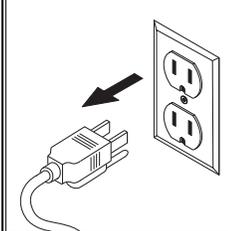
1. DISCONNECT SANDER FROM POWER!
2. Remove each brush cover with a flat head screwdriver and remove the brushes from the motor, as shown in **Figure 57**.
3. Insert the new carbon brushes into the holes in the motor housing.
4. Re-install the brush covers.



**Figure 57.** Motor brush components removed (one of two brushes shown).

# Bearing Replacement

The Model W1740 Drum Sander is designed for many years of reliable service. But after long periods of heavy use, it may be necessary to replace the drum bearings. Always replace both bearings the same time.



**WARNING**  
Keep your drum sander unplugged during all assembly, maintenance, and adjustment tasks. Ignoring this warning can cause serious personal injury to you or others!

To replace the drum bearings, do these steps:

1. DISCONNECT SANDER FROM POWER!
2. Open the top cover. Remove the mounting nuts, the washers and the set screws (see Figure 58).

**NOTICE**

DO NOT hammer on the bearing or housing as you WILL damage these precision parts.

3. Lift the drum and slide the bearing block and bearing from the drum shaft.
4. Clean and inspect the drum shaft for cracks, burrs, wear, and other damage; replace/repair as required.
5. Use a screwdriver to pry and rotate the bearing so it is horizontal to the bearing-block mounting flanges (see Figure 59).
6. Slide the bearing out of the bearing block (see Figure 60).

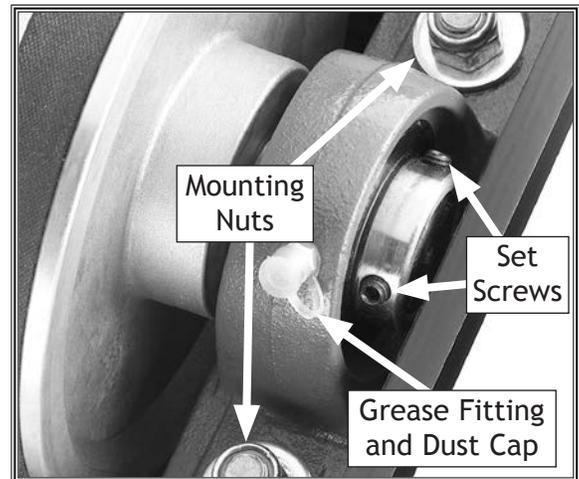


Figure 58. Mounting nuts, washers, and set screws.



Figure 59. Bearing positioning for removal.

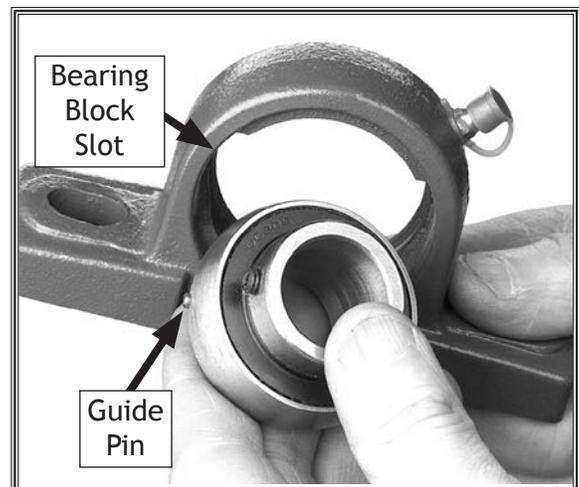


Figure 60. Removal and installation bearing slot positioning.

**SERVICE**

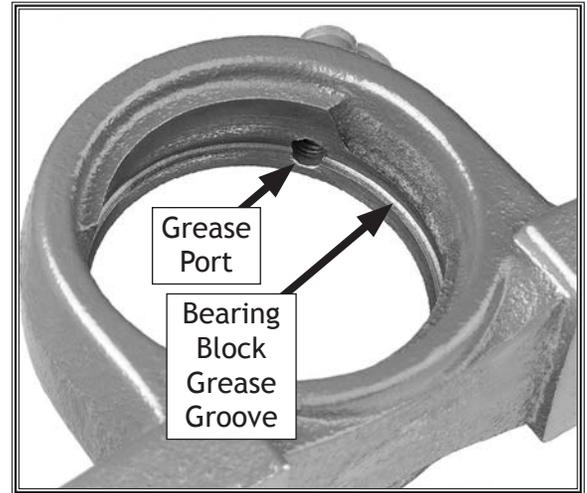
7. Remove any metal or abrasives trapped in the bearing grease groove and grease port, or contaminants will be pumped into the new bearing when you lubricate it, causing bearing failure (**Figure 61**).
8. Clean and inspect the bearing-block for cracks, burrs, wear, and other damage; replace/repair as required.

The “bearing race” should rotate inside of the “bearing block” smoothly. If the race is loose or wobbles inside of the bearing block, replace the bearing block.

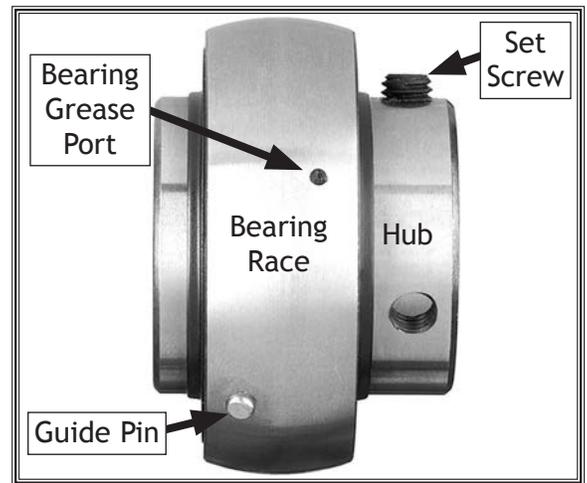
## NOTICE

**Make sure the bearing grease hole in the bearing lines up with the grease groove in the bearing block and that no obstructions prevent bearing lubrication.**

9. Insert the new bearing into the bearing-block so when the bearing block is installed in the sander, the grease fitting is facing forward and the set screws and hub are on the right-side of the bearing housing (see **Figures 61** and **62**).
10. Slide (**DO NOT** hammer) the bearing block and bearing onto the drum shaft.
11. Lower the drum and bearing-block onto the mounting studs, and install the flat washers and the nuts. Tighten the nuts in an alternating pattern until snug.
12. Install and tighten the set screws.
13. Wipe the grease fitting clean, and lubricate the bearing with just enough grease to slightly seep from the dust seal and wipe clean (these bearings are not pre-lubricated). **DO NOT** over-grease.
14. Repeat **Steps 3–13** on all other bearings that need replacement. Always replace both bearings on the same drum.
15. Adjust the drum and pressure rollers as outlined in this manual.

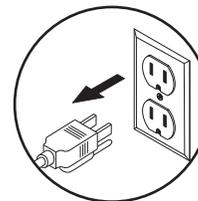


**Figure 61.** Bearing-block grease grove and grease port.



**Figure 62.** Key bearing parts.

# Troubleshooting



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

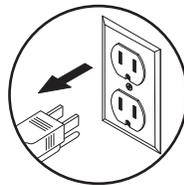
## Motor & Electrical

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Motor does not start or a breaker trips.	<ol style="list-style-type: none"> <li>1. Power supply at fault, or is switched OFF.</li> <li>2. ON button or ON/OFF switch at fault.</li> <li>3. Start capacitor at fault.</li> <li>4. Centrifugal switch is at fault.</li> <li>5. Motor is at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Make sure all hot lines and grounds are operational and have correct voltage on all legs. Ensure circuit size can handle motor load.</li> <li>2. Replace at fault ON button or ON/OFF switch (see <b>Figure 65</b> on <b>Page 47</b>).</li> <li>3. Test and replace start capacitor as required (see photo, <b>Page 47</b>).</li> <li>4. Adjust or replace the centrifugal switch.</li> <li>5. Test, repair or replace motor.</li> </ol>
Motor has vibration or noisy operation.	<ol style="list-style-type: none"> <li>1. V-belt is worn or is loose.</li> <li>2. The noise is just the centrifugal switch operating.</li> <li>3. Pulley is loose.</li> <li>4. Motor or component is loose.</li> <li>5. Motor fan is rubbing on fan cover.</li> <li>6. Motor bearings are at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inspect belt and adjust or replace as required.</li> <li>2. No corrective action required. Normal snap/click sound on RPM wind down.</li> <li>3. Remove pulley, replace shaft, pulley, set screw, and key as required, and realign.</li> <li>4. Inspect, replace for stripped or damaged bolts/nuts, and re-tighten with thread locking fluid.</li> <li>5. Replace dented fan cover, and replace loose or damaged fan.</li> <li>6. Check bearings, replace motor or bearings as required.</li> </ol>
Motor overheats.	<ol style="list-style-type: none"> <li>1. Motor overloaded.</li> <li>2. Air circulation through the motor restricted.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce load on motor.</li> <li>2. Clean off motor to provide normal air circulation.</li> </ol>

## Sanding Operations

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Machine stalls or is under-powered.	<ol style="list-style-type: none"> <li>1. Motor has overheated.</li> <li>2. Machine is undersized for the task.</li> <li>3. Belt is slipping.</li> <li>4. Low power supply voltage.</li> <li>5. Pulley or sprocket is slipping on shaft.</li> <li>6. Motor connection is wired incorrectly.</li> <li>7. Centrifugal switch is at fault.</li> <li>8. Motor bearings are at fault.</li> <li>9. Motor is at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Unobstructed motor cooling air flow, let motor cool, and reduce workload on machine.</li> <li>2. Use new sandpaper with appropriate grit, and reduce the feed rate/depth of sanding.</li> <li>3. Replace bad belt, align pulleys, and re-tension.</li> <li>4. Make sure all hot lines and grounds are operational and have correct voltage on all legs.</li> <li>5. Replace loose pulley and shaft.</li> <li>6. Correct motor wiring (see Page 48).</li> <li>7. Adjust or replace the centrifugal switch.</li> <li>8. Rotate motor shaft for noisy or burnt bearings, repair/replace as required.</li> <li>9. Test, repair or replace motor.</li> </ol>
Machine lacks power; drum stops turning under load.	<ol style="list-style-type: none"> <li>1. V-belt loose.</li> <li>2. Too much pressure on pressure rollers.</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten V-belt (<b>Page 25</b>).</li> <li>2. Reduce pressure roller pressure (<b>Page 33</b>).</li> </ol>
Machine slows when sanding, making a squealing noise, especially on start-up.	<ol style="list-style-type: none"> <li>1. V-belt loose.</li> <li>2. V-belt worn out.</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten V-belt (<b>Page 25</b>).</li> <li>2. Replace V-belt (<b>Page 25</b>).</li> </ol>
Vibration when sanding.	<ol style="list-style-type: none"> <li>1. Loose drum pillow block bearings.</li> <li>2. Worn drum pillow block bearings.</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten drum pillow block bearings.</li> <li>2. Replace drum pillow block bearings.</li> </ol>
Grinding, screeching, or rubbing noise when sanding drum is powered up.	<ol style="list-style-type: none"> <li>1. Drum bearings lack sufficient grease.</li> <li>2. Drum bearings are worn and need replacement.</li> </ol>	<ol style="list-style-type: none"> <li>1. Grease pillow block bearings (<b>Page 24</b>).</li> <li>2. Replace the drum bearings.</li> </ol>

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Short V-belt lifespan.	<ol style="list-style-type: none"> <li>1. Pulleys not aligned correctly.</li> <li>2. Improperly tensioned.</li> </ol>	<ol style="list-style-type: none"> <li>1. Align pulleys (Page 26).</li> <li>2. Properly tension V-belts (Page 25).</li> </ol>
Conveyor slips under load.	<ol style="list-style-type: none"> <li>1. Conveyor is too loose.</li> <li>2. Too much load.</li> </ol>	<ol style="list-style-type: none"> <li>1. Tension conveyor (Page 27).</li> <li>2. Decrease load.</li> </ol>
Conveyor tracks to one side; conveyor hits the roller cover.	<ol style="list-style-type: none"> <li>1. Conveyor tracking is incorrect.</li> </ol>	<ol style="list-style-type: none"> <li>1. Track the conveyor so it runs straight (Page 28).</li> </ol>
Workpiece pulls to one side during sanding operations.	<ol style="list-style-type: none"> <li>1. The sanding drum is not parallel with the table.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust the sanding drum parallel to the table (Page 29).</li> </ol>
Excessive snipe.	<ol style="list-style-type: none"> <li>1. Too much pressure from all the pressure rollers.</li> <li>2. Too much pressure from the rear pressure roller.</li> <li>3. Lack of outfeed support.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce pressure roller pressure (Page 33).</li> <li>2. Reduce rear pressure roller pressure (Page 33).</li> <li>3. Set up outfeed table or have someone catch the workpiece as it comes out.</li> </ol>
Workpiece kicks out of sander.	<ol style="list-style-type: none"> <li>1. Not enough pressure from the pressure rollers.</li> </ol>	<ol style="list-style-type: none"> <li>1. Increase pressure roller pressure (Page 33).</li> </ol>
Sandpaper tears off drums during operation.	<ol style="list-style-type: none"> <li>1. Nail/staple in workpiece.</li> <li>2. Sandpaper not tightened or fastened correctly.</li> <li>3. Drum not tracking with feed direction.</li> </ol>	<ol style="list-style-type: none"> <li>1. Sand only clean workpieces.</li> <li>2. Install the sandpaper correctly (Page 21).</li> <li>3. Adjust the drum to tracking (Page 31).</li> </ol>
Table elevation controls are stiff and hard to adjust.	<ol style="list-style-type: none"> <li>1. Table lift screws are dirty or loaded with sawdust.</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean and regrease table lift screws (Page 24).</li> </ol>
Poor dust collection.	<ol style="list-style-type: none"> <li>1. Dust collection lines incorrectly sized for this machine.</li> <li>2. Dust collector underpowered or too far away from this machine.</li> <li>3. Dust collection ducting is at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use at least an 8" main line with two 6" branch lines that each Y into 2 1/2" at the machine.</li> <li>2. Upgrade your dust collector or decrease the distance from the dust collector to the machine.</li> <li>3. Seal all leaks, size ducts correctly, eliminate bends, and refer to Dust Collection Basics Handbook (ISBN 0-9635821-2-7) for further recommendations.</li> </ol>
Grease on conveyor belt	<ol style="list-style-type: none"> <li>1. Chain too low.</li> </ol>	<ol style="list-style-type: none"> <li>1. Raise table far enough up so it doesn't touch chain.</li> </ol>



# Electrical Safety Instructions

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

## WARNING

1. **SHOCK HAZARD.** Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!
2. **QUALIFIED ELECTRICIAN.** Due to the inherent hazards of electricity, only a qualified electrician should perform wiring tasks on this machine. If you are not a qualified electrician, get help from one before attempting any kind of wiring job.
3. **WIRE CONNECTIONS.** All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.
4. **WIRE/COMPONENT DAMAGE.** Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components before completing the task.
5. **MOTOR WIRING.** The motor wiring shown in these diagrams is current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.
6. **MODIFICATIONS.** Using aftermarket parts or modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire.
7. **CAPACITORS/INVERTERS.** Some capacitors and power inverters store an electrical charge for up to five minutes after being disconnected from the power source. To avoid being shocked, wait at least this long before working on these components.
8. **ELECTRICAL REQUIREMENTS.** You **MUST** follow the electrical requirements at the beginning of this manual when connecting your machine to a power source.
9. **EXPERIENCING DIFFICULTIES.** If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (360) 734-3482.

### NOTICE

The photos and diagrams included in this section are best viewed in color. You can view these pages in color at [www.shopfox.biz](http://www.shopfox.biz).

### WIRING DIAGRAM COLOR KEY

BLACK	BLUE	YELLOW	LIGHT BLUE
WHITE	BROWN	YELLOW GREEN	BLUE WHITE
GREEN	GRAY	PURPLE	WHITE
RED	ORANGE	PINK	TURQUOISE

# Electrical Components



Figure 63. Feed motor.

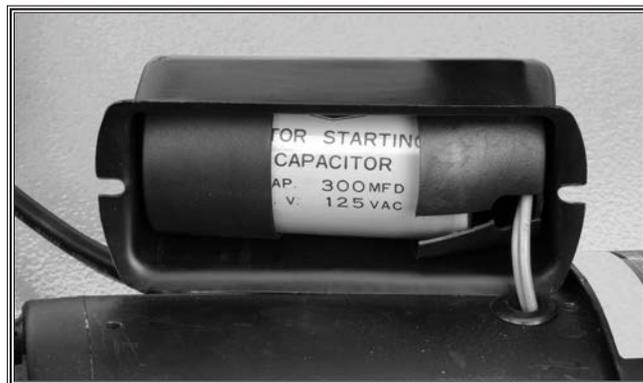


Figure 65. Capacitor.



Figure 64. Drum motor wiring.

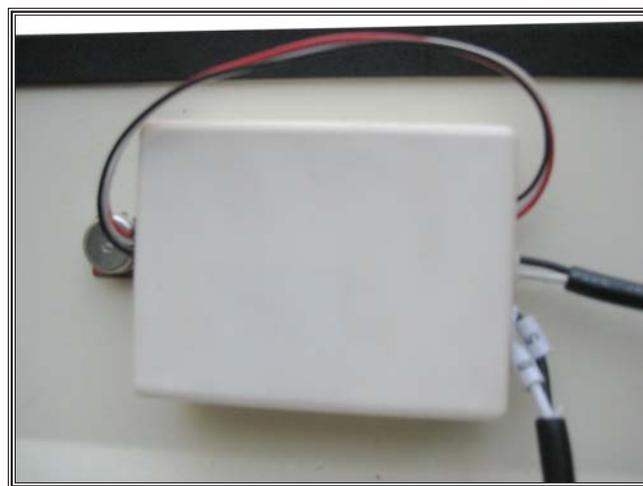


Figure 66. Variable speed control and circuit board.

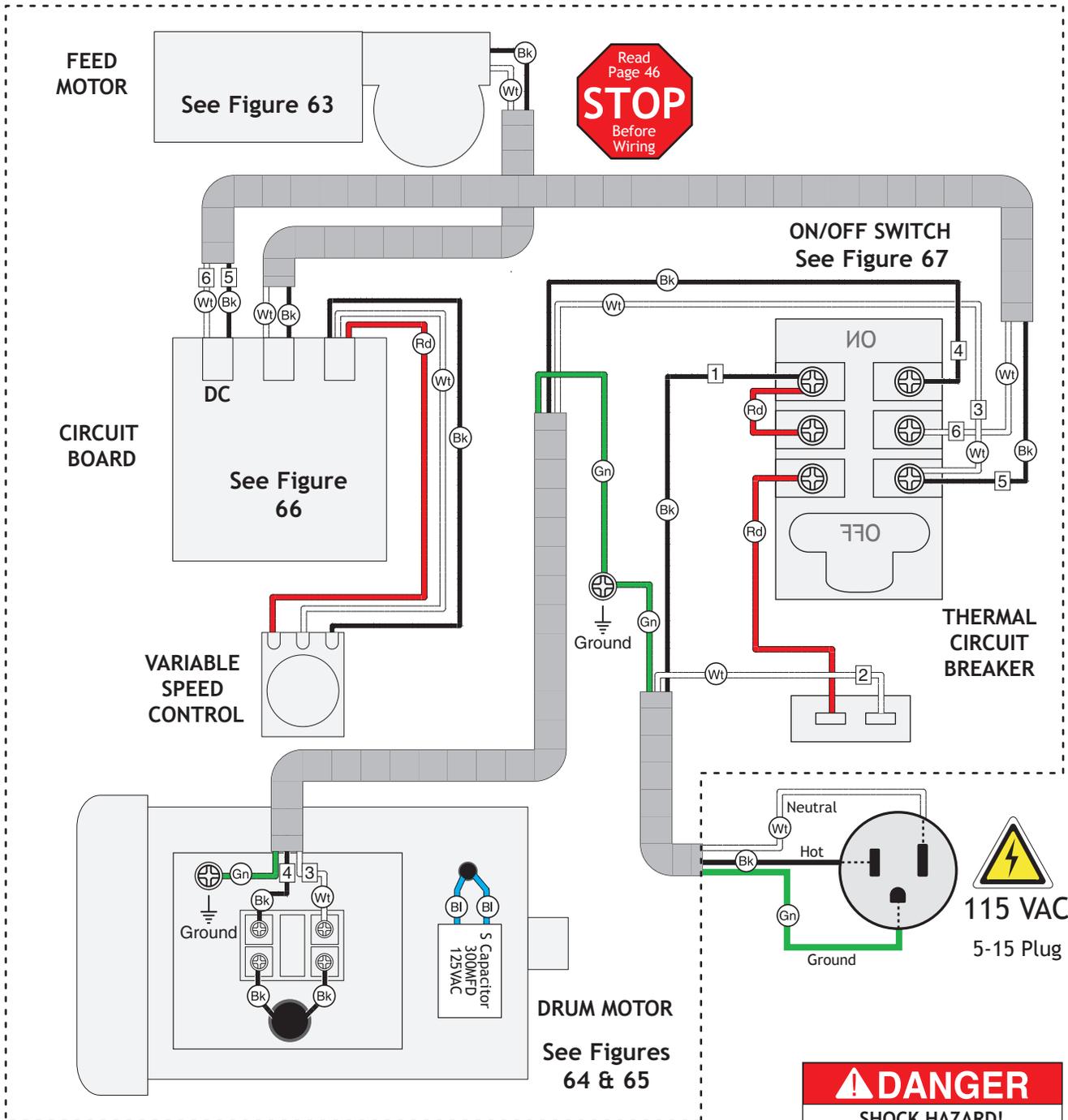


Figure 67. ON/OFF switch wiring.



SERVICE

# Wiring Diagram



**NOTICE**

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

**⚠ DANGER**

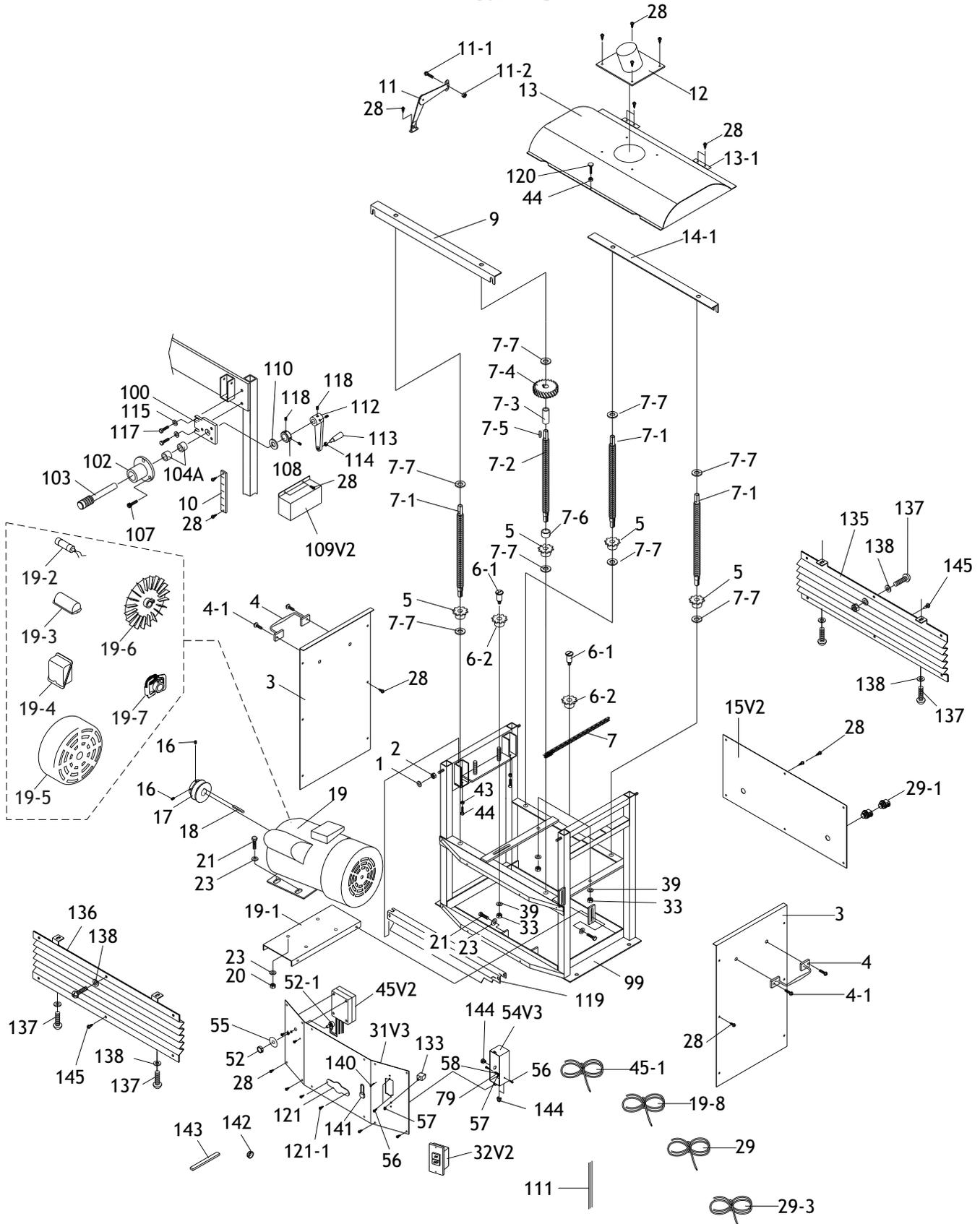
**SHOCK HAZARD!**

Disconnect power before servicing electrical parts. Touching electrified parts will result in severe burns, electrocution, or death.

SERVICE

# PARTS

## Frame

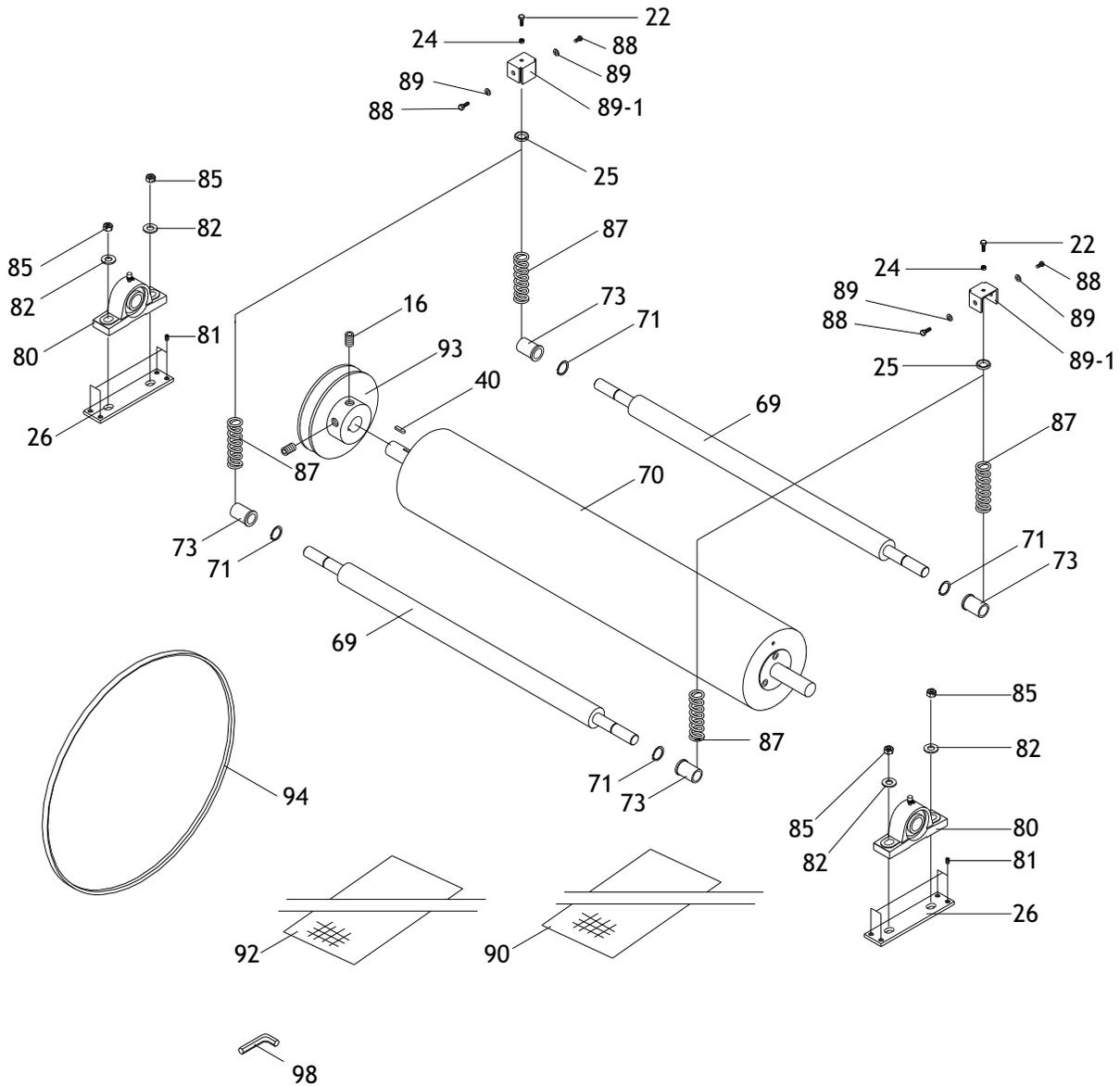


# Frame Parts List

REF	PART #	DESCRIPTION
1	XPN02	HEX NUT 5/16-18
2	XPW07	FLAT WASHER 5/16
3	X1740003	SIDE PANEL
4	X1740004	HANDLE
4-1	XPCAP09	CAP SCREW 5/16-18 X 5/8
5	X1740005	SPROCKET
6-1	X1740006-1	SPROCKET SHAFT
6-2	X1740006-2	SPROCKET
7	X1740007	ELEVATION CHAIN
7-1	X1740007-1	TABLE LIFT SCREW
7-2	X1740007-2	DRIVING TABLE LIFT SCREW
7-3	X1740007-3	BUSHING
7-4	X1740007-4	SIDE GEAR
7-5	XPK06M	KEY 5 X 5 X 10
7-6	X1740007-6	BRASS WASHER 1/2
7-7	XPW01	FLAT WASHER 1/2
9	X1740009	FRONT BRACE
10	X1740010	DEPTH SCALE
11	X1740011	RIGHT SUPPORT ARM
11-1	XPS01	PHLP HD SCR 10-24 X 1/2
11-2	XPN12	HEX NUT 6-32
12	X1740012	DUST PORT
13	X1740013	TOP COVER
13-1	X1740013-1	HINGE
14-1	X1740014-1	REAR BRACE
15V2	X1740015V2	REAR PANEL V2.01.10
16	XPSS03	SET SCREW 1/4-20 X 3/8
17	X1740017	MOTOR PULLEY
18	XPK110	KEY 1/4 X 1/4 X 1
19	X1740019	MOTOR 1.5HP 115V 1-PH
19-1	X1740019-1	MOTOR BRACKET
19-2	X1740019-2	S CAPACITOR 300M 125V 1-1/2 X 3-1/8
19-3	X1740019-3	CAPACITOR COVER
19-4	X1740019-4	MOTOR WIRING COVER
19-5	X1740019-5	FAN COVER
19-6	X1740019-6	MOTOR FAN
19-7	X1740019-7	CENTRIFUGAL SWITCH
19-8	X1740019-8	MOTOR CORD
20	XPN02	HEX NUT 5/16-18
21	XPB07	HEX BOLT 5/16-18 X 3/4
23	XPW07	FLAT WASHER 5/16
28	XPHTEK7	TAP SCREW #8 X 3/8
29	X1740029	POWER CORD 14G 3W 5-15P
29-1	X1740029-1	STRAIN RELIEF 1/2"

REF	PART #	DESCRIPTION
29-3	X1740029-3	CONTROL WIRE
31V3	X1740031V3	FRONT PANEL V3.01.13
32V2	X1740032V2	PUSH BUTTON SWITCH V2.01.10
33	XPN02	HEX NUT 5/16-18
39	XPW07	FLAT WASHER 5/16
43	XPN05	HEX NUT 1/4-20
44	XPB05	HEX BOLT 1/4-20 X 3/4
45-1	X1740045-1	VS POWER CORD
45V2	X1740045V2	PC BOARD CONSOLE UNIT V2.01.10
54V3	X1740054V3	SWITCH BOX V3.01.13
55	X1740055	SPEED INDICATOR LABEL
56	XPFS03	FLANGE SCREW 10-24 X 3/8
57	XPN07	HEX NUT 10-24
58	XPTLW02M	EXT TOOTH WASHER 5MM
99	X1740099	FRAME
100	X1740100	WORM GEAR SHAFT BRACKET
102	X1740102	SHAFT MOUNT
103	X1740103	PINION GEAR
104A	X1740104A	BUSHING
107	XPB19	HEX BOLT 1/4-20 X 1/2
108	X1740108	COLLAR
109V2	X1740109V2	GEAR COVER V2.01.13
110	X1740110	CRANK HANDLE WASHER 16MM
112	X1740112	CRANK HANDLE
113	X1740113	HANDLE
114	XPN08	HEX NUT 3/8-16
115	XPW07	FLAT WASHER 5/16
117	XPB03	HEX BOLT 5/16-18 X 1
118	XPSS11	SET SCREW 1/4-20 X 1/4
119	X1740119	DUST SCOOP
120	X1740120	KNOB 1/4-20 X 1/2
121	D3375	SHOP FOX LOGO PLATE
121-1	XPHTEK12	TAP SCREW #5 X 3/8
133	X1740133	THERMAL CIRCUIT BREAKER 20A
135	X1740135	REAR ELEVATION CHAIN GUARD
136	X1740136	FRONT ELEVATION CHAIN GUARD
137	XPS01	PHLP HD SCR 10-24 X 1/2
138	XPW03	FLAT WASHER #10
140	X1740140	PADLOCK STORAGE HOOK
141	X1740141	SWITCH PADLOCK
142	X1740142	SNAP BUSHING
143	X1740143	ADHESIVE FOAM STRIP
144	X1740144	STRAIN RELIEF 5/8" STRAIGHT SB6R-3
145	XPHTEK8	TAP SCREW #8 X 1/2

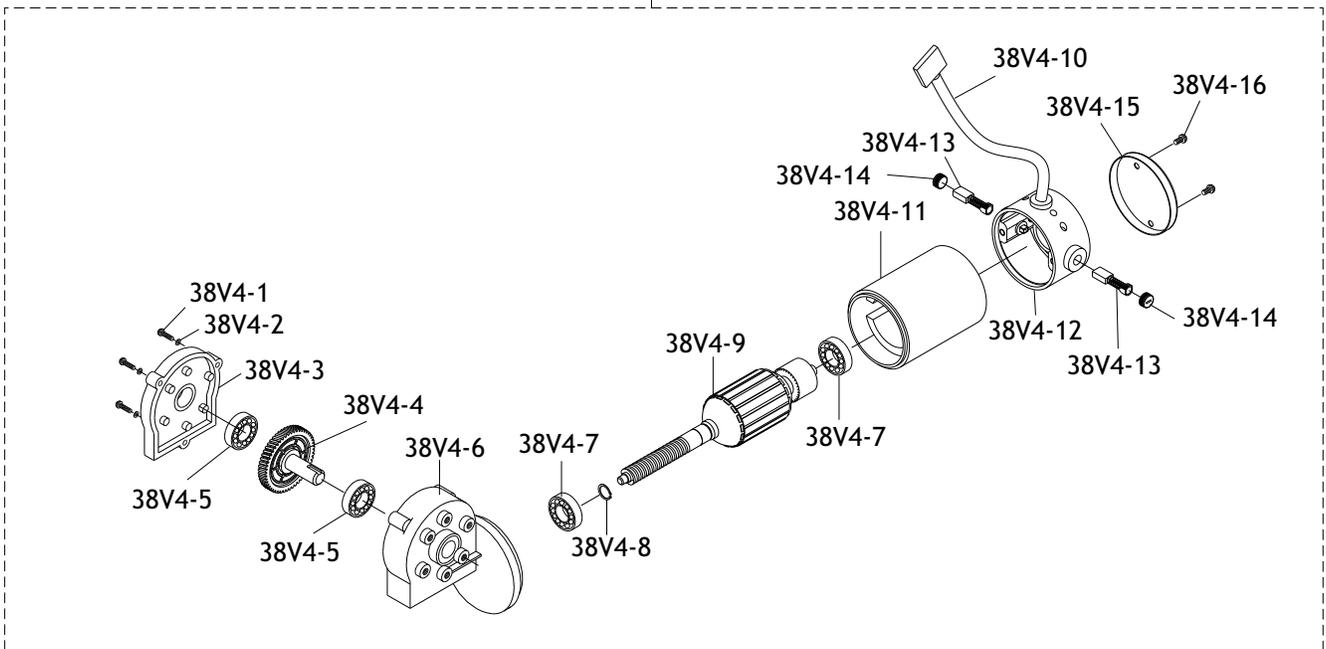
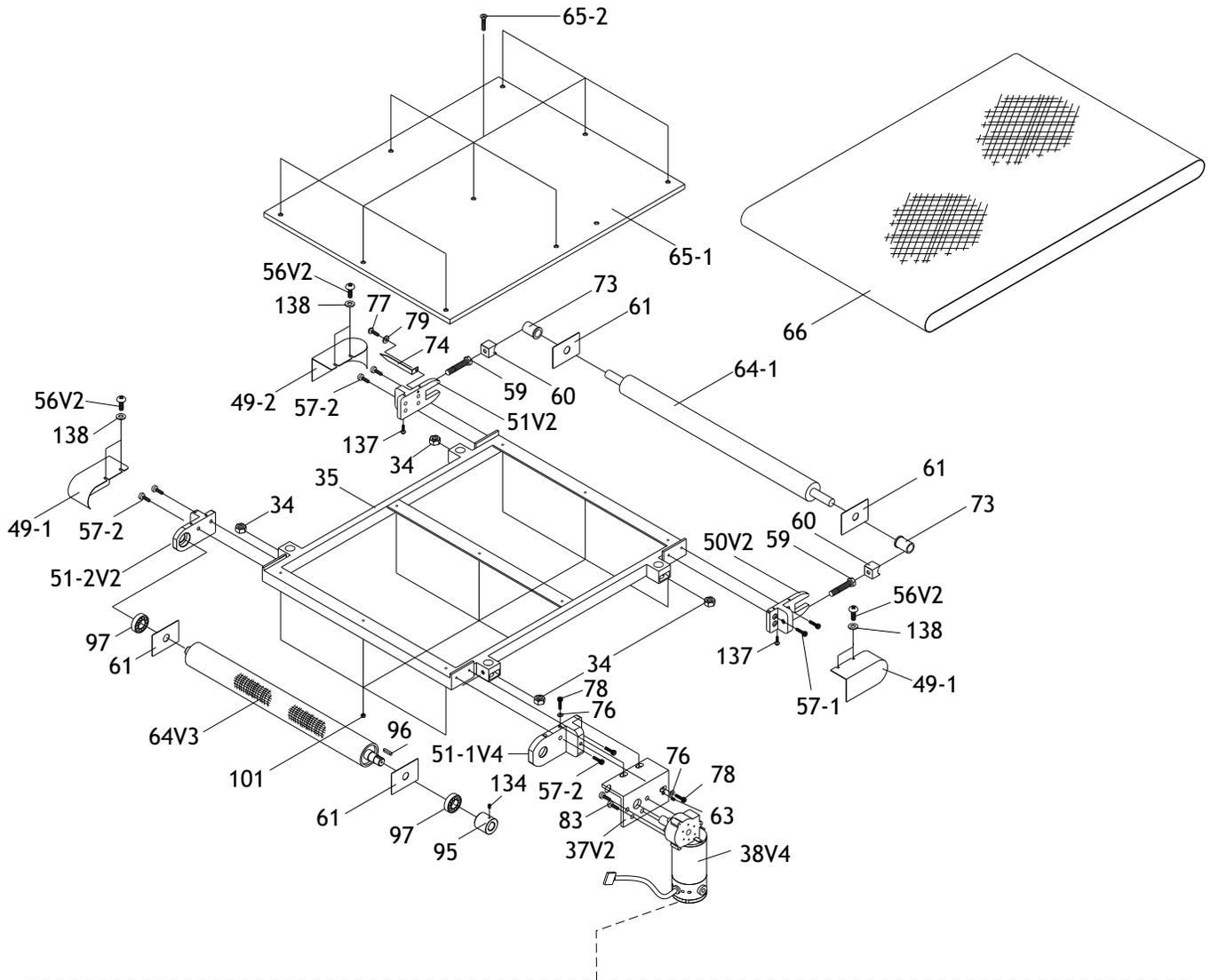
# Drum



REF	PART #	DESCRIPTION
16	XPSS03	SET SCREW 1/4-20 X 3/8
22	XPB02	HEX BOLT 1/4-20 X 5/8
24	XPN05	HEX NUT 1/4-20
25	X1740025	SPRING PLATE
26	X1740026	ADJUST PLATE
40	XPK34M	KEY 5 X 5 X 20
69	X1740069	PRESSURE ROLLER
70	X1740070	SANDING DRUM
71	XPR08M	EXT RETAINING RING 19MM
73	X1740073	BUSHING
80	X1740080	PILLOW BLOCK BEARING
81	XPSS51	SET SCREW 5/16-24 X 1/2

REF	PART #	DESCRIPTION
82	XPW02	FLAT WASHER 3/8
85	XPLN01	LOCK NUT 3/8-16
87	X1740087	COMPRESSION SPRING
88	XPB51	HEX BOLT 1/4-20 X 3/8
89	XPW06	FLAT WASHER 1/4
89-1	X1740089-1	BRACKET
90	X1740090	HOOK & LOOP SANDBELT
92	X1740092	HOOK & LOOP DRUM COVER
93	X1740093	DRUM PULLEY
94	XPVA36	V-BELT A36
98	XPWA03M	HEX WRENCH 3MM

# Conveyor



# Conveyor Parts List

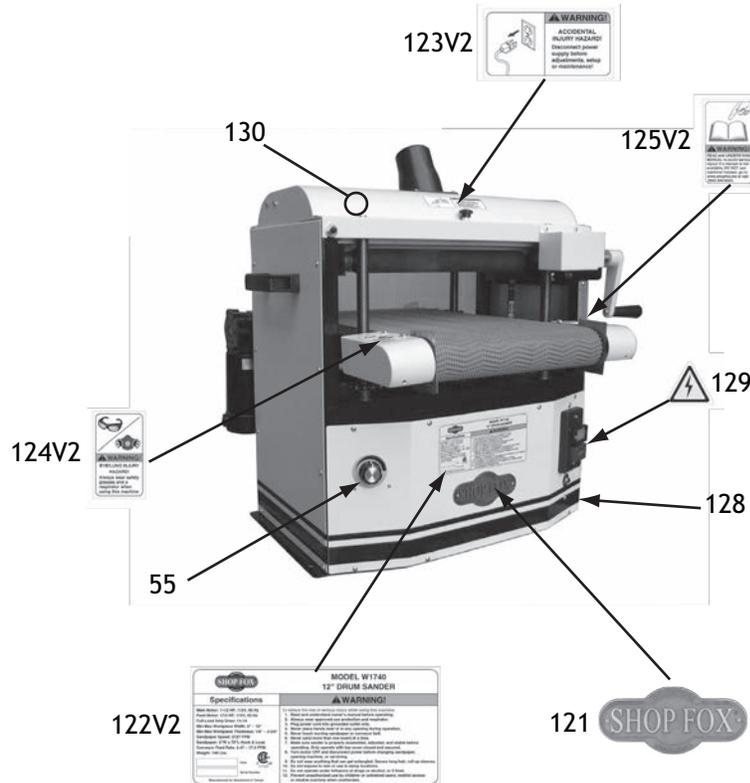
REF	PART #	DESCRIPTION
34	XPN03	HEX NUT 3/4-16
35	X1740035	TABLE FRAME
37V2	X1740037V2	CONVYR MOTOR PLATE V2.01.10
38V4	X1740038V4	DC FEED MOTOR 105W V4.01.10
38V4-1	XPS56M	PHLP HD SCR M4-.7 X 16
38V4-2	XPLW02M	LOCK WASHER 4MM
38V4-3	X1740038V4-3	END CASE V4.01.10
38V4-4	X1740038V4-4	DRIVE GEAR V4.01.10
38V4-5	XP6003ZZ	BALL BEARING 6003ZZ
38V4-6	X1740038V4-6	MAIN CASE V4.01.10
38V4-7	XP6000ZZ	BALL BEARING 6000ZZ
38V4-8	XPR06M	EXT RETAINING RING 16MM
38V4-9	X1740038V4-9	ARMATURE V4.01.10
38V4-10	X1740038V4-10	FEED MOTOR PWR CORD V4.01.10
38V4-11	X1740038V4-11	STATOR HOUSING V4.01.10
38V4-12	X1740038V4-12	MIDDLE CAP V4.01.10
38V4-13	X1740038V4-13	CARBON BRUSH V4.01.10
38V4-14	X1740038V4-14	PLASTIC LOCK SCREW V4.01.10
38V4-15	X1740038V4-15	END CAP V4.01.10
38V4-16	XPS19M	PHLP HD SCR M5-.8 X 6
49-1	X1740049-1	LFT ROLLER END GUARD COVER
49-2	X1740049-2	RT ROLLER END GUARD COVER
50V2	X1740050V2	LFT FRONT ROLLER BRACKET V2.01.13
51V2	X1740051V2	RT FRONT ROLLER BRACKET V2.01.13
51-1V4	X1740051-1V4	LFT REAR ROLLER BRCKT V4.01.13
51-2V2	X1740051-2V2	RT REAR ROLLER BRACKET V2.01.13

REF	PART #	DESCRIPTION
56V2	XPS18	PHLP HD SCR 10-24 X 1/4
57-1	XPS06	PHLP HD SCR 10-24 X 3/8
57-2	XPCAP06	CAP SCREW 1/4-20 X 1
59	X1740059	TENSION ADJUSTMENT BOLT
60	X1740060	BUSHING SUPPORT
61	X1740061	PLATE
63	XPSS11	SET SCREW 1/4-20 X 1/4
64-1	X1740064-1	IDLER ROLLER
64V3	X1740064V3	DRIVE ROLLER V3.01.10
65-1	X1740065-1	TABLE
65-2	XPFH12	FLAT HD SCR 1/4-20 X 1
66	X1740066	CONVEYOR BELT
73	X1740073	BUSHING
74	X1740074	SCALE POINTER
76	XPW06	FLAT WASHER 1/4
77	XPS06	PHLP HD SCR 10-24 X 3/8
78	XPCAP01	CAP SCREW 1/4-20 X 5/8
79	XPW03	FLAT WASHER #10
83	XPCAP28M	CAP SCREW M6-1 X 15
95	X1740095	BUSHING
96	XPK12M	KEY 5 X 5 X 30
97	XP6003-2RS	BALL BEARING 6003-2RS
101	XPLN02	LOCK NUT 1/4-20
134	XPSS11	SET SCREW 1/4-20 X 1/4
137	XPS01	PHLP HD SCR 10-24 X 1/2
138	XPW03	FLAT WASHER #10

# Labels & Cosmetics

## ⚠️ WARNING

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



REF	PART #	DESCRIPTION
55	X1740055	SPEED INDICATOR LABEL
121	D3375	SHOP FOX LOGO PLATE
122V2	X1740122V2	ID LABEL CSA V2.01.13
128	X1740128	TAPE BLACK/TAN TRIM
129	XLABEL-04	ELECTRICITY LABEL

REF	PART #	DESCRIPTION
130	XPPAINT-1	SHOP FOX WHITE TOUCH-UP PAINT
123V2	XLABEL-24B	DISCONNECT 110V LABEL 3.8W X 2H
124V2	XLABEL-06A	RESPIRATOR/GLASSES 1.5W X 2.5H
125V2	XLABEL-08A	READ MANUAL LABEL 2.8W X 1.5H



# Warranty Registration

Name \_\_\_\_\_  
 Street \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Phone # \_\_\_\_\_ Email \_\_\_\_\_ Invoice # \_\_\_\_\_  
 Model # \_\_\_\_\_ Serial # \_\_\_\_\_ Dealer Name \_\_\_\_\_ Purchase Date \_\_\_\_\_

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

1. How did you learn about us?
 

<input type="checkbox"/> Advertisement	<input type="checkbox"/> Friend	<input type="checkbox"/> Local Store
<input type="checkbox"/> Mail Order Catalog	<input type="checkbox"/> Website	<input type="checkbox"/> Other:
  
2. How long have you been a woodworker/metalworker?
 

<input type="checkbox"/> 0-2 Years	<input type="checkbox"/> 2-8 Years	<input type="checkbox"/> 8-20 Years	<input type="checkbox"/> 20+ Years
------------------------------------	------------------------------------	-------------------------------------	------------------------------------
  
3. How many of your machines or tools are Shop Fox?
 

<input type="checkbox"/> 0-2	<input type="checkbox"/> 3-5	<input type="checkbox"/> 6-9	<input type="checkbox"/> 10+
------------------------------	------------------------------	------------------------------	------------------------------
  
4. Do you think your machine represents a good value?
 

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------
  
5. Would you recommend Shop Fox products to a friend?
 

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------
  
6. What is your age group?
 

<input type="checkbox"/> 20-29	<input type="checkbox"/> 30-39	<input type="checkbox"/> 40-49
<input type="checkbox"/> 50-59	<input type="checkbox"/> 60-69	<input type="checkbox"/> 70+
  
7. What is your annual household income?
 

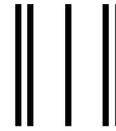
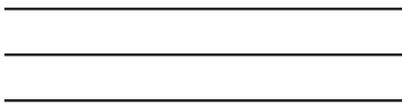
<input type="checkbox"/> \$20,000-\$29,000	<input type="checkbox"/> \$30,000-\$39,000	<input type="checkbox"/> \$40,000-\$49,000
<input type="checkbox"/> \$50,000-\$59,000	<input type="checkbox"/> \$60,000-\$69,000	<input type="checkbox"/> \$70,000+
  
8. Which of the following magazines do you subscribe to?
 

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

9. Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE



Place  
Stamp  
Here



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



FOLD ALONG DOTTED LINE

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

# WARRANTY

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

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

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

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



## High Quality Machines and Tools

Woodstock International, Inc. carries thousands of products designed to meet the needs of today's woodworkers and metalworkers.

Ask your dealer about these fine products:

**BROSENA**  
PRECISION STOP BLOCK

**JOINTER PAL**<sup>®</sup>

**Rotacator**<sup>®</sup>

**THE REBEL**<sup>®</sup>

**DURASTICK**<sup>®</sup>

**Gutmann**<sup>®</sup>

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**PLANER PAL**<sup>®</sup>

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**PRO-STIK**<sup>®</sup>  
ABRASIVE BELT & DISC CLEANER

**ACCU-SHARP**<sup>®</sup>

*Aluma-Classic*<sup>®</sup>



**STEELEX**<sup>®</sup>  
FINE TOOLS

**STEELEX**<sup>®</sup>  
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