



# MODEL W1766 1/2 HP POWER FEEDER



## OWNER'S MANUAL

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.



## **WARNING!**

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

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

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

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



## **WARNING!**

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

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

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

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# INTRODUCTION

## Woodstock Technical Support

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

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

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

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

Woodstock International, Inc.  
Attn: Technical Documentation Manager  
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Bellingham, WA 98227  
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# MACHINE SPECIFICATIONS



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

## MODEL W1766 1/2 HP POWER FEEDER

### Motor

Type .....	TEFC Capacitor Start Induction
Horsepower .....	1/2 HP
Voltage .....	220V
Prewired .....	220V
Phase .....	Single
Amps .....	5.5A
Speed .....	1725 RPM
Cycle .....	60 Hz
Number of Speeds .....	1
Power Transfer .....	Gear Box
Bearings .....	Lubricated for Life

### Main Specifications

#### Operation Info

Minimum Workpiece Length .....	6 in.
Number of Feed Speeds .....	4
Feed Speeds .....	9.5, 15, 25, 38 FPM
Swing .....	360 deg.
Vertical Movement .....	10-1/4 in.
Horizontal Movement .....	16-3/8 in.
Rotation .....	Forward, Reverse

#### Roller Info

Number of Rollers .....	3
Roller Width .....	2 in.
Roller Diameter .....	4 in.
Roller Suspension Travel .....	15/16 in.
Maximum Height of Rollers .....	7-7/8 in.
Distance Between Rollers .....	4-3/4 in.

### Overall Dimensions

Weight .....	104 lbs.
Length/Width/Height .....	45 x 18 x 28-1/2 in.
Column Diameter .....	1-1/2 in.

### Construction Materials

Roller Construction .....	Synthetic Rubber
Housing Construction .....	Cast Aluminum
Supports Construction .....	Cast Iron
Column Construction .....	Steel
Paint .....	Epoxy



Shipping Dimensions

Carton #1

Type ..... Cardboard
Content ..... Machine
Weight ..... 70 lbs.
Length/Width/Height..... 20 x 11 x 19 in.

Carton #2

Type ..... Cardboard
Content ..... Stand
Weight ..... 48 lbs.
Length/Width/Height..... 30 x 11 x 9 in.

Electrical

Switch ..... Forward/Reverse Barrel
Switch Voltage ..... 220V
Cord Length..... 9 ft.
Cord Gauge ..... 18 gauge
Recommended Breaker Size ..... 10 amp
Included Plug ..... No

Other

ISO Factory ..... ISO 9001
Country of Origin ..... Taiwan
Warranty ..... 2 Years
Assembly Time ..... 45 minutes

Optional Accessories

Extra Roller ..... Model D3872

Features

- Spring Tensioned Rollers
Heavy-Duty Gear Reduction Gearbox with Hardened Gears
Universal Positioning with Handle Locks

# Controls and Features

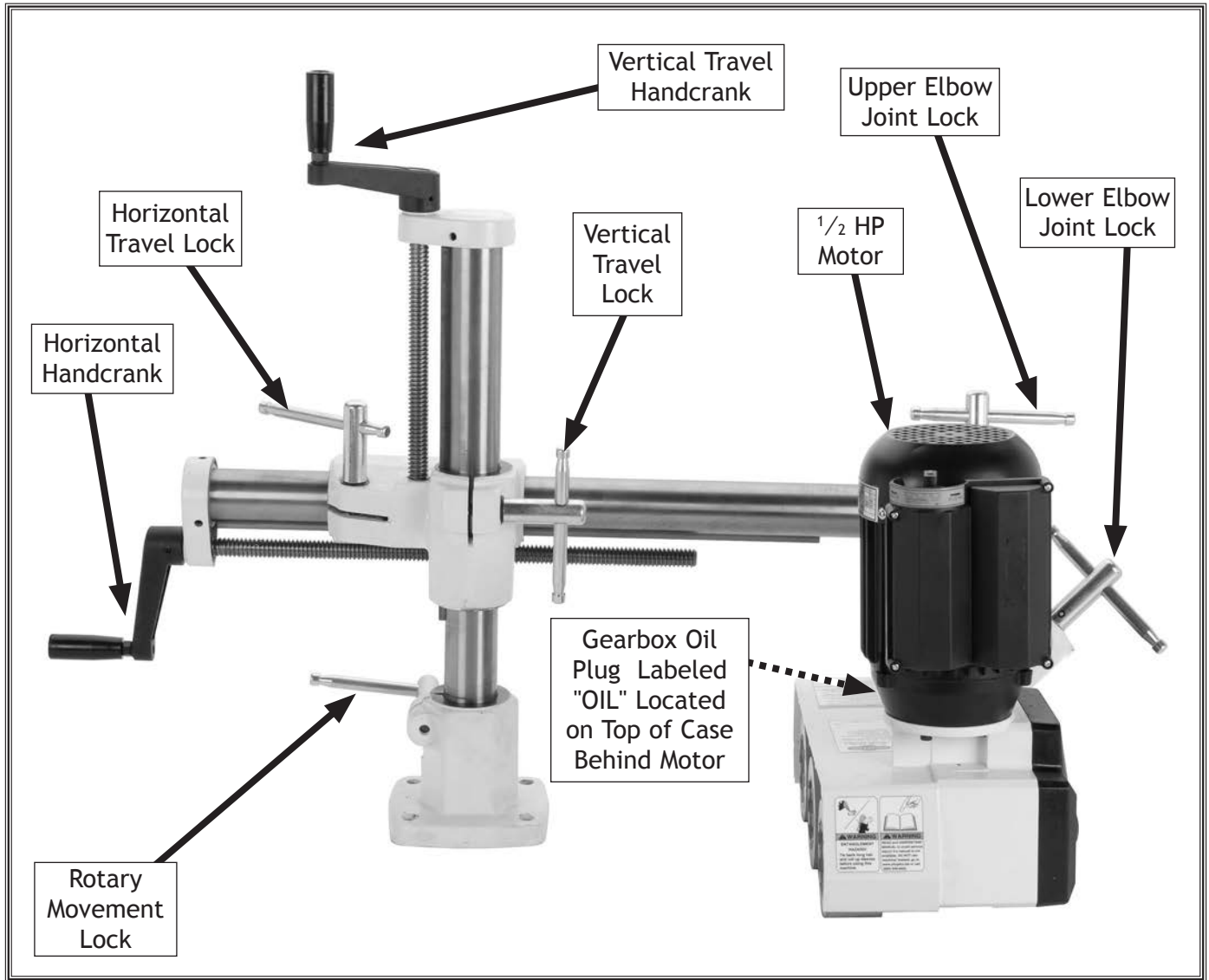


Figure 1. Controls and Features.

# SAFETY

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



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, and/or a situation that may cause damage to the machinery.

## Standard Safety Instructions


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



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

# Additional Safety for Power Feeders

SAFETY



**⚠️ 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!

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

1. **SAFETY ACCESSORIES.** Always use appropriate machine guards.
2. **TOOL SPEED.** Make sure all cutting tools are rotating at the operating speed before feeding the workpiece.
3. **FEEDING SPEED.** **DO NOT** overload the cutting tool by feeding too quickly. The cutting tool will perform better and be safer working at the rate for which it was designed.
4. **HAND SAFETY.** Keep hands away from rotating parts on the feeder and the cutting tool. Do not allow hands or clothing to be pinched between the rollers and workpiece.
5. **WORKPIECE SUPPORT.** **DO NOT** feed long workpieces without providing adequate support at the outfeed end of the table.
6. **STOPPING FEEDER.** Always stop the feeder before stopping the cutting tool.
7. **ADJUSTMENTS.** Disconnect the feeder from its power source before cleaning, repairing, or making adjustments.
8. **EXPERIENCING DIFFICULTIES.** If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact Tech Support at (360) 734-3482.
9. **MACHINE MANUAL.** This manual only covers the power feeder. It is not a replacement for the manual that came with the machine on which the power feeder is mounted. Make sure to read that manual also for correct operation instructions and safety precautions.

# ELECTRICAL

**⚠️ 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 in the "Test Run" portion of this manual.

## 220V Operation

The Model W1766 is wired for 220V operation. We recommend connecting this machine to a dedicated circuit with a verified ground, using the circuit size below as a minimum. Never replace a circuit breaker with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes.

This machine must be grounded! The electrical cord supplied with this machine comes with a grounding pin. If your outlet does not accommodate a ground pin, have it replaced by a qualified electrician.

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

## Extension Cords

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

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

## Electrical Specifications

Operating Voltage	Amp Draw	Min. Circuit Size	Plug/Receptacle	Extension Cord
220V Operation	5.5 Amps	15A	NEMA 6-15	14 Gauge

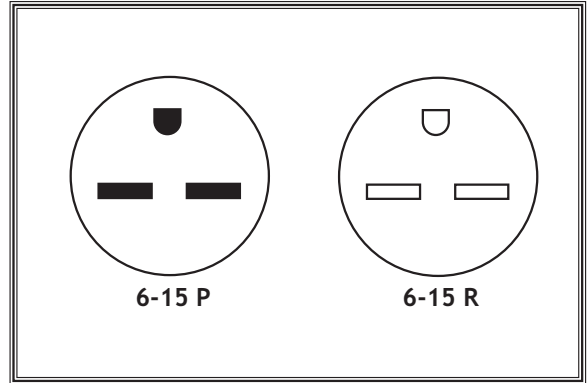


Figure 2. 6-15 plug and receptacle.

**⚠️ WARNING**

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

ELECTRICAL

# SETUP

## Unpacking

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

## Inventory

The following is a description of the main components shipped with the Model W1766. 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 (Figures 3 & 4)	Qty
A. Power Feeder Assembly .....	1
B. Extra 26 and 34-Tooth Gears (Behind Cover) .....	1 Ea
C. Elbow Joint Assembly .....	1
D. Base and Column Assembly .....	1
E. Horizontal Crank and Leadscrew Assembly.....	1
F. Base Bolt Pattern Template.....	1
G. Pointed Set Screws M8-1.25 x 12 .....	3
H. Hex Wrench 4mm.....	1
I. Handwheel Handles .....	2
J. Flat Washer 13mm.....	1
K. T-Handle .....	1
L. Horizontal Column Assembly.....	1

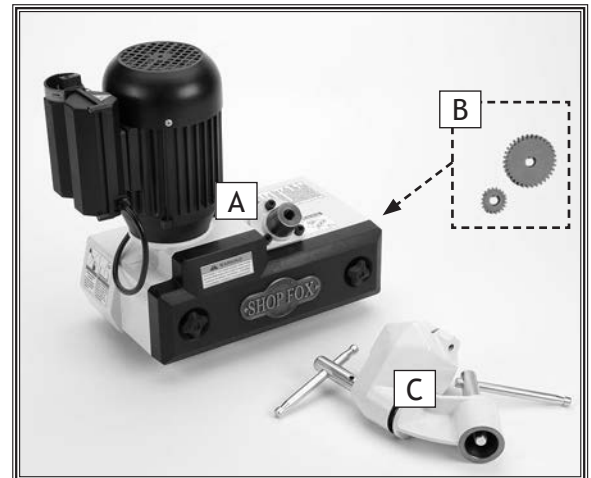
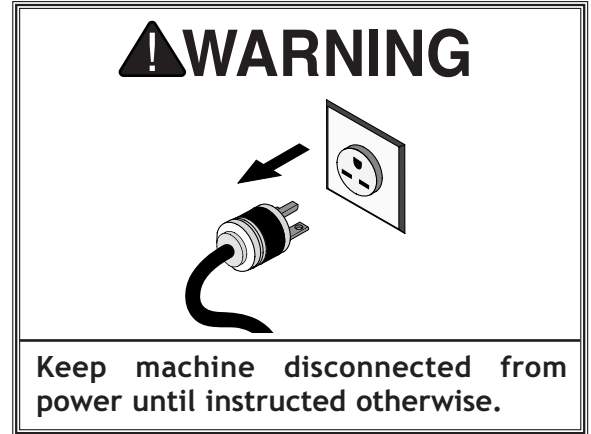


Figure 3. Inventory.

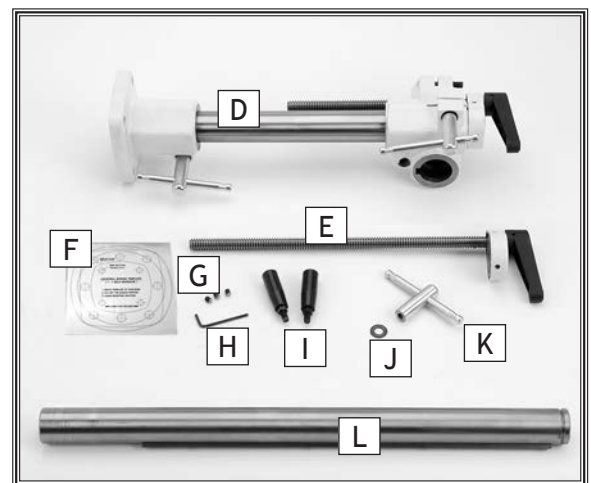


Figure 4. Inventory.

SETUP

# Machine Placement

- **Table Load:** This power feeder distributes a heavy load in a small footprint. Some machine table tops may require additional bracing or clamps for correct support.
- **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 power feeder.
- **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.

	<p><b>⚠ CAUTION</b>  <b>MAKE SURE</b> your shop is "child safe." Ensure that your workplace is inaccessible to children by closing and locking all entrances when you are away. <b>NEVER</b> allow untrained visitors in your shop when assembling, adjusting or operating equipment.</p>
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# Cleaning Machine

Some unpainted parts of your power feeder may be coated with oil or a waxy grease that protects them from corrosion during shipment. Clean this oil or 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.

	<p><b>⚠ WARNING</b>  <b>NEVER</b> use gasoline or other petroleum-based solvents to clean with. Most have low flash points, which make them extremely flammable. A risk of explosion and burning exists if these products are used. Serious personal injury may occur if this warning is ignored!</p>
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	<p><b>⚠ CAUTION</b>  <b>ALWAYS</b> 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 <b>DO NOT</b> create fire or environmental hazards.</p>
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SETUP

# Assembly

To correctly position this power feeder on your table top, first gather the stand parts shown in **Figure 5** and assemble the power feeder stand (refer to the parts diagram for any intricate details). Next, connect the stand to the power feeder as shown in **Figure 6**, and then refer to **Base Mounting** on **Page 14**. With your power feeder unit completely assembled, it will be easier for you to determine where on the table top to drill your base mounting holes, so you can take advantage of the full range of power feeder swing and adjustments.

## WARNING

You **MUST** assemble all guards, fences, and holdowns before starting your machine or power feeder. Failure to heed this warning could result in serious personal injury.



Figure 5. Item layout.



Figure 6. Assembled power feeder.

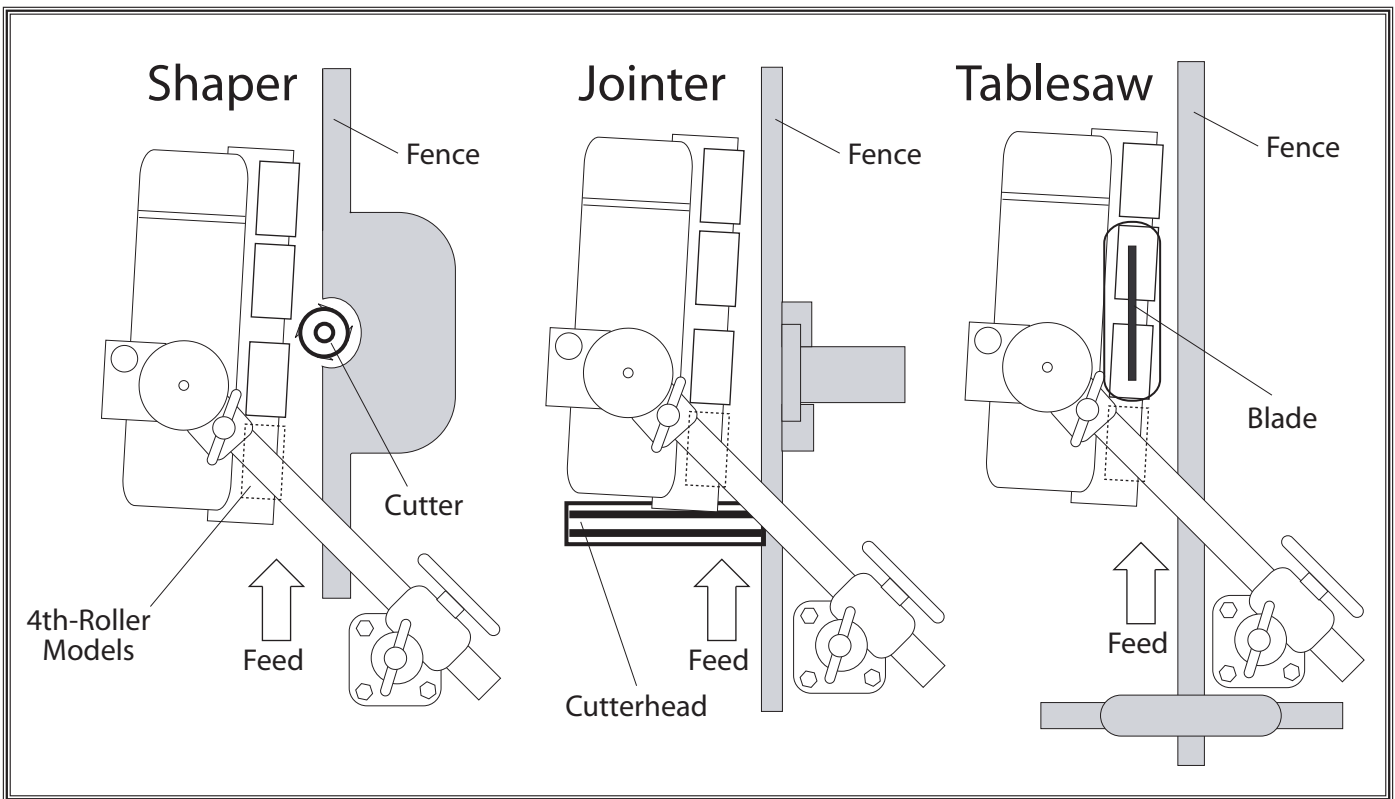
## Base Mounting

Assemble the power feeder before you mount the base to determine where on the table top to drill your base mounting holes, so you can maximize power feeder swing and adjustment options.

There are two mounting options available, **Through Bolt Mounting** and **Direct Mounting** options discussed on **Page 14**. Choose an option that suits your requirements.

Your final goal is to be able to use the handwheels and lock levers to position the power feeder wheels so they are parallel with the table surface, and  $\frac{1}{8}$ " lower than the thickness of your workpiece.

Also, you must be able to adjust the power feeder so it points towards the machine fence slightly (see **Figure 8**). In other words, the tracking of the power feeder must be **toed-in** approximately  $1^\circ$  to  $1.5^\circ$  degrees toward the machine fence, so the power feeder wheels push the workpiece against the fence slightly during cutting operations.



**Figure 8.** Typical power feed mounting on a shaper, jointer, and tablesaw.

Continued on next page



## Through-Bolt Mounting

We recommend that you mount your new power feeder to the machine table with through bolts, nuts and washers (Figure 9). This option will give the most rigidity and clamping strength to prevent the feeder base from twisting out of alignment during use. However, if any under-table support webs interfere with washer or nut locations under the table, you will have to use an optional clamping kit, or drill and thread holes directly into the table as described in the **Direct Mount Option** paragraph below.

## Direct Mounting

You may choose to use the included mounting template and drill and tap your table, so the power feeder base can be directly mounted to the table surface (Figure 10). But make sure that the machine cast-iron table is no less than 3/8" thick where the threaded holes are drilled and tapped. If the table is any thinner, you run the risk of having shallow and weak threads that will allow the bolts to loosen as the power feeder is used. Thread locking compound will not cure this problem. Do not drill and tap into any table support webs or table supports to compensate for a thin table, or you will weaken the table and possibly cause cracking. Revert to the **Through-Bolt Option** if the table is too thin or if support webbing is in the way. In any case, make sure to use an automotive-grade liquid thread locking compound on all threads.

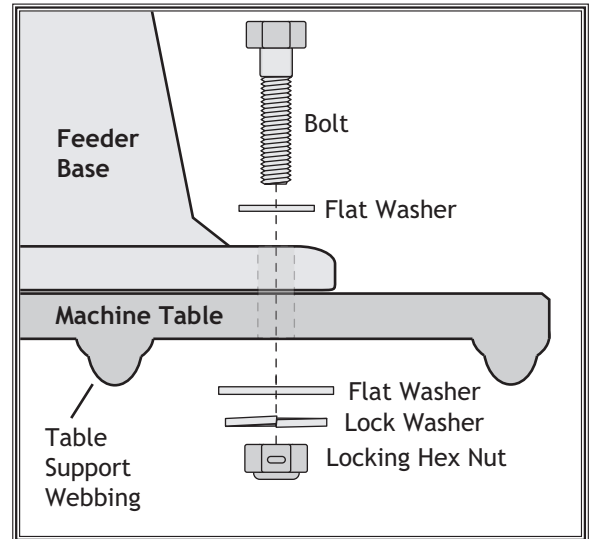


Figure 9. Through-bolt mounting.

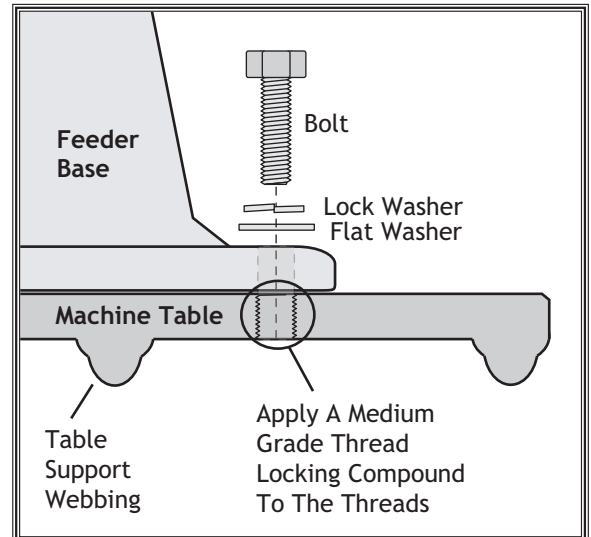


Figure 10. Direct mounting.



## Test Run

Once power feeder assembly is complete and mounted on the table, you must test run your power feeder 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 power feeder immediately, then review the **Troubleshooting** table on **Page 21**.

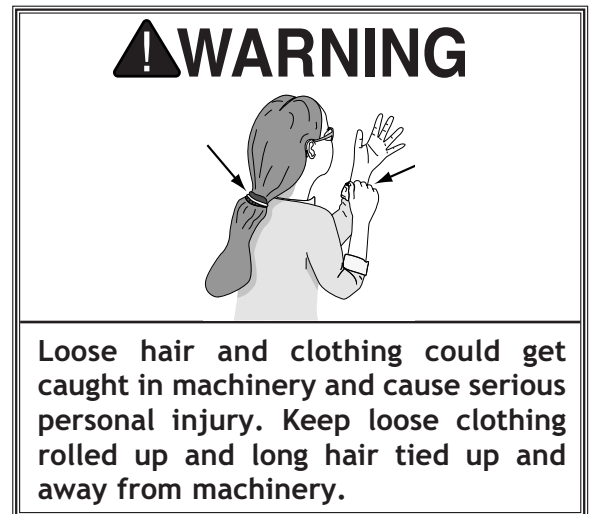
If you still cannot remedy a problem, contact our Technical Support at (360) 734-3482 for assistance.

To test run the power feeder, do these steps:

1. Make sure you understand the safety instructions at the beginning of the manual, and verify that the power feeder is adjusted and is setup properly.
2. Make sure that the power feeder gearbox oil level is full. The oil level should be 1" below the oil fill port.

**Note:** See **Figure 1** on **Page 5** for oil fill port location.

3. Ensure that all tools and objects used during set up are cleared away from the machine.
4. Adjust and lock the power feeder so the wheels are held approximately one inch above the table and nothing will interfere with wheel rotation.
5. Connect the power feeder to the power supply and use the feed direction switch (**Figure 11**) to test operation in both **FOR** and **REV** directions.
  - Listen and watch for abnormal noises or vibrations. The power feeder should run smoothly.
  - Correct for any unusual noises or vibrations before operating the power feeder any further. Always disconnect the power feeder from power when investigating or correcting potential problems.
6. Turn the feed direction switch to **OFF**.



**Figure 11.** Feed direction switch.

# 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 experience difficulties performing any operation, stop using the machine!**

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

### Basic Use and Care

Power feeders reduce kickback hazards and improve cutting results by feeding in a consistent and stable manner. Remember, do not to stand in the path of potential kickback. When not in use, support the power feeder with a wooden block so the rubber wheels are raised above the table and do not compress from the weight of the power feeder.

The lock levers and the handcranks on this power feeder allow you to adjust the power feeder tracking and height to accommodate many workpiece sizes. Before loosening any lock lever, always support the power feeder with a block of wood, so the power feeder does not drop and cause damage.

Adjust the power feeder so it is toed-in approximately 1° to 1.5° degrees towards the machine fence. This adjustment will ensure that the power feeder wheels slightly push the workpiece against the fence during cutting operations (see **Figure 8**).

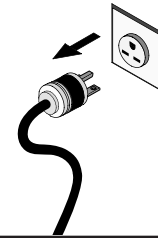
Next, adjust the power feeder so the rubber feeder wheels are parallel with the table surface, and are 1/8" lower than the thickness of your workpiece. This adjustment ensures that the workpiece will not slip or hang in the middle of a cut. Always double check that the power feeder wheels are slightly lower than the workpiece before you begin feeding operations. Otherwise, the workpiece may slip and kickback.

### ! WARNING



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

### ! WARNING



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

### ! WARNING



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

## Changing Feed Speed

Your power feeder has the option to feed a workpiece at four different feed rates: 9.5, 15, 25, and 38 feet per minute. These rates are achieved by changing the combination of change gears in the power feeder gear box.

To change the feed rate of your power feeder, do these steps:

1. DISCONNECT THE POWER FEEDER FROM POWER!
2. Make sure the speed dial is pointing to the *OFF* position.
3. Refer to the feed rate chart on the inside of the chain cover (**Figure 12**) to find the gear combination required for your chosen feed rate.

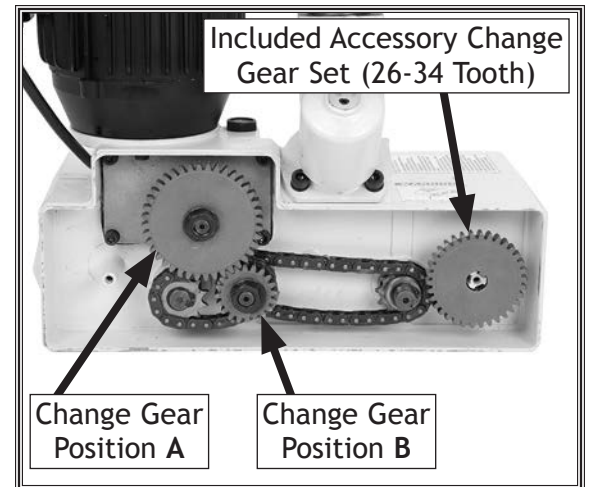
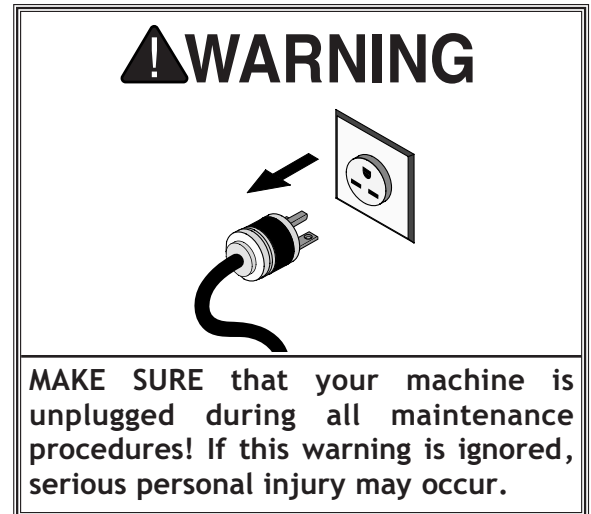
Installed Change Gears:

- A, 20 Tooth + B, 40 Tooth = 9.5 Ft (2.9 M)/Per Min
- A, 40 Tooth + B, 20 Tooth = 15 Ft (4.6 M)/Per Min

Included Accessory Change Gears:

- A, 26 Tooth + B, 34 Tooth = 25 Ft (7.6 M)/Per Min
- A, 34 Tooth + B, 26 Tooth = 38 Ft (11.6 M)/Per Min

4. Remove the chain cover and the two 14mm hex nuts securing the position A & B change gears to the shafts.
5. Swap the required gears in positions A & B shown in **Figure 12**.
6. Reinstall the hex nuts and the chain cover.



**Figure 12.** Change gear locations.

# ACCESSORIES

## Power Feeder Accessories

The following power feeder 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: 1-800-545-8420 or at [sales@woodstockint.com](mailto:sales@woodstockint.com).

The **Model D3872 Extra Roller** adds insurance against downtime should a workpiece damage a wheel, or after long use the wheel tire wears out. These wheels can be replace in a few minutes.



# MAINTENANCE

## General

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

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

- Loose mounting bolts and damaged wheel rubber.
- Worn or damaged, switch, cord, and plug.
- Any other condition that could hamper the safe operation of this power feeder.

## Cleaning

- Frequently blow-off sawdust with compressed air. This is especially important for the internal working parts and motor. Dust build-up around the motor is a sure way to decrease its life span.
- If the wheels become loaded up with pitch, oil, or other residues, wipe them clean using a clean rag and a mild solvent. Avoid touching the plastic or paint with mineral spirits or you may damage the surfaces.

## Lubrication

- To prevent surface rust and binding, periodically clean and oil all lock lever and lead screw threads with a light machine oil.
- After the first month or 200 hours of use, change the gearbox oil with 4.5 fluid ounces of an automotive grade 80-90W gear oil. For the remaining life of the power feeder, change the oil every 6 months or 1000 hours of use. **Note:** To drain the unit, remove the fill plug labeled "OIL" (Figure 14) and invert the power feeder.
- Every 40 hours of use, or once every two weeks, wipe clean and lubricate the wheel grease fittings (Figure 13) with one pump of a grease gun filled with automotive grade GL-2 grease.
- To prevent rust and binding, paint the sprockets, chain, and change gears (Figure 14) with a light film of an automotive grade GL-2 grade grease.

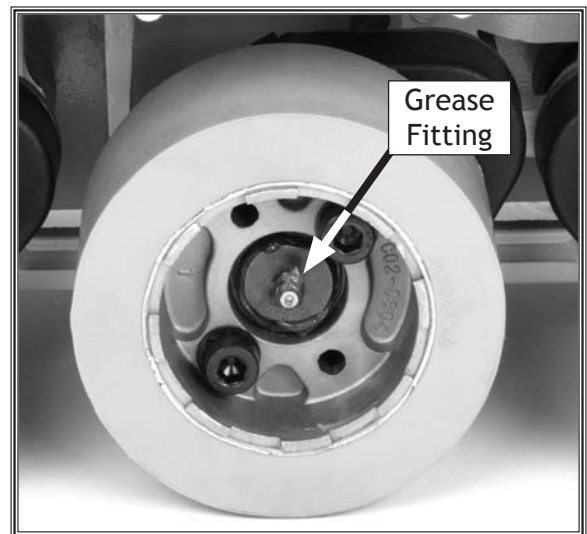
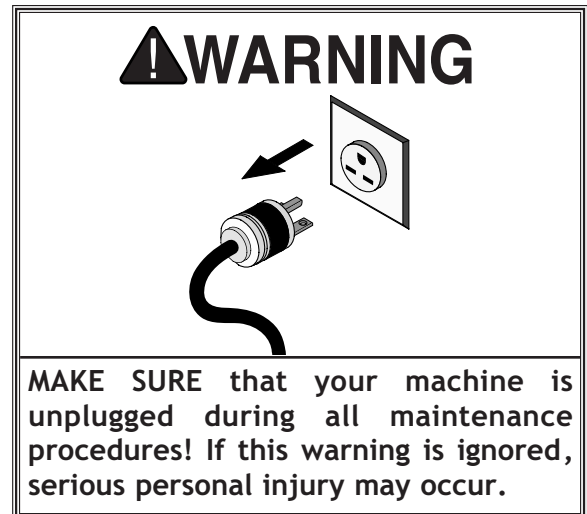


Figure 13. Wheel lubrication.

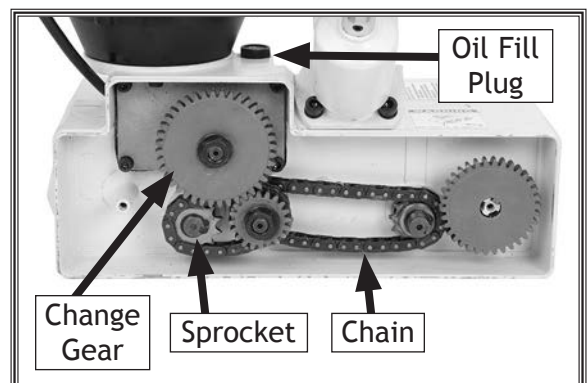


Figure 14. Sprockets, chain, and change gears

# 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).

## Wheel Replacement

If you damage one or more wheels, you can easily replace the wheels.

To replace a wheel, do these steps:

1. DISCONNECT THE POWER FEEDER FROM POWER!
2. Using a 5mm hex wrench, remove the two wheel retaining cap screws (Figure 15).
3. Swap the old wheel with the new.
4. Reinstall the two cap screws, and tighten in an alternating pattern until the wheel is not loose.

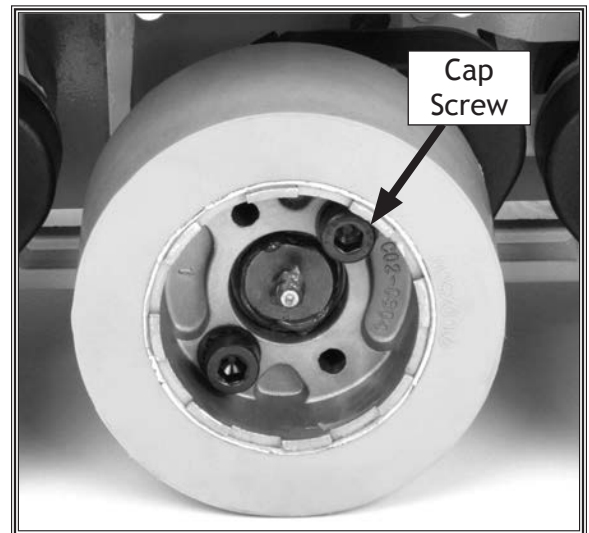
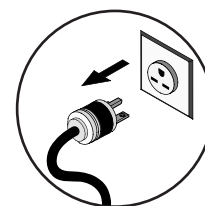


Figure 15. Wheel replacement.



# Troubleshooting



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

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Motor will not start.	<ol style="list-style-type: none"> <li>1. Low voltage.</li> <li>2. Open circuit in motor or loose connections.</li> <li>3. Faulty start capacitor.</li> <li>4. Faulty motor switch.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check power supply for proper voltage.</li> <li>2. Inspect all lead connections on motor and magnetic switch for loose or open connections.</li> <li>3. Replace start capacitor.</li> <li>4. Replace switch.</li> </ol>
Fuses or circuit breakers trip open.	<ol style="list-style-type: none"> <li>1. Short circuit in line cord or plug.</li> <li>2. Short circuit in motor or loose connections.</li> <li>3. Incorrect fuses or circuit breakers in power supply.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inspect cord or plug for damaged insulation and shorted wires and replace extension cord.</li> <li>2. Inspect all connections on motor for loose or shorted terminals or worn insulation.</li> <li>3. Install correct fuses or circuit breakers.</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 power feeder feed rate.</li> <li>2. Clean out motor fan cover to provide normal air circulation.</li> </ol>
Workpiece jams when feeding under rollers.	<ol style="list-style-type: none"> <li>1. Rollers set too low.</li> <li>2. Feeder at wrong angle.</li> </ol>	<ol style="list-style-type: none"> <li>1. Raise feeder.</li> <li>2. Adjust angle.</li> </ol>
Workpiece slips while passing beneath rollers.	<ol style="list-style-type: none"> <li>1. Rollers positioned too high, no traction.</li> <li>2. Feeding too fast, cutter overloads.</li> <li>3. Rollers are dirty or oily.</li> <li>4. Worn roller(s).</li> </ol>	<ol style="list-style-type: none"> <li>1. Lower feeder.</li> <li>2. Slow feed speed.</li> <li>3. Clean roller surface with a mild solvent or mineral spirit.</li> <li>4. Replace roller(s).</li> </ol>
Workpiece is burnt.	<ol style="list-style-type: none"> <li>1. Wrong feed speed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust feed speed.</li> </ol>
Rough finish or chipped grain on workpiece.	<ol style="list-style-type: none"> <li>1. Feed speed too fast.</li> <li>2. Dull cutter or blade.</li> <li>3. Power feeder angle is not toed in as to keep workpiece against the fence.</li> </ol>	<ol style="list-style-type: none"> <li>1. Slow speed.</li> <li>2. Replace with sharp cutter or blade.</li> <li>3. Adjust power feeder so it is toed-in 1° to 1.5° degrees.</li> </ol>
Fuzzy grain occurs when planing or moulding.	<ol style="list-style-type: none"> <li>1. Lumber has high moisture content.</li> <li>2. Dull knives.</li> </ol>	<ol style="list-style-type: none"> <li>1. If moisture content is higher than 20%, sticker and allow to dry.</li> <li>2. Sharpen or replace knives.</li> </ol>
Workpiece hangs and does not enter the machine.	<ol style="list-style-type: none"> <li>1. Power feeder rollers is incorrect.</li> </ol>	<ol style="list-style-type: none"> <li>1. Lower the power feeder 1/8" lower than the height of the workpiece.</li> </ol>

# Electrical



## Model W1766 Power Feeder Wiring Diagram

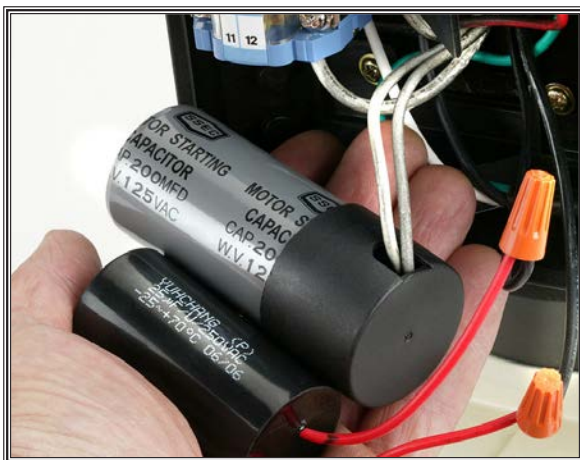
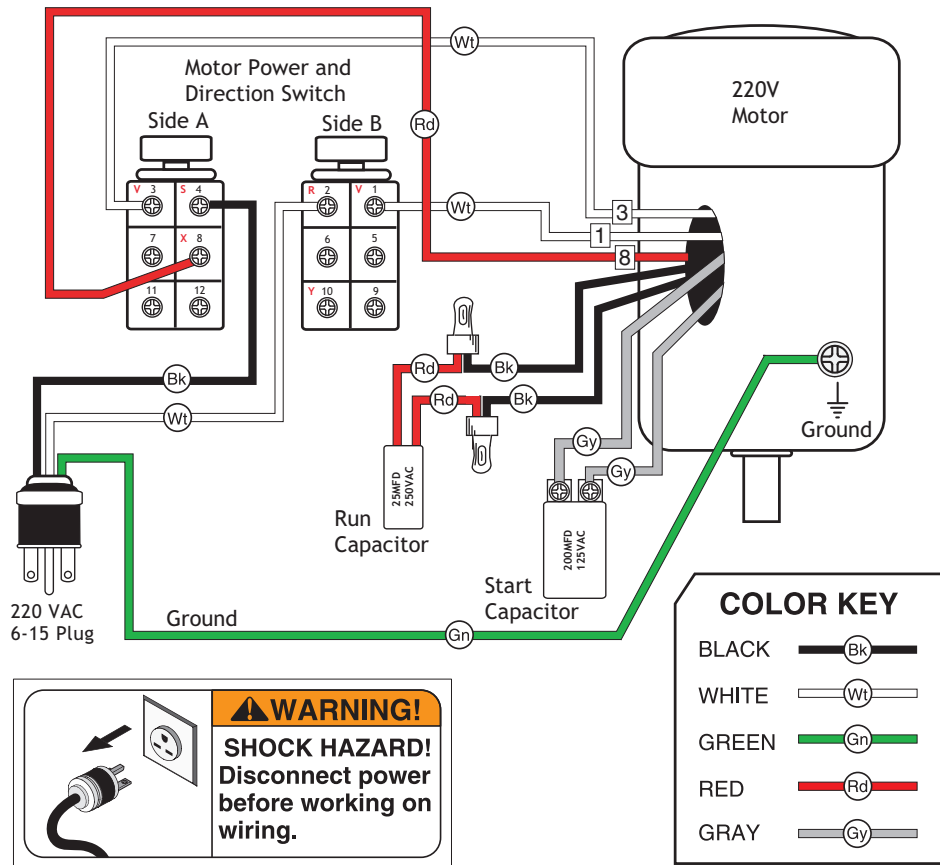


Figure 16. Motor capacitor.



Figure 17. Motor power and direction switch.

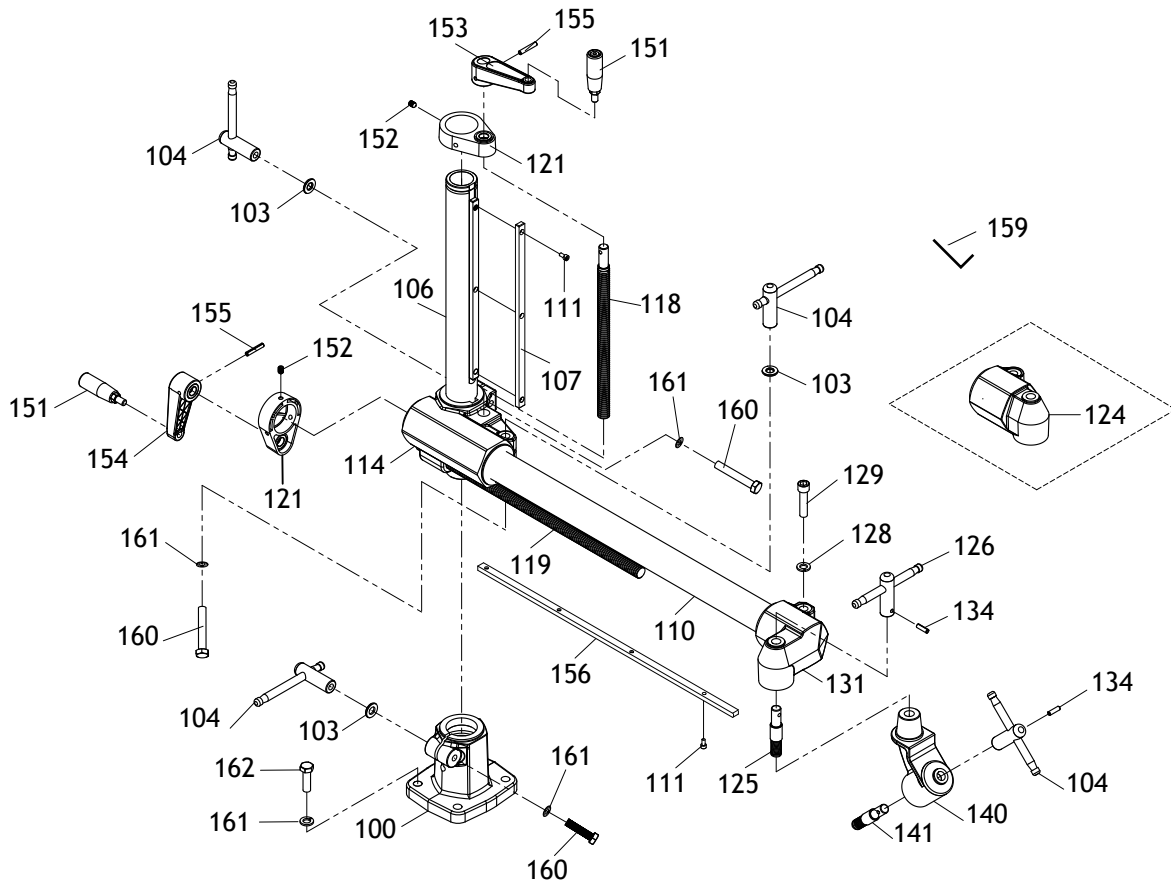




REF	PART #	DESCRIPTION
1	X1766001	COVER
3	X1766003	CONE
4	X1766004	LOCK WASHER 8MM
5	X1766005	CAP SCREW M8-1.25 X 25
7	X1766007	SPROCKET
8	X1766008	SPROCKET
9	X1766009	SPACER COLLAR
10	X1766010	CHAIN (36S)
11	X1766011	CHAIN (22S)
13	X1766013	WORM GEAR SHAFT
14	X1766014	WORM GEAR
15	X1766015	KEY 6 X 6 X 12
16	X1766016	FLAT WASHER 12MM
17	X1766017	HEX NUT M12-1.75
18	X1766018	KNOB
20	X1766020	OIL SEAL
21	X1766021	COVER
22	X1766022	OIL SEAL
23	X1766023	CAP SCREW M6-1 X 16
25	X1766025	GEAR (20T)
26	X1766026	GEAR (40T)
27	X1766027	GREASE FITTING M6-1 STRAIGHT
28	X1766028	SPROCKET CASE
29	X1766029	TORSION SPRING 3.5 x 100
33	X1766033	GEAR (34T)
34	X1766034	GEAR (26T)
35	X1766035	ROLLER
36	X1766036	OIL CAP
37	X1766037	SEAL
38	X1766038	MOTOR (1/2 HP/WORM SHAFT DRVE)
38-1	X1766038-1	START CAPACITOR 200MFD/125VAC
38-2	X1766038-2	RUN CAPACITOR 25MFD/250VAC
38-3	X1766038-3	FAN COVER
38-4	X1766038-4	FAN

REF	PART #	DESCRIPTION
44	X1766044	GREASE FITTING M6-1 STRAIGHT
45	X1766045	SPROCKET CASE
46	X1766046	TORSION SPRING 3.5 X 100
47	X1766047	CASE COVER
51	X1766051	ROLLER BASE
52	X1766052	SPROCKET
53	X1766053	LOCK WASHER 5MM
54	X1766054	CAP SCREW M5-.8 X 16
55	X1766055	LOCK WASHER 8MM
56	X1766056	CAP SCREW M8-1.25 X 25
58	X1766058	CHAIN-22S
60	X1766060	TUBE
61	X1766061	EXT RETAINING RING 24MM
63	X1766063	SPROCKET SHAFT
64	X1766064	EXT RETAINING RING 13MM
66	X1766066	SPROCKET SHAFT
67	X1766067	FLAT WASHER 12MM
68	X1766068	HEX NUT M12-1.75
70	X1766070	GREASE FITTING M6-1 STRAIGHT
71V2	X1766071V2	ROLLER SPINDLE V2.06.14
72	X1766072	FLAT WASHER 12MM
73	X1766073	HEX NUT M12-1.75
75	X1766075	CASE
76	X1766076	BUSHING
77	X1766077	SET SCREW M6-1 X 10
78	X1766078	ELECTRICAL BOX WITH SWITCH
78-1	X1766078-1	ELECTRICAL BOX COVER
79	X1766079	BALL BEARING 6203
80	X1766080	HEX BOLT M6-1 X 20
81	X1766081	FLAT WASHER 6MM
82	X1766082	HEX BOLT M12-1.75 X 50
83	X1766083	EXT RETAINING RING 17MM
84	X1766085	SPACER

# Stand



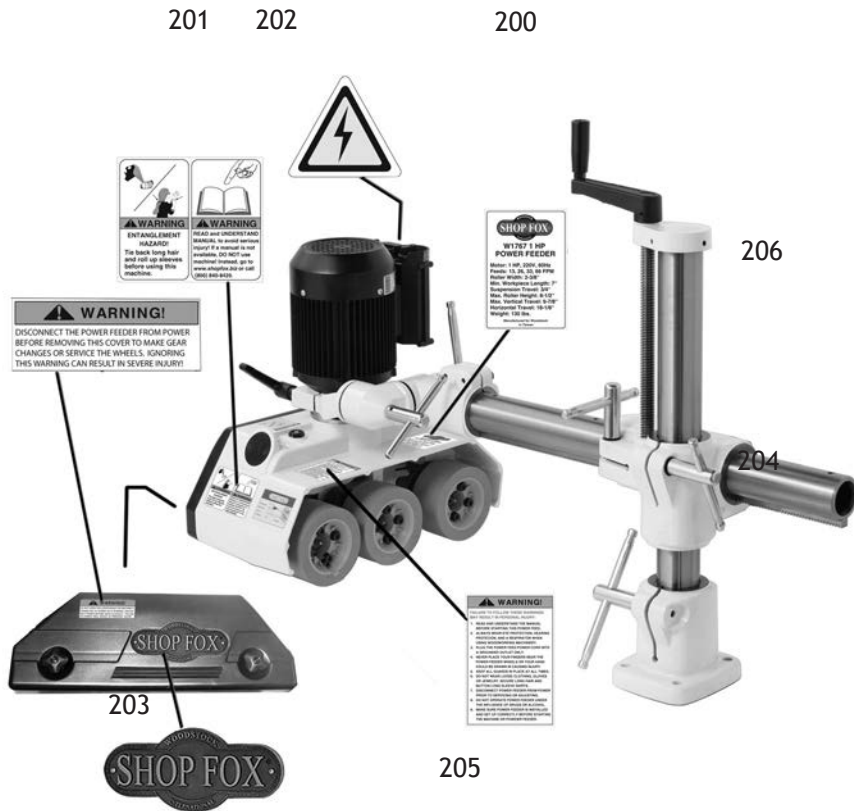
REF	PART #	DESCRIPTION
100	X1766100	COLUMN BASE
102	X1766102	STUD M12-1.75 X 70
103	X1766103	FLAT WASHER 12MM
104	X1766104	T-HANDLE
106	X1766106	VERTICAL COLUMN
107	X1766107	GUIDE
110	X1766110	HORIZONTAL TUBE
111	X1766111	CAP SCREW M5-.8 X 10
114	X1766114	ELEVATING BRACKET
115	X1766115	STUD M12-1.75 X 70
118	X1766118	VERTICAL LEAD SCREW
119	X1766119	HORIZONTAL LEAD SCREW
121	X1766121	COLUMN CAP
124	X1766124	OVER ARM CONE
125	X1766125	LOCK STUD
126	X1766126	T-HANDLE

REF	PART #	DESCRIPTION
128	X1766128	FLAT WASHER 12MM
129	X1766129	CAP SCREW M12-1.75 X 50
131	X1766131	HORIZONTAL TUBE CONE
134	X1766134	ROLL PIN 6 X 22
140	X1766140	SWIVEL CONE
141	X1766141	LOCK STUD
151	X1766151	HANDLE
152	X1766152	POINTED SET SCREW M8-1.25 x 12
153	X1766153	CRANK ARM
154	X1766154	CRANK ARM
155	X1766155	ROLL PIN 6 X 40
156	X1766156	GUIDE
159	X1766159	HEX WRENCH 4MM
160	X1766160	HEX BOLT M12-1.75 X 70
161	X1766161	LOCK WASHER 12MM
162	X1766162	HEX BOLT M12-1.75 X 50

# Label Placement

## ⚠️ WARNING

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



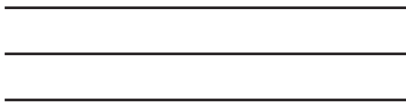
SERVICE

REF	PART #	DESCRIPTION
200	X1766200	DATA LABEL (W1766)
201	X1766201	ENTANGLEMENT LABEL
202	X1766202	READ MANUAL LABEL
203	X1766203	GENERAL WARNING LABEL

REF	PART #	DESCRIPTION
204	X1766204	COVER LABEL
205	X1766205	SHOP FOX LOGO PLATE
206	XLABEL-045	ELECTRICITY WARNING LABEL



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.

