

# **MODEL W1754 20" PLANER WITH MOBILE BASE**



# **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/equipment.

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

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

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



## **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

Your new **SHOP FOX®** 20" Planer With Mobile Base 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:

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# MACHINE SPECIFICATIONS



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

## MODEL W1754 20" PLANER WITH MOBILE BASE

### Motor

Type .....	TEFC Capacitor-Start Induction
Horsepower.....	5 HP
Phase .....	Single
Voltage .....	220V
Amps.....	30A
Cycle .....	60 Hertz
RPM .....	3450 RPM
Switch .....	Magnetic With Thermal Overload Protector
Power Transfer .....	Triple V-Belt Drive
Bearings.....	Sealed & Lubricated Ball Bearings

### Capacities

Maximum Depth of Cut .....	1/8"
Maximum Width of Cut .....	20"
Maximum Cutting Height.....	8"
Minimum Stock Thickness .....	3/16"
Minimum Stock Length .....	8"
Table Movement Per Handwheel Revolution.....	0.059"
Cutterhead Diameter .....	3 1/8"
Cutterhead Speed .....	5000 RPM
Cuts per Minute.....	20,000
Number of Cutterhead Knives.....	4
Cutterhead Knife Size .....	20" x 1" x 1/8"
Feed Rates.....	16 FPM & 20 FPM

### Overall Dimensions

Table Size .....	21 1/2" x 25 3/4"
Table Size including Wings.....	21 1/8" x 55 1/2"
Overall Height .....	45 7/8"
Overall Depth .....	55 1/2"
Overall Width .....	43 1/2"
Shipping Weight .....	860 lbs.
Net Weight .....	771 lbs.
Crate Size.....	42" L x 29" W x 48" H
Footprint.....	23 1/2" x 29 1/2"

### Construction

Table .....	Precision-Ground Cast Iron
Power Feed Rollers .....	Solid Serrated Steel
Stand .....	Formed Steel

### Features

- Two Positive Table Locks
- 5" Dust Port
- Chip Breaker & Pressure Bar

## Controls and Features

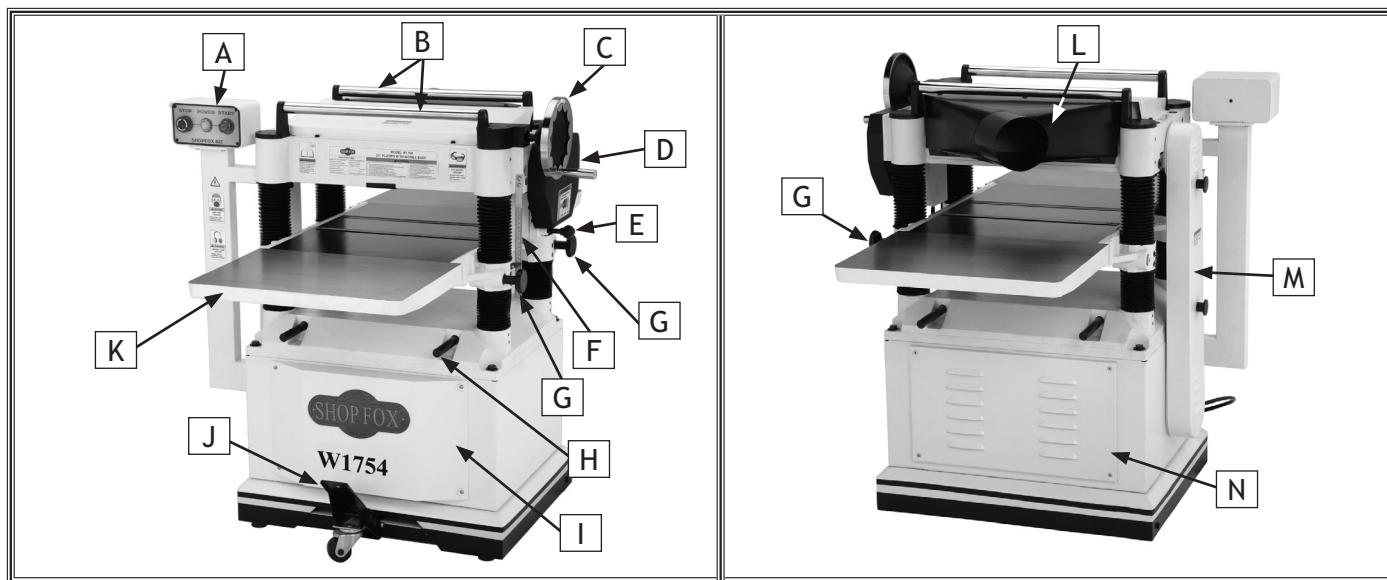


Figure 1. W1754 controls and features.

- A. Control Box and Panel
- B. Return Rollers
- C. Table Height Handwheel
- D. Gearbox
- E. Speed Control Knob
- F. Table Height Scale
- G. Table Locks
- H. Lifting Bar
- I. Front Access Panel
- J. Foot Pedal
- K. Extension Wing
- L. Dust Hood
- M. V-belt cover
- N. Motor and Magnetic Switch Access Panel

# SAFETY

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

## **DANGER**

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

## **WARNING**

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

## **CAUTION**

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

## **NOTICE**

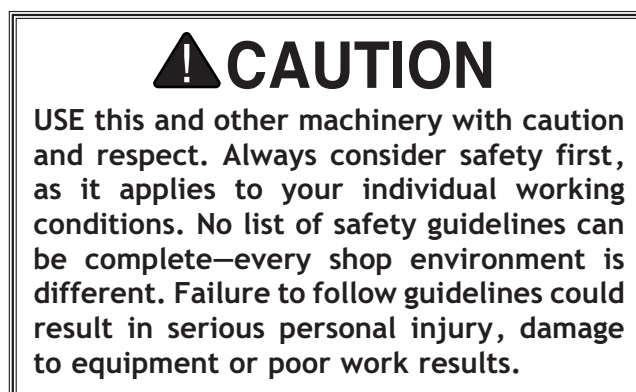
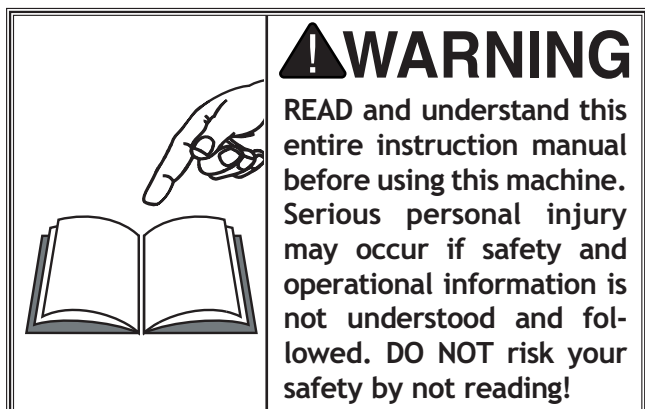
This symbol is used to alert the user to useful information about proper operation of the equipment, and/or a situation that may cause damage to the machinery.

## Standard Safety Instructions

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

10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power off and allow all moving parts to come to a complete stop before leaving machine unattended.
11. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.
12. **KEEP WORK AREA CLEAN AND WELL LIT.** Clutter and dark shadows may cause accidents.
13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Undersized cords over-heat 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 BEFORE OPERATING MACHINERY.**
25. **BE AWARE THAT CERTAIN DUST MAY BE HAZARDOUS** to the respiratory systems of people and animals, especially fine dust. Make sure you know the hazards associated with the type of dust you will be exposed to and always wear a respirator approved for that type of dust.

# Additional Safety Instructions for Planers



1. **INFEED CLEARANCE SAFETY:** The infeed roller is designed to pull material into the cutterhead. Always keep hands, clothing, and long hair away from the infeed roller during operation to prevent serious injury.
2. **BODY POSITION WHILE OPERATING:** The workpiece may kick out during operation. To avoid getting hit, stand to the side of the planer during the entire operation.
3. **PLANING CORRECT MATERIAL:** Planing materials not designed for this planer creates a hazard for yourself and the machine. Only plane natural wood stock with this planer. **DO NOT** plane MDF, plywood, laminates, or other synthetic or man-made products.
4. **GRAIN DIRECTION:** Planing across the grain is hard on the planer and may cause the workpiece to kick out. Always plane in the same direction or at a slight angle with the wood grain.
5. **CLEAN STOCK:** Only plane clean stock. Planing stock with nails, staples, or imbedded stone will damage your cutters, and may cause a fire hazard if the dust collector captures sparks or hot particles that have contacted the cutters. Always thoroughly inspect and prepare stock to avoid these hazards.
6. **MACHINE LIMITATIONS:** The planer may kick out a workpiece at you or you can damage it if it is pushed beyond these limits:
  - Maximum Depth of Cut:  $\frac{1}{8}$ "
  - Minimum Board Length: 8"
  - Minimum Board Thickness:  $\frac{3}{16}$ "
  - Maximum # of Boards at One Time: 1
7. **LOOKING INSIDE PLANER:** Wood chips fly around inside the planer at a high rate of speed. **DO NOT** look inside the planer or remove guards/covers during operation.
8. **REMOVING JAMMED WORKPIECES:** Attempting to remove jammed workpieces while the planer is running may cause serious injury to the operator. Always stop the planer and disconnect power before removing jams.
9. **DULL/DAMAGED CUTTERS:** The planer may kick out a workpiece at the operator or give poor finish results if it is operated with dull or damaged cutters.
10. **UNPLUGGING DURING ADJUSTMENTS:** When connected to power, the planer can be accidentally turned **ON**. Always disconnect power when servicing or adjusting the components of the planer.

# ELECTRICAL

## 220V Operation

The Model W1754 is wired for 220V single-phase operation.

This machine must be hardwired to a locking shutoff switch by a qualified electrician. Since hardwiring involves a permanent installation with conduit runs, this task can only be safely accomplished by a qualified electrician. As always, observe all applicable electrical codes when connecting this machine to power.

This machine must be grounded! Verify the ground before connecting this machine to the power source.

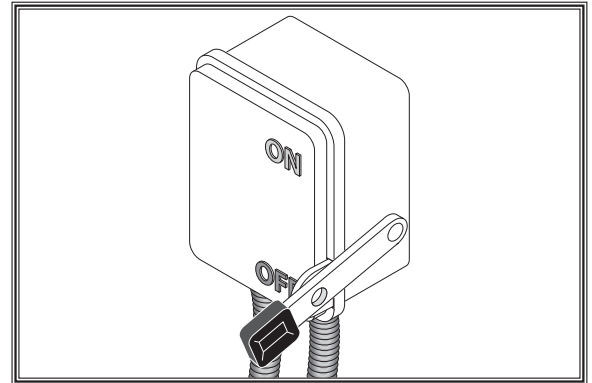
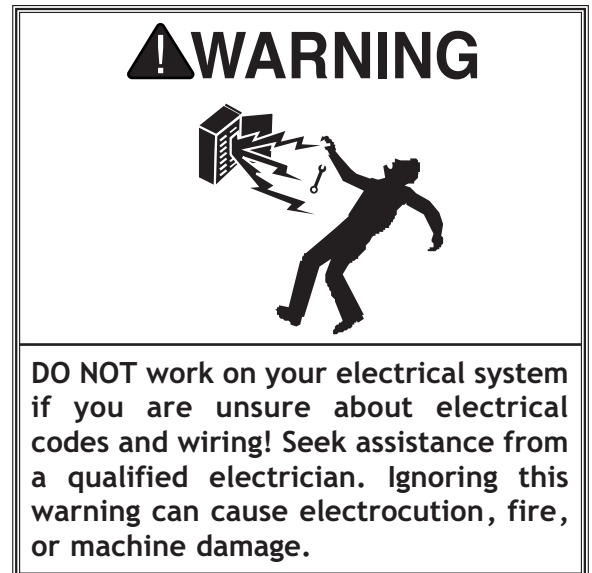


Figure 2. Locking shutoff switch.



## Electrical Specifications

Voltage	Amp Draw	Min. Circuit Size	Connection	Cord	Extension Cord
220V	30A	40A	Hardwire	Conduit Setup	N/A (Hardwire Only)

# SETUP

## Unpacking

The **SHOP FOX®** Model W1754 has been carefully packaged for safe transporting. If you notice the machine has been damaged, please contact your authorized **SHOP FOX®** dealer immediately.

If any parts are missing, examine the packaging for the missing parts. For any missing parts, find the part number in the back of this manual and contact Woodstock International, Inc. at (360) 734-3482 or at [tech-support@shopfox.biz](mailto:tech-support@shopfox.biz)

## Items Needed for Setup

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

- Safety Glasses (for each person).....1
- Solvent Cleaner .....1
- Shop Rags for Cleaning ..... As Needed
- Extra Person for Lifting Help .....1
- Fork Lift.....1
- Straightedge (see **Page 12**).....1
- Phillips Screwdriver #2 .....1

## Inventory

The following is a description of the main components shipped with the **SHOP FOX®** Model W1754. Lay the components out to inventory them.

**Note:** Some parts and hardware may already be installed on the machine. Make sure to check the machine when you use this inventory list.

Box Inventory (Figure 3)	Qty
A. Planer Unit .....	1
B. Dust Hood.....	1
C. Table Extension Wings.....	2
D. Handwheel.....	1
E. Foot Lifting Lever .....	1
F. Caster .....	1
G. Knife Gauge .....	1

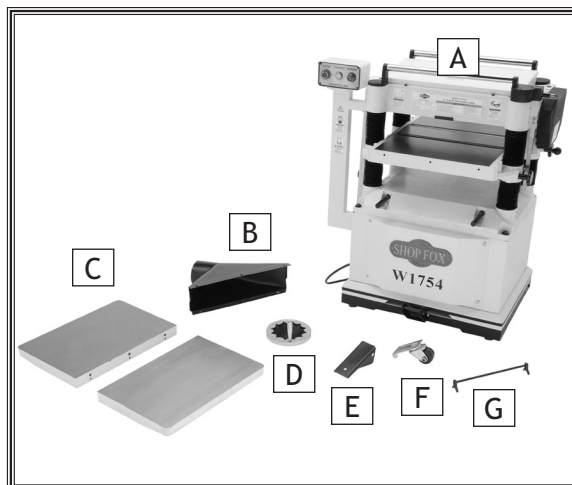
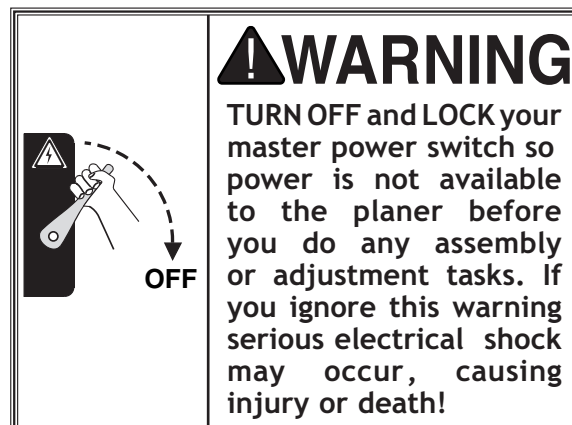
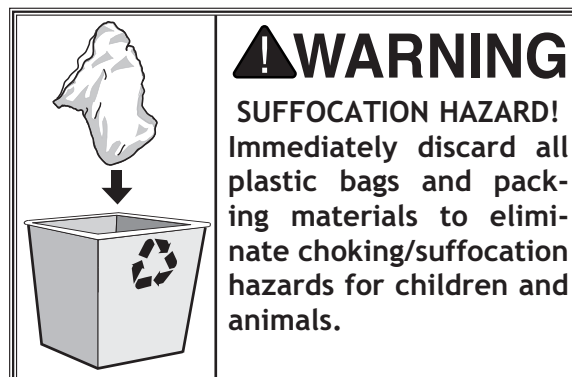


Figure 3. Planer box inventory.



### Hardware and Tools (Not Shown)

- Hex Wrenches 3, 4, 5, 6mm.....4
- Wrenches 8/10, 12/14, 17/19mm .....3
- Set Screws M8-1.25 x 20 (Wings).....6
- Hex Bolts M8-1.25 x 35 (Wings) .....6
- Flat Washers 8mm (Wings).....6
- Lock Washers 6mm (Wings).....6
- Handwheel Bushing (Handwheel) .....1
- Handwheel Handle (Handwheel).....1
- Hex Nut M12-1.75 (Handwheel) ..... 1
- Flat Washer 12mm (Handwheel) .....1
- Key 4 x 4 x 20mm (Handwheel) .....1
- Flange Bolts M6-1 x 12 (Dust Hood) .....6

## Machine Placement

- **Floor Load:** This machine distributes a heavy load in a small footprint. Some 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 planer.
- **Lighting:** Lighting should be bright enough to eliminate shadow and prevent eye strain.

## Lifting Planer

The cabinet stand on the Model W1754 is equipped with lifting bars to lift and place the planer.

Before lifting the planer, remove the shipping brace. We recommend placing shop rags or cardboard between the forks and cabinet base so you do not scratch the paint.

**Figure 4** shows an example of a typical planer being lifted correctly with a forklift by the lifting bars.



# CAUTION



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



**Figure 4.** Example of planer being lifted using forklift.





# WARNING

**USE** power lifting equipment to lift this planer. Otherwise, serious personal injury may occur.



## Cleaning Machine

The table and other unpainted parts of your planer 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.

These items are coated and must be cleaned:

1. Cutterhead
2. Table
3. Feed Rollers
4. Extension Wings and Wing Mounting Surfaces

### 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.

### WARNING



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

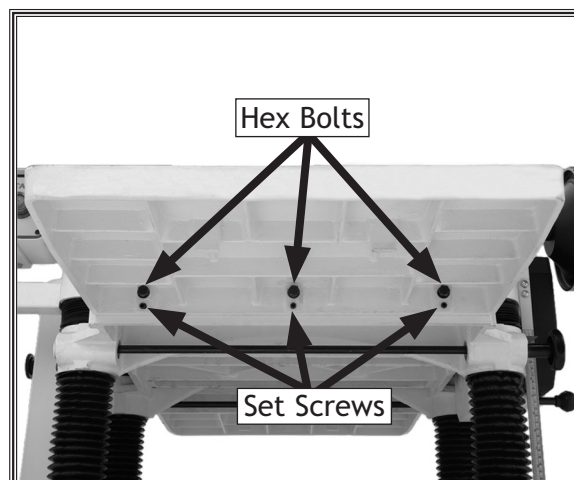
## Extension Wings

### CAUTION

Extension wings are heavy and could cause personal injury if dropped during installation. Have an assistant hold the table while you fasten it to the planer.

To attach the table extension wings, do these steps:

1. Install the M8-1.25 x 20 set screws in the holes in the bottom of the wings (**Figure 5**).
2. With the help of an assistant, attach the table extension wings to the planer table (**Figure 5**) with the M8-1.25 x 35 hex bolts. Finger tighten the bolts for now.
3. Check table-to-extension wing alignment (**Figure 6**) with a straightedge and adjust the leveling set screws until the table and wings are flush.
4. Tighten the hex bolts.



**Figure 5.** Extension wing fasteners and leveling controls.



**Figure 6.** Example of leveling extension wings and table.

# Handwheel, Dust Hood & Caster

To install the handwheel, do these steps:

1. Place the bushing on the handwheel shaft.
2. Insert the 4 x 4 x 20 key into the shaft keyway.
3. Thread the handle into the handwheel.
4. Place the handwheel on the shaft and secure it with the M12-1.75 hex nut and flat washer, as shown in Figure 7.



Figure 7. Installing handwheel on shaft.

## CAUTION

During the next step, you **MUST** connect your planer to a dust collection system. Accumulated wood chips could cause a malfunction, resulting in personal injury or damage to the planer.

To install the dust hood, do these steps:

1. Put on gloves and adjust the gap between the edge of the chip deflector and knife edge to  $\frac{1}{4}$ ".
2. Attach the dust hood to the planer with six M6-1 x 12 flange bolts as shown in Figure 8.
3. Attach the dust hood to the dust collector.

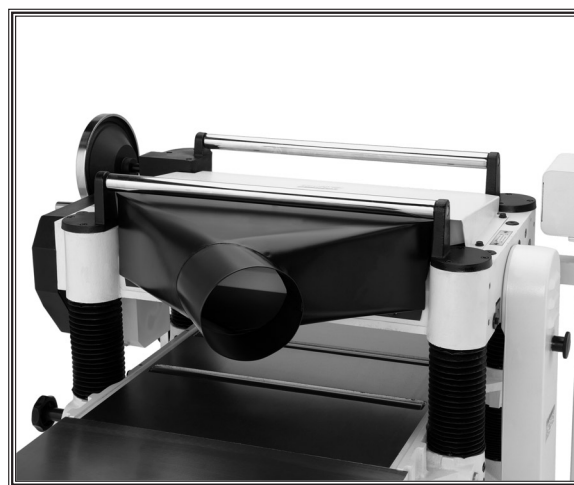


Figure 8. Dust hood attached.

**Note:** To maximize work results and minimize clogging, chipout, etc., use a dust collector with a minimum of 600 CFM at the planer dust port.

To install the caster and foot pedal, do these steps:

1. Remove the pin and hex bolt that are already mounted in the foot pedal bracket.
2. Align the caster with the mounting holes in the foot pedal bracket.
3. Insert the hex bolt removed in **Step 1** into the hole in the back side of the caster assembly, thread the washer and locknut onto the bolt, and tighten the bolt just enough for it to be snug without hampering the pivot action of the caster.

4. Mount the foot pedal onto the caster and insert the pin between the two parts.
5. Lock the caster and pedal in place with the E-clip and washers, as shown in **Figure 9**.

## Gearbox Oil Level

Before starting your machine for the first time, make sure the gearbox has oil. The proper oil level is just even with the bottom of the fill plug hole. The gearbox uses 80W-90W automotive grade gear oil.

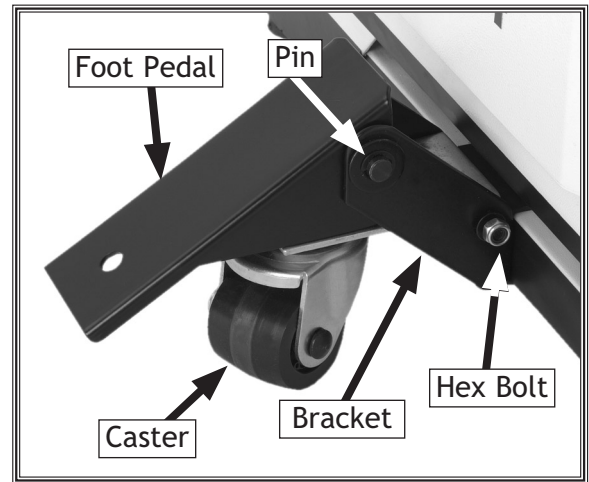
To check the gearbox oil level, do these steps:

1. Wipe the outside of the fill plug clean.
2. Using a 6mm hex wrench, remove the gearbox fill plug (**Figure 10**).
3. Using the short end of the hex wrench (make sure it is CLEAN), dip it inside the fill hole and remove it. (Do not drop the wrench into the gearbox!)
  - If the end of the hex wrench is coated with oil, then the gearbox oil level is okay. Replace the fill plug and continue with set up.
  - If the end of the hex wrench is not coated with oil, then fill the gearbox with 80-90W gear oil until the oil reaches the top of the fill plug.

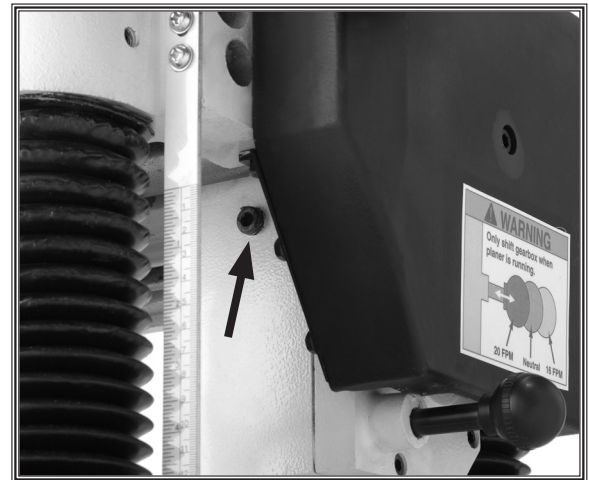
**Note:** Replace the gearbox oil after the first 20 hours of operation. This is a normal break-in procedure. See Lubrication on **Page 25**.

## Connecting to Power

Make sure you have read and followed precautions listed on **Page 8**, before connecting your planer to power. The POWER button and STOP button (**Figure 11**) should illuminate when the planer is connected to the power. Refer to **Page 40** to troubleshoot any problems.



**Figure 9.** Foot pedal and caster assembled.



**Figure 10.** Gearbox fill plug location.



**Figure 11.** W1754 control panel.

## Test Run

Complete this test run process once you have familiarized yourself with all instructions in this manual and taken all safety precautions. The purpose of the test run is to make sure that the motor and EMERGENCY STOP button work properly before proceeding.

To perform a test run, do these steps:

1. Read the entire manual, and make sure the gearbox oil level is full (Refer to the **Lubrication** section on **Page 25**).
2. Make sure all tools and foreign objects have been removed from the planer.
3. Make sure the feed control knob is pushed in or out all the way (Refer to **Feed Speed, Page 19**).
4. Put on safety glasses, and secure loose clothes or long hair.
5. Press the green START button to turn the machine **ON (Figure 42)**. The START button should illuminate and the planer should run smoothly with little or no vibration.
  - If you suspect any problems, immediately turn the planer **OFF** by pushing the red STOP button. Refer to **Page 40** to troubleshoot/fix any problems before starting the planer again.
  - If the source of an unusual noise or vibration is not readily apparent, contact our technical support for help at (360) 734-3482 or contact us online at [tech-support@shopfox.biz](mailto:tech-support@shopfox.biz).
6. Press the STOP button in.
7. Press the START button in. The machine should not run and the START button should not illuminate.
  - If the STOP button is working correctly, turn it clockwise until it pops out. The machine is ready for operation.
  - If the planer starts, the STOP button is not working correctly. Immediately **DISCONNECT THE PLANER FROM POWER!** and contact our technical support before proceeding further.

## Recommended Adjustments

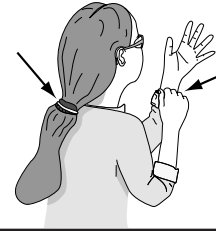
For your convenience, the adjustments listed below have been performed at the factory and no further setup is required to operate your machine.

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

Step-by-step instructions for these adjustments can be found in the **SERVICE** section.

1. Table Parallelism (Page 29).
2. Chain Tension (Page 28).
3. Spring Tension (Page 34).
4. Rollers, Chip Breakers and Pressure Bar Heights (Page 31).
5. Chip Deflector Positioning (Page 35).

## ! WARNING



Loose hair and clothing could get caught in machinery and cause serious personal injury. Keep loose clothing rolled up and long hair tied up and away from machinery.

## Tighten V-Belts

The final step in the setup process must be done after approximately 16 hours of operation. During this first 16 hours, the V-belts will stretch and seat into the pulley grooves. After this 16 hours, the V-belts must be tensioned or your belts will slip and burn out. Refer to **Page 24** when you are ready to perform this important adjustment.

**Note:** Pulleys and belts run very hot. This is a normal condition. Allow them to cool before making adjustments.

**Note:** A collection of black belt dust at the bottom of the belt housing is a normal during the life of the machine and does not indicate premature belt failure is in progress.



# OPERATIONS

## General

The Model W1754 will perform many types of operations that are beyond the scope of this manual. Many of these operations can be dangerous or deadly if performed incorrectly.

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

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

## Basic Operation

The table moves approximately  $1/16$ " with one turn of the handwheel.

The basic steps of operating the planer are as follows:

1. Put on safety glasses, respirator, and hearing protection.
2. Unless your workpiece is very flat, surface plane one face of the workpiece on a jointer until it is flat—having the face flat will ensure that it sits flat on the planer table during operation.
3. Adjust the table height slightly lower than your workpiece to ensure the first cut is as light as possible (approximately  $1/32$ "– $1/16$ "). This cut removes any excessive high spots.
4. Start the planer.
5. Making sure not to stand directly in front or behind the workpiece to avoid kickback injury, place the flat side of the board down on the table, and feed the workpiece through the planer.
  - If the cut is too heavy and bogs down the planer, turn the planer **OFF** immediately, allow it to come to a complete stop, and remove the workpiece. Lower the table, then repeat **Steps 2-5**.

### WARNING



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

### WARNING

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



### WARNING



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

6. Measure your workpiece thickness and adjust the table height as necessary to take a lighter or heavier pass, depending on your needs. For most wood types,  $\frac{1}{16}$ " per pass is a good cutting depth.

**Note:** *Any time you switch directions with the handwheel, there will be a small amount of backlash—so the first crank of the handwheel after switching directions will be slightly less than  $\frac{1}{16}$ ". However, as long as you move the handwheel in the same direction during operation, backlash will not be a factor.*

## Operation Tips

- Inspect lumber for defects, warping, cupping, twisting, and for foreign objects such as nails, staples, and imbedded gravel, which, if they hit the cutters and are drawn into the dust collector, may cause a fire hazard. If you have any question about the quality of your lumber, do not use it. Remember, wood stacked on a concrete floor can have small pieces of stone or concrete pressed into the surface.
- Use the full width of the planer. Alternate between the left, the right, and the middle when feeding lumber into the planer. Your cutters will remain sharp much longer.
- Scrape all glue off of joined boards before planing.
- Plane ONLY natural wood fiber. No wood composites (OSB, MDF, particle board, etc.).
- Plane wood with the grain. Never feed end-cut or end-grained lumber into your planer.
- Do not use boards with loose or large knots, splits, crossgrain or other obvious blemishes or defects. They can damage the machine and pose the possibility of operator injury.
- Keep your work area clear.
- When making multiple passes through the planer on long stock, use the stock return rollers on the top of the machine to move the material back to the infeed side of the machine.
- Avoid planing wood with a high water content. Wood with more than 20% moisture content or wood exposed to rain or snow, will plane poorly and cause excessive wear to the cutters and motor. Excess moisture can also hasten rust and corrosion.



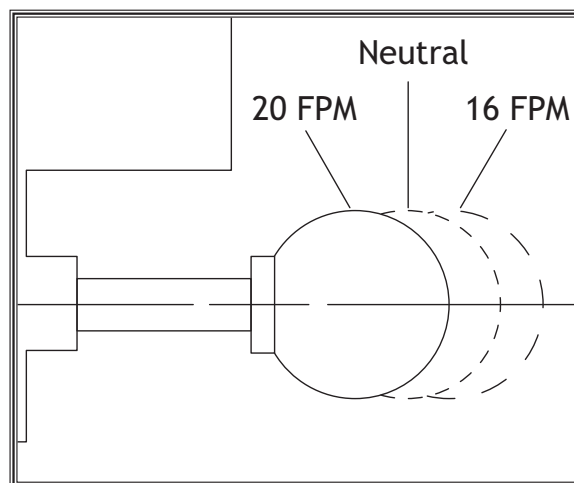
## Feed Speed

The infeed and outfeed rollers power the stock through the planer while keeping boards flat and providing a consistent rate of movement.

The power feed features high/low feed rates. The speed should only be changed when the machine is running. Use the different feed rates as stated below:

16 FPM.....Dimensioning Pass  
20 FPM..... Finishing Pass

**Figure 12** illustrates the three different positions of the feed control knob.



**Figure 12.** Feed control knob positions.

### ***NOTICE***

Only change the speeds when the planer is running, but **DO NOT** attempt to change speeds during any cutting operations or damage to the gearbox will result.

# Bed Rollers

Adjustment Height Range: ..... 0.002"-0.020"

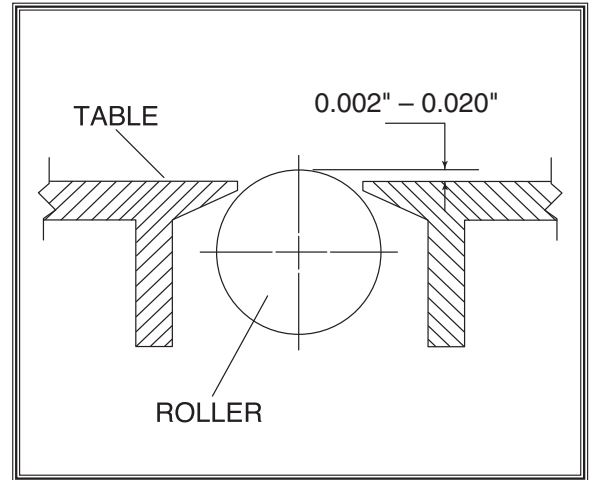
The height of the bed rollers will vary, depending on the type of material you intend to plane, but as a general rule keep the roller height within 0.002"-0.020" above the table (**Figure 13**). When planing rough stock, set the rollers high to keep the lumber from dragging along the bed. When planing milled lumber, set the rollers low to help minimize snipe.

To ensure accurate results and make the adjustment process quicker and easier, we recommend using a Model W1218 Rotacator (see **Page 21**) to gauge the bed roller height from the table. If a Rotacator is not available, a straightedge and feeler gauges can be used, but extra care must be taken to achieve satisfactory results.

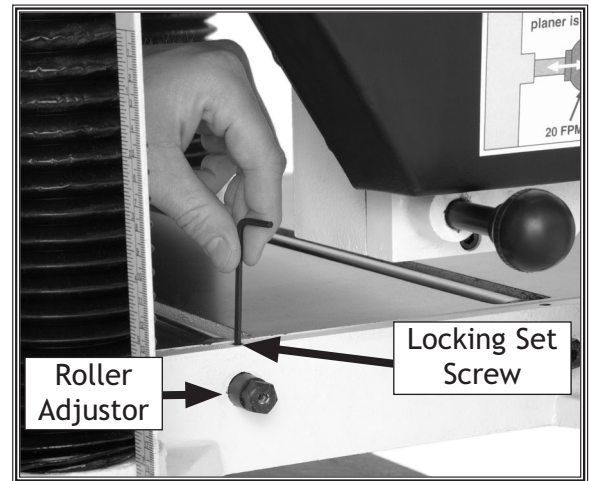
**Note:** *Misaligned bed rollers can cause workpiece chatter, a washboard surface, uneven workpiece feeding, or binding. This is the most common cause for poor planing results.*

To adjust the bed rollers, do these steps:

1. DISCONNECT THE PLANER FROM POWER!
2. Lower the table to give yourself at least 4" of working room below the cutterhead.
3. Using a 3mm hex wrench, loosen the locking set screws (see **Figure 14**) above the roller adjusters (4 total).
4. Raise or lower the rollers by rotating the roller adjusters to reach your desired height.
5. Verify both sides of the bed roller are at the same height in relation with each other, side-to-side, and to the table surface, and lock them in position with the locking set screws.
6. Double check the roller heights to make sure they did not move when you locked them (if they did, repeat the procedure).



**Figure 13.** Bed roller height range.



**Figure 14.** Typical bed roller controls (only one side shown).

# ACCESSORIES

## Planer Accessories

The following planer 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).

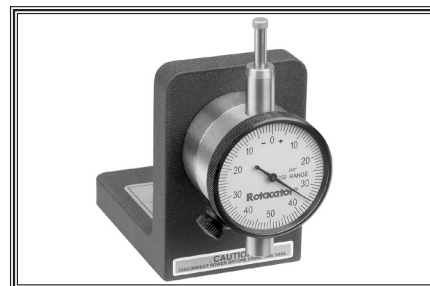
The **SHOP FOX® Heavy-Duty Roller Stands and Roller Tables** make your planer safer and easier to use. All models feature convenient hand knobs for fast height adjustment and offer rigid steel construction. These stands are invaluable for supporting long workpieces on your planer.



The **D2271 SHOP FOX® Heavy-Duty Roller Table** is a versatile roller table wherever you need extra workpiece support for up to a 1,000 lb. capacity. It features all-steel welded construction and it measures 19" x 65" long. The roller table also comes with 9 ball bearing rollers with four independently adjustable legs for any leveling requirement. The roller table is also adjustable in height from 26<sup>3</sup>/<sub>8</sub>" to 44<sup>1</sup>/<sub>8</sub>".



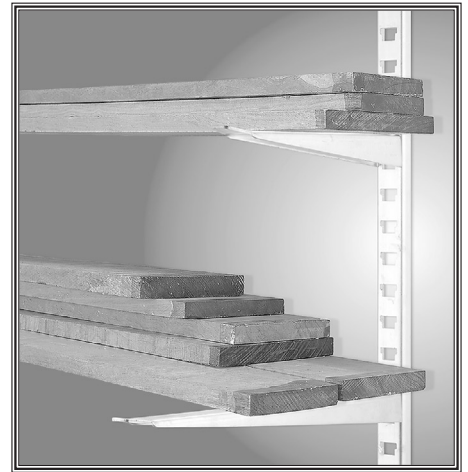
The **W1218 Rotacator®** makes a planer setup process easier and more accurate for adjusting the table rollers, feed rollers, chip breaker, and the pressure bar if equipped on your planer. This tool is a rotating dial indicator on a magnetic base. Shown to the right, this handy device measures table-to-cutterhead alignment and the table roller height. The Rotacator® allows you to set your table within 0.001" from being parallel with the cutterhead.



**PLANER PAL® Magnetic Planer Knife Setting Jigs.** Our patented knife-setting system lets you set straight-type planer knives in perfect alignment every time! You can shift nicked knives on 2<sup>1</sup>/<sub>2</sub>"- 4" cutterheads to get a perfect cut with an accuracy of ±.002". Two jigs are needed for 15"- 20" planers. Use the **STANDARD JIGS** for Steel Knives W1216 (Pair), or the **CARBIDE JIGS** for Steel or Carbide Knives W1217 (Pair).



The **SHOP FOX® Wood Rack System** features interchangeable rack bars and shelf brackets to create simple or elaborate wood racks. 24" and 48" rack bars can be joined together to provide 6 feet of vertical storage capacity. Easily adjustable 12" and 18" shelf brackets lock into the rack bars for a secure system. Weight capacity is 300 lbs. for 12" brackets and 200 lbs. for 18" brackets when wood rack bars are supported by the floor and weight is evenly distributed. Assembly instructions included. D2829 24" Wood Rack Bars, D2830 48" Wood Rack Bars, D2831 12" Wood Rack Shelf Brackets, and D2832 18" Wood Rack Shelf Brackets.



The **W1049 SHOP FOX® Large Dust Collection Separator** increases the efficiency and capacity of standard dust collection systems. Designed to fit securely on top of a standard 30-gallon metal trash can, this molded ABS fitting is engineered to use cyclonic action to drop out larger particles from the dust flow. The fitting features molded inlets and outlets which can be easily connected to standard systems using 4" flexible hose.



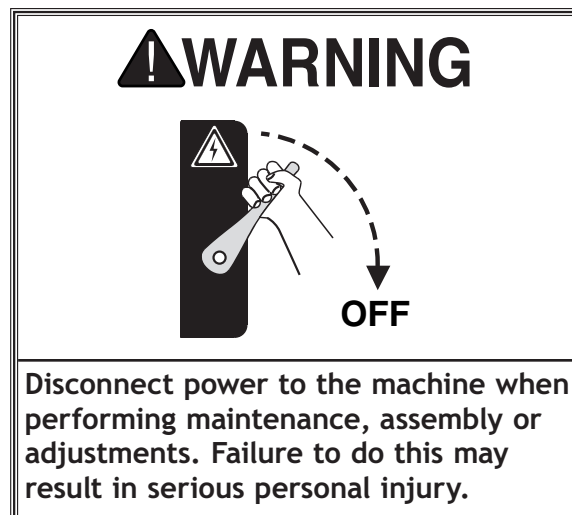
# MAINTENANCE

## General

Regular periodic maintenance on your **SHOP FOX®** Model W1754 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.
- Worn switch.
- Worn or damaged cords.
- Damaged V-belt.
- Any other condition that could hamper the safe operation of this machine.



## Cleaning

Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. Protect the unpainted cast iron surfaces on the table by wiping the table clean after every use. Keep tables rust-free with regular applications of quality metal protectants.

## Maintenance Schedule

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

### Daily Maintenance:

- Clean the unpainted cast iron part of the table
- Lubricate feed rollers (see **Page 25**)

### Monthly Maintenance:

- Inspect V-belt tension, damage, or wear (see **Page 24**)
- Lubricate four columns (see **Page 25**)
- Clean/vacuum dust buildup from inside cabinet and off motor
- Lubricate worm gear (see **Page 25**)
- Lubricate drive chain (see **Page 25**)

### Yearly Maintenance:

- Change gear box oil (see **Page 25**)

## V-Belts

V-belt removal and replacement is simply a matter of adjusting the motor mount, rolling the belts off of the pulleys and replacing them with new belts, then retensioning them.

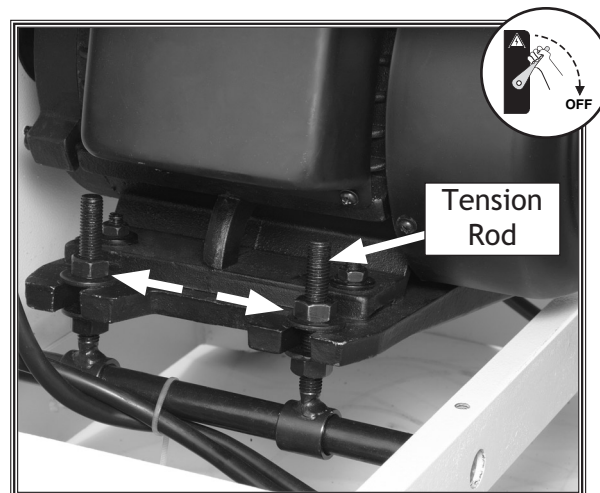
Always replace V-belts with a matched set of 3 belts, or belt tension may be uneven among the 3 belts and may cause premature belt failure.

To adjust/replace the V-belts, do these steps:

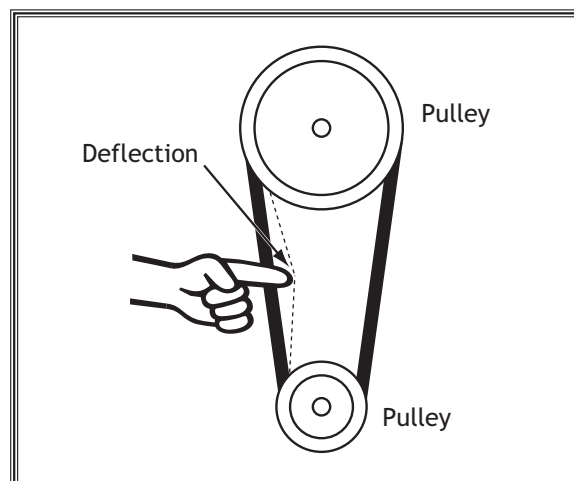
1. DISCONNECT THE PLANER FROM POWER!
2. Remove the motor and front access panels and V-belt cover.
3. Using a 19mm wrench, loosen the hex nuts on the tension rods shown in **Figure 15**.
4. Lift the motor up and slide the V-belts off of the pulleys.
5. Make sure the pulleys are in alignment as outlined in **Pulley Alignment** on **Page 37**.
6. Slide the new belts onto the pulley, lower the motor, and tighten the fasteners loosened in **Step 3**.
7. Check belt deflection as shown in **Figure** .

**Note:** The correct tension for the V-belts is  $\frac{1}{4}$ "- $\frac{1}{2}$ " deflection when pushed in the center with moderate pressure. After the first 16 hours of belt life, retension them, as they will stretch and seat during this time.

8. Close the V-belt cover and replace the front and motor access panels.



**Figure 15.** Fasteners needed to be loosened for V-belt replacement.



**Figure 16.** Checking belt deflection.



## Lubrication

This planer uses sealed and pre-lubricated ball bearings that require no lubrication.

The following is a list of parts that need lubrication:

**Columns/Lead Screws:** The four columns should be lubricated monthly with SAE 30W oil. Unfasten dust covers to gain access. The four lead screws (**Figure 17**) should be lubricated with general purpose grease once a month.

**Worm Gear:** The worm gear should be inspected monthly and lubricated with general purpose grease when needed. Remove the worm gear box to inspect. See parts diagram on **Page 42** for location.

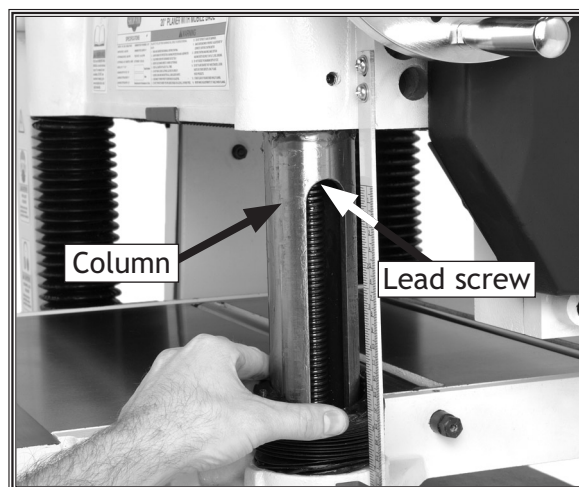
**Chain:** The table height adjustment chain (see **Figure 24** on **Page 28**) should be inspected monthly and lubricated with general purpose grease when needed.

**Gear Box:** Gear box oil should be changed after the first 20 hours of operation (see **Figure 18**). Inspect levels periodically and change yearly. Replace gear oil more frequently under heavy use. See **Page 14** for instructions on adding oil.

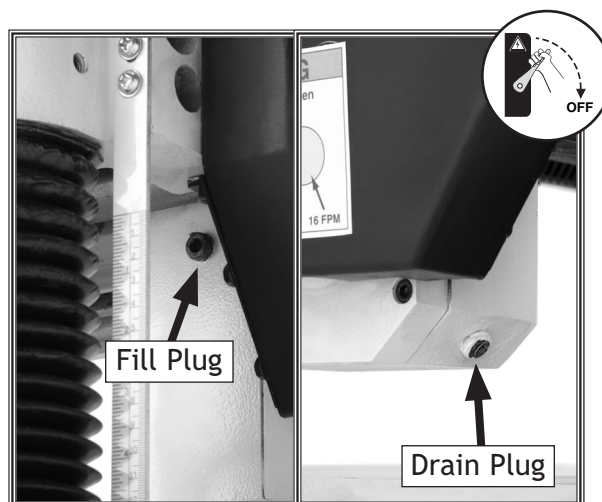
Replace with 80W-90W gear oil. Fill until oil reaches the top of the filler plug port for correct oil level.

**Drive Chain:** The drive chain should be inspected and lubricated monthly. See Part 206 on **Page 45**. Check sprocket, chain and cotter pin during inspection. Use a general purpose grease. Some chains will have master links instead of cotter pins.

**Feed Rollers:** Regular lubrication of feed rollers is crucial to the operation of your planer. Lubricate every 24-30 hours of use. Each end of each power feed roller has an oiling port located on the top of the headstock (**Figure 19**). Apply SAE 30W oil, making sure that the lubricant penetrates the bearing.



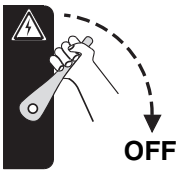
**Figure 17.** Example of columns and lead screws (Shown with cover removed).



**Figure 18.** Gearbox oil drain/fill locations.



**Figure 19.** Feed roller lubrication locations.



### ! WARNING

**SHOCK HAZARD!**

Always disconnect power to the machine before lubricating! Failure to do this may result in serious personal injury!

# 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).

## Inspecting Knives

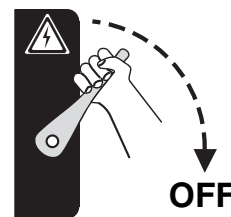
The Model W1754 Planer has a four-knife cutterhead. Because of normal use and wear, the knives must be periodically sharpened, replaced or adjusted. It is always wise to check knife adjustment before first time use.

The height of the knives can be easily and quickly inspected with a knife setting gauge or Planer Pal® (Model W1216, Page 21). This inspection will ensure that the knives are protruding equally and are parallel with the cutterhead body.

To inspect the knives, do these steps:

1. DISCONNECT THE PLANER FROM THE POWER SOURCE!
2. Remove the dust hood and top cover.
3. Put on leather gloves and place a knife gauge on the cutterhead, directly over a knife, as shown in Figure 20.
4. Carefully inspect how the gauge touches the cutterhead and the knife.
  - If both outside legs of the gauge sit firmly on the cutterhead and the middle pad just touches the knife, then that knife is protruding the correct amount (0.060" to 0.070"). Repeat this inspection with the other knives.
  - If the gauge sits firmly on the cutterhead and the knife does not contact the middle pad, or if the knife contacts the middle pad but the feet rock, then reset that knife. Repeat this inspection with the other knives before resetting.

### ! WARNING



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

These Points Must All Touch Evenly

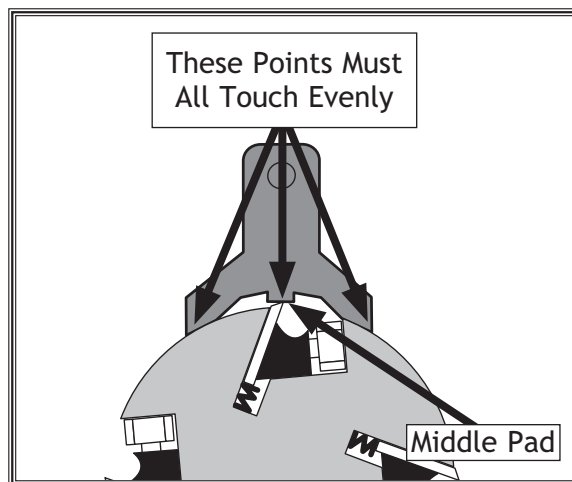


Figure 20. Gauge positioned over cutterhead knife.



## Setting/Replacing Knives

Setting the knives correctly is crucial to the proper operation of the planer and is very important in keeping the knives sharp. If one knife protrudes higher than the others, it will do the majority of the work, and thus, dull much faster than the others.

The included knife gauge is designed to set the knives approximately 0.070" higher than the cutterhead. Planer Pal® (Model W1216) can also be used to set the knives.

This planer comes with both jack screws and springs to provide you with two options for cutterhead adjustments (see **Figure 21**).

**Note:** Only one of these options is needed to set the knives—see **Step 5** for clarification.

To set the knives, do these steps:

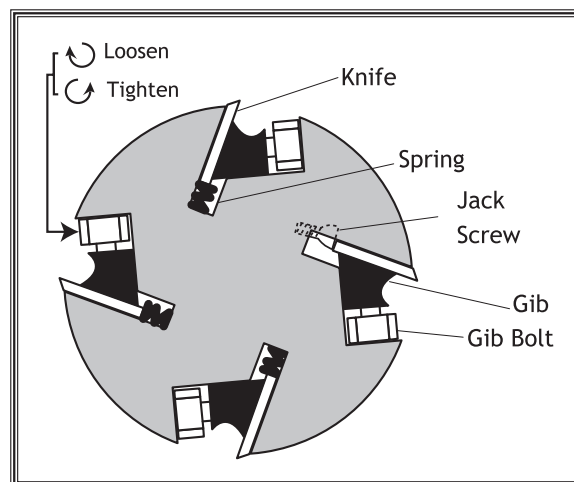
1. DISCONNECT THE PLANER FROM THE POWER SOURCE!

### CAUTION

Planer knives are dangerous and may cause personal injury. To reduce the risk of being injured, wear leather gloves when handling the knives in the following steps.

2. Put on leather gloves and remove the dust hood and top cover.
3. Remove the V-belt cover to expose the cutterhead pulley.
4. Rotate the cutterhead pulley to access one of the knives.
5. Using a 12mm wrench, loosen the cutterhead gib bolts, starting in the middle, and alternating back and forth until all of the gib bolts are loose, but not falling out.

**Note:** If this is the first time you are setting the knives, remove the gib and knife from the cutterhead. The cutterhead comes with both springs and jack screws installed. Decide which adjustment option you are going to use. If you decide to use the jack screws, remove the springs from the cutterhead. If you decide to use the springs, you can just thread the jack screws completely into the cutterhead so they will not get lost. Replace the gib and knife.

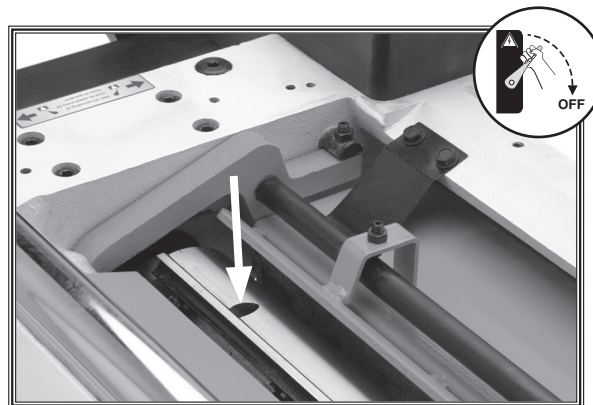


**Figure 21.** Cutterhead profile diagram.

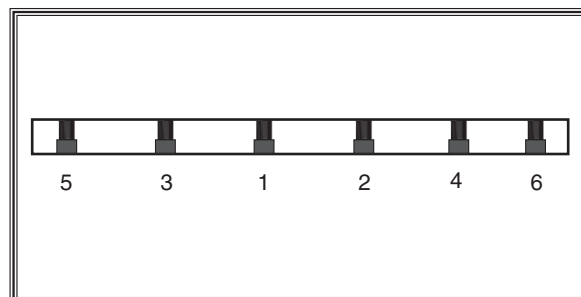
6. Position the knife gauge over the knife as shown in **Figure 20**.
7. **Jack Screws**—Using a 3mm hex wrench, find the jack screws through the access holes in the cutterhead (**Figure 22**) and rotate the jack screws to raise or lower the knife. When the knife is set correctly, it will barely touch the middle pad of the knife setting gauge. Snug the gib bolts tight enough to just hold the knife in place. Repeat **Steps 5-7** with the remaining knives.

**Springs**—Push the knife down with the gauge so that the knife edge touches the middle pad of the gauge. Hold the gauge down and tighten the gib bolts just tight enough to keep the knife in place. Repeat **Steps 5-7** with the remaining knives.

8. Rotate the cutterhead to the first knife you started with. Slightly tighten all the gib bolts by following the tightening sequence shown in **Figure 23**. Repeat this step on the remaining knives.
9. Final tighten each gib bolt, then reinstall the top cover, dust hood and V-belt cover.



**Figure 22.** Example of jack screw access hole.



**Figure 23.** Gib bolt tightening sequence.

## Chain Tension

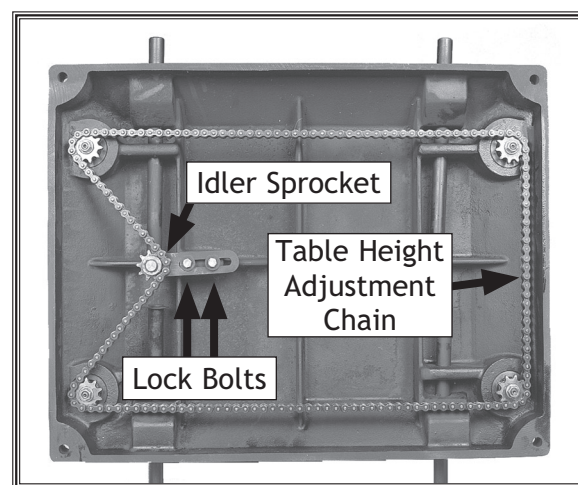
The chain drive can be adjusted to remove slack if the chain stretches over time or is loosened during table leveling procedures.

To adjust the chain tension, do these steps:

1. DISCONNECT THE PLANER FROM THE POWER SOURCE!
2. Remove the motor and front access panels.

### NOTICE

During the next step, DO NOT let the chain fall off the sprockets. Returning the chain to its proper location without changing the table adjustments will be very difficult and time consuming.



**Figure 24.** Underside of table.

3. Using a 14mm wrench, loosen the two lock bolts, move the idler sprocket against the chain to tighten it (**Figure 24**) and re-tighten the locking bolts.
4. Check chain lubrication. Refer to **LUBRICATION** on **Page 23** for further details.

## Table Parallelism

Table parallelism is critical to the operation of the machine. As such, it is essential that the table is parallel with the cutterhead (within 0.002") from side-to-side, as illustrated in **Figure 25**.

### Maximum Allowable Tolerances:

Cutterhead to Table Side-to-Side ..... 0.002"

Headstock to Table Front/Back ..... 0.020"

How the table sits in relation to the headstock from front-to-back is also important (see **Figure 26**). Because the feed rollers, pressure bar, and chip breaker will be adjusted off the table position, the tolerances on the front-to-back positioning are not as critical as the cutterhead/table side-to-side positioning. Therefore, the maximum allowable tolerance for the front-to-back parallelism is not more than 0.020".

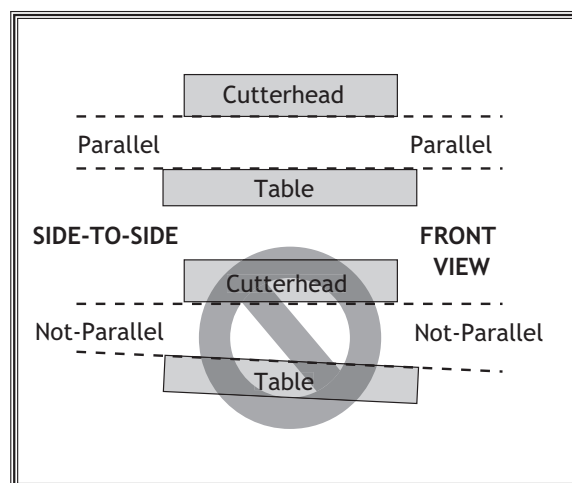
### Table Parallelism Inspection

The easiest way to determine if your table has a parallelism problem with the headstock is to lower the bed rollers below the table surface, plane a workpiece, and measure the thickness in multiple locations. If the workpiece is tapered from left-to-right or from front-to-back, then parallelism may be a problem.

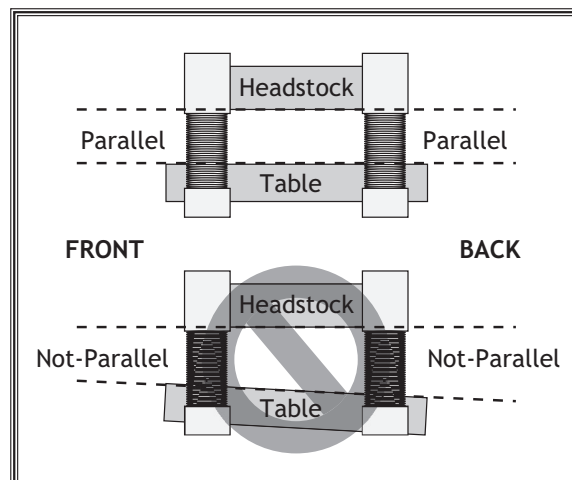
Use your Rotacator to further inspect the table parallelism. If you do not have a Rotacator, a wood block and feeler gauges may be used, but extra care must be taken to ensure accuracy. If the table is not within the maximum allowable tolerances, it must be adjusted.

### Table Parallelism Adjustments

The table is adjusted by turning the chain sprockets underneath the table for movements over 0.016" or by adjusting how the table is mounted on the columns for movements under 0.016".



**Figure 25.** Side-to-side parallelism of table and cutterhead.



**Figure 26.** Front-to-back parallelism.

## NOTICE

When making adjustments, tighten fasteners after each step to ensure the accuracy of your tests. When adjusting the chain sprockets, keep in mind that if the chain becomes too loose, it will fall off of all the sprockets. Returning it to its proper location will be frustrating and time consuming.

To adjust the table parallelism, do these steps:

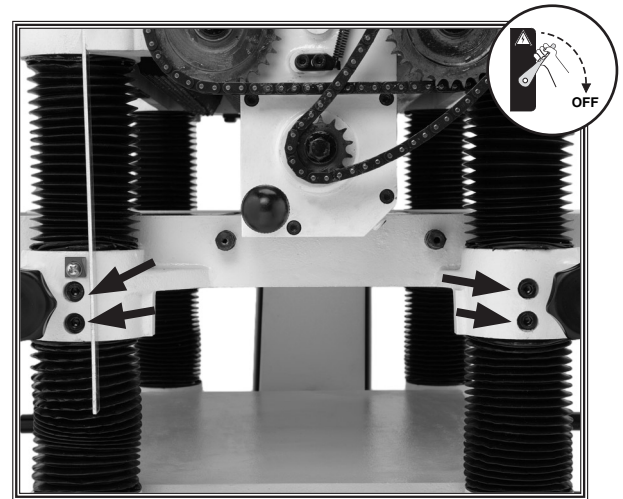
1. DISCONNECT THE PLANER FROM THE POWER SOURCE!
2. Remove the motor and front access panels and locate the chain on the underside of the table.
3. Loosen the lock bolts and idler sprocket (see **Chain Tension** instructions on **Page 28**).
4. Mark the location of one tooth in the sprocket that you are adjusting.
5. Move the chain away from only the sprocket you want to adjust so only that sprocket can be turned independent of the chain.

**Note:** *If the left side of the table is too high, the left two sprockets will need to be adjusted. Each tooth on the sprocket represents 0.016" of vertical movement as the cogs are turned. Make sure, as you turn the sprockets, to keep an accurate tooth count to ensure that the table is adjusted equally.*

6. Carefully turn the sprocket (counterclockwise to raise the table; clockwise to lower the table) just enough to position the next tooth at the marked location, then fit the chain around the sprocket again.
7. Repeat **Steps 4-6** with each sprocket that needs to be adjusted until the table-to-cutterhead clearance is within 0.016" from one side to the other.
8. Make sure the chain is properly fitted on the sprockets, and tighten the idler sprocket and lock bolts.
9. Micro-adjust the table position by loosening the cap screws (**Figure 27**) using a 6mm wrench, and lifting the table upward or downward until the table and cutterhead are in alignment.

**Note:** *This process may require adjusting the columns on both the left and right hand sides until you find the correct combination.*

10. Replace the motor and front access panels.



**Figure 27.** Table micro-adjustment screws.

# Rollers, Breaker & Pressure Bar Heights

Depending upon the type of wood, feed rate, and depth of cut, you may have to vary the below adjustments a few thousandths of an inch. No single adjustment works for all wood, feed rates or depths of cuts.

To ensure accurate results and make the adjustment process quicker and easier, we recommend using a Rotacator (see Page 21) for these adjustments.

If a Rotacator is not available, a 6' 2x4 cut into two even sized pieces and a feeler gauge set can be used, but care must be taken when jointing the blocks to achieve accurate results.

## Distance Below Knife Edge at \*BDC:

Infeed Roller.....	0.040"
Chip Breaker.....	0.040"
Pressure Bar .....	0.008"
Outfeed Roller .....	0.020"

\*BDC = Bottom Dead Center (see Figure 28).

To set the height of the infeed and outfeed rollers, chip breaker, and pressure bar using a Rotacator, do these steps:

1. DISCONNECT THE PLANER FROM THE POWER SOURCE!
2. Make sure the knives are set correctly with the knife gauge.
3. Lower the table at least 4" below the headstock and lock the table in place.
4. Remove the dust hood, top cover, and V-belt cover.
5. Using your Rotacator, find BDC of any knife edge by slowly rocking the cutterhead pulley back and forth, and set the Rotacator dial to zero, as shown in Figure 29.
6. Place the Rotacator under the right-hand side of the infeed roller, and find bottom dead center on a serrated edge by rocking the infeed roller back and forth.

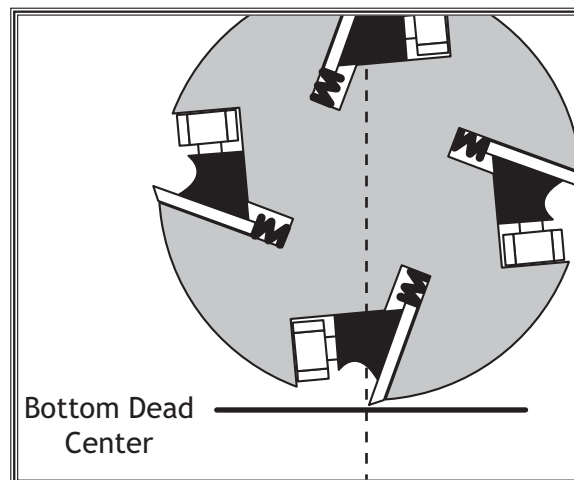


Figure 28. Knife edge at bottom dead center.

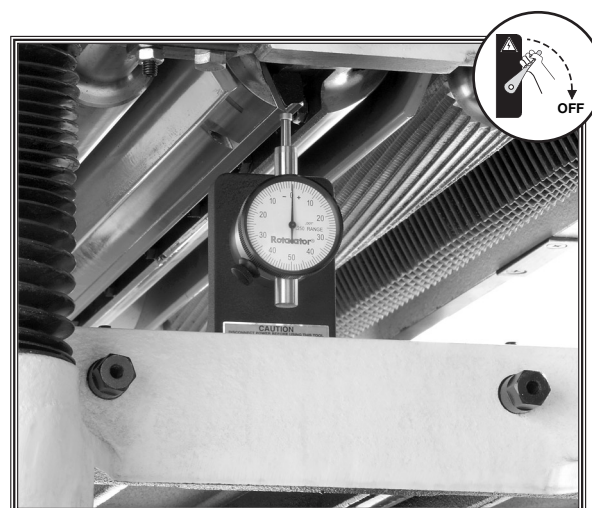
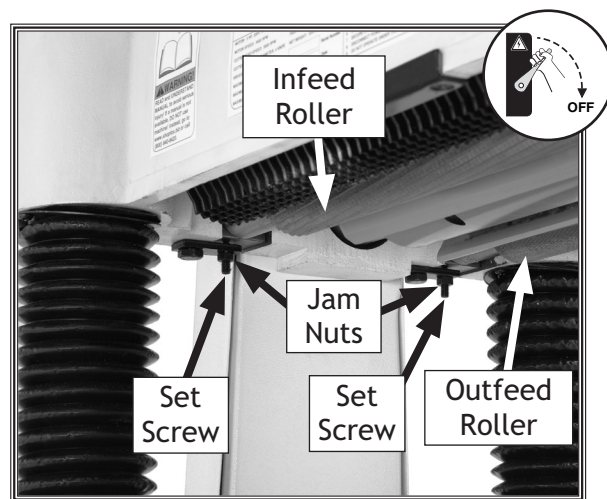


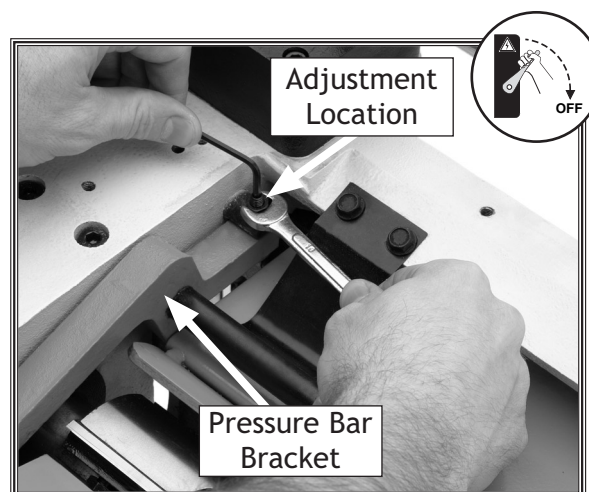
Figure 29. Finding BDC with the Rotacator.



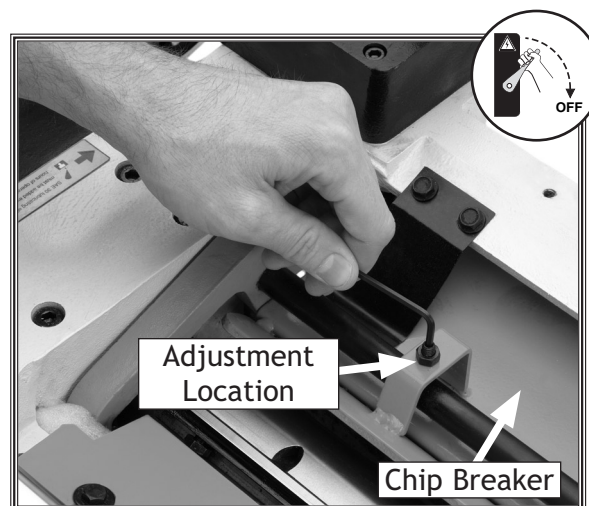
7. Adjust the height of the infeed roller on the same side as the Rotacator to the specification given at the beginning of this procedure, using the zero setting of the Rotacator as a reference point. **Figure 30** shows the jam nut and set screw for adjusting the roller height.
8. Repeat **Steps 6-7** on the left-hand side of the infeed roller.
9. Double-check and micro-adjust both sides of the infeed roller, then carefully lock both sides in place.
10. Using the same zeroed reference on the Rotacator, adjust the height of the outfeed roller, pressure bar, and chip breaker to their given specifications. The adjustment controls for each are shown in **Figures 30-32**.



**Figure 30.** Typical roller height adjustment controls.



**Figure 31.** Typical pressure bar height adjustment controls (One side shown. Bar not in sight.)



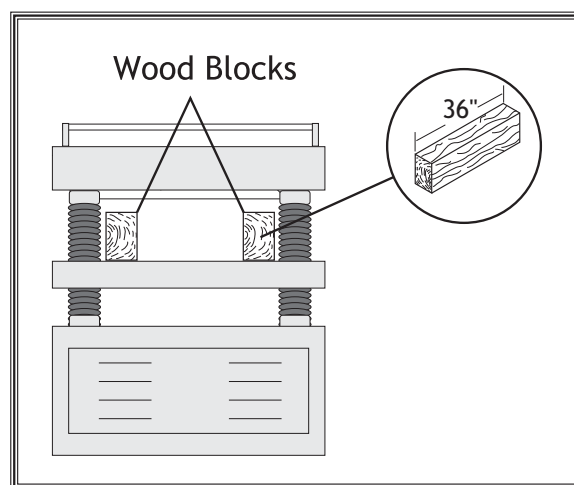
**Figure 32.** Typical chip breaker height adjustment controls (One side shown).

To adjust the height of the infeed and outfeed rollers, chip breaker and pressure bar using wood blocks and a feeler gauge, do these steps:

1. Build the wood blocks by cutting a straight 6' long 2x4 in half.

**Note:** Having the wood blocks at an even height is critical to the accuracy of your overall adjustments. For best results, remove board warpage by squaring the 2x4 with a jointer and table saw before cutting in half.

2. DISCONNECT THE PLANER FROM THE POWER SOURCE!
3. Lower the bed rollers below the table.
4. Place one wood block along the left side of the table, and place the other wood block along the right side of the table, as illustrated in **Figure 33**.
5. Remove the dust hood, top cover, and V-belt cover.
6. Adjust the table and use the feeler gauge until you have a 0.040" gap between the edge of a knife at bottom dead center (find by rocking cutterhead pulley) and the wood blocks.
7. Lock the table height in place, as the wood blocks will now be your reference points for the rest of the adjustments.
8. Loosen the infeed roller adjustment jam nuts (**Figure 30, Page 32**) and turn the adjustment set screws on each end to raise the feed roller above the wood block (if necessary), then bring it back down so it just touches the wood block on both sides.
9. Lock the infeed roller adjustment set screws in place with the jam nuts, making sure they do not move while tightening.
10. Without moving the table, adjust the chip breaker (**Figure 32**), pressure bar (**Figure 31**), and outfeed roller (**Figure 30**) in the same manner, using the wood blocks as your reference point.
11. When you are finished with the adjustments, replace the top cover, dust hood, and V-belt cover.



**Figure 33.** Wood blocks on table.

# Spring Tension

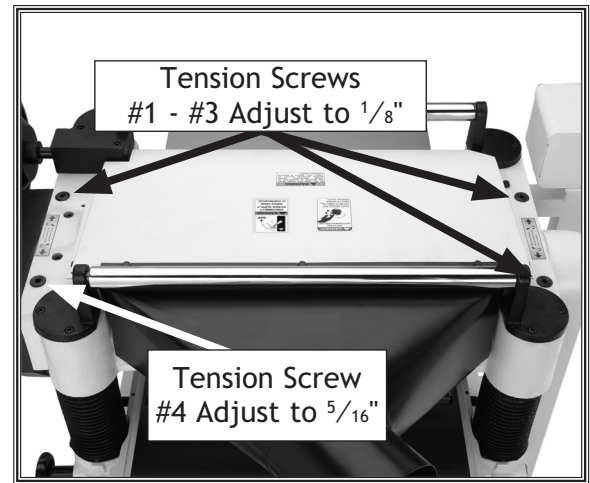
Roller spring tension must be adjusted so that roller pressure is uniform at all four corners. Roller spring tension will vary, depending on the type of wood you plane. This is usually determined from trial-and-error.

Generally speaking, less spring tension is more forgiving on workpieces. Therefore, if you primarily plane milled lumber with relatively consistent surfaces, you can get away with having less spring tension. Likewise, if you primarily plane rough lumber with inconsistent surface heights, more spring tension is a must to keep the workpiece feeding through the planer without stopping.

If workpieces regularly stop feeding during operation, it may be a sign of weak spring tension.

**To adjust roller spring tension, do these steps:**

1. Locate the four tension screws located on the top of the planer, as shown in **Figure 34**.
2. Using a 6mm hex wrench, adjust tension screws #1-#3 so that they protrude  $\frac{1}{8}$ " above the headstock.
3. Adjust tension screw #4 so that it protrudes  $\frac{5}{16}$ " above the headstock.



**Figure 34.** Tension screw locations and adjustments.



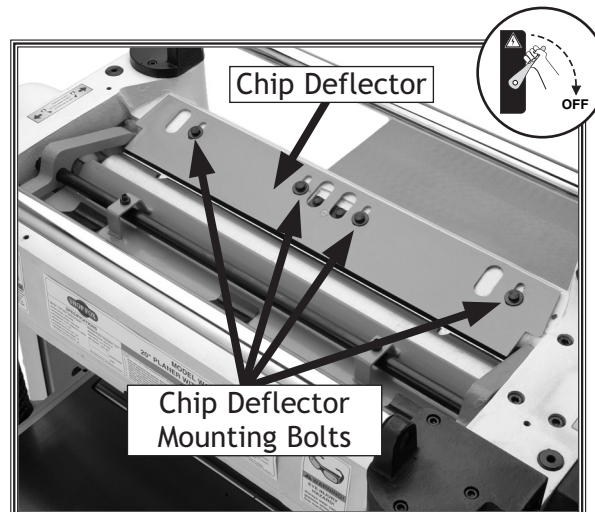
# Chip Deflector Positioning

The chip deflector keeps chips from falling onto the outfeed roller.

Chip Deflector Gap Setting .....  $\frac{1}{4}$ "

To adjust the deflector position, do these steps:

1. DISCONNECT THE PLANER FROM THE POWER SOURCE!
2. Put on leather gloves.
3. Remove the dust hood, top cover, and V-belt cover.
4. Loosen the chip deflector mounting bolts (see **Figure 35**).
5. Make sure the deflector is beveled toward the cutterhead. Move the deflector until the edge is the correct distance (given above) from the knife edge.
6. Rotate the cutterhead to ensure clearance by turning the cutterhead pulley.
7. Re-tighten the mounting bolts and reinstall the top cover, dust hood, and V-belt cover on the planer.



**Figure 35.** Chip deflector and mounting bolts.



**Figure 36.** Depth scale adjustment screws.

## Scale Calibration

The scale can be adjusted for accuracy. The machine will need to be run to calibrate the scale.

To calibrate the scale, do these steps:

1. Set the table to the approximate thickness of your test lumber. Measure the lumber with calipers to determine its exact thickness.
2. Move the table to  $\frac{1}{16}$ " under the thickness of your lumber and feed your test board through the planer.
3. Turn the handwheel one full rotation and run the board through once more. Turn the board over and repeat.
4. Re-measure the board and compare your results with the scale. If there is a discrepancy, loosen the screws (see **Figure 36**) and adjust as necessary.

## Anti-Kickback Fingers

The Model W1754 provides an anti-kickback system as a safety feature. The anti-kickback fingers hang from a rod suspended across the cutter headstock. The anti-kickback fingers should be inspected regularly.

Check the fingers (**Figure 37**) to ensure that they swing freely and easily. If the fingers do not swing freely and easily, clean them with a wood resin solvent.

### **WARNING**

Proper operation of the anti-kickback fingers is essential for the safe operation of this machine. Failure to ensure that they are working properly could result in serious operator injury.

Do not apply oil or other lubricants to the anti-kickback fingers. Oil or grease will attract dust, restricting the free movement of the fingers.



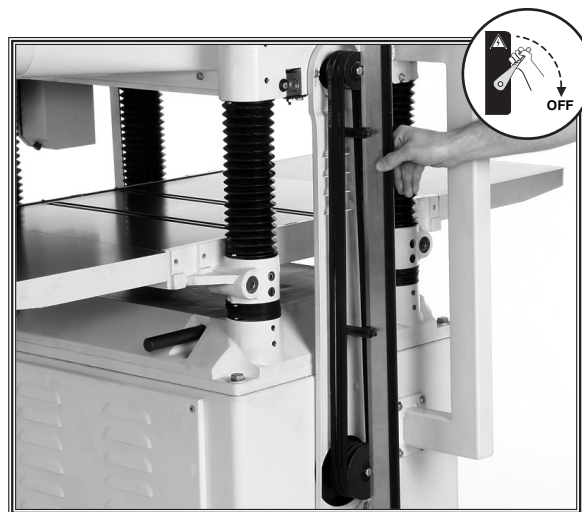
**Figure 37.** Anti-kickback fingers.

## Pulley Alignment

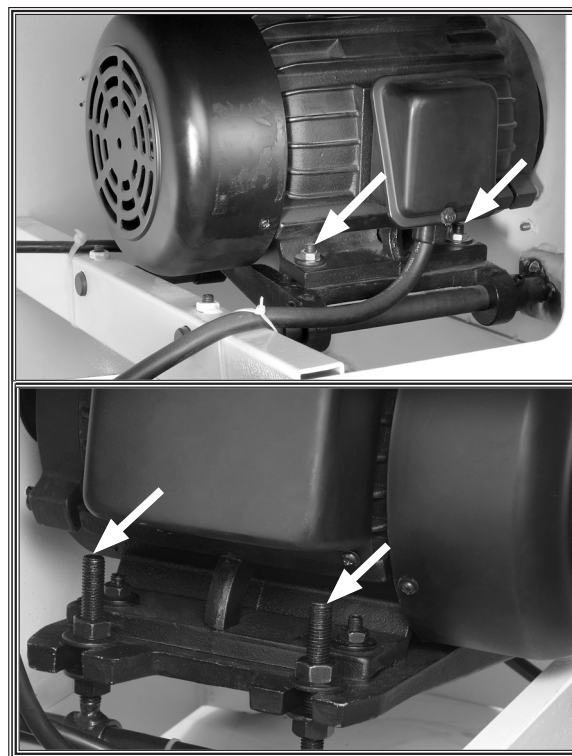
Proper pulley alignment (see **Figure 38**) prevents premature belt wear. The pulleys are properly aligned when they are parallel and in the same plane as each other. Use a straightedge on the edge of the pulleys to judge alignment.

Should you find that the pulleys are out of alignment, do these steps:

1. DISCONNECT THE PLANER FROM THE POWER SOURCE!
2. Remove the motor and front access panels, the V-belt cover, and loosen the belt tension (**Page 24**).
3. Using a 14mm wrench, loosen the motor mount fasteners shown in **Figure 39** just enough to allow the motor to be repositioned.
4. Slide the motor as required to align the pulleys.
5. Re-tighten the motor mount fasteners.
6. Inspect V-belts for damage caused by bad pulley alignment and replace belts as a matched set of three if necessary.
7. Re-tension the V-belts.
8. Replace the V-belt cover, motor and front access panels.



**Figure 38.** Example of checking belt alignment.



**Figure 39.** Motor mount fasteners.

## W1754 Electrical Components

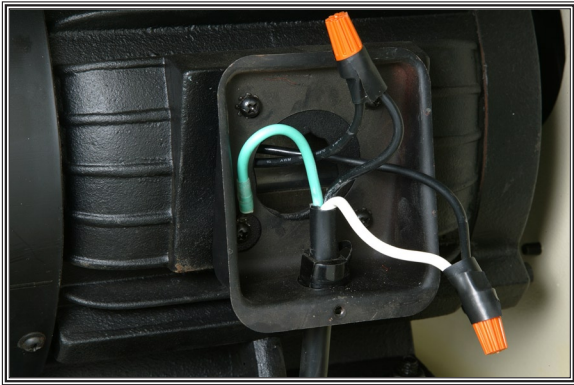


Figure 40. Motor junction box.

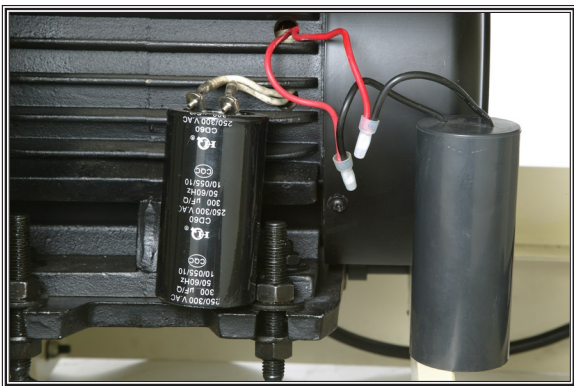


Figure 41. Capacitors.

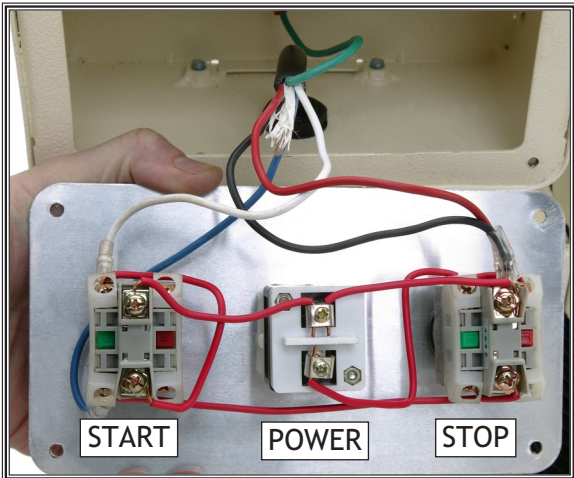


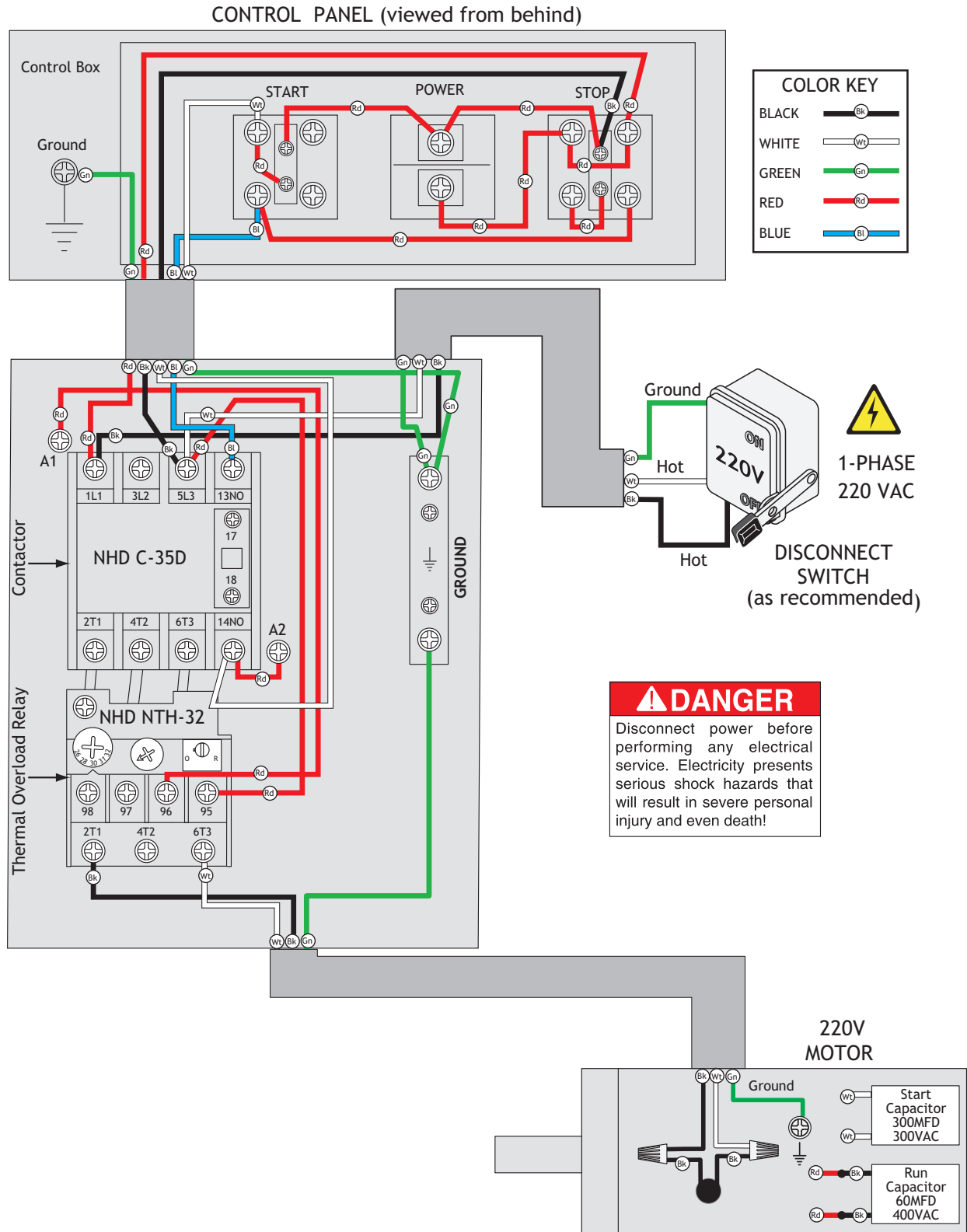
Figure 42. W1754 control panel (viewed from behind).



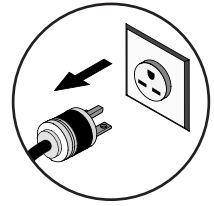
Figure 43. W1754 magnetic switch assembly.



# W1754 Wiring Diagram



# 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!

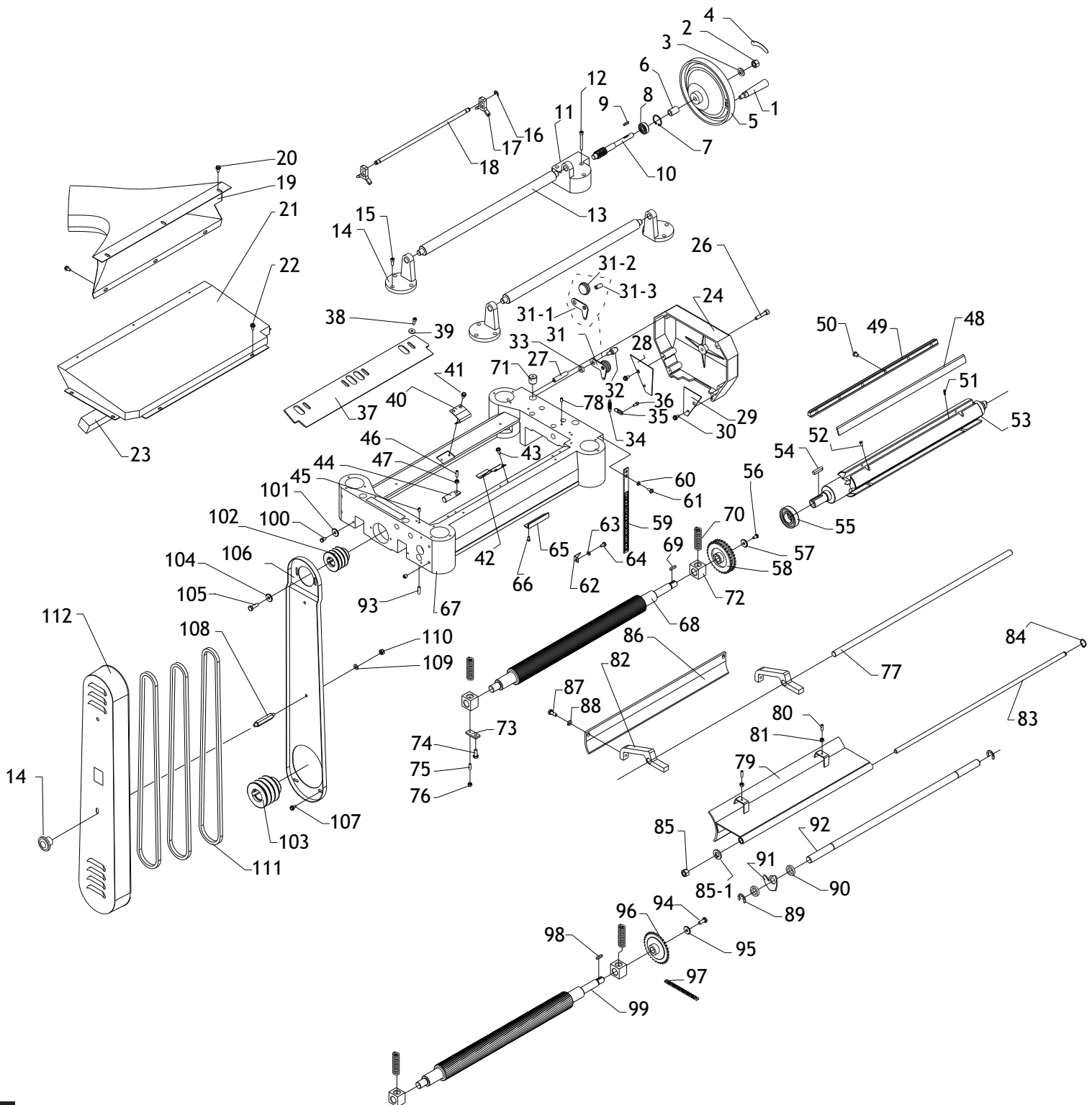
PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Motor will not start.	<ol style="list-style-type: none"> <li>1. Emergency stop button depressed.</li> <li>2. Thermal protection circuit. Breaker amperage is set too low, or motor is at fault.</li> <li>3. Open circuit in motor or loose connections.</li> <li>4. Start capacitor at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Rotate clockwise until it pops out/replace.</li> <li>2. Unplug machine, open magnetic switch cover, turn amperage dial on Thermal Protection Circuit Breaker to a higher amperage setting. If switch is maxed out, replace motor.</li> <li>3. Inspect all lead connections on motor for loose or open connections.</li> <li>4. Replace start capacitor.</li> </ol>
Fuses or circuit breakers blow.	<ol style="list-style-type: none"> <li>1. Short circuit in line cord or plug.</li> </ol>	<ol style="list-style-type: none"> <li>1. Repair or replace cord or plug for damaged insulation and shorted wires.</li> </ol>
Motor fails to develop full power (output of motor decreases rapidly with decrease in voltage at motor terminals).	<ol style="list-style-type: none"> <li>1. Undersized wires or circuits too long.</li> <li>2. Motor run capacitor at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Increase wire sizes or reduce length of the circuit.</li> <li>2. Replace run capacitor.</li> </ol>
Motor overheats.	<ol style="list-style-type: none"> <li>1. Motor overloaded during operation.</li> <li>2. Air circulation through the motor restricted.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce cutting load; take lighter cuts.</li> <li>2. Clean out motor to provide normal air circulation.</li> </ol>
Motor stalls or shuts off during a cut.	<ol style="list-style-type: none"> <li>1. Motor overloaded during operation.</li> <li>2. Thermal protection circuit breaker amperage is set too low or motor is at fault.</li> <li>3. Short circuit in motor or loose connections.</li> <li>4. Circuit breaker tripped.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce cutting load; take lighter cuts.</li> <li>2. Unplug machine, open magnetic switch cover, turn amperage dial on Thermal Protection Circuit Breaker to a higher amperage setting. If switch is maxed out, replace motor.</li> <li>3. Repair or replace connections on motor for loose or shorted terminals or worn insulation.</li> <li>4. Install correct circuit breaker; reduce # of machines running on that circuit.</li> </ol>
Cutterhead slows or squeals when cutting, 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 24</b>).</li> <li>2. Replace V-belt (<b>Page 24</b>).</li> </ol>
Loud repetitious noise coming from machine.	<ol style="list-style-type: none"> <li>1. Pulley setscrews or keys are missing or loose.</li> <li>2. Motor fan is hitting the cover.</li> <li>3. V-belts are damaged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inspect keys and setscrews. Replace or tighten if necessary.</li> <li>2. Adjust fan cover mounting position, tighten fan, or shim fan cover.</li> <li>3. Replace V-belts (<b>Page 24</b>).</li> </ol>
Vibration when running or cutting.	<ol style="list-style-type: none"> <li>1. Loose or damaged knife.</li> <li>2. Damaged V-belt.</li> <li>3. Worn cutterhead bearings.</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten or replace knife (<b>Page 27</b>).</li> <li>2. Replace V-belt (<b>Page 24</b>).</li> <li>3. Check/replace cutterhead bearings.</li> </ol>
Control panel buttons do not illuminate.	<ol style="list-style-type: none"> <li>1. Wiring switched or damaged.</li> <li>2. Faulty button.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check wiring, switch or replace damaged wires.</li> <li>2. Replace button.</li> </ol>

## Cutting

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Excessive snipe (gouge in the end of the board that is uneven with the rest of the cut).  <b>Note:</b> A small amount of snipe is inevitable with all types of planers. The key is minimizing it as much as possible.	<ol style="list-style-type: none"> <li>One or both of the bed rollers are set too high.</li> <li>Outfeed extension slopes down or is not level with the main table.</li> <li>Chipbreaker or pressure bar set too low.</li> <li>Workpiece is not supported as it leaves the planer.</li> </ol>	<ol style="list-style-type: none"> <li>Lower the bed rollers (<b>Page 20</b>).</li> <li>Shim the outfeed extension wing level with the main table.</li> <li>Raise the height of the chipbreaker or pressure bar (<b>Page 31</b>).</li> <li>Hold the workpiece up slightly as it leaves the outfeed end of the planer.</li> </ol>
Workpiece stops/slows in the middle of the cut.	<ol style="list-style-type: none"> <li>Taking too heavy of a cut.</li> <li>One or both of the bed rollers are set too low or too high.</li> <li>Chipbreaker or pressure bar set too low.</li> <li>Feed rollers set too low or too high.</li> <li>Table not parallel with headstock.</li> <li>Pitch and glue build up on planer components.</li> </ol>	<ol style="list-style-type: none"> <li>Take a lighter cut.</li> <li>Lower/raise the bed rollers (<b>Page 20</b>).</li> <li>Raise the height of the chipbreaker or pressure bar (<b>Page 31</b>).</li> <li>Adjust the feed rollers to the correct height (<b>Page 31</b>).</li> <li>Adjust the table so it is parallel to the headstock.</li> <li>Clean the internal cutterhead components with a pitch/resin dissolving solvent.</li> </ol>
Chipping (consistent pattern).	<ol style="list-style-type: none"> <li>Knots or conflicting grain direction in wood.</li> <li>Nicked or chipped knife.</li> <li>Feeding workpiece too fast.</li> <li>Taking too deep of a cut.</li> <li>Misaligned chipbreaker.</li> </ol>	<ol style="list-style-type: none"> <li>Inspect workpiece for knots and grain direction; only use clean stock.</li> <li>Replace the affected knife (<b>Page 27</b>).</li> <li>Slow down the feed rate (<b>Page 19</b>).</li> <li>Take a smaller depth of cut. (Always reduce cutting depth when surface planing or working with hard woods.)</li> <li>Adjust both sides of the chipbreaker to the correct height (<b>Page 35</b>).</li> </ol>
Fuzzy grain.	<ol style="list-style-type: none"> <li>Wood may have high moisture content or surface wetness.</li> <li>Dull knives.</li> </ol>	<ol style="list-style-type: none"> <li>Check moisture content and allow to dry if moisture is too high.</li> <li>Rotate/replace the knives (<b>Page 27</b>) or have them professionally sharpened.</li> </ol>
Long lines or ridges that run along the length of the board	<ol style="list-style-type: none"> <li>Nicked or chipped knife(s).</li> </ol>	<ol style="list-style-type: none"> <li>Replace the knives (<b>Page 27</b>) or have them professionally sharpened.</li> </ol>
Uneven knife marks, wavy surface, or chatter marks across the face of the board.	<ol style="list-style-type: none"> <li>Feeding workpiece too fast.</li> <li>Chipbreaker or pressure bar set unevenly.</li> <li>Knives not installed evenly.</li> <li>Worn cutterhead bearings.</li> </ol>	<ol style="list-style-type: none"> <li>Slow down the feed rate.</li> <li>Adjust the height of the chipbreaker or pressure bar (<b>Page 31</b>).</li> <li>Adjust the knives with the knife gauge (<b>Page 27</b>).</li> <li>Replace cutterhead bearings.</li> </ol>
Glossy surface.	<ol style="list-style-type: none"> <li>Knives are dull.</li> <li>Feed rate too slow.</li> <li>Cutting depth too shallow.</li> </ol>	<ol style="list-style-type: none"> <li>Rotate/replace the knives (<b>Page 27</b>) or have them professionally sharpened.</li> <li>Increase the feed rate (<b>Page 19</b>).</li> <li>Increase the depth of cut.</li> </ol>
Chip Marks (inconsistent pattern).	<ol style="list-style-type: none"> <li>Chips aren't being properly expelled from the cutterhead.</li> </ol>	<ol style="list-style-type: none"> <li>Use a dust collection system; adjust the chip deflector in or out depending on your setup (<b>Page 35</b>).</li> </ol>



# Headstock Assembly Parts Breakdown



# Headstock Assembly Parts List

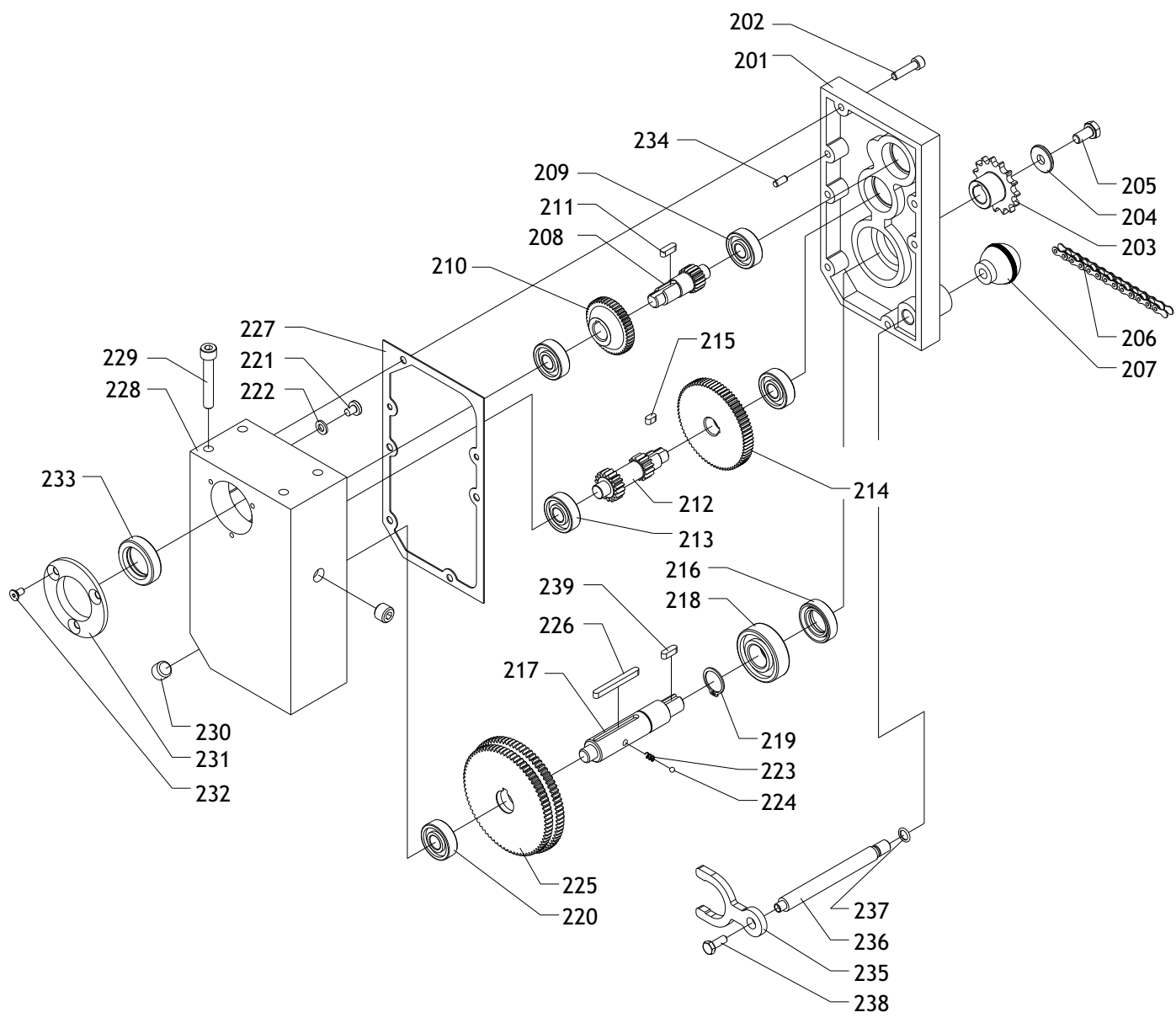
REF	PART #	DESCRIPTION
1	X1754001	HANDLE
2	XPNO9M	HEX NUT M12-1.75
3	XPW06M	FLAT WASHER 12MM
5	X1754005	HAND WHEEL
6	X1754006	COLLAR
7	XPR29M	INT RETAINING RING 32MM
8	XP6201	BALL BEARING 6201
9	XP48M	KEY 4 X 4 X 20
10	X1754010	WORM GEAR
11	X1754011	WORM HOUSING
12	XPSB83M	CAP SCREW M6-1 X 55
13	X1754013	ROLLER
14	X1754014	ROLLER STAND
15	XPSB01M	CAP SCREW M6-1 X 16
16	XPEC015M	E-CLIP 8MM
17	X1754017	KNIFE GAUGE
18	X1754018	KNIFE GAUGE SHAFT
19	X1754019	DUST HOOD
20	XPFB01M	FLANGE BOLT M6-1 X 12
21	X1754021	UPPER COVER
22	XPFB01M	FLANGE BOLT M6-1 X 12
23	X1754023	GASKET
24	X1754024	GEAR BOX COVER
26	XPSB12M	CAP SCREW M8-1.25 X 40
27	XPRP07M	ROLL PIN 6 X 20
28	X1754028	SAFETY HATCH
29	X1754029	SAFETY HATCH
30	XPFB09M	FLANGE BOLT M6-1 X 10
31	X1754031	BRACKET ASSEMBLY
31-1	X1754031-1	BRACKET
31-2	X1754031-2	IDLE PULLEY
31-3	X1754031-3	IDLE SHAFT
32	X1754032	SHAFT
33	X1754033	COLLAR
34	X1754034	EXTENSION SPRING
35	X1754035	HANGER
36	XPSB04M	CAP SCREW M6-1 X 10
37	X1754037	CHIP DEFLECTOR PLATE
38	XPFB10M	FLANGE BOLT M6-1 X 15
39	XPW03M	FLAT WASHER 6MM
40	X1754040	PLATE SPRING
41	XPFB01M	FLANGE BOLT M6-1 X 12
42	X1754042	PLATE SPRING
43	XPFB01M	FLANGE BOLT M6-1 X 12
44	X1754044	ADJUSTING SHAFT
45	XPSS04M	SET SCREW M6-1 X 12
46	XPSS25M	SET SCREW M6-1 X 20
47	XPNO1M	HEX NUT M6-1
48	X1754048	SET OF 4 KNIVES
49	X1754049	GIB
50	X1754050	GIB SCREW

REF	PART #	DESCRIPTION
51	X1754051	COMPRESSION SPRING
52	X1754052	JACK SCREW M5-.8 X 12
53	X1754053	CUTTERHEAD
54	XP4129M	KEY 8 X 8 X 36
55	XP6206	BALL BEARING 6206ZZ
56	XPB83M	HEX BOLT M6-1 X 16
57	XPW03M	FLAT WASHER 6MM
58	X1754058	SPROCKET
59	X1754059	SCALE
60	XPW03M	FLAT WASHER 6MM
61	XPS14M	PHLP HD SCR M6-1 X 12
62	X1754062	CUT LIMIT POINTER
63	XPW03M	FLAT WASHER 6MM
64	XPS14M	PHLP HD SCR M6-1 X 12
65	X1754065	CUT LIMITER PLATE
66	XPB107M	HEX BOLT M5-.8 X 12
67	X1754067	HEAD CASTING
68	X1754068	OUTFEED ROLLER
69	XP401M	KEY 5 X 5 X 22
70	X1754070	COMPRESSION SPRING
71	X1754071	SPECIAL OILER SET SCREW
72	X1754072	BUSHING
73	X1754073	PLATE
74	XPB09M	HEX BOLT M8-1.25 X 20
75	XPSS25M	SET SCREW M6-1 X 20
76	XPNO1M	HEX NUT M6-1
77	X1754077	SHAFT
78	XPSS11M	SET SCREW M6-1 X 16
79	X1754079	CHIP BREAKER
80	XPSS25M	SET SCREW M6-1 X 20
81	XPNO1M	HEX NUT M6-1
82	X1754082	BRACKET
83	X1754083	LOCKING ROD
84	XPR03M	EXT RETAINING RING 12MM
85	XPNO9M	HEX NUT M12-1.75
85-1	XPLW05M	LOCK WASHER 12MM
86	X1754086	PRESSURE PLATE
87	XPB09M	HEX BOLT M8-1.25 X 20
88	XPLW04M	LOCK WASHER 8MM
89	XPEC05M	E-CLIP 15MM
90	X1754090	COLLAR
91	X1754091	ANTI-KICKBACK FINGER
92	X1754092	SHAFT
93	XPSS14M	SET SCREW M8-1.25 X 12
94	XPB83M	HEX BOLT M6-1 X 16
95	XPW03M	FLAT WASHER 6MM
96	X1754096	SPROCKET
97	X1754097	CHAIN 06B-1 X 67
98	XP401M	KEY 5 X 5 X 22
99	X1754099	INFEED ROLLER
100	XPB02M	HEX BOLT M6-1 X 12

REF	PART #	DESCRIPTION
101	XPW03M	FLAT WASHER 6MM
102	X1754102	CUTTERHEAD PULLEY
103	X1754103	MOTOR PULLEY
104	XPW01M	FLAT WASHER 8MM
105	XPB07M	HEX BOLT M8-1.25 X 25
106	X1754106	BELT GUARD
107	XPFB09M	FLANGE BOLT M6-1 X 10

REF	PART #	DESCRIPTION
108	X1754108	SPECIAL BOLT
109	XPW01M	FLAT WASHER 8MM
110	XPN03M	HEX NUT M8-1.25
111	X1754111	COGGED V-BELT MX-60
112	X1754112	BELT COVER
114	X1754114	STAR KNOB M8-1.25

# Gearbox Parts Breakdown

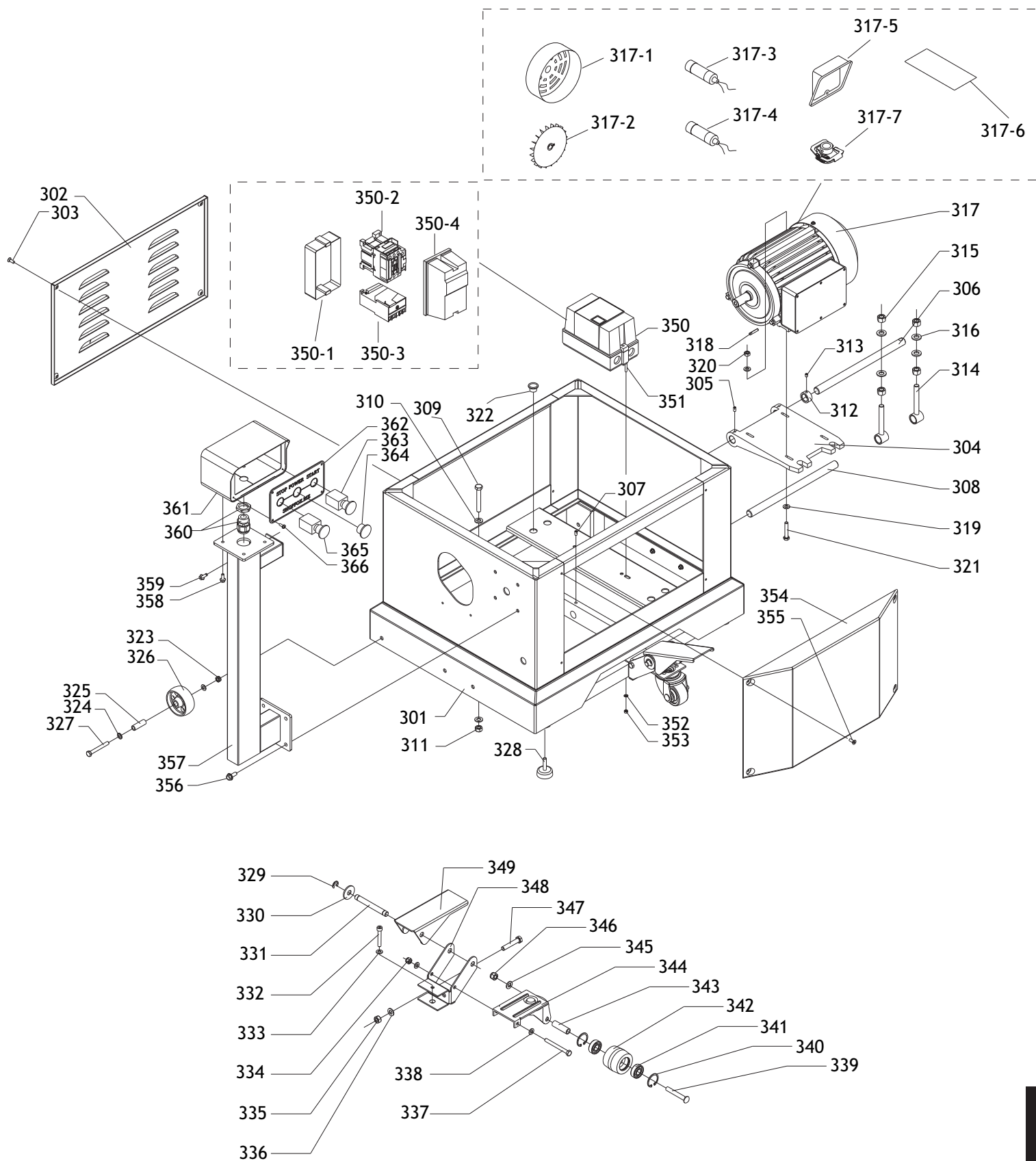


# Gearbox Parts List

REF	PART #	DESCRIPTION
201	X1754201	GEAR BOX COVER
202	XPSB06M	CAP SCREW M6-1 X 25
203	X1754203	SPROCKET
204	XPW01M	FLAT WASHER 8MM
205	XPB03M	HEX BOLT M8-1.25 X 16
206	X1754206	CHAIN 06B-1 X 51
207	X1754207	BALL KNOB M10-1.5
208	X1754208	SHAFT
209	XP6201	BALL BEARING 6201
210	X1754210	GEAR
211	XPB19M	KEY 5 X 5 X 14
212	X1754212	SHAFT
213	XP6201	BALL BEARING 6201
214	X1754214	GEAR
215	XPB06M	KEY 5 X 5 X 10
216	X1754216	OIL SEAL 20 X 35 X 7
217	X1754217	SHAFT
218	XP6204	BALL BEARING 6204ZZ
219	XPR09M	EXT RETAINING RING 20MM
220	XP6201	BALL BEARING 6201

REF	PART #	DESCRIPTION
221	XPS03M	PHLP HD SCR M6-1 X 8
222	XPW03M	FLAT WASHER 6MM
223	X1754223	COMPRESSION SPRING
224	X1754224	STEEL BALL 4MM
225	X1754225	GEAR
226	XPB36M	KEY 5 X 5 X 50
227	X1754227	PACKING PIECE
228	X1754228	GEAR BOX
229	XPSB05M	CAP SCREW M8-1.25 X 50
230	X1754230	OIL PLUG
231	X1754231	FLANGE COVER
232	XPB58M	FLAT HD ALLEN SCR M5-.8 X 12
233	X1754233	OIL SEAL 25 X 40 X 10
234	X1754234	PIN 5 X 10
235	X1754235	CLUTCH
236	X1754236	HANDLE SHAFT
237	X1754237	O-RING 16 X 2.4
238	X1754238	HEX LOCTITE SCREW
239	XPB08M	KEY 5 X 5 X 16

# Base Breakdown



# Base Parts List

## REF PART # DESCRIPTION

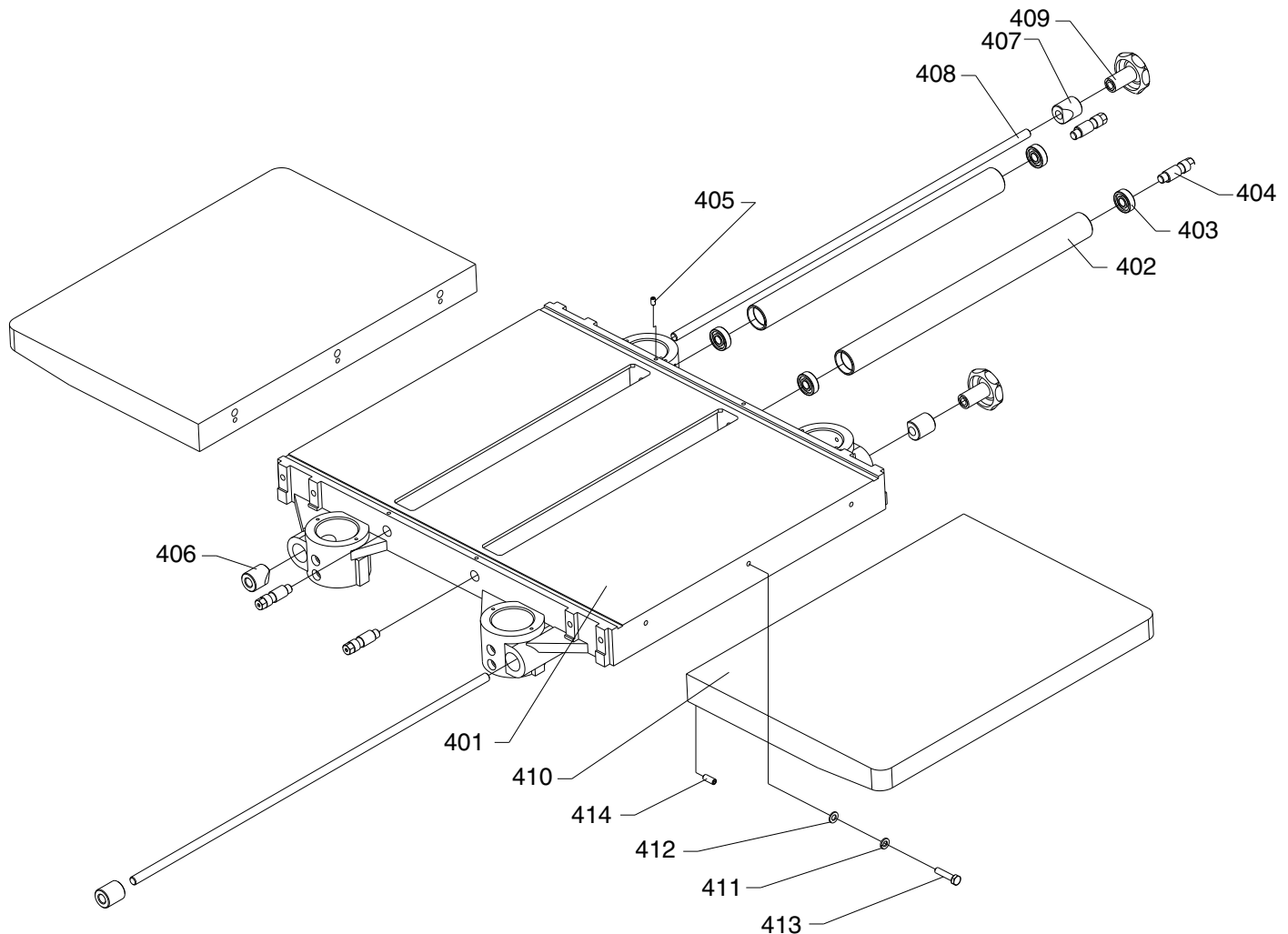
301	X1754301	ENCLOSED STAND
302	X1754302	COVER
303	XPFH06M	FLAT HD SCR M6-1 X 20
304	X1754304	MOTOR PLATE
305	XPSS04M	SET SCREW M6-1 X 12
306	X1754306	PLATE CONNECTING ROD
307	XPSS04M	SET SCREW M6-1 X 12
308	X1754308	PLATE CONNECTING ROD
309	XPB160M	HEX BOLT M10-1.5 X 70
310	XPW04M	FLAT WASHER 10MM
311	XPNO2M	HEX NUT M10-1.5
312	X1754312	COLLAR
313	XPSS03M	SET SCREW M6-1 X 8
314	X1754314	ADJUST BOLT
315	XPNO9M	HEX NUT M12-1.75
316	XPW06M	FLAT WASHER 12MM
317	X1754317	MOTOR 3HP 220V
317-1	X1754317-1	MOTOR FAN COVER
317-2	X1754317-2	MOTOR FAN
317-3	X1754317-3	R. CAPACITOR 60MFD/400VAC
317-4	X1754317-4	S. CAPACITOR 300MFD/300VAC
317-5	X1754317-5	JUNCTION BOX COVER
317-6	X1754317-6	MOTOR LABEL
317-7	X1754317-7	CENTRIFUGAL SWITCH
318	XPB12M	KEY 5 X 5 X 30
319	XPW01M	FLAT WASHER 8MM
320	XPNO3M	HEX NUT M8-1.25
321	XPB118M	HEX BOLT M8-1.25 X 45
322	X1754322	STRAIN RELIEF
323	XPNO3M	HEX NUT M8-1.25
324	XPW01M	FLAT WASHER 8MM
325	X1754325	SLEEVE
326	X1754326	UNIVERSAL PULLEY
327	XPB163M	HEX BOLT M8-1.25 X 65
328	X1754328	RUBBER FOOT
329	XPR16M	EXT RETAINING RING 9MM
330	XPW06M	FLAT WASHER 12MM
331	X1754331	SHAFT 12MM
332	XPSB05M	CAP SCREW M8-1.25 X 50

## REF PART # DESCRIPTION

333	XPW01M	FLAT WASHER 8MM
334	XPNO3M	HEX NUT M8-1.25
335	XPNO2M	HEX NUT M10-1.5
336	XPW04M	FLAT WASHER 10MM
337	X1754337	HEX BOLT M8-1.25 X 100
338	XPW01M	FLAT WASHER 8MM
339	X1754339	SPECIAL BOLT
340	XPR21M	INT RETAINING RING 35MM
341	XP6202ZZ	BALL BEARING 6202ZZ
342	X1754342	TROLLEY WHEEL
343	X1754343	SLEEVE
344	X1754344	TROLLEY UNIVERSAL KIT
345	XPW04M	FLAT WASHER 10MM
346	XPLN09	LOCK NUT M12-1.75
347	X1754347	HEX BOLT M10-1.5 X 55
348	X1754348	BRACKET
349	X1754349	PEDAL
350	X1754350	COMPLETE MAG SWITCH
350-1	X1754350-1	MAG SWITCH BACK COVER
350-2	X1754350-2	CONTACTOR
350-3	X1754350-3	THERMAL OVERLOAD RELAY
350-4	X1754350-4	MAG SWITCH FRONT COVER
351	XPSB118M	BUTTON HD CAP SCR M5-.8 X 20
352	XPW02M	FLAT WASHER 5MM
353	XPNO6M	HEX NUT M5-.8
354	X1754354	FRONT COVER
355	XPSBS05M	BUTTON HD CAP SCR M6-1 X 20
356	XPFB18M	FLANGE BOLT M8-1.25 X 20
357	X1754357	SWITCH MOUNTING BRACKET
358	XPFB17M	FLANGE BOLT M6-1 X 16
359	XPFB17M	FLANGE BOLT M6-1 X 16
360	X1754360	BALL STRAIN RELIEF
361	X1754361	SWITCH BOX
362	X1754362	SWITCH FACE COVER
363	X1754363	START BUTTON
364	X1754364	INDICATOR LIGHT
365	X1754365	STOP BUTTON
366	X1754366	TAP SCREW ST4.2 X 8



# Table Breakdown & List



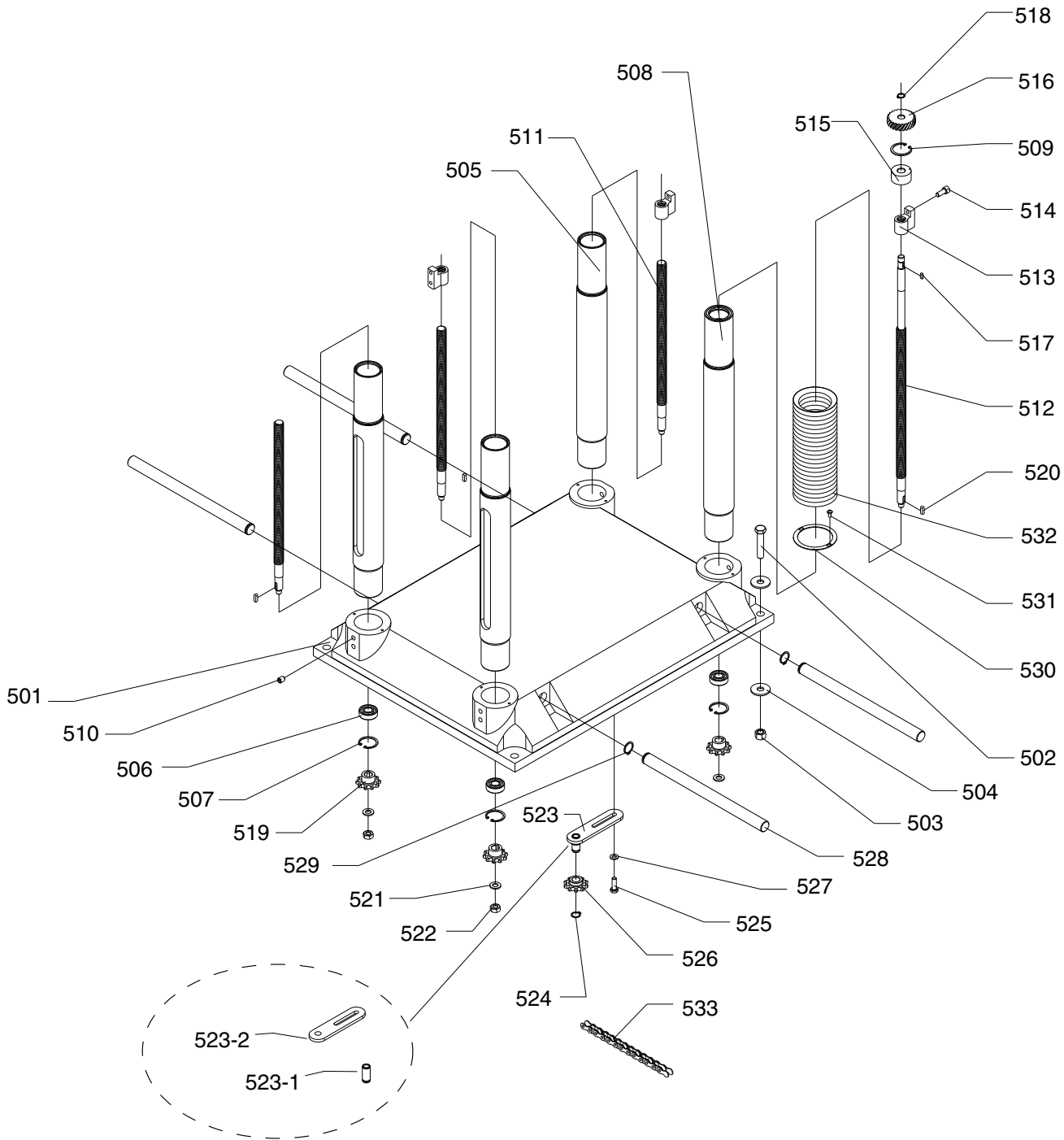
## REF PART # DESCRIPTION

401	X1754401	TABLE/BED
402	X1754402	ROLLER
403	XP6201	BALL BEARING 6201
404	X1754404	ECCENTRIC SHAFT
405	XPSS04M	SET SCREW M6-1 X 12
406	X1754406	LOCK BAR
407	X1754407	LOCK SLEEVE

## REF PART # DESCRIPTION

408	X1754408	LOCKING ROD
409	X1754409	STAR KNOB M12-1.75
410	X1754410	EXTENSION WING
411	XPLW04M	LOCK WASHER 8MM
412	XPW01M	FLAT WASHER 8MM
413	XPB20M	HEX BOLT M8-1.25 X 35
414	XPSS09M	SET SCREW M8-1.25 X 20

# Columns Breakdown



# Columns Parts List

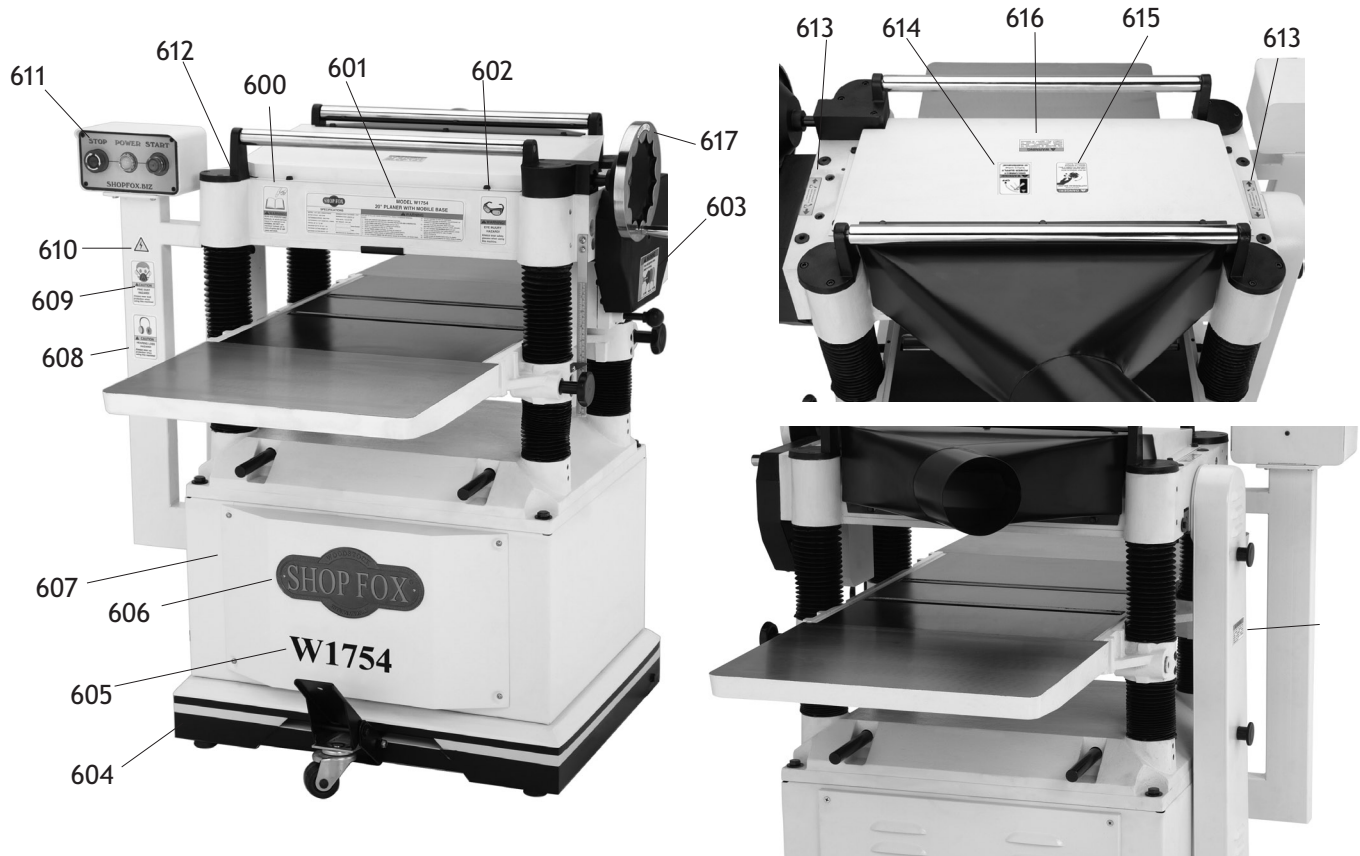
REF	PART #	DESCRIPTION
501	X1754501	BASE
502	XPB38M	HEX BOLT M12-1.75 X 60
503	XPB09M	HEX NUT M12-1.75
504	XPW06M	FLAT WASHER 12MM
505	X1754505	COLUMN
506	XP6202ZZ	BALL BEARING 6202ZZ
507	XPR21M	INT RETAINING RING 35MM
508	X1754508	COLUMN
509	XPR22M	INT RETAINING RING 38MM
510	XPSS13M	SET SCREW M10-1.5 X 12
511	X1754511	LEAD SCREW
512	X1754512	LEAD SCREW
513	X1754513	LEAD NUT
514	XPSB14M	CAP SCREW M8-1.25 X 20
515	X1754515	BUSHING
516	X1754516	GEAR
517	XPB69M	KEY 4 X 4 X 12
518	XPR03M	EXT RETAINING RING 12MM

REF	PART #	DESCRIPTION
519	X1754519	SPROCKET
520	XPB08M	KEY 5 X 5 X 16
521	XPW04M	FLAT WASHER 10MM
522	XPB02M	HEX NUT M10-1.5
523	X1754523	BRACKET ASSEMBLY
523-1	X1754523-1	SHAFT
523-2	X1754523-2	BRACKET
524	XPR05M	EXT RETAINING RING 15MM
525	XPB07M	HEX BOLT M8-1.25 X 25
526	X1754526	SPROCKET
527	XPW01M	FLAT WASHER 8MM
528	X1754528	CRANE POST
529	XPR81M	EXT RETAINING RING 21MM
530	X1754530	PIPE BAND
531	XPS09M	PHLP HD SCR M5-.8 X 10
532	X1754532	DUST BOOT
533	X1754533	CHAIN 08A-1 X 66

# Labels & Cosmetic Parts

## !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.



REF	PART #	DESCRIPTION
600	XLABEL-12	READ MANUAL LABEL
601	X1754601	MACHINE ID LABEL
602	XLABEL-11	SAFETY GLASSES LABEL
603	X1754603	SPEED CHANGE LABEL
604	X1754604	DECORATIVE STRIPE TAPE
605	X1754605	MODEL NUMBER LABEL
606	X1754606	SHOP FOX LOGO PLATE
607	X1754607	SHOP FOX WHITE
608	XLABEL-1	EAR PROTECTION LABEL

REF	PART #	DESCRIPTION
609	X1754609	RESPIRATOR LABEL
610	XLABEL-04	ELECTRICITY LABEL
611	X1754611	CONTROL PANEL LABEL
612	XPPAINT-7	SHOP FOX BLACK
613	X1754613	LUBRICATION LABEL
614	X1754614	CUTTERHEAD WARNING LABEL
615	X1754615	DISCONNECT POWER LABEL
616	X1754616	SHUT COVER WARNING LABEL
617	X1754617	HAND WHEEL LABEL

# 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.





# Warranty Registration

Name \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone # \_\_\_\_\_ Email \_\_\_\_\_ Invoice # \_\_\_\_\_

Model # \_\_\_\_\_ Serial # \_\_\_\_\_ Dealer Name \_\_\_\_\_ Purchase Date \_\_\_\_\_

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

1. How did you learn about us?

\_\_\_\_\_ Advertisement

\_\_\_\_\_ Friend

\_\_\_\_\_ Local Store

\_\_\_\_\_ Mail Order Catalog

\_\_\_\_\_ Website

\_\_\_\_\_ Other:

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

\_\_\_\_\_ 0-2 Years

\_\_\_\_\_ 2-8 Years

\_\_\_\_\_ 8-20 Years

\_\_\_\_\_ 20+ Years

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

\_\_\_\_\_ 0-2

\_\_\_\_\_ 3-5

\_\_\_\_\_ 6-9

\_\_\_\_\_ 10+

4. Do you think your machine represents a good value?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

5. Would you recommend Shop Fox® products to a friend?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

6. What is your age group?

\_\_\_\_\_ 20-29

\_\_\_\_\_ 30-39

\_\_\_\_\_ 40-49

\_\_\_\_\_ 50-59

\_\_\_\_\_ 60-69

\_\_\_\_\_ 70+

7. What is your annual household income?

\_\_\_\_\_ \$20,000-\$29,000

\_\_\_\_\_ \$30,000-\$39,000

\_\_\_\_\_ \$40,000-\$49,000

\_\_\_\_\_ \$50,000-\$59,000

\_\_\_\_\_ \$60,000-\$69,000

\_\_\_\_\_ \$70,000+

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

\_\_\_\_\_ Cabinet Maker

\_\_\_\_\_ Popular Mechanics

\_\_\_\_\_ Today's Homeowner

\_\_\_\_\_ Family Handyman

\_\_\_\_\_ Popular Science

\_\_\_\_\_ Wood

\_\_\_\_\_ Hand Loader

\_\_\_\_\_ Popular Woodworking

\_\_\_\_\_ Wooden Boat

\_\_\_\_\_ Handy

\_\_\_\_\_ Practical Homeowner

\_\_\_\_\_ Woodshop News

\_\_\_\_\_ Home Shop Machinist

\_\_\_\_\_ Precision Shooter

\_\_\_\_\_ Woodsmith

\_\_\_\_\_ Journal of Light Cont.

\_\_\_\_\_ Projects in Metal

\_\_\_\_\_ Woodwork

\_\_\_\_\_ Live Steam

\_\_\_\_\_ RC Modeler

\_\_\_\_\_ Woodworker West

\_\_\_\_\_ Model Airplane News

\_\_\_\_\_ Rifle

\_\_\_\_\_ Woodworker's Journal

\_\_\_\_\_ Modeltec

\_\_\_\_\_ Shop Notes

\_\_\_\_\_ Other:

\_\_\_\_\_ Old House Journal

\_\_\_\_\_ Shotgun News

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

FOLD ALONG DOTTED LINE

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



Place  
Stamp  
Here



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



FOLD ALONG DOTTED LINE



