

MODEL W1692 15" PLANER



INSTRUCTION MANUAL

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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

About Your New Planer

Your new SHOP FOX® 15" Planer 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 in providing this manual. It is our intent to make sure all the information necessary for safety, ease of assembly, practical use and durability of this product be included.

If you need the latest revised edition of this manual, you can download it from http://www.shopfox.biz. If you still have questions after reading the latest revised manual, or if you have comments please contact us at:

Woodstock International, Inc. Attn: Technical Department P.O. Box 2309 Bellingham, WA 98227

Woodstock Service and Support

We stand behind our machines! In the event that a defect is found, parts are missing or questions arise about your machine, please contact Woodstock International Service and Support at 1-360-734-3482 or tech-support@shopfox.biz. Our knowledgeable staff will help you troubleshoot problems, send out parts or arrange warranty repair or returns.



Warranty and Returns

Woodstock International, Inc. warrants all SHOP FOX® machinery to be free of defects from workmanship and materials for a period of 2 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 to repair or alterations made or specifically authorized by anyone other than Woodstock International, Inc.

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 the SHOP FOX® factory service center or authorized repair facility designated by our Bellingham, WA office, with proof of their purchase of the product within 2 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.

Specifications

3 HP, 220V, Single-Phase
18A
6"
8"
3"
5000 RPM
14 ⁷ / ₈ " x 20"
3 HSS
4"
16 and 20 FPM
21 ¹ / ₂ " Wide x 21" Deep and 43" High
545 lbs.



SAFETY FIRST!

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.

AWARNING

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

ACAUTION

Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE

This symbol is used to alert the user to useful information about proper operation of the equipment.

- 1. Thoroughly read the instruction manual before operating your machine. Learn the applications, limitations and potential hazards of this machine. Keep manual in a safe, convenient place for future reference.
- 2. Keep work area clean and well lighted. Clutter and inadequate lighting invite potential hazards.
- **3. Ground all tools.** If a machine is equipped with a three-prong plug, it must be plugged into a three-hole electrical outlet or grounded extension cord. If using an adapter to aid in accommodating a two-hole receptacle, ground using a screw to a known ground.
- **4. Wear eye protection at all times.** Use safety glasses with side shields or safety goggles (that meet the national safety standards) while operating this machine.
- **5. Avoid dangerous environments.** Do not operate this machine in wet or open flame environments. Airborne dust particles could cause an explosion and severe fire hazard.
- 6. Ensure all guards are securely in place and in working condition.
- 7. Make sure switch is in the "OFF" position before connecting power to machine.
- **8. Keep work area clean** and free of clutter, grease, etc.
- **9. Keep children and visitors away.** All visitors should be kept a safe distance away while operating unit.
- 10. Childproof workshop with padlocks, master switches or by removing switch keys.
- 11. Disconnect machine when cleaning, adjusting or servicing.
- 12. Do not force tool. The machine will do a safer and better job at the rate for which it was



designed.

- 13. Use correct tool. Do not force machine or attachment to do a job for which it was not designed.
- 14. Wear proper apparel. Do not wear loose clothing, neck ties, gloves, jewelry, etc.
- 15. Remove adjusting keys and wrenches before starting the machine. Make this a habit!
- **16. Use proper extension cord.** When using an extension cord, make sure it is in good condition. Use extension cords 100' or less in length that are rated Hard Service (grade S) or better, and that have a conductor size of 16 A.W.G. A drop in line voltage, loss of power and overheating can result when using an undersized cord. The extension cord must have a ground wire and ground plug pin, as well.
- **17. Keep proper footing and balance** at all times, and make sure you lock a mobile base from moving.
- **18. Do not leave machine unattended**—wait until it comes to a complete stop before leaving the area.
- **19. Perform machine maintenance and care.** Follow lubrication and accessory attachment instructions in the manual.
- **20. Keep machine away from open flame.** Operating machines near pilot lights and/or open flames creates a high risk if dust is dispersed in the area. Dust particles and an ignition source may cause an explosion. Do not operate the machine in high risk areas, including but not limited to, those mentioned above.
- 21. Do not use machine under the influence of drugs or alcohol or if you are excessively tired.
- 22. Do not let untrained people use the machine if they are not supervised by an experienced operator.
- **23.** If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Then contact our service department or ask a qualified expert how the operation should be performed.
- **24.** Magnetic switches and power switches can be accidentally turned on when they are bumped. Always be aware of switch location when moving items around the shop.



Additional Safety Instructions for Planers



AWARNING

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

ACAUTION

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

- 1. Always make sure the planer is on firm ground and is stable before operating. Immediately fix or shim the planer if it rocks or wobbles.
- 2. Always inspect the workpiece before running it through the planer. Stock with loose knots, nails, staples, dirt or other foreign objects should be rejected from use or corrected by eliminating the condition that makes it questionable.
- **3.** Always make sure that all components of the planer are adjusted to their proper specifications before planing stock.
- 4. Always use the help of another person or some type of support fixture when planing long stock.
- **5. Never** stand behind the workpiece when you are feeding it into the planer; the workpiece could possibly kick back and be thrown in the direction from which it came.
- **6. Never** operate the planer if knives are dull or damaged. Sharp knives are safer and produce better final results.
- 7. **Never** process any material through the planer other than wood. This planer is designed for wood only!
- 8. Always take multiple light cuts rather than excessively deep cuts.
- 9. Never attempt to free a stalled workpiece while the planer is powered on and plugged in.
- 10. Never reach inside the planer or open the top cover while the planer is plugged in.
- 11. Never plane wood that is less than 8" long or less than 1/4" thick.
- 12. Always wear hearing protection when operating the planer.



ELECTRICAL

220V Operation

The motor supplied with your new planer is rated at 3 HP and will draw approximately 12 amps during 220 volt operation. When choosing an outlet for this machine, we recommend using a NEMA L6-15 plug and receptacle with a 15 amp circuit breaker or fuse. Keep in mind that a circuit being used by other machines or tools at the same time will add to the total load being applied to the circuit. Add up the load ratings of all machines on the circuit. If this number exceeds the rating of the circuit breaker, fuse or wires, use a different circuit.

Extension Cords

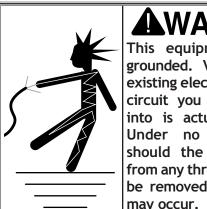
We do not recommend using an extension cord for 220V equipment. Instead, arrange the placement of your machinery and installed wiring to eliminate the need for extension cords. If you must use an extension cord, make sure it is rated Standard Service (grade S) and capable of handling a 15 amp load. The extension cord must always contain a ground wire and plug pin. Be sure to ask an expert about the correct gauge to use with your desired cord length. Always repair or replace extension cords when they become worn or damaged.

Grounding

This machine must be grounded! See Figure 1. The electrical cord supplied with the Model W1692 15" Planer does not come with a 220 volt plug. Use a plug with a ground pin. If your outlet does not accommodate a ground pin, have it replaced by a qualified electrician or have an appropriate adapter installed and grounded properly. An adapter with a grounding wire does not guarantee the machine will be grounded. A ground source must be verified.

NOTICE

NEVER replace the circuit breaker with one rated at a higher amperage or damage to the circuit may occur.



AWARNING

This equipment must be grounded. Verify that any existing electrical outlet and circuit you intend to plug into is actually grounded. Under no circumstances should the grounding pin from any three-pronged plug be removed. Serious injury may occur.

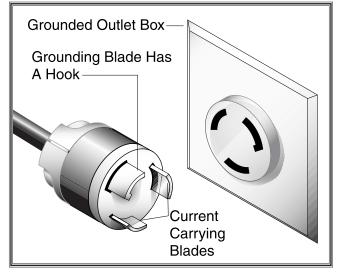


Figure 1. Typical 220V 3-prong NEMA L6-15 plug and outlet.



ASSEMBLY

Overview

The following is a description of the components shipped with the SHOP FOX® W1692 15" Planer.

Should any parts be missing, examine the packaging carefully to be sure parts are not among the packing materials. If any parts are missing, contact Woodstock International, Inc. at 360-734-3482 or by e-mail at: tech-support@shopfox.biz.

Box Contents

- 1. Planer Unit (Not Shown)
- 2. Dust Hood and Hardware
 - (3) Flange Bolt M6-1.0 x 12
 - (3) Flat Washer 6mm
 - (3) Hex Nut M6-1.0
 - (3) Lock Washer 6mm
 - (3) Cap Screw M6-1.0 x 12
- 3. Extension Roller Assembly and Hardware
 - (3) Hex Head Screw M8-1.25 x 20
 - (3) Setcrew M8-1.25 x 12
 - (3) Flat Washer 8mm
- 4. Knife Setting Jig Assembly
 - (1) Knife Setting Rod
 - (2) Knife setting gauge
 - (4) E-clip ring 9mm
- 5. Handwheel and Hardware
 - (1) Double Round End Key 4 x 4 x 10mm
 - (1) Hex Nut M10
 - (1) Flat Washer 10mm
 - (1) Direction Label
- 6. Crank Handle
- **7.** Tools:
 - (1) 3mm Allen Wrench
 - (1) 4mm Allen Wrench
 - (1) 5mm Allen Wrench
 - (1) 6mm Allen Wrench
 - (1) 8mm & 10mm Combo Wrench
 - (1) 12mm & 14mm Combo Wrench
- 8. Control Box Hardware:
 - (3) Flat Washer 6mm
 - (3) Hex Head Screw M6-1.0 x 25

The factory has assembled most of your new planer; however, depending on manufacture date, some parts shown in **Figure 2** may still need to be assembled after delivery. Please take your time and try to be as accurate as possible when following each step. This care will provide you with better results when you are finished.

Additional Tools Required: Besides the tools that were included with the planer, you will also need a Phillips® screwdriver, a flat-head screwdriver and a good straightedge. A set of feeler gauges and a dial indicator will also be necessary for the *Adjustments* section.

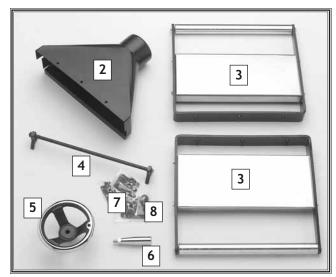
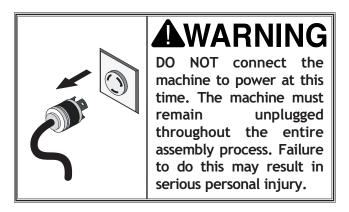


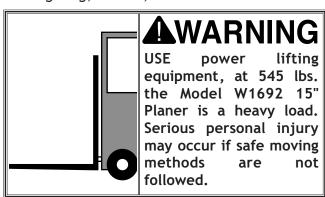
Figure 2. Parts that need to be assembled.

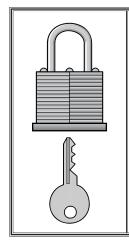




Shop Preparation

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





ACAUTION

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

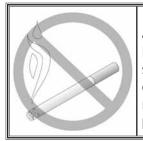
Cleaning Planer

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—if you happen to splash some onto a painted surface, you will ruin the finish.



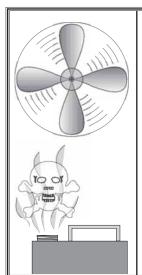
AWARNING

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



WARNING

NEVER smoke while using solvents. A risk of explosion or fire exists and may result in serious personal injury.



ACAUTION

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.



Extension Rollers

The extension roller assemblies are identical for both the infeed and the outfeed ends of the table. Depending on the length of the workpiece, to help minimize snipe, you may have to adjust the extension rollers periodically so they are approximately 0.030" above the table.

To mount the extension rollers, do these steps:

- 1. Loosen the setscrews where the table rollers mount to the planer body (on both ends) as shown in **Figure 3**.
- **2.** Use a wrench to lower the rollers on their eccentric shafts
- Position the extension roller assemblies on the planer table, and install the M8-1.25 x 20 mounting bolts and washers finger tight.
 See Figure 3.
- **4.** Place a straightedge across the table and across the rollers as shown in **Figure 4**.
- Turn the adjustment setscrews (See Figure
 so the extension roller assemblies are flush with the table surface as indicated by the straightedge.
- **6.** Tighten the mounting bolts to secure the extension bar in place. See **Figure 5.**

The top of the rollers should now be completely even with the top of the table. Double-check to make sure that the rollers did not move during the tightening process.

Do not adjust the table rollers you previously retracted into the planer table, because the final set of adjustments will be explained in the **ADJUSTMENTS** section.

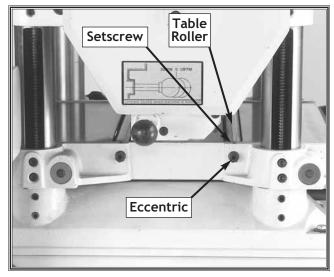


Figure 3. Table rollers and setscrews.



Figure 4. Extension roller-to-table alignment.

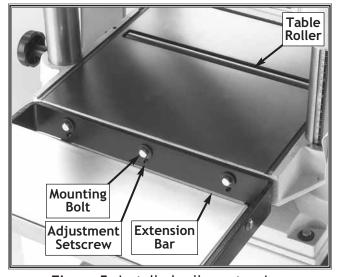


Figure 5. Installed roller extension.



Handwheel

The handwheel and crank operate the chaindriven leadscrews that raise and lower the table to control the cutting depth.

To mount the handwheel and crank, do these steps:

- 1. Install the key in the worm gear shaft and slide the handwheel onto the shaft.
- Install and tighten the hex nut and washer on the end of the shaft as shown in Figure
 6.
- 3. Thread the crank into the handwheel and tighten to keep the crank locked in place.

Dust Hood

We strongly recommend connecting your planer to a dust collection system for optimum planing results and personal safety.

To install the dust hood, do these steps:

- Match the holes in the dust hood to the tapped holes in the planer casting on the outfeed end.
- 2. Secure the dust hood with the (6) M6-1.0 x 12 hex bolts from the hardware bag, as shown in **Figure 7**.
- **3.** Attach the dust hose to the dust port with a hose clamp.



Figure 6. Installed handwheel and crank.

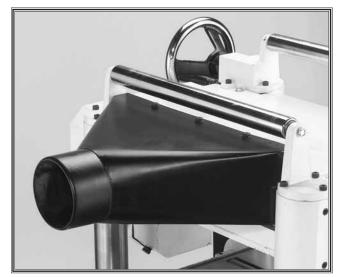


Figure 7. Installed dust hood.



Control Panel Assembly

The prewired control panel assembly needs to be mounted to the planer stand.



To mount the control panel assembly, do these steps:

- Position the control panel support arm, control box with the planer as shown in Figure 8.
- 2. Secure the assembly with the hex bolts, DO NOT over-tighten or you can crack the control panel support arm.
- 3. Connect the control panel wiring harness plug to planer wiring harness plug.

Knife Setting Jig

We have provided a jig to make the knife setting process easy and quick. See **Figure 7** for jig component identification while assembling.

To assemble the knife setting jig, do these steps:

- 1. Snap one of the E-clips over the notch on one end of the knife setting rod.
- 2. Slide the aluminum knife setting jig brackets onto the rod.
- 3. Snap the other E-clip on the other end of the knife setting rod.



Figure 8. Installed control panel assembly.



Figure 9. Knife setting jig.



cutting

ADJUSTMENTS

Planer Overview

Take the time to familiarize yourself with the controls of your new planer. They will be frequently mentioned throughout this instruction manual. The better you know your machine, the better you can make it perform. Figure 10 points out your planer controls and features.

As with all precision machinery, adjustments to the planer require very close tolerances. The adjustments described in this section have a basic factory setting. However, due to storage and shipping, it is necessary for you to finetune these adjustments in the same order as presented in this manual, or your planing results will be compromised. To achieve exact results, use a dial indicator or a Rotacator® (refer to Planer Accessories on pages 34 and 35). Once you set up the planer correctly, you will enjoy stable machine settings and excellent planing results for a long time.



WARNING

NEVER connect power to machine the performing adjustments. Failure to follow this warning may result in serious personal injury.



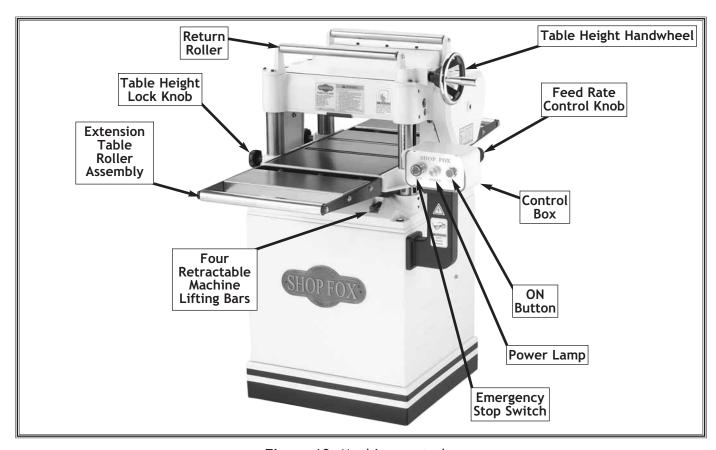


Figure 10. Machine controls.



Table

The most critical adjustments made on your new planer are dependent on the table being parallel to the cutterhead body. Because of this relationship, checking the table is the first step to setting up an accurate planer.

There are two dimensions you should be concerned about when checking/aligning the table—the table should be parallel to the head casting from front-to-back, and the table should be parallel with the cutterhead body from side-to-side.

The table has been pre-set at the factory, but it is a good idea to check any machine thoroughly before use.

To check the table alignment, do these steps:

1. UNPLUG THE PLANER!

- 2. If you have not already done so, loosen the setscrews where the table rollers mount to the planer body (on both ends) as shown in Figure 11.
- 3. Use a wrench to lower the rollers on their eccentric shafts. Leave the table rollers in this position until instructed to adjust them at the end of this section.
- **4.** Make the gauge shown in **Figure 12** out of a block of wood.
- **5.** Place the block on one end of the table, directly under the cutterhead body.
- 6. Raise the table up so the block only touches the cutterhead body (keep knives rotated out of the way for this step).
- 7. Without moving the table, slide the block of wood to the other end of the cutterhead. If the block of wood will not fit, or if the block is below the cutterhead body, measure this gap with a feeler gauge. If the difference is more than 0.002", then the table needs to be adjusted from left to right.
- 8. Place the block under the front of the head casting to either side of the stop. See Figure 13.

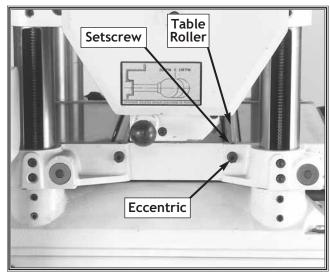


Figure 11. Table rollers and setscrews.

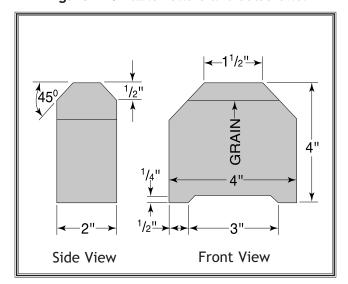


Figure 12. Gauge block.



Figure 13. Checking table/head casting in front.



- Raise the table up so the block barely touches the head casting as shown in Figure 13.
- 10. Remove the block and place it between the middle-rear of the head casting and the table. If there is a gap or it will not fit under the head casting, measure the difference with a feeler gauge. If this measurement is more than 0.002", then the table needs to be adjusted from front to back.
- 11. There are two methods to adjust the table on your planer. The first is for adjustments smaller than 0.016" and the second is for adjustments larger than 0.016".

To adjust the table less than 0.016", do these steps:

- Loosen the table mounting screws and lift/lower the table until the table and the cutterhead body are parallel with each other and the table is parallel with the head casting from front to back.
 - NOTE: This adjustment may require some trial and error. See **Figure 12**.
- 2. Adjust each column on both sides until the table is properly set. While adjusting the columns, tighten each screw after each step to ensure accurate results.

To adjust the table more than 0.016", do these steps:

On the underside of the table there is a chain drive and five sprockets as shown in **Figure 13**. The four sprockets in the corners control the movement of the table columns. The fifth sprocket is the idler sprocket that controls the chain tension.

 Loosen the two bolts on the idler sprocket bracket (as shown in Figure 13) to loosen the chain so that each sprocket can be rotated on its own. See Figure 14.

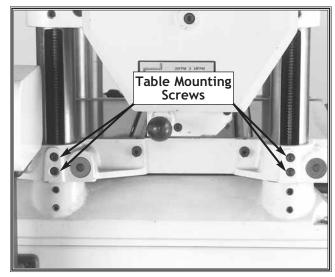


Figure 12. Table mounting screws.

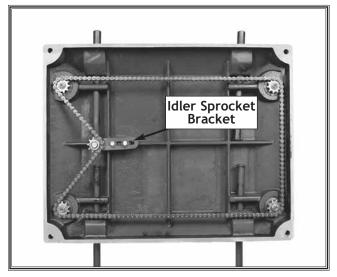


Figure 13. Underside of table.

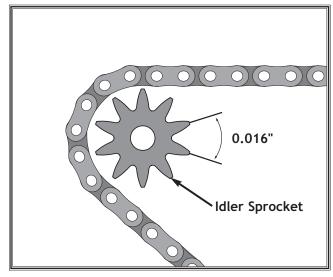


Figure 14. Understanding sprocket movement.



- 2. Hold the chain away from the sprocket while you turn the sprocket. Make sure, as you adjust each sprocket, that you count the number of teeth that pass a fixed point.
- 3. Moving the sprockets clockwise lowers the table and moving them counter-clockwise raises the table. Each tooth on the corner sprockets equals 0.016" of vertical movement when the sprockets are turned.
- 4. After you have the table adjusted to within 0.016" from front-to-back and from side-to-side, tighten the chain so all of the slack is removed.

- 5. Loosen the table mounting screws and lift/lower the table until the table and the cutterhead body are parallel with each other and the table is parallel with the head casting from front to back.
 - NOTE: This adjustment may require some trial and error. See **Figure 12**.
- **6.** Adjust each column on both sides until the table is properly set. While adjusting the columns, tighten each screw after each step to ensure accurate results.
- 7. If you have already adjusted the knives, go to page 20 and adjust the feed rollers and chip breaker.



Inspecting Knives

The Model W1692 15" Planer features a 3 knife cutterhead. Correctly positioned knives act as a reference point for adjusting the feed rollers and the chip breaker.

The knife edge should be within 0.002" from one end to the other. Improperly adjusted knives may unbalance the cutterhead, reduce the sharpness of knife edges prematurely, shorten bearing life, and produce poor planing



ACAUTION

WEAR thick gloves and use extreme caution when working near planer knives. These knives are dangerously sharp! Failure to exercise care while working near knives could result in severe injury.

results. To check the knives, do these steps:

- UNPLUG THE PLANER!
- 2. Remove the upper cover as shown in Figure 15 for access to the cutterhead.
- 3. Remove the V-belt cover from the left-hand side of the planer (facing front).
- **4.** Using the V-belt to rotate the cutterhead, turn the cutterhead so one of the knives is accessible.
- Position both feet of the knife setting jig on the cutterhead. The knife should barely touch the center of the jig as shown in Figure 16.
- 6. If the knife does not contact the center of the jig, or if the knife contacts the center of the jig but both feet will not sit solidly on the cutterhead, then the knives will need to be adjusted.

For quick and easy knife adjustments to within 0.001" from one knife end to the other, use a Planer Pal®. Refer to Planer Accessories on pages 34 and 35 for more details.



Figure 15. Cover removed from planer.

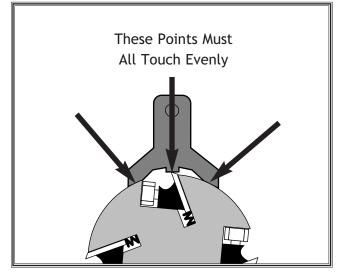


Figure 16. Correct jig position on a typical SHOP FOX® cutterhead.



Knife Adjustment

The Model W1692 15" Planer is equipped with both springs and jack screws for knife adjustment. Springs allow adjustments to be made quickly, while jack screws are more accurate. Both methods are covered below.



ACAUTION

WEAR thick gloves and use extreme caution when working near planer knives. These knives are dangerously sharp! Failure to exercise care while working near knives could result in severe injury.

<u>JACK SCREWS</u> support the knives from underneath. By threading the jack screws in or out, you can precisely control the knife height. See **Figure 17** for identification.

To adjust the knives using the jack screws, do these steps:

- 1. UNPLUG THE PLANER!
- 2. Loosen the gib bolts and remove the gib and knives. Remove all of the springs and place them in a plastic bag.
- 3. Tape the bag to the inside of the cabinet so they do not get lost.
- 4. Place the knives, gibs, and gib bolts back in the cutterhead as they were before removal. Make sure the knives are resting on the jack screws when you install them.
- **5.** Place the knife setting jig on the cutterhead so both feet sit solidly on the body of the cutterhead.

If the knife does not allow the jig to sit on the cutterhead evenly, raise or lower the knife with the jack screws to adjust as needed.

- 6. Snug the two outermost gib bolts (5 and 4 shown in Figure 18) to hold the knife in position.
- 7. Tighten the knives by following the instructions on page 19.

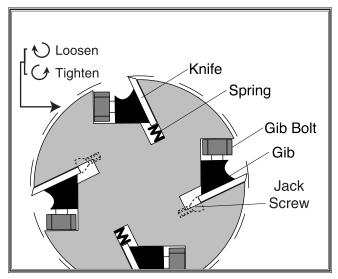


Figure 17. Typical SHOP FOX® cutterhead.

<u>SPRINGS</u> exert upward pressure under the knives while wedge-type gibs and gib bolts lock the knives in place. See **Figure 17** for cutterhead assembly identification.

To adjust the knives using the springs, do these steps:

- 1. UNPLUG THE PLANER!
- **2.** Lower the jack screws completely to get them out of the way.
- 3. Loosen the gib bolts so the knife will move upward from the pressure of the springs.
- 4. Place the knife setting jig on the cutterhead so both feet sit solidly on the cutterhead and so that the center of the jig pushes down on the knife (similar to Figure 16).
- 5. Place equal pressure on both ends of the jig so the jig is parallel with the cutterhead and the knife is set.
- 6. Snug the two outermost gib bolts (5 and 4 shown in Figure 18) to hold the knife in position.
- 7. Tighten the knives by following "tightening" instructions on page 19.



NOTICE

Uneven tightening of the gib bolts may cause the cutterhead to become unbalanced, which will lead to premature wear and tear of the knives.

To tighten the knives after adjustment, do these steps:

- 1. UNPLUG THE PLANER!
- 2. Alternating back-and-forth, lightly snug the gib bolts following the tightening sequence shown in Figure 18, but DO NOT tighten the bolts completely.
- 3. Rotate the cutterhead to the next knife and repeat step 2, and then repeat again with each knife. When all knife gib bolts been snugged, and you come back to the knife you started with, check the height with the jig to make sure that it is still correct.

If the bolt height is not correct, fix as necessary and re-snug the gib bolts; if the height is correct, snug each bolt down a little more in the same alternating method as in **step 2**, but **DO NOT** tighten the bolts completely. Repeat again with each knife.

4. When you return to the original knife, tighten all gibs **completely** in the same fashion, repeating on all knives.

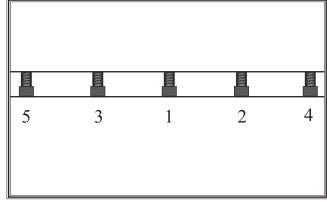


Figure 18. Gib bolt tightening sequence.



Feed Rollers and Chip Breaker

The feed rollers and the chip breaker are factory set for general planing. If you need to alter the settings or reset them after maintenance, these components can be adjusted at the same time, assuming that the knife height is set correctly. The standard setting for the infeed roller and the chipbreaker is 0.004"-0.008" below the cutterhead knife at bottom dead center. The outfeed roller should be set to 0.020" below the cutterhead knife at bottom dead center.

To accurately perform this adjustment, you will need a dial indicator (not included). Refer to Planer Accessories on pages 34 and 35 for more details.

To adjust the feed rollers and the chip breaker make sure you have adjusted the table as outlined on page 14 first, then do these steps:

1. UNPLUG THE PLANER!

- 2. You will need two boards that are the same height and are long enough to span the entire length of the table. An easy way to get two boards of the same height is to rip one board down the middle of its thickness.
- Place each board across the entire length of the table, on each side of the table, similar to Figure 19.
- 4. Rotate the cutterhead with the V-belt pulley so one of the knives is at bottom dead center. Bottom dead center is the furthest point down that the knife reaches in its rotation. The black line underneath the cutterhead in Figure 20 represents bottom dead center.
- **5.** Raise the table up until the boards barely touch the knife edge.
- **6.** Lower the feed rollers onto the boards using the feed roller adjustment setscrew shown in **Figure 21**.



Figure 19. Board position on table.

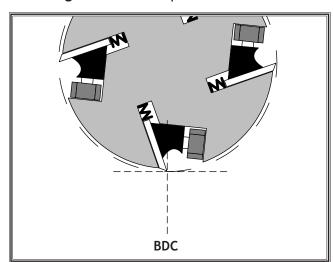


Figure 20. Typical cutterhead knife at bottom dead center (BDC).



Figure 21. Feed roller adjustment.



- 7. Lower the chipbreaker onto the boards, using the chip breaker adjustment setscrews shown in Figure 22.
- 8. Make sure that each of the adjustment controls for the feed rollers and the chipbreaker are backed off enough so that they will allow the components to move below the current position on the board.
- Place the dial indicator where you can measure solid table movement as shown in Figure 23.
- 10. Lower the table 0.004"-0.008" as indicated by the Rotacator® or a dial indicator. The feed rollers and the chipbreaker should all move freely with the table. If they do not, make sure that they are all resting evenly on the boards at this current position.
- 11. With the table lowered to 0.004"-0.008," lock the infeed roller and the chipbreaker in place. They should now all be set between 0.004"-0.008" below the knife edge when it is at bottom dead center.
- 12. The outfeed roller should still be able to move with the table. Continue lowering the table another 0.012" (0.008" + 0.012" = 0.020") as indicated by the Rotacator® or a dial indicator. The outfeed roller should now be set to approximately 0.020" below the knife edge at bottom dead center. Lock the outfeed roller in place.
- 13. Go to page 24 and adjust the table rollers.

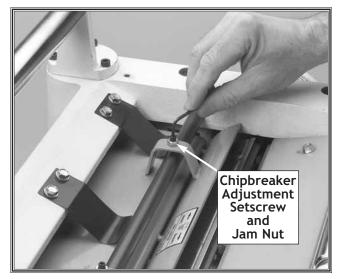


Figure 22. Chipbreaker height adjustment.

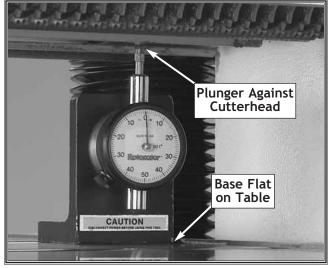


Figure 23. Typical Planer with the Rotacator® positioned to measure 0.004"-0.008" table movement.

NOTICE

For super accurate setup, consider purchasing a Rotacator[®]. This handy tool allows you to adjust the chipbreaker to an accuracy within 0.001" every time. Refer to **Planer** Accessories on pages 34 and 35 for more details.



Chip Deflector

A chip deflector is mounted behind the cutterhead to keep wood chips from falling onto the outfeed roller.

To adjust the chip deflector, do these steps:

- 1. UNPLUG THE PLANER!
- 2. Loosen the chip deflector mounting bolts shown in **Figure 24**.
- 3. Make sure the deflector is angled toward the cutterhead.
 - If you do not use a dust collector, position the edge of the deflector $^{1}/_{16}$ " from the knife edge.
 - If you use a dust collector, position the edge of the deflector 1/4" from the knife edge.
- 4. Rotate the cutterhead with the V-belt pulley and make sure there is enough clearance between all the knives and the chip deflector.
- **5.** Re-tighten the mounting bolts and replace the top cover.

Anti-Kickback Pawls

ACAUTION

Unbinding and free operation of the antikickback pawls is essential for the safe operation of the planer. Pawls clogged with pitch, sawdust, or other contaminants can render them useless if a kickback occurs.

The Model W1692 15" Planer features antikickback pawls that allow the workpiece to enter the planer, but stop the workpiece from coming back out of the entrance in the event of a kickback. See **Figure 25**.

Inspect the anti-kickback pawls frequently to ensure that they swing free and easy and that no pitch, sawdust, or other contaminants restrict operation. Never lubricate the pawls. Lubrication may cause dust to build-up, which will restrict movement.

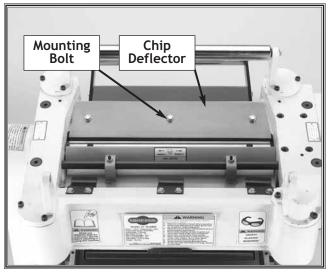


Figure 24. Chip deflector mounting bolts.

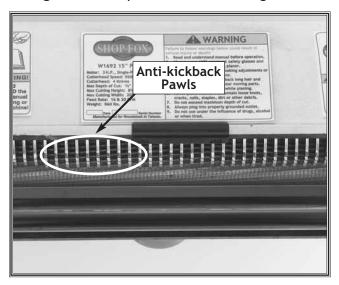


Figure 25. Anti-kickback pawls.



Roller Spring Tension

Roller spring tension keeps the workpiece securely fed into the planer without chatter or slipping.

To adjust the roller spring tension, do these steps:

- Adjust the threaded plugs A, B, and C so they protrude 1/8" above the head casting.
 Figure 26 shows the four spring adjustment plugs.
- 2. Adjust plug D so it protrudes $\frac{5}{16}$ " above the head casting. This extra height compensates for the pressure of the chain during operation.

NOTICE

More adjustments may be necessary to the roller spring tension after the machine has been run and is in safe working condition. See the *Operations* section for more details.

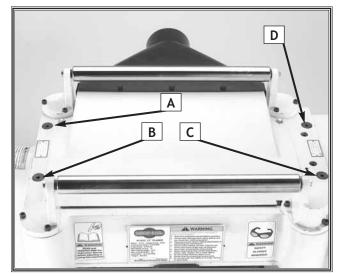


Figure 26. Roller spring tension adjustment screws.



Table Rollers

The table rollers should be set last so they stay out of the way during the other adjustments. The required height of the table rollers will vary depending on the type of stock you intend to plane.

As a general rule, table roller height should be between 0.002" and 0.020" above the table (see Figure 27). However, some stock may have better results outside of these numbers. Often, a small amount of trial-and-error is required to find the best table roller height for any particular stock. Rough stock will plane better when the rollers are higher, and smooth stock will have less snipe when the rollers are lower.

To adjust the table roller height, do these steps:

1. UNPLUG THE PLANER!

- 2. Place a straightedge across the length of the table as shown in **Figure 28**.
- 3. Use a feeler gauge to measure the gap between the table surface and the straightedge, and adjust the table rollers by loosening the setscrews and then turning the eccentric to reach the needed roller height. The gap between the straightedge and the table should be even on both sides of the rollers. See Figure 28.

NOTICE

For super accurate setup, consider purchasing a Rotacator[®]. This handy tool allows you to adjust the feed table rollers to an accuracy within 0.001" every time. Refer to **Planer Accessories** on **pages 34** and **35** for more details.

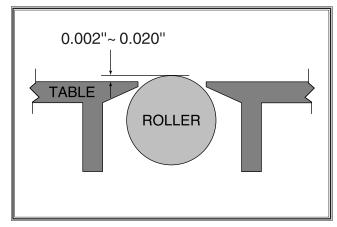


Figure 27. Table roller tolerances.

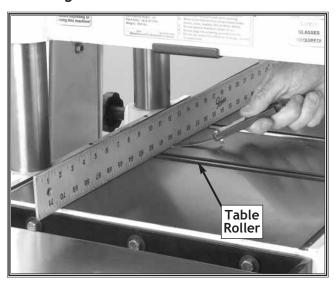


Figure 28. Measuring table roller protrusion with a feeler gauge.

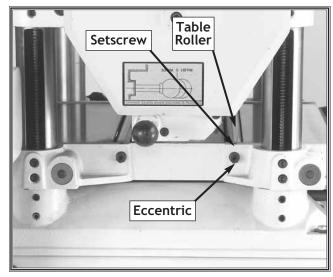


Figure 29. Table rollers and setscrews.



OPERATIONS

Test Run

Before turning the machine *ON* for the first time, make sure you have read through the entire manual and have completed the instructions given in the **Assembly** and **Adjustments** sections, and that you have taken all safety precautions.

Make sure any tools used to assemble/adjust the machine are properly cleared away. The table should be lowered enough to provide plenty of room for the safe operation of the feed rollers and the cutterhead.

Plug in the power cord and press the *START* button. Make sure that you remain near the switch in case you have to press the *STOP* button in an emergency. Strange or unnatural noises should be investigated and corrected before operating the machine further.

Feed Rate

The feed rate is the speed that the rollers drive the workpiece through the planer. Your planer features 16, and 20 FPM feed rates.

As a general rule, the faster the feed rate the faster the workpiece is planed, but a rougher finish is left behind; and the slower the feed rate the slower the workpiece is planed, but a smoother finish is left behind.

Often, a small amount of trial-and-error will be the best way to determine which setting is right for your particular application.

NOTICE

DO NOT change speeds while planing or severe damage to gearbox will result!

To change the feed roller speed, locate the feed rate knob shown in **Figure 30**. The machine must be running in order to change speeds; however, you should NEVER be planing stock through the machine when you switch speeds. Start the planer and pull or push in the knob as illustrated in **Figure 31**.



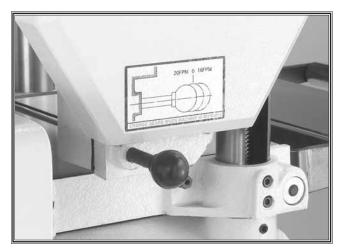


Figure 30. Feed rate knob.

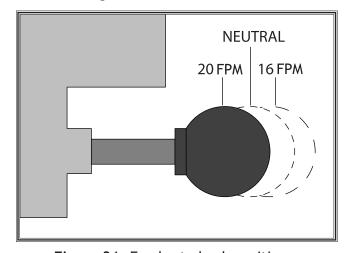


Figure 31. Feed rate knob positions.



Operational Tips

- Carefully inspect any lumber that you plan to run through the planer. Each board must have at least one flat surface to slide along the planer table. To create a flat surface, pass the stock over a jointer first. See Figure 32. Some defects such as moderate twisting, loose knots or severe cracks may make the stock planeable.
- Only use clean stock. See Figure 33.
 Scrape off all glue from joined boards before planing. Remove all dirt, nails, staples, imbedded gravel, etc. from any lumber you plan on using. A hidden nail in a workpiece will instantly damage the sharp edges of the knives. This will cause unsatisfactory results in future operations.
- Plane ONLY natural wood fiber. Never plane wood composites such as particle board, plywood or MDF. Never plane laminates, formica or other synthetic materials.
- Surface wood in the same direction as the grain. Never feed end-cut or end-grained lumber into the planer.
- Keep your work area clear. Always make sure that long workpieces are supported and have enough room to exit the planer.
- When making multiple passes with the long stock, use the top rollers to move material back to the infeed side of the planer.
- Avoid planing wood with a high moisture content. Stock with more than 20% moisture, or stock that has been exposed to rain or snow, will plane poorly and cause unnecessary wear on the knives and motor. Excess moisture may also cause rust or corrosion problems.

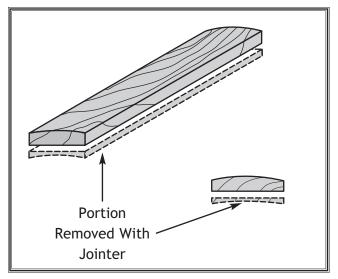


Figure 32. Face joint the concave side of cupped stock before planing.

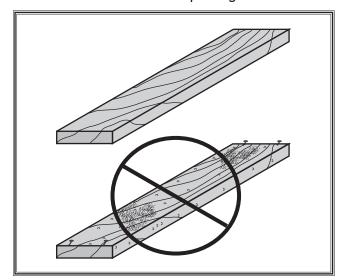


Figure 33. Only plane clean stock.



Troubleshooting Planing Results

This section covers the most common problems with the workpiece that you may encounter. Do not make any adjustments until the planer is unplugged and moving parts have come to a complete stop. For Machine troubleshooting go to page 32.

Planing results are affected by the species and condition of the wood, how the planer is setup, and the condition of the knives. The following characteristics are some common problems, and the solutions woodworkers might use while planing.

SNIPE — More material is being removed from the board ends rather than the middle of the board.

SOLUTIONS:

- Provide more support on the infeed and outfeed sides so the wood travels completely through the planer without any vertical tilting. This alignment problem occurs with all planers to some degree.
- Hold the workpiece flat against the planer tables and rollers so the board does not tilt while entering and exiting the planer.
- Install extra roller stands.
- Raise the table/ lift the board ends.

CHIP MARKS — Chips are not being properly expelled from the cutterhead. The chips get caught between the knives and the workpiece and hinder knife cutting ability. Chip marks are usually random and uneven.

SOLUTIONS:

- Unclog the chip deflector blockage and correct for cause of blockage.
- Increase cleaning intervals.
- Install a dust collector.

CHIPPED GRAIN — Grain shows cut marks and chips.

SOLUTIONS:

- Do not plane against the grain.
- Do not plane wood with knots or cross grain.
- Use sharp knives.
- Make shallower cuts.
- Surface clean and flat stock.

FUZZY GRAIN — Grain fibers stand up on the workpiece after planing.

SOLUTIONS:

- Do not surface damp or wet wood, check it with a moisture meter. Anything over 20% should be allowed to dry.
- Install sharp knives.

GLOSSY SURFACE — The wood is scorched, blackened, and/or glossy.

SOLUTIONS:

- Remove all resin or glue build-up on the rollers, cutterhead, and the surface of the wood to be planed.
- Install sharp knives so shallow cuts do not have to be made to compensate for dull knives that burn the wood. If this is the case and the condition has existed for a long time, the knives may be damaged as a result and cannot be turned. The knives must be replaced.
- If knives are sharp and a glossy surface still results, increase the cutting depth.

WOOD DOES NOT FEED CORRECTLY — The planer draws wood in erratically or slowly.

SOLUTIONS:

- Plane wood that is not twisted or warped
- Remove any pitch build-up on the feed rollers.
- Replace the knives if they are dull or broken.





MAINTENANCE

General

Regular periodic maintenance on your Model W1692 15" Planer will ensure its optimum performance. Make a habit of inspecting your planer each time you use it.

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

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

Cleaning

Wear safety glasses and a respirator and use compressed air to blow-off dust buildup. Dust build-up around the motor can lead to motor failure.

Occasionally it will become necessary to clean the internal parts with more than compressed air. To do this, remove the covers and clean the internal parts with a citrus cleaner or mineral spirits and a stiff wire brush or steel wool. DO NOT USE WATER—WATER WILL RUST CAST IRON. Make sure the internal workings are dry before using the planer again. If any essential lubrication is removed during cleaning, relubricate those areas.

Table

The table can be kept rust-free with regular applications of products like Boeshield® T-9. For long term storage, you may want to consider products like Kleen Bore's Rust Guardit™.



AWARNING

Disconnect power to the machine when performing any maintenance or repairs. Failure to do this may result in serious personal injury.



AWARNING

Inspect your planer for loose nuts and bolts. Make sure that all tools are cleared away from the machine.



Lubrication

Since all bearings are sealed and permanently lubricated, leave them alone until they need to be replaced. Do not lubricate them. However, the Model W1692 15" Planer does need lubrication in the following listed places, depending on heavy use and the shop environment:

- Columns and Lead Screws Lubricate
 columns as needed with light oil to prevent
 rust, and lubricate the four leadscrews
 once with a general purpose grease to
 prevent rust and maintain smooth
 operation.
- Worm Gear Under heavy use, inspect the worm gear yearly and lubricate when needed. The worm gear box will need to be removed to perform the inspection. See Figure 34.
- Chain Inspect the table height adjustment chain periodically and lubricate as needed. Use high quality chain lubricant for best results.
- **Gear Box** Drain the gear box after the first 30 hours of operation. **Figure 35** shows the gear box drain and fill plugs. Refill with 80-90w gear oil. The oil level should reach the top of the filler plug port. After the initial change, inspect fluid levels periodically and change yearly. *If your planer receives heavy use, change the gear oil more frequently.*
- Drive Chains Inspect and lubricate the drive chains every six months. Check the sprockets, the chain, and the master links during inspection. Use a general purpose grease to lubricate the chain.
- Feed Rollers The feed roller plugs have holes to accept oil. Make sure that no dust is in the oil holes and lubricate feed roller plugs with two drops of oil before daily start-up. Figure 36 shows the lubrication points for the feed rollers. DO NOT lubricate more than two drops or the excess oil will end up on the floor.



Figure 34. Worm gear.

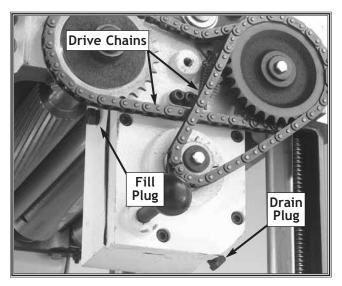


Figure 35. Gear box drain and fill plugs.

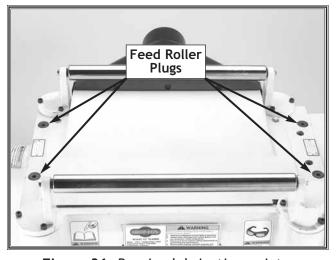


Figure 36. Bearing lubrication points.



Belt Tension

Frequently inspect the V-belt tension during the first twenty hours of break-in operation. During this period, the belts will stretch and seat, which can generate a fair amount of black dust inside of the belt cover. This dust buildup is a normal condition during planer life since the cover retains the dust.

However, it is very important that you check the drive belts so all belts have the same tension (belt deflection) after the break-in period. If one belt is looser than the others you must align the pulleys.

When replacing belts, always replace belts as a matched set.

To adjust belt tension, lower the motor slightly by loosening the lower jam nut shown in **Figure 40**. When belt tension is satisfactory, tighten the upper jam nuts down onto the motor bracket to secure it.

DO NOT over-tighten the jam nuts if the motor mount casting ear is tilted and the nuts do not contact the casting ear surface evenly (See **Figure 40**). The ear can snap off. Merely snug the jam nuts.

Pulley Alignment

The V-belt pulleys must be aligned with each other so all belts share the same belt tension (deflection). If the belts do not share the same work load, belt life will suffer. Check the alignment with a good quality straightedge as shown in **Figure 41**.

To align the pulleys:

- 1. Loosen the belt tension jam nuts so the motor will freely move up and down.
- 2. Loosen, but do not remove, the bolts that secure the motor to the motor mounting plate.
- 3. Slide the motor as needed to align the pulleys.
- **4.** When the pulleys are aligned, tighten the motor mount bolts.
- **5.** Tension the V-belts and replace the belt cover.

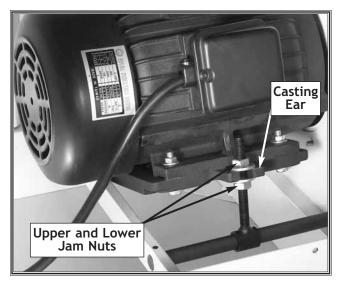


Figure 40. V-belt adjustment jam nut.

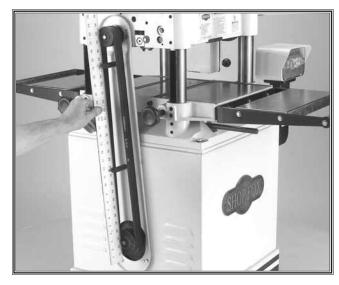
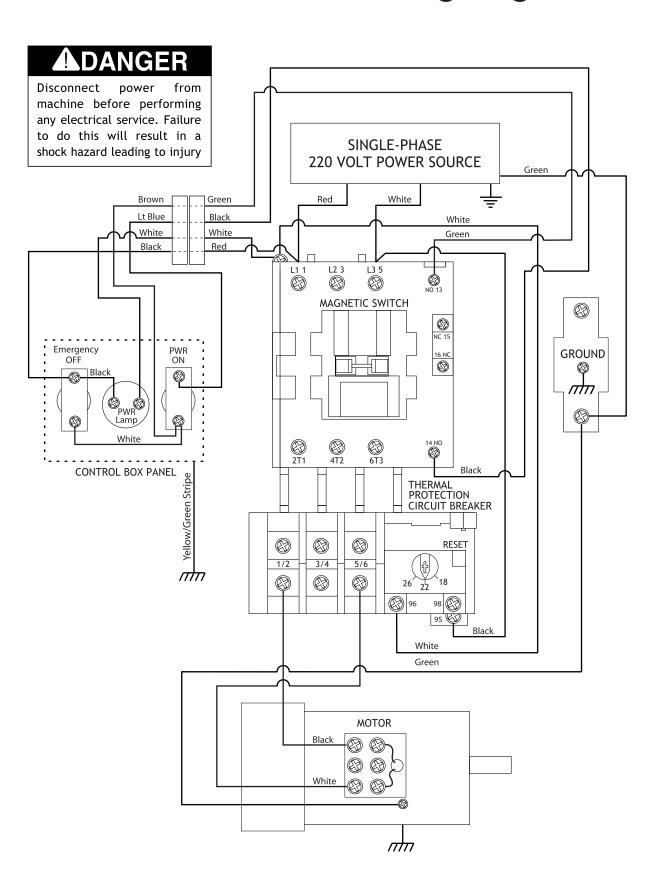


Figure 41. Aligning V-belt pulleys.





W1692 15" Planer Wiring Diagram





Troubleshooting Machine Operation

This section covers the most common planer problems no matter which planer you own. Do not make any adjustments until the planer is unplugged and moving parts have come to a complete stop. For troubleshooting planing results go to page 27.

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
Motor will not start.	Low voltage. Open circuit in motor or loose connections.	Check power line for proper voltage. Inspect all lead connections on motor for loose or open connections.
Motor will not start; fuses or circuit breakers blow.	 Short circuit in line cord or plug. Short circuit in motor or loose connections. Incorrect fuses or circuit breakers in power line. 	Inspect cord or plug for damaged insulation and shorted wires. Inspect all connections on motor for loose or shorted terminals or worn insulation. Install correct fuses or circuit breakers.
Motor overheats.	Motor overloaded. Air circulation through the motor restricted.	Reduce load on motor. Clean out motor to provide normal air circulation.
Motor automatically shuts off (resulting in blown fuse or tripped circuit in planer magnetic switch, or in power supply circuit).	Breaker amperage is set too low. 2. Short circuit in motor or loose	Unplug machine, open magnetic switch cover, turn amperage dial on Thermal Protection Circuit Breaker to a higher amprage setting. Inspect connections on motor for loose or shorted terminals or worn insulation. Correct the low voltage conditions. Install correct fuses or circuit breakers.
Machine slows when operating.	Feed rate too high. Depth of cut too great.	Feed workpiece slower. Reduce depth of cut.
Loud, repetitious noise coming from machine.	 Pulley setscrews or keys are missing or loose. Motor fan is hitting the cover. V-belt is defective 	Inspect keys and setscrews. Replace or tighten if necessary. Tighten fan or shim cover. Replace V-belt. See Maintenance.
Machine is loud when cutting. Overheats or bogs down in the cut.	· ·	Decrease depth of cut. Sharpen knives.
Infeed roller marks are left on the workpiece.	Depth of cut too shallow.	Increase depth of cut.
Outfeed roller marks are left on right side of workpiece.	' ~	Refer to Adjustments, Spring Tension.
Chip buildup on outfeed roller.	Chips working their way back under the chip deflector.	Lay duct tape over the mounting bolts along the outside edge to seal any possible gaps.
Machine howls on startup.	Chip deflector too close to the cutterhead.	Move back 1/8" to 1/4" from the cutterhead.
Table moves down while cutting.	Knives dull	Replace knives.





Closure

The following pages contain general machine data, parts diagrams/lists and warranty/return information for your SHOP FOX® Model W1692 15" Planer.

If you need parts or help in assembling your machine, or if you need operational information, we encourage you to call our Service Department. Our trained service technicians will be glad to help you.

If you have comments dealing specifically with this manual, please write to us using the address in General Information part of this manual. The specifications, drawings and photographs illustrated in this manual represent the Model W1692 15" Planer as supplied when the manual was prepared. However, due to Woodstock International, Inc.'s policy of continuous improvement, changes may be made at any time with no obligation on the part of Woodstock International, Inc. Whenever possible, though, we send manual updates to all owners of a particular tool or machine. Should you receive one, add the new information to this manual and keep it for reference.

We have included some important safety measures that are essential to the operation of this machine. While most safety measures are generally universal, we remind you that each workshop is different and safety rules should be considered as they apply to your specific situation.

We recommend you keep this manual for complete information regarding Woodstock International, Inc.'s warranty and return policy. If you need additional technical information relating to this machine, or if you need general assistance or replacement parts, please contact the Service Department at 1-360-734-3482 or techsupport@shopfox.biz.

Additional information sources are necessary to realize the full potential of this machine. Trade journals, woodworking magazines and your

WARNING

As with all power tools, there is danger associated with the Model W1692. Use the tool with respect and caution to lessen the possibility of mechanical damage or operator injury. If normal safety precautions are overlooked or ignored, injury to the operator or others is likely.

local library are good places to start.

The Model W1692 15" Planer was specifically designed for cutting natural wood stock. DO NOT MODIFY AND/OR USE THIS PLANER FOR ANY OTHER PURPOSE. Modifications or improper use of this tool will void the warranty. If you are confused about any aspect of this machine, DO NOT use it until all your questions have been answered.



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.

The D2057 SHOP FOX® Adjustable Mobile Base supports your planer so you can move it easily and lock it in position. Designed for long term and frequent moving of heavy machinery. All SHOP FOX® Adjustable Mobile Bases are the first mobile bases designed strong enough to move heavy machines on a continual basis. The stands are adjustable to fit a variety of machines and can be leveled without the use of shims or tools.



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 work on planers to help reduce snipe at the ends of long boards due to infeed and outfeed alignment issues. Go to

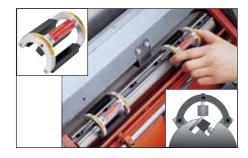
<u>http://www.shopfox.biz/rollerstand.cfm</u> to view all of the available roller tables and stands.



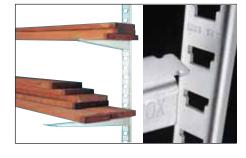
The D2271 SHOP FOX® Heavy-Duty Roller Table is a versatile roller table wherever you need extra workpiece support for up to 1,000 lb. capacity. It features all-steel welded construction and it measures 19" x 65" long. The roller table also comes with 9 ball bearing rollers with four independently adjustable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



PLANER PAL® Magnetic Planer Knife Setting Jigs. Our patented knife-setting system lets you set planer knives in perfect alignment every time! You can shift nicked knives on 21/2"- 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).



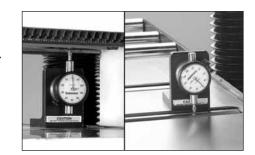
The SHOP FOX® Wood Rack System features interchangeable Rack Bars and Shelf Brackets to create simple or elaborate wood racks. 24" and 48" Rack Bars can be joined together to provide 6 feet of vertical storage capacity. Easily adjustable 12" and 18" Shelf Brackets lock into the Rack Bars for a secure 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, D283112" Wood Rack Shelf Brackets, and D2832 18" Wood Rack Shelf Brackets.



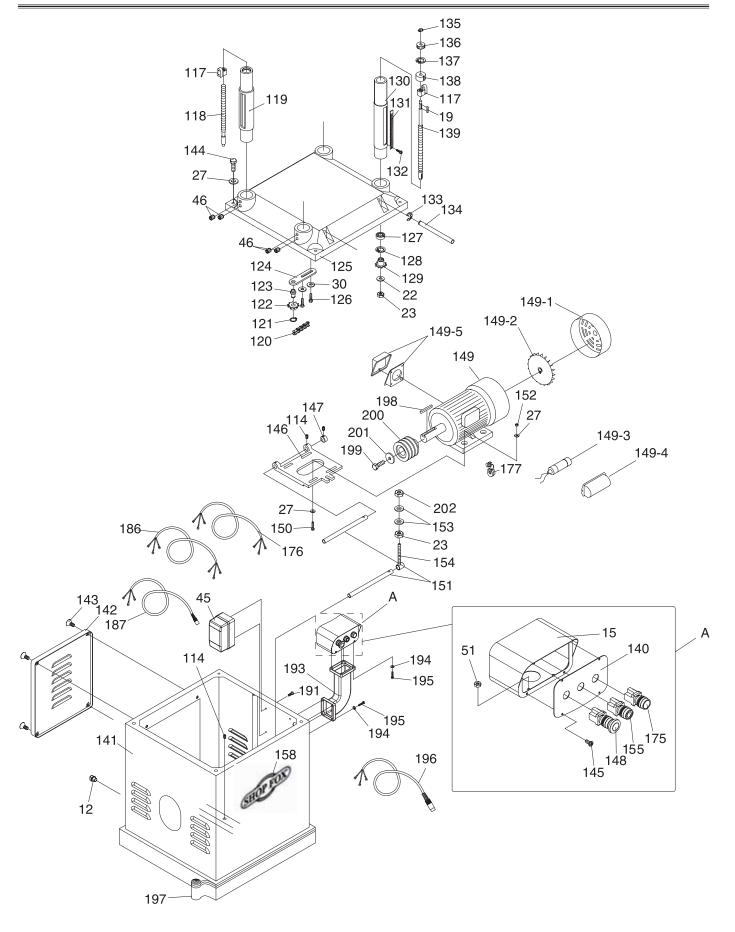




The W1218 Rotacator® makes a planer setup process easier and more accurate for adjusting the table rollers, feed rollers, chip breaker, and the pressure bar if equipped on your planer. This tool is a rotating dial indicator on a magnetic base. Shown to the right, this handy device Measures table-to-cutterhead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





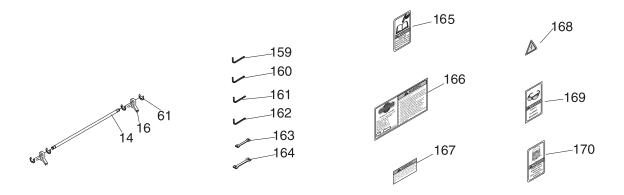


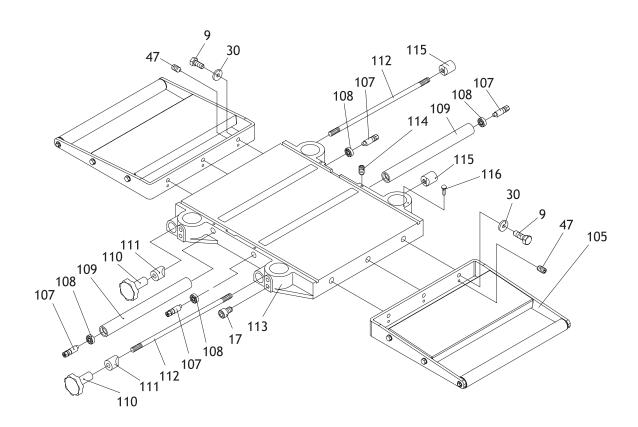


REF	PART #	DESCRIPTION
1	X1692001	ROUND KNOB (FEMALE)
2	X1692002	PULLEY COVER
3	XPVM59	V-BELT M-59 3L590
4	X1692004	STUD
5	XPFB01M	FLANGE BOLT M6-1 X 12
6	X1692006	PULLEY GUARD
7	XPW07	FLAT WASHER 5/16"
8	XPN02	HEX NUT 5/16"-18
9	XPB09M	HEX BOLT M8-1.25 X 20
10	X1692010	SPECIAL WASHER
11	X1692011	CUTTERHEAD PULLEY
12	X1678344	STRAIN RELIEF 5/8"
13	X1692013	UPPER COVER
14	X1692014	KNIFE SETTING ROD
15	X1692015	ELECTRIC CONTROL BOX
16	X1692016	GAUGE
17	XPSB02M	CAP SCREW M6-1 X 20
18	X1692018	ROLLER STAND
19	XPK05M	KEY 4 X 4 X 10MM
20	X1692020	HEIGHT HANDWHEEL
21	X1692021	DIRECTION SCALE
22	XPW04M	FLAT WASHER 10MM
23	XPN08M	HEX NUT M10-1.25
24	X1692024	HANDLE
25	X1692025	CHIP DEFLECTOR
26	XPB02M	HEX BOLT M6-1 X 12
27	XPW07	FLAT WASHER 5/16"
28	X1692028	CHIP BREAKER SPRING
29	X1692029	TENSIONING SETSCREW
30	XPW07	FLAT WASHER 5/16"
31	X1692031	BRACKET
32	X1692032	SHAFT
33	X1692033	IDLE PULLEY
34	X1692034	SHAFT
35	XPRP07M	ROLL PIN 6 X 20MM

REF	PART #	DESCRIPTION
36	X1692036	CHAIN COVER
37	XPSB05M	CAP SCREW M8-1.25 X 50
38	XPSS11M	SET SCREW M6-1 X 16
39	X1692039	SPRING
40	X1692040	HANGER
41	XP6205	BALL BEARING
42	XPSB04M	CAP SCREW M6-1 X 10
43	XPK09M	KEY 8 X 8 X 36MM
44	X1692044	CUTTERHEAD COMPLETE ASSY
44-1		GIB
44-2	X1692044-2	JACK SCREW
44-3	X1692044-3	GIB BOLT
44-4	X1692044-4	JACK BOLT
45	X1692045	MAGNETIC SWITCH
46	XPSS13M	SET SCREW M10-1.5 X 12
47	XPSS14M	SET SCREW M8-1.25 X 12
48	X1692048	SPRING
49	X1692049	BUSHING BLOCK
50	X1692050	PLATE
51	XPN01M	HEX NUT M6-1
52	X1692052	HEAD CASTING
53	X1692053	OUTFEED ROLLER
54	X1692054	DEPTH LIMITER
55	XPFH30M	FLAT HD SCR M5-0.8 X 8
56	XPK01M	KEY 5 X 5 X 22MM
57	X1692057	SPROCKET
58	XPW06	FLAT WASHER 1/4"
59	XPB83M	HEX BOLT M6-1 X 16
60	X1692060	CHAIN #06B X 63
61	X1692061	E CLIP RING 9MM
62	X1692062	CHIPBREAKER
63	XPR03M	EXT RETAINING RING 12MM
64	X1692064	CHIPBREAKER ADJUST ROD
65	X1692065	PIVOT ROD
66	XPN09M	HEX NUT M12-1.75







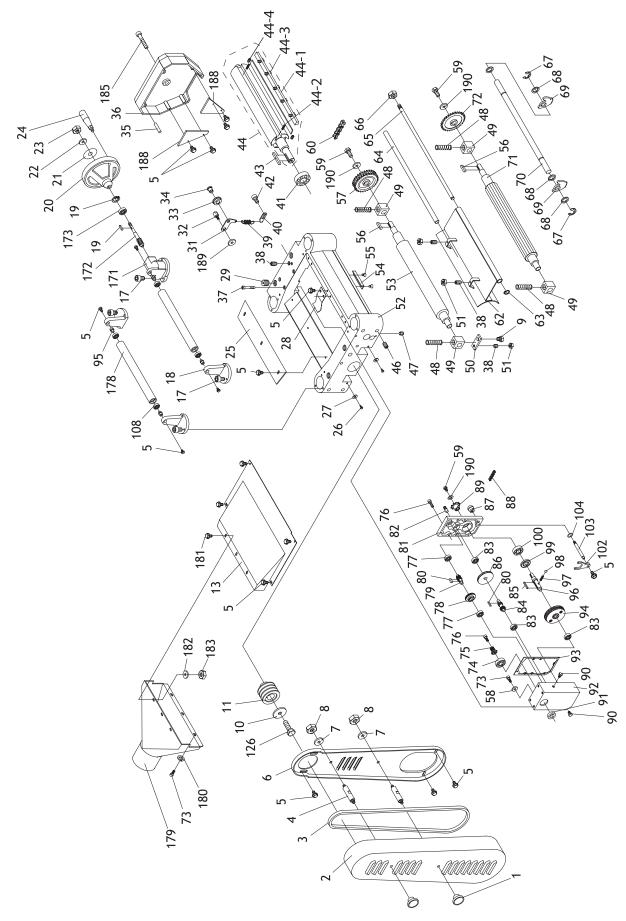


REF	PART #	DESCRIPTION
67	XPEC05M	E-CLIP 15MM
68	X1692068	SPACER
69	X1692069	ANTI-KICKBACK FINGER
70	X1692070	SHAFT
71	X1692071	INFEED ROLLER
72	X1692072	SPROCKET
73	XPSB26M	CAP SCREW M6-1 X 12
74	XP6204	BALL BEARING
75	X1692075	GEAR
76	XPSB06M	CAP SCREW M6-1 X 25
77	XP6201	BALL BEARING
78	X1692078	GEAR
79	X1692079	SHAFT
80	XPK06M	KEY 5 X 5 X 10MM
81	X1692081	GEAR CASE COVER
82	X1692082	PIN
83	XP6201	BALL BEARING
84	X1692084	GEAR, 2 SPEED
85	XPK11M	KEY 6 X 6 X 40MM
86	X1692086	GEAR
87	X1692087	ROUND KNOB (FEMALE)
88	X1692088	CHAIN #06B X 47P
89	X1692089	SPROCKET
90	X1692090	OIL PLUG PT ¹ / ₄ "-19
91	X1692091	OIL SEAL 28 X 40 X 8MM
92	X1692092	GEAR BOX
93	X1692093	GASKET
94	X1692094	DOUBLE GEAR
95	X1692095	SHAFT
96	X1692096	SHAFT
97	X1692097	SPRING
98	X1692098	BALL 6MM
99	X1692099	OIL SEAL 25 X 47 X 6MM

REF	PART #	DESCRIPTION
100	XP6204	BALL BEARING
102	X1692102	SHIFTER
103	X1692103	SHIFTING HANDLE
104	X1692104	O-RING P12
105	X1692105	EXTENSION ROLLER ASSY
105-1	X1692105-1	ROLLER FRAME
105-2	X1692105-2	ROLLER
105-3	X1692105-3	ROLLER ROD
105-4	X1692105-4	PLASTIC ROLLER BUSH
105-5	X1692105-5	EXTENSION BOARD
105-6	XPB02M	HEX BOLT M6-1 X 12
105-7	XPW07	FLAT WASHER 5/16"
105-8	XPW06	FLAT WASHER 1/4"
105-9	XPN03M	HEX NUT M8-1.25
107	X1692107	TABLE ROLLER SHAFT
108	XP608ZZ	BALL BEARING
109	X1692109	TABLE ROLLER
110	X1692110	LOCKING KNOB (FEMALE)
111	X1692111	GIB
112	X1692112	LOCKING ROD
113	X1692113	TABLE
114	XPSS04M	SET SCREW M6-1 X 12
115	X1692115	THREADED GIB
116	X1692116	RIVET 2 X 5MM
117	X1692117	SPINDLE NUT
118	X1692118	ELEV. LEAD SCREW, SHORT
119	X1692119	COLUMN
120	X1692120	CHAIN #41 X 134P
121	XPR05M	EXT RETAINING RING 15MM
122	- '	IDLER SPROCKET
123	X1692123	SHAFT
124	X1692124	IDLER BRACKET









REF	PART #	DESCRIPTION
125	X1692125	BASE
126	XPB07M	HEX BOLT M8-1.25 X 25
127	XP6202	BALL BEARING
128	XPR21M	INT RETAINING RING 35MM
129	X1692129	SPROCKET
130	X1692130	COLUMN
131	X1692131	SCALE
132	XPS12M	PHLP HD SCR M3-0.5 X 6
133	XPECO12M	E-CLIP 12MM
134	X1692134	LIFTING HANDLE
135	XPR01M	EXT RETAINING RING 10MM
136	X1692136	GEAR
137	XPR22M	INT RETAINING RING 38MM
138	X1692138	SPACER
139	X1692139	ELEV. SPINDLE, LONG
141	X1692141	STAND
142	X1692142	PANEL
143	XPFH02M	FLAT HD SCR M6-1 X 12
144	XPB118M	HEX BOLT M8-1.25 X 45
146	X1692146	MOTOR PLATE
147	X1692147	COLLAR
149	X1692149	MOTOR 3HP, 220V, 1PH
149-1	X1692149-1	MOTOR FAN COVER
149-2	X1692149-2	MOTOR FAN
149-3	X1692149-3	CAPACITOR 125VAC 600MFD
149-4	X1692149-4	CAPACITOR COVER
149-5	X1692149-5	MOTOR WIRING BOX
150	XPB15M	HEX BOLT M8-1.25 X 40
151	X1692151	MOUNTING SHAFT
152	XPN03M	HEX NUT M8-1.25
153	XPW09M	FLAT WASHER 13MM
154	X1692154	PIVOT STUD
155	X1692155	PWR ON LAMP ASSY
158	X1692158	SHOP FOX LOGO PLATE

REF	PART #	DESCRIPTION
159	XPAW3M	ALLEN WRENCH 3MM
160	XPAW4M	ALLEN WRENCH 4MM
161	XPAW5M	ALLEN WRENCH 5MM
162	XPAW6M	ALLEN WRENCH 6MM
163	XPWR810	COMBO WRENCH 8 / 10MM
164	XPWR1214	COMBO WRENCH 12 / 14MM
165	X1692165	READ MANUAL LABEL
166	X1692166	MACHINE/ID LABEL
167	X1692167	DON'T OPEN COVER LABEL
168	X1692168	ELECTRICITY LABEL
169	X1692169	SAFETY GLASSES LABEL
170	X1692170	GLASSES/RESPIRATOR LABEL
171	X1692171	WORM GEAR BOX
172	X1692172	SHAFT WITH GEAR
173	XP6200	BALL BEARING
177		STRAIN RELIEF SB9R-2
178	X1692178	ROLLER SHAFT
179		CHIP CHUTE
180	XPLW02	LOCK WASHER 1/4"
181	XPFB01M	FLANGE BOLT M6-1 X 12
182	XPW06	FLAT WASHER 1/4"
183		HEX NUT M6-1
185	XPSB45M	CAP SCREW M8-1.25 X 45
188	X1692188	SAFETY HATCH
189	XPK10M	KEY 5 X 5 X 12
190	X1692190	SPECIAL WASHER
191	XPS05M	PHLP HD SCR M5-0.8 X 8
194	XPW06	FLAT WASHER 1/4"
195	XPB10M	HEX BOLT M6-1 X 25
198	XPK12M	KEY 5 X 5 X 30MM
199	XPBO7M	HEX BOLT M81.25 X 25
200	X1692200	MOTOR PULLEY
201	X1692201	SPECIAL WASHER
202	XPN08M	HEX NUT M10-1.25



Notes

CUT ALONG DOTTED LINE

WARRANTY CARD



Street				
City			State	Zip
Phone Number	E-Mail		FAX	
	SERIAL#			
The following information is given	on a voluntary basis and is strictly confide	ential.		
Where did you purchase your	SHOP FOX® machine?	10.	What stationary woodworking too	ls do you own? Check all that appl
			Air Compressor	Panel Saw
2. How did you first learn about	us?		Band Saw	Planer
,			Drill Press	Power Feeder
Advertisement	Friend		Drum Sander	Radial Arm Saw
Mail order Catalog	Local Store		Dust Collector	Shaper
World Wide Web Site			Horizontal Boring Machine	Spindle Sander
			Jointer	Table Saw
Other			Lathe	Vacuum Veneer Press
			Mortiser	Wide Belt Sander
3. Which of the following maga:	zines do vou subscribe to.		Other	
	,			
American Woodworker	Today's Homeowner	11.	Which benchtop tools do you own	? Check all that apply.
Cabinetmaker	WOOD			
Family Handyman	Wooden Boat		1" x 42" Belt Sander	6" - 8" Grinder
Fine Homebuilding	Woodshop News		5" - 8" Drill Press	Mini Lathe
Fine Woodworking	Woodsmith		8" Table Saw	10" - 12" Thickness Planer
Home Handyman	Woodwork		8" - 10" Bandsaw	Scroll Saw
Journal of Light Construc			Disc/Belt Sander	Spindle/Belt Sander
Old House Journal	Woodworker's Journal		Mini Jointer	
Popular Mechanics	Workbench		Other	
Popular Science	American How-To			
Popular Woodworking		12.	Which portable/hand held power t	cools do you own? Check all that ap
-			D 1: 6	01716
			Belt Sander	Orbital Sander
4. Which of the following wood	working/remodeling shows do you watch?		Biscuit Joiner	Palm Sander
S	,		Circular Saw	Portable Planer
Backyard America	The New Yankee Workshop		Detail Sander	Saber Saw
Home Time	This Old House		Drill/Driver	Reciprocating Saw
The American Woodworke			Miter Saw	Router
Other			Other	
5. What is your annual househo	d income?	13.	What machines/supplies would you like to see?	
•				
\$20,000-\$29,999	\$60,000-\$69,999			
\$30,000-\$39,999	\$70,000-\$79,999			
\$40,000-\$49,999	\$80,000-\$89,999			
\$50,000-\$59,999	\$90,000 +	14.	What new accessories would you I	ike Woodstock International to ca
6. What is your age group?				
, .3.3				
20-29	50-59	15.	Do you think your purchase repres	sents good value?
30-39	60-69			
40-49	70 +		Yes	No
7. How long have you been a w	oodworker?	16.	Would you recommend SHOP FO	K® products to a friend?
0.27	0. 22.4		Yes	No
0 - 2 Years 2 - 8 Years	8 - 20 Years 20+ Years		Yes	INU
2 - 6 fedis	20+ feats			
8. How would you rank your wo	odworking skills?	17.	Comments:	
Simple	Advanced			
Intermediate	Master Craftsman			
How many SHOP FOX® mach	ines do vou own?			

FOLD ALONG DOTTED LINE			
	- - -		Place Stamp Here
	SHOP FOX		
	WOODSTOCK INTERNATIONAL, INC. P.O. BOX 2309 BELLINGHAM, WA 98227-2309		
	Haladadaddhadaddaddad	l.lll.llll.ll.l.	ııl

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