

MODEL W1748 10" HYBRID TABLE SAW



OWNER'S MANUAL

Phone: (360) 734-3482 • Online Technical Support: 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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USE THE QUICK GUIDE PAGE LABELS TO SEARCH OUT INFORMATION FAST!

INTRODUCTION

Woodstock Technical Support

Your new **SHOP FOX®** 10" Hybrid Table Saw has been specially designed to provide many years of trouble-free service. Close attention to detail, ruggedly built parts and a rigid quality control program assure safe and reliable operation.

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

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

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

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

Specifications

Motor:

Type	TEFC Capacitor Start Induction
Horsepower.....	2 HP
Phase/Cycle	Single-Phase/60 Hz
Voltage	110/220V
Prewired Voltage	110V
Amps.....	20/10A
RPM	3450
Power Transfer	Belt Drive
Power Switch.....	On/Off Push Button, Magnetic

Overall Dimensions:

Table Height	34"
Table Size	27" D x 20" W
Table Size W/Extension Wings	27" D x 39 ¹ / ₂ " W
Overall Size (W/Extension Wings & Fence Rails).....	48 ¹ / ₂ " D x 57" W
Miter Gauge T-Slot	³ / ₄ " W x ³ / ₈ " D
Blade Tilt	Left 0-45°
Shipping Weight (2 Boxes)	359 lbs.
Shipping Weight (Box 1 Of 2)	56 lbs.
Shipping Weight (Box 2 Of 2)	303 lbs.
Net Machine Weight	286 lbs.
Footprint.....	26 ¹ / ₄ " W x 20 ³ / ₄ " D

Cutting Capacities:

Blade Size	10"
Maximum Depth Of Cut @ 90°	3"
Maximum Depth Of Cut @ 45°	2 ¹ / ₈ "
Maximum Rip Capacity To Right Of Blade	30"
Distance From Front Of Table To Center Of Blade	18"
Distance From Front Of Table To Front Of Blade	13 ¹ / ₄ "
Maximum Width Of Dado Cut.....	¹³ / ₁₆ "

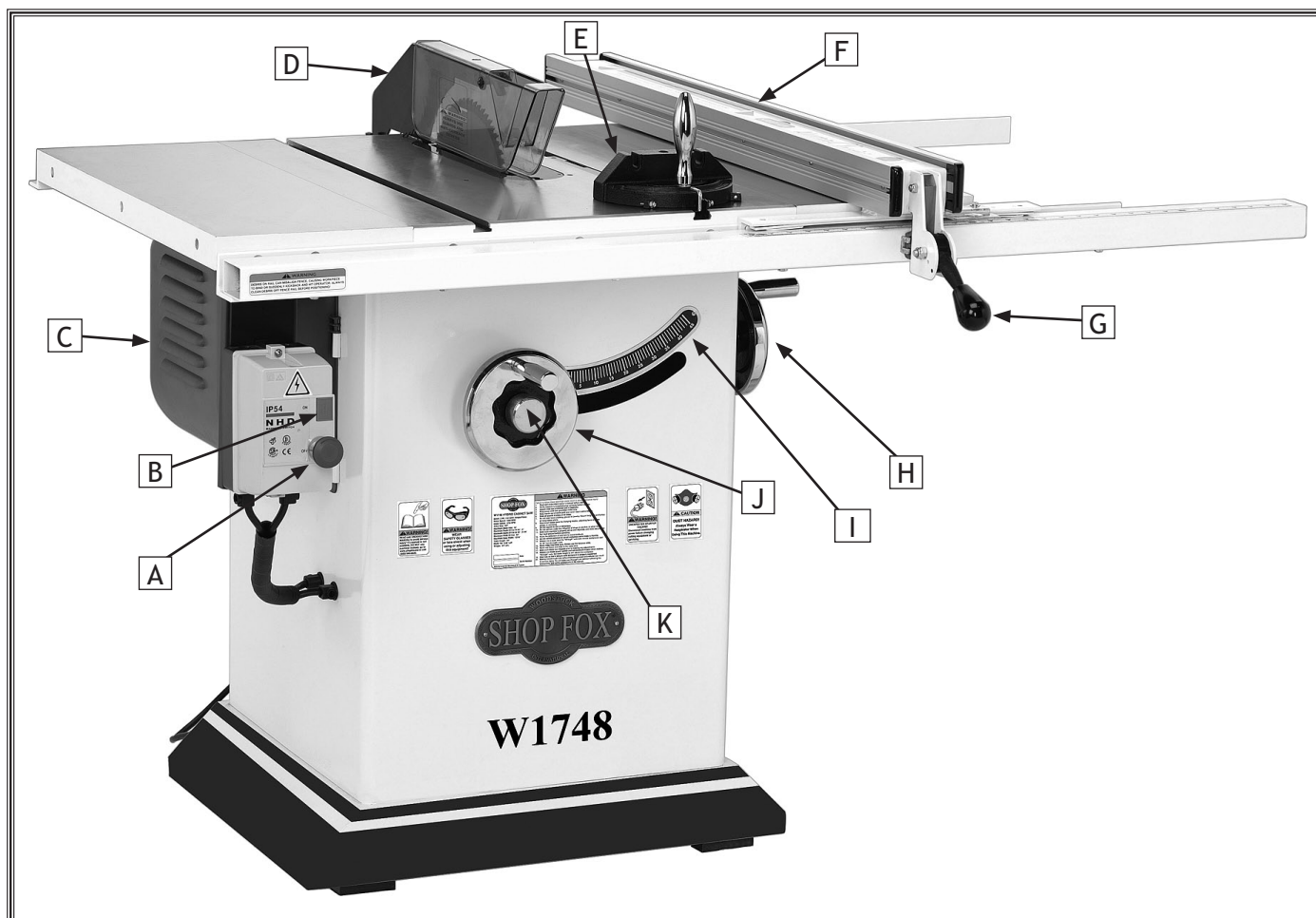
Construction:

Main Table	Precision-Ground Cast Iron
Stand	Pre-Formed Steel
Miter Gauge	Cast Iron/Steel Miter Bar
Trunnions	Cast Iron
Bearings.....	Sealed & Permanently Lubricated
Guard.....	Steel & Clear Plastic
Extension Wings	Precision-Ground Cast Iron

Arbor Shaft:

Dimensions	⁵ / ₈ " Diameter
Speed.....	3500 RPM

Identification



- | | |
|-----------------------------|---------------------------|
| A. Emergency Stop Button | G. Rip Fence Lock Handle |
| B. ON Button | H. Blade Tilt Handwheel |
| C. Motor Cover | I. Blade Tilt Gauge |
| D. Blade Guard and Splitter | J. Blade Height Handwheel |
| E. Miter Gauge | K. Handwheel Lock |
| F. Rip Fence | |

SAFETY

WARNING

For Your Own Safety, Read Instruction Manual Before Operating this Machine

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



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



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



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

WARNING


Safety Instructions for Machinery

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 ANSI 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, and **make the workshop child proof.** Use padlocks, master switches, and remove start switch keys.
9. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power **OFF** and allow all moving parts to come to a complete stop before leaving machine unattended.
10. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.
11. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Undersized cords overheat and lose power. Replace extension cords if they become damaged. DO NOT use extension cords for 220V machinery.
12. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY.** Make sure switch is in OFF position before reconnecting.
13. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
14. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**
15. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make a habit of checking for keys and adjusting wrenches before turning machinery **ON**.
16. **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.
17. **USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury.
18. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.
19. **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.
20. **DO NOT OVERREACH.** Keep proper footing and balance at all times.
21. **MANY MACHINES WILL EJECT THE WORKPIECE TOWARD THE OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."
22. **ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY.**
23. **BE AWARE THAT CERTAIN WOODS MAY CAUSE AN ALLERGIC REACTION** in people and animals, especially when exposed to fine dust. Make sure you know what type of wood dust you will be exposed to and always wear an approved respirator.

!WARNING

Additional Safety Instructions for Table Saws



!WARNING

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

!CAUTION

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

- SAFETY ACCESSORIES.** Always use the blade guard and splitter on all "through-sawing" operations. Through-sawing operations are those when the blade cuts completely through the workpiece.
- KICKBACK.** Be familiar with kickback. Kickback happens when the workpiece is thrown towards the operator at a high rate of speed. Until you have a clear understanding of kickback and how it occurs, DO NOT operate this table saw!
- WORKPIECE CONTROL.** Make sure the workpiece is placed in a stable position on the table and is either supported by the rip fence or the crosscut table during cutting operations.
- PUSH STICK.** Always use a push stick when ripping narrow stock.
- OPERATOR POSITION.** Never stand or have any part of your body directly in-line with the cutting path of the saw blade.
- REACHING OVER SAW BLADE.** Never reach behind or over the blade with either hand while the saw is running. If kickback occurs while reaching over the blade, hands or arms could be pulled into the spinning saw blade.
- USING THE RIP FENCE AND THE MITER GAUGE.** Using the rip fence as a stop block when using the miter gauge can cause kickback. Remove the rip fence when using the miter gauge and remove the miter gauge when using the rip fence.
- STALLED BLADE.** Turn the saw **OFF** before attempting to "free" a stalled saw blade.
- CUTTING OPERATIONS.** Avoid awkward operations and hand positions where a sudden slip could cause your hand to move into the spinning saw blade.
- EXPERIENCING DIFFICULTIES.** If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact Tech Support at (360) 734-3482.
- BLADE HEIGHT.** Always adjust the blade to the proper height above the workpiece.
- DAMAGED SAW BLADES.** Never use blades that have been dropped or otherwise damaged.

Protecting From Kickback

Below are tips to avoid the most common causes of kickback:

- Only cut workpieces with at least one smooth and straight edge. DO NOT cut warped, cupped or twisted wood.
- Never attempt freehand cuts. If the workpiece is not fed parallel with the blade, a kickback will likely occur. Always use the rip fence or crosscut fence to support the workpiece.
- Make sure the splitter is aligned with the blade. A misaligned splitter can cause the workpiece to catch or bind, resulting in an increased chance of kickback. If you think that your splitter is not aligned with the blade, check it immediately!
- Take the time to check and adjust the rip fence parallel with the blade; otherwise, the chances of kickback are extreme.
- Use the splitter during every cut. The splitter maintains the kerf in the workpiece, reducing the chance of kickback.
- Feed cuts through to completion. Anytime you stop feeding a workpiece that is in the middle of a cut, the chance of binding, resulting in kickback, is greatly increased.
- Stand to the side of the blade during every cut. If a kickback does occur, the thrown workpiece usually travels directly in front of the blade.
- Wear safety glasses or a face shield. In the event of a kickback, your eyes and face are the most vulnerable part of your body.
- Never, for any reason, place your hand behind the blade. Should kickback occur, your hand will be pulled into the blade.
- Use a push stick to keep your hands farther away from the moving blade. If a kickback occurs, the push stick will most likely take the damage that your hand would have received.
- Use featherboards, or anti-kickback devices to prevent, or slow down kickback.

WARNING

Statistics prove that most common accidents among table saw users can be linked to kickback. Kickback is typically defined as the high-speed expulsion of stock from the table saw toward its operator. In addition to the danger of the operator or others in the area being struck by the flying stock, it is often the case that the operator's hands are pulled into the blade during the kickback.

CAUTION

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

ELECTRICAL

110V/220V Operation

The SHOP FOX® Model W1748 is prewired for 110V operation, but may be rewired for 220V operation. To do this, refer to the wiring diagram in the back of this manual and replace the 110V magnetic switch assembly with a 220V unit.

Always connect this machine to a dedicated circuit (wire, breaker, plug, receptacle) with a verified ground, using the recommended circuit breakers and plugs/receptacles listed at the bottom of this page.

Never replace a circuit breaker with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. If you are unsure about the wiring codes in your area or plan to connect your machine to a shared circuit, you may create a fire hazard—consult a qualified electrician to reduce this risk.

Extension Cords

We do not recommend using an extension cord for 220V operation. When it is necessary to use an extension cord, use the following guidelines:

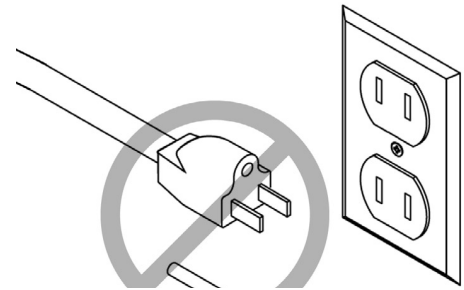
- Use cords rated for Standard Service
- Never exceed a length of 50 feet
- Ensure cord has a ground wire and pin
- Do not use cords in need of repair

Grounding

This machine must be grounded! Verify that any existing electrical outlet and circuit you intend to plug into is actually grounded. If it is not, it will be necessary to run a separate copper grounding wire, of the appropriate size, from the outlet to a known ground. Under no circumstances should you connect your machine to an ungrounded power source or electrocution or severe shock could occur.

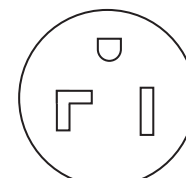
⚠ WARNING

NEVER cut a ground pin off!
Electrocution or severe shock could occur if a machine is not grounded.

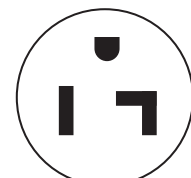


NOTICE

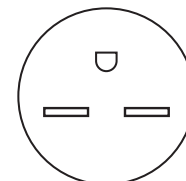
The Model W1748 is prewired for 110V operation. If you plan to rewire your machine for 220V, you must convert to a 220V magnetic switch assembly. Consult a qualified electrician before attempting to rewire your machine!



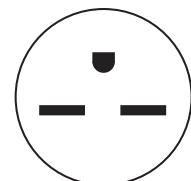
5-30R



5-30P



6-15R



6-15P

Figure 1. Plug & receptacle examples.

Operating Voltage	Amp Draw	Min. Circuit Size	Plug/Receptacle	Extension Cord
110V Operation	20 Amps	30A	NEMA 5-30	10 Gauge
220V Operation	10 Amps	15A	NEMA 6-15	12 Gauge

SET UP

Unpacking

The SHOP FOX® Model W1748 has been carefully packaged for safe transporting. If you notice the machine has been damaged, please contact your authorized SHOP FOX® dealer immediately.

Inventory

The following is a description of the main components shipped with the SHOP FOX® Model W1748. Lay the components out to inventory them.

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

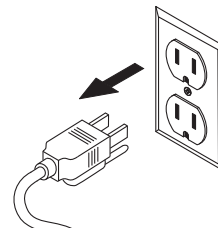
Table Saw Inventory (Figures 2 & 3):	Qty
A. Hybrid Table Saw (Not Shown)	1
B. Cast Iron Extension Wings	2
C. Blade Guard/Splitter Assembly	1
D. Splitter Mounting Bracket	1
E. Splitter Pivot Rod	1
F. Miter Gauge	1
G. Handwheels	2
H. Handwheel Handles	2
I. Handwheel Lock Knobs	2
J. Dado Insert	1

Fence Inventory:

The inventory for the Shop Fox Aluma-Classic fence and rails is located in the manual that is included in the fence box.

Hardware and Tools: (Not Shown)	Qty
• Hex Bolts $\frac{7}{16}$ "-14 x $1\frac{1}{4}$ "	6
• Lock Washers $\frac{7}{16}$ "	6
• Hex Bolts $\frac{5}{16}$ "-18 x 1"	2
• Lock Washers $\frac{5}{16}$ "	2
• Flat Washers $\frac{5}{16}$ "	4
• Hex Nuts $\frac{1}{2}$ "-12	2
• Flat Washers $\frac{1}{2}$ "	2
• Cap Screws $\frac{1}{4}$ "-20 x $\frac{5}{8}$ "	3
• Flat Washers $\frac{1}{4}$ "	5
• Hex Nuts $\frac{1}{4}$ "-20	2
• Arbor Wrench	1

! WARNING



UNPLUG-power cord before you do any assembly or adjustment tasks! Otherwise, serious personal injury to you or others may occur!

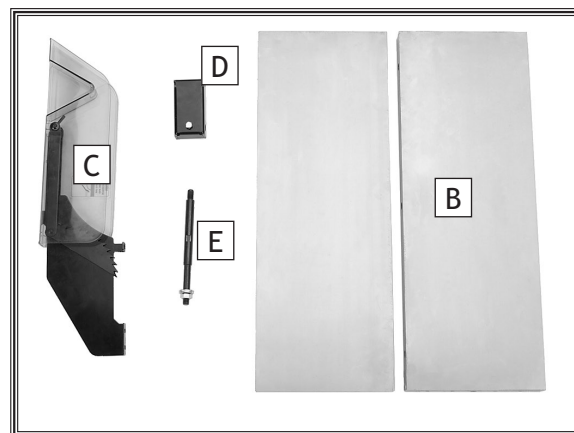


Figure 2. Table saw inventory.

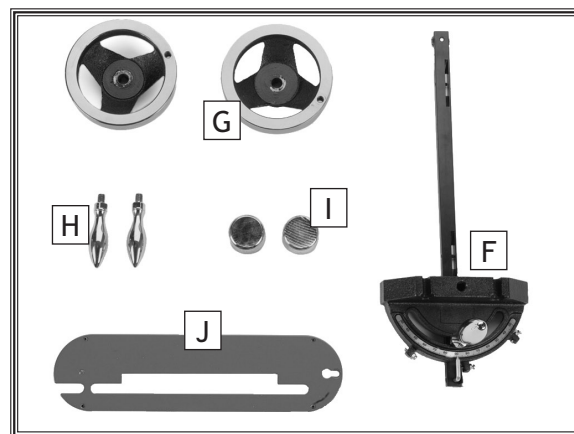


Figure 3. Table saw inventory.

Machine Placement

- **Floor Load:** This machine distributes a heavy load in a small footprint. Some residential floors may require additional bracing to support both machine and operator.
- **Working Clearances:** Consider existing and anticipated needs, size of material to be processed through the machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your table saw.

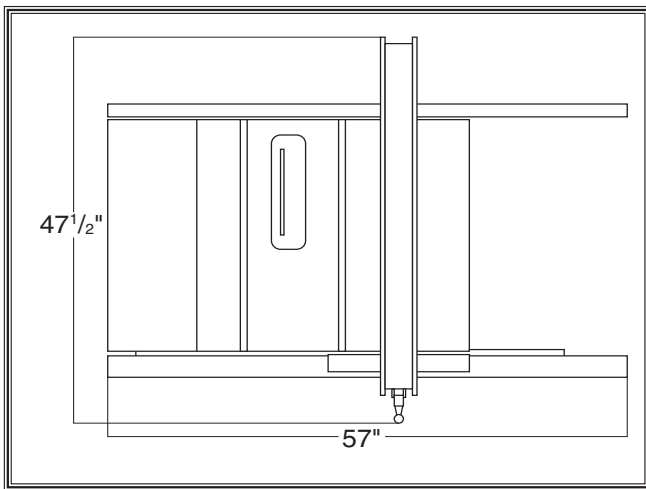
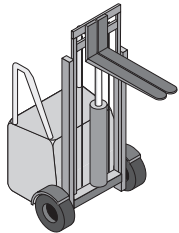


Figure 4. Minimum working clearances.



! WARNING

USE helpers or power lifting equipment to lift this table saw. Otherwise, serious personal injury may occur.



! CAUTION

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

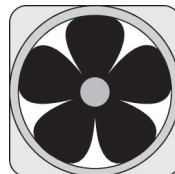
Cleaning Machine

The table and other unpainted parts of your table saw 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.



! 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!



! 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.

Extension Wings

To install the extension wings, do these steps:

1. Align the extension wing holes with the holes on the cast iron table edges.
2. Secure the extension wings to the cast iron table with the lock washers and hex bolts.
3. Lay a straightedge across the extension wings and cast iron table surface.
 - If the straightedge lays flat across all three surfaces, then skip ahead to the **Fence** sub-section.
 - If either extension wing tilts up, loosen it and place a strip of masking tape along the top edge of the table (**Figure 5**).
 - If either extension wing tilts down, loosen it and place a strip of masking tape along the bottom edge of the table (**Figure 6**).

Note: *The masking tape acts as a shim, causing the table to tilt.*

4. Once all three table surfaces are level, remove the excess masking tape with a razor blade.
5. Tighten the extension wing bolts and repeat **Step 3**.

Fence

The Shop Fox Aluma-Classic fence and rails are installed according to the fence manual with the addition of two installation options:

- Install the fence with the end of the rails aligned with the left end of the table for a cutting capacity of 27" to the right of the blade and 11" to the left of the blade.
- Install the fence with the rails inset 3" from the left end of the table to achieve a cutting capacity of 30" to the right and 8" to the left of the blade.

NOTICE

Only lift the table saw by the table top. **DO NOT** lift the saw by the fence rails or wings. Lifting the saw by the fence rails or wings can cause the table top to shift, warp, or a wing to snap off.

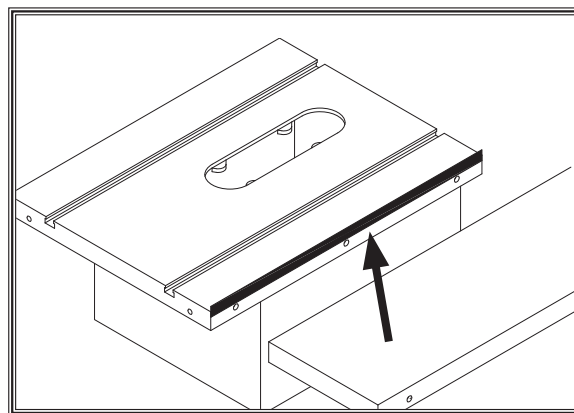


Figure 5. Masking tape location for adjusting the extension wing down.

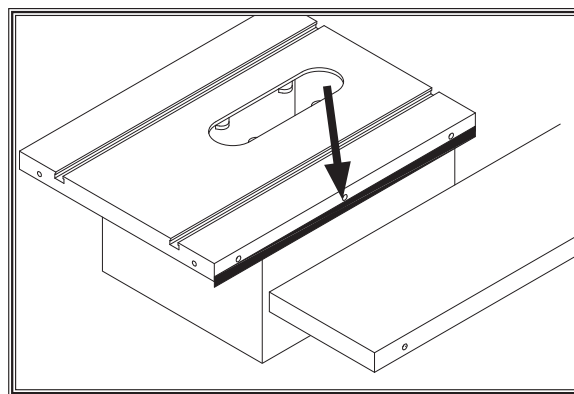
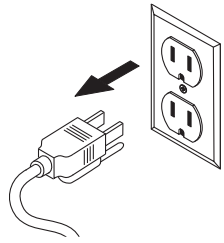


Figure 6. Masking tape location for adjusting extension table up.

Magnetic Start Switch

⚠ WARNING



UNPLUG-power cord before you do any assembly or adjustment tasks! Otherwise, amputation and serious personal injury to you or others may occur!

To install the magnetic start switch, do these steps:

1. Bolt the switch bracket to the underside of the rail with the hex bolts and washers (see Figure 7).

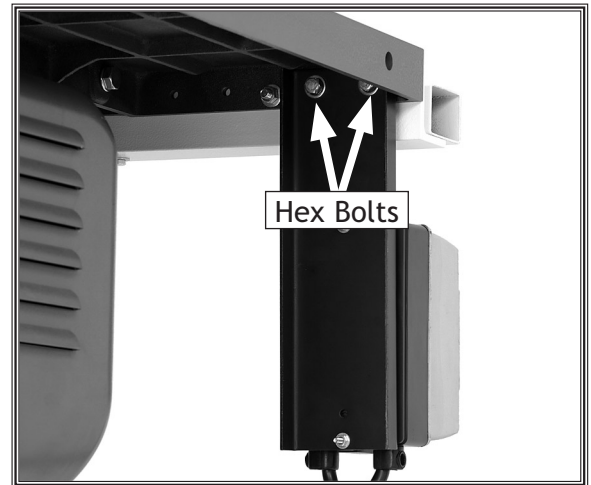


Figure 7. Installed switch.

Handwheels

To install the handwheels, do these steps:

1. Thread a chrome handle into each handwheel and tighten with a wrench.
2. Slide each handwheel over the threaded shafts that protrude from the side and front of the saw cabinet (Figure 8).

Note: Align the keyway on the back of each handwheel with the roll pin on the threaded shafts.

3. Secure the handwheels to the threaded shaft with the handwheel lock knobs.
4. Using the blade tilt handwheel, adjust the trunnion assembly until the tilt scale reads 90°.

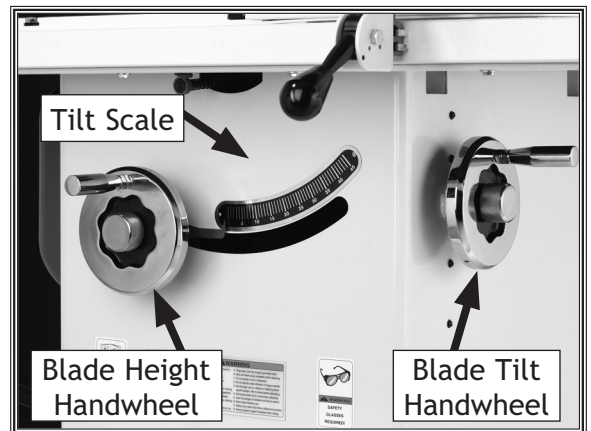
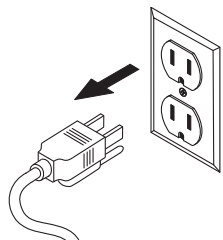


Figure 8. Installed handwheel.

Blade

⚠ WARNING



UNPLUG-power cord before you do any assembly or adjustment tasks! Otherwise, amputation and serious personal injury to you or others may occur!

To install the blade (not included), do these steps:

1. Use the arbor wrench to remove the arbor nut and arbor flange while holding the blade from turning with a scrap piece of wood.
- Note:** The arbor nut has right hand threads and loosens by turning counterclockwise.
2. Slide the blade over the arbor with the teeth facing the front of the saw as shown in **Figure 9**.
 3. Re-install the arbor flange and the arbor nut, and tighten them against the blade.

Table Insert

To install the table insert, do these steps:

1. Place the table insert into the table and tighten the screw shown in **Figure 10**.
2. Place a straightedge across the table and the table insert.
3. Use a hex wrench to adjust the table insert flush with the table by rotating the setscrews as shown in **Figure 11**.

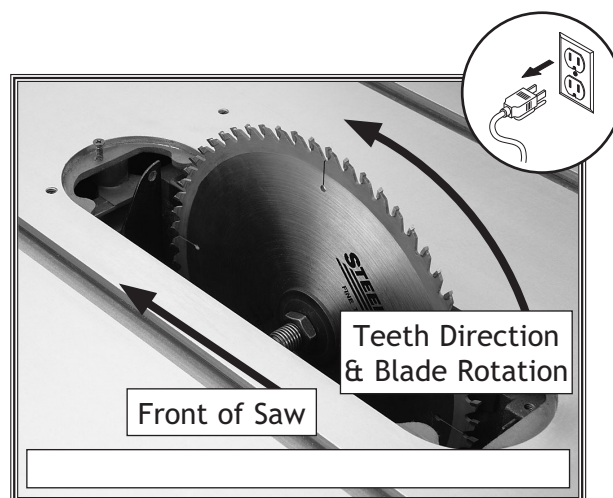


Figure 9. Correct blade direction. (Guard and Insert Removed for Clarity)

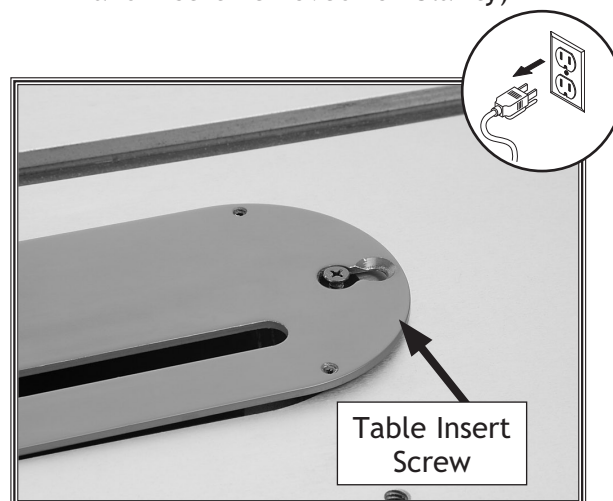


Figure 10. Table insert screw.

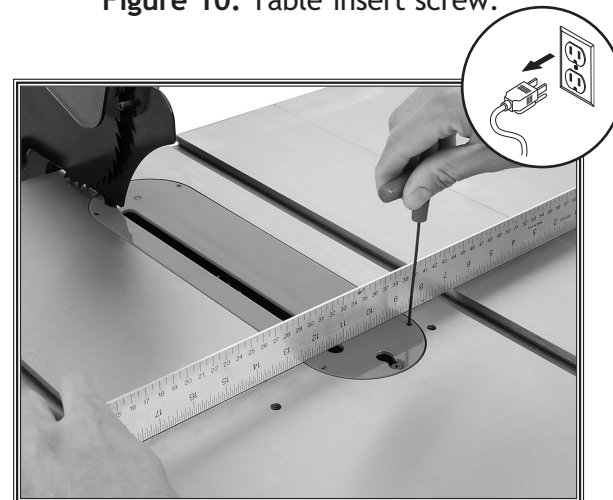
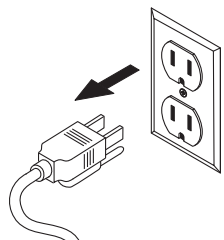


Figure 11. Adjusting the table insert.

Blade Guard

⚠ WARNING



UNPLUG-power cord before you do any assembly or adjustment tasks! Otherwise, amputation and serious personal injury to you or others may occur!

To install the blade guard, do these steps:

1. Thread the splitter pivot shaft into the trunnion as shown in **Figure 12**.
2. Slide the splitter mounting bracket onto the shaft (**Figure 13**), and secure it with the $\frac{1}{2}$ "-12 hex nut and a $\frac{1}{2}$ " flat washer.
3. Loosely bolt the blade guard/splitter assembly onto the blade guard mounting bracket with the $\frac{1}{4}$ "-20 cap screws, washers, and hex nuts (**Figure 14**).
4. Install the blade guard and make sure all fasteners are tight.



Figure 12. Installing the pivot shaft.

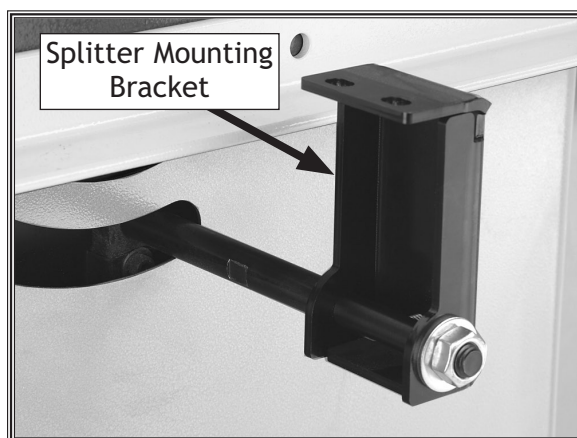


Figure 13. Blade guard mounting bracket.

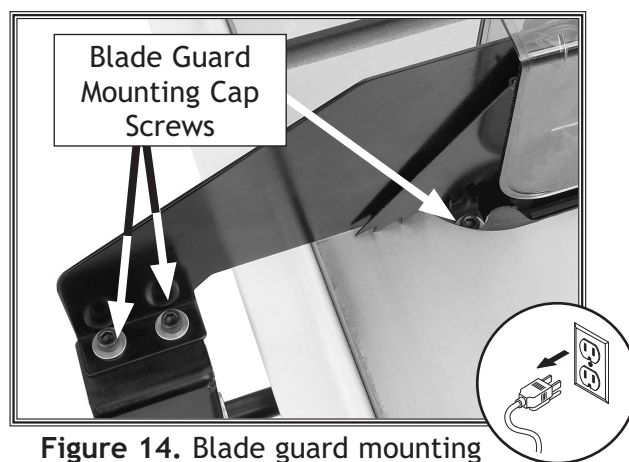


Figure 14. Blade guard mounting cap screws.

4. Place a straightedge against the face of the saw blade (**Figure 15**), and slide the splitter over until it touches the straightedge.
5. Tighten the cap screws to secure the blade guard/splitter assembly.
6. Place a machinist's or a combination square against the face of the splitter as shown in **Figure 16**.
7. Loosen the hex nut that secures the mounting bracket to the shaft, and align the face of the splitter perpendicular to the table surface (**Figure 16**).
8. Tighten the hex nut that secures the mounting bracket to the shaft.
9. Adjust the saw blade through its complete tilt and height adjustments. The saw blade should not make contact with any part of the blade guard. If it does, re-adjust as necessary.

Recommended Adjustments

The adjustments listed below have been performed at the factory and no further setup is required to operate the machine.

However, because of the many variables involved with shipping, we recommend checking the following adjustments to ensure the best possible results from the new machine.

Recommended adjustment checklist, do these steps:

- Blade Parallelism on Page 34.
- 45° & 90° Blade Stops on Page 36.

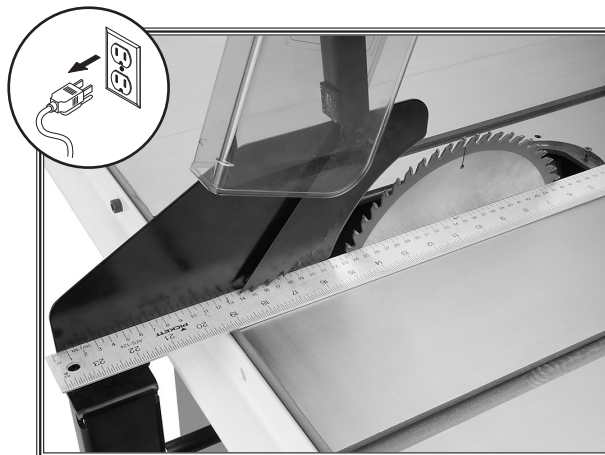


Figure 15. Checking alignment of blade guard.

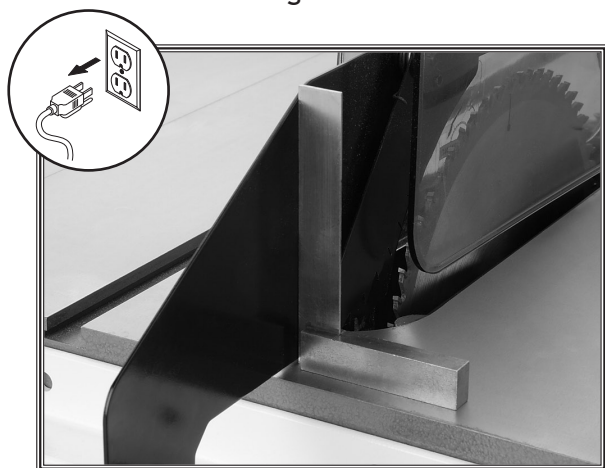


Figure 16. Blade guard perpendicular to the table.

Test Run

Before starting the machine, do these steps:

1. Read this manual and make sure you understand **SAFETY** on Page 6.
2. Review **ELECTRICAL** on Page 10 and make any necessary changes.
3. If using a 220V power source, install a NEMA 6-15 220V plug. DO NOT plug the tablesaw into the power source at this time.
4. Make sure the blade guard and splitter are installed and correctly adjusted.
5. Make sure all tools and foreign objects have been removed from the machine.

To start the saw, do these steps:

1. Plug the tablesaw into a power source.
2. Put on safety glasses and hearing protection, and make sure any bystanders are wearing safety glasses, hearing protection, and are out of the way.
3. Keep a finger on the STOP button at all times during the test run.
4. Press the START button.
 - If any problems occur, immediately press the **STOP** button and unplug the tablesaw. Turn to **Troubleshooting** on Page 37, and correct the problem before operating the machine further.
 - If you cannot easily locate the source of an unusual noise or vibration by yourself, please contact Technical Support at (360) 734-3482.
5. If the saw is operating normally, turn it **OFF** and prepare to make a cut according to the instructions outlined in **OPERATIONS** on Page 19.

! WARNING



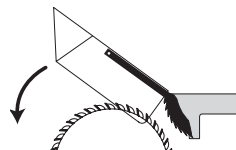
Loose hair and clothing could get caught in machinery causing serious personal injury. Keep loose clothing rolled up and long hair tied up and away from machinery.

! WARNING



Projectiles thrown from the machine could cause serious eye injury. Wear safety glasses during the test run.

! WARNING



Keep the blade guard in the down position at all times when making through cuts. Failure to do this could result in serious personal injury or death.

OPERATIONS

General

The Model W1748 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 table saw operator before performing any unfamiliar operations. **Above all, your safety should come first!**

Types of Cuts and Kickback

Non-Through Cuts

A non-through cut is a sawing operation where the blade does not protrude above the top face of the wood stock. Non-through cuts require the removal of the blade guard and splitter which increases the risk of kickback. Dado cuts, rabbit cuts, and resawing are the only non-through cuts that can be performed with this table saw. Make sure to immediately reinstall the splitter and blade guard after non-through cuts.

Through Cuts

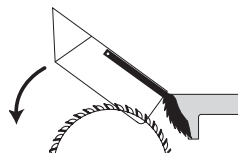
A through cut is a sawing operation in which the workpiece is completely sawn through. Ripping, crosscutting, miter cuts, and angled cuts are all through cutting operations.

Both through and non-through cuts have a risk of kickback. Kickback is an event in which the workpiece is propelled back towards the operator at a high rate of speed. Non-through cuts have a higher risk of injury from kickback because the splitter and blade guard must be removed. Always remember to re-install the blade guard

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



Keep the blade guard in the down position at all times when making through cuts. Failure to do this could result in serious personal injury or death.

Blade Selection

In order to maintain table saw safety and ensure high-quality cuts, select the correct blade for every cutting task. Incorrect blade selection can give poor cutting results and make cutting tasks hazardous.

Rip blade features:

- Best for cutting with the grain of the workpiece.
- 20-40 teeth.
- Flat-top ground tooth profile.
- Large gullets for large chip removal.

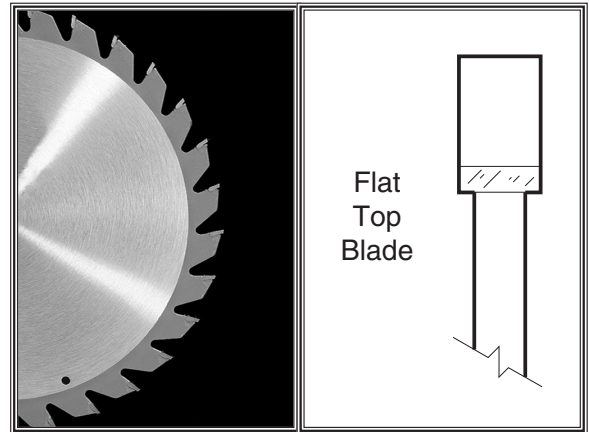


Figure 17. Rip blade.

Crosscut blade features:

- Best for cutting across the grain of the workpiece.
- 60-80 teeth.
- Alternate top bevel tooth profile.
- Small hook angle and a shallow gullet.

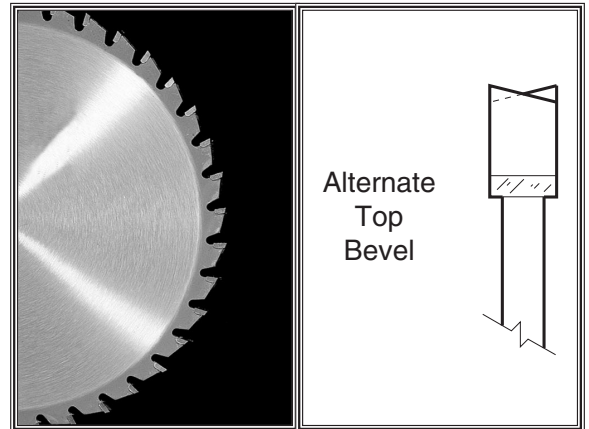


Figure 18. Crosscutting blade.

Combination blade features:

- Adequate for cutting both with and across the grain.
- 40-50 teeth.
- Alternate top bevel and flat, or alternate top bevel and raker tooth profile.
- Teeth are arranged in groups of five.
- Gullets are small and shallow within the groups of five teeth, similar to a cross-cut blade; then large and deep between each group of five, like a ripping blade.

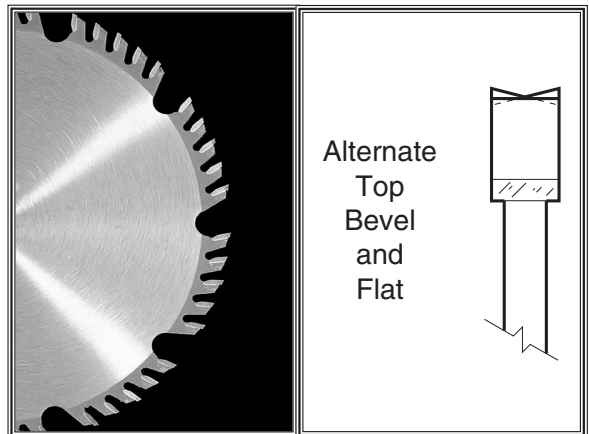


Figure 19. Combination blade.

Laminate blade features:

- Best for cutting plywood or veneer.
- 40-80 teeth.
- Triple chip tooth profile.
- Very shallow gullet.

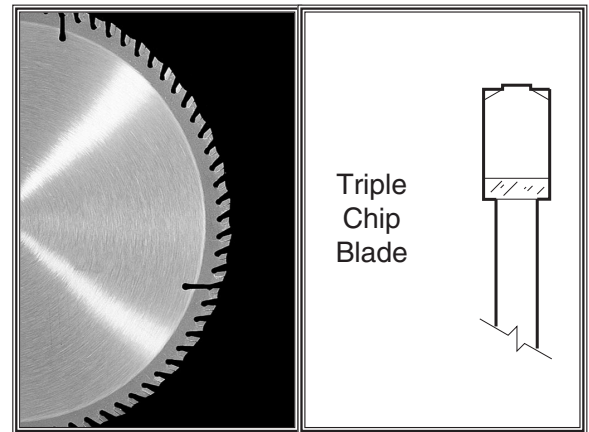


Figure 20. Laminate blade.

Dado Blades:

There are two types of dado blades: stacked and wobble.

- **Stacked Dado Blade:** These dedicated dado cutting blade sets consist of up to 8 individual blades. Multiple cutters are "stacked" between two outside blades. The width of the dado is determined by the combination of cutters that are "stacked" together. The dado is cut in a single pass leaving a smooth and square channel in the face of the workpiece. Stacked dado blades are the most expensive option, but are worth considering if your projects require a lot of visible dado cuts. A stacked dado blade is shown in **Figure 21**.
- **Wobble Dado Blade:** Also a dedicated dado blade, a wobble blade usually consists of a single blade that is tilted on the arbor shaft while it is spinning. The channel is cut in the face of the workpiece as the blade passes through its pre-adjusted width of travel. Wobble blades are an inexpensive option when visibly pleasing channels are not a concern.

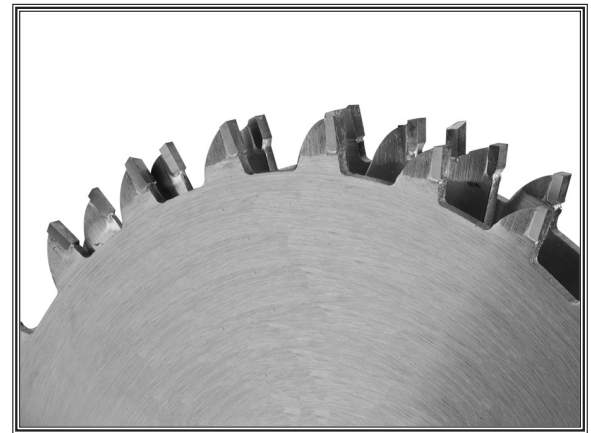


Figure 21. Stacked dado blade.

Note: This section on blade selection is by no means comprehensive. Always follow the saw blade manufacturer's recommendations to ensure safe and efficient operation of your table saw.

Ripping

Ripping means cutting with the grain of the workpiece. In other materials such as MDF or plywood, ripping simply means cutting lengthwise.

To make a rip cut, do these steps:

1. Review **Preventing Kickback** on **Page 9** and take the necessary precautions to prevent kickback.
2. Joint one long edge of the workpiece on a jointer.
3. **UNPLUG THE TABLE SAW!**
4. Set the fence to the desired width of cut on the scale.
5. Adjust the blade height so the highest saw tooth protrudes approximately $\frac{1}{4}$ " above the workpiece.
6. Set up safety devices such as featherboards or other anti-kickback devices.
7. Rotate the blade to make sure it does not come into contact with any of the safety devices.
8. Plug the saw into the power source, turn it **ON**, and allow it to reach full speed.
9. The jointed edge of the workpiece must slide against the fence during the cutting operation.
10. Using a push stick, feed the workpiece through the saw blade, as shown in **Figure 22**, until the workpiece is completely clear of the saw blade.

! WARNING

You or bystanders can be struck and severely injured by an ejected or workpiece. Your hand or fingers can also be pulled into the blade if this workpiece kickback occurs. **ALWAYS** use a feather board, miter gauge, rip fence, and a push stick when needed. And **NEVER** use the saw without the blade guard and splitter installed.

! WARNING

Turn **OFF** the saw and allow the blade to come to a complete stop before removing the cut-off piece. Failure to follow this warning could result in serious personal injury.

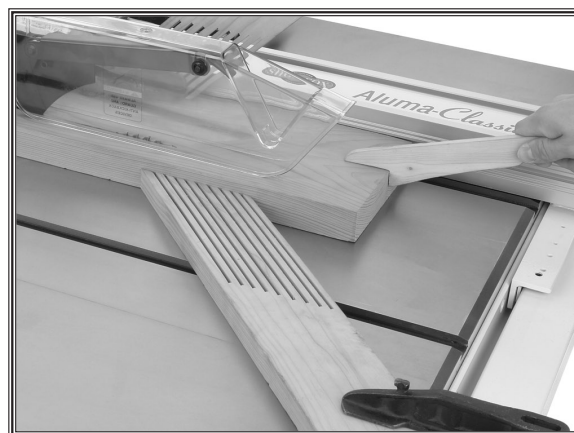


Figure 22. Ripping operation.

Crosscutting

Crosscutting is cutting across the grain of the workpiece. In MDF or particleboard, crosscutting is cutting across the width of the workpiece.

To make a crosscut using the miter gauge, do these steps:

1. **UNPLUG THE TABLE SAW!**
2. Remove the rip fence and position the miter gauge, adjusted to 90°, in a miter slot.
3. Adjust the blade height so the teeth protrude approximately 1/4" above the workpiece.
4. Slide the miter gauge near the blade, and adjust the workpiece so the blade will cut on the waste side of the line.
5. Plug in the tablesaw, turn it **ON**, and allow it to reach full speed.
6. Hold the workpiece firmly against the face of the miter gauge and ease it into the blade as shown in **Figure 23**.

WARNING

You or bystanders can be struck and severely injured by an ejected or workpiece. Your hand or fingers can also be pulled into the blade if this workpiece kickback occurs. **ALWAYS** use a feather board, miter gauge, rip fence, and a push stick when needed. And **NEVER** use the saw without the blade guard and splitter installed.

WARNING

Turn **OFF** the saw and allow the blade to come to a complete stop before removing the cut-off piece. Failure to follow this warning could result in serious personal injury.

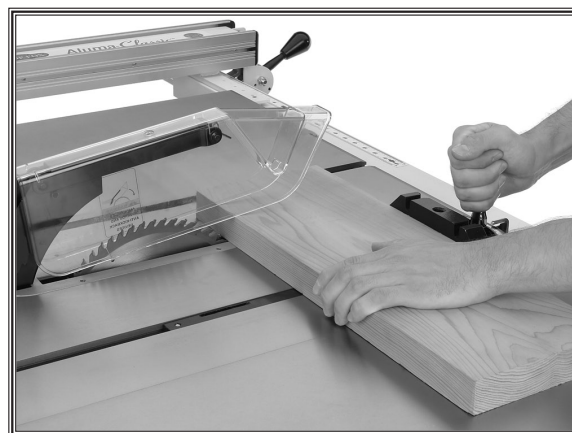


Figure 23. Crosscutting operation.

Miter Cuts

A miter is an angled crosscut. Miters are usually cut in the same manner as crosscuts, using the miter gauge and a predetermined mark on the workpiece.

To perform a miter cut, do these steps:

1. **UNPLUG THE TABLE SAW!**
2. Determine the angle of your cut. If the angle needs to be exact use, a protractor to set the miter gauge to the blade.
3. Set the miter gauge to the needed cut angle, and then place the face of the miter gauge against the edge of the workpiece and the bar across the face of the workpiece as shown in **Figure 24**.
4. Scribe the line of cut on your workpiece.
5. Place the miter gauge back into the slot and hold the workpiece firm against the miter gauge body. Slide the miter gauge near the blade and adjust the workpiece so the blade will cut on the waste side of the line.
6. Proceed to make the cut in the same manner as described in the **Crosscutting** instructions.

Blade Tilt/Bevel Cuts

When the positive stops are properly adjusted, the blade tilt handwheel allows the operator to tilt the blade to the left, anywhere between 0° and 45°. This is used most often when cutting bevels, compound miters or chamfers. **Figure 25** shows an example of the blade when tilted to 45°.

! WARNING

You or bystanders can be struck and severely injured by an ejected or workpiece. Your hand or fingers can also be pulled into the blade if this workpiece kickback occurs. **ALWAYS** use a feather board, miter gauge, rip fence, and a push stick when needed. And **NEVER** use the saw without the blade guard and splitter installed.

! WARNING

Turn **OFF** the saw and allow the blade to come to a complete stop before removing the cut-off piece. Failure to follow this warning could result in serious personal injury.

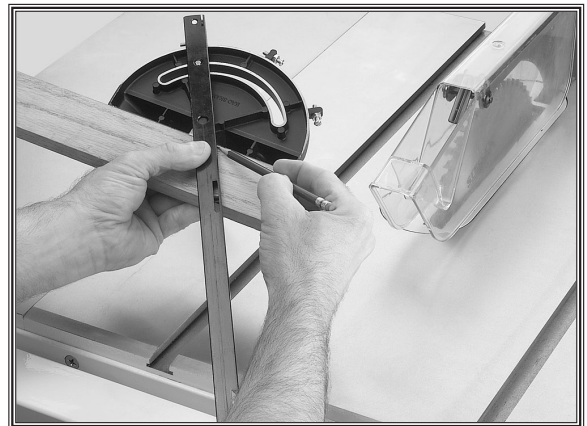


Figure 24. Marking miter line.



Figure 25. Blade tilted to 45° (guard removed for clarity).

Dado Cutting

Commonly used in furniture joinery, a dado is a straight channel cut in the face of the workpiece. Dadoes can be cut using either a dedicated dado blade or a standard saw blade.

The table saw motor is pushed to its limits when making a dado cut. If the motor starts to bog down, slow down your feed rate.

To use a stacked or wobble dado blade, do these steps:

1. **UNPLUG THE TABLE SAW!**
2. Remove the table insert, the blade guard, and the saw blade.
3. Attach and adjust the dado blade system according to the dado blade manufacturer's instructions, then install the dado insert.
4. Raise the dado blade up to the desired depth of cut (depth of dado channel desired). When cutting deep dadoes, take more than one pass to reduce the risk of kickback.
5. Adjust the distance between the fence and the inside edge of the blade, as shown in **Figure 26**, to dado the length of a workpiece.
6. If dadoing across the workpiece, use the miter gauge and carefully line up the desired cut with the dado blade. **DO NOT** use the fence in combination with the miter gauge.
7. Reconnect the saw to the power source.
8. Turn the saw **ON** and keep one finger ready to push the STOP button. The blade should run smooth with no vibrations.
9. When the blade has reached full speed, perform a test cut with a scrap piece of wood.
10. If the cut is satisfactory, repeat the cut with the actual workpiece.
11. Immediately reinstall the blade guard and splitter when finished.

WARNING

Dado operations require proper procedures to avoid serious injury. Extra care must be taken to prevent kickback when using dado blades. Any movement of the workpiece away from the fence will cause kickback. Be certain that stock is flat and straight. Failure to follow these warnings could result in serious personal injury.

WARNING

DO NOT make a through-cut with a dado blade. Dado blades are not designed for through cuts. Failure to follow this warning could result in serious personal injury.

WARNING

The danger of kickback increases relative to the depth and width of a cut. Reduce the risk of kickback by making multiple passes to achieve the desired depth of cut. Failure to follow these warnings could result in serious personal injury.

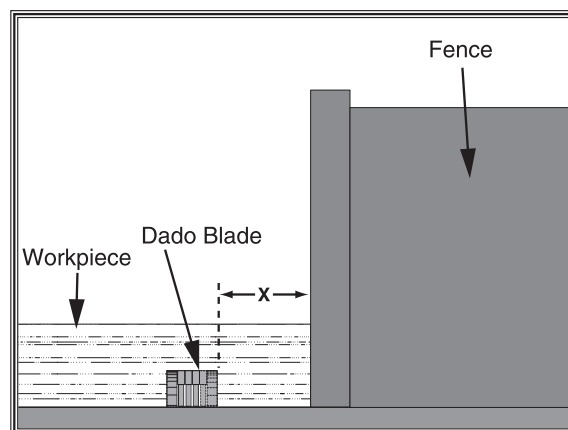


Figure 26. Stacked or wobble dado cut.

To use a standard saw blade to cut dados, do these steps:

Note: Reduce motor overloading and blade wear by using a ripping blade. Ripping blades have between 8 and 30 teeth to clear the sawdust quickly.

1. **UNPLUG THE TABLE SAW!**
2. Mark the width of the dado cut on the workpiece. Include marks on the edge of the workpiece so the cut path can be aligned when the workpiece is lying on the table.
3. Raise the dado blade up to the desired depth of cut (depth of dado channel desired). When cutting deep dados, take more than one pass to reduce the risk of kickback.
4. If dadoing across the workpiece, use the miter gauge to support the workpiece, and align the blade to cut one of the dado sides. **DO NOT** use the fence in combination with the miter gauge.
5. If dadoing the length of a workpiece, align the blade to cut one of the dado sides as shown in **Figure 27**.
6. Reconnect the saw to the power source and turn the saw **ON**. Allow the blade to reach full speed.
7. Perform the cutting operation.
8. Re-adjust the fence so the blade is aligned with the other edge of the intended dado channel (**Figure 28**).
9. Continue making cuts toward the center of the dado until the dado is complete.

Note: Be sure to keep the cuts within your marks; otherwise, the dado will be too big.

10. Immediately reinstall the blade guard and splitter when finished.

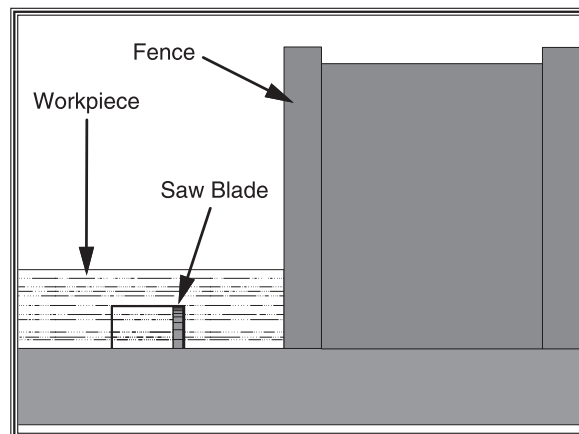


Figure 27. Single-blade dado first cut.

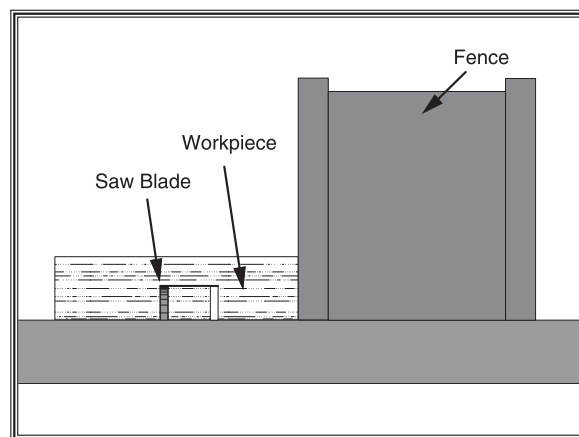


Figure 28. Single-blade dado second cut.

Rabbet Cutting

Commonly used in furniture joinery, a rabbet is an L-shaped groove cut in the edge of the workpiece. Rabbets can be cut with either a dado blade or a standard saw blade.

To attach a sacrificial fence, do these steps:

Rabbet cutting on the edge of the workpiece requires a sacrificial fence attachment (**Figure 29**). Make the sacrificial fence the same length as the fence and $\frac{3}{4}$ " thick. Once the sacrificial fence has been cut, attach it to the fence with screws or clamps, making sure they are all secure and tight.

To cut rabbets with the dado blade, do these steps:

1. **UNPLUG THE TABLE SAW!**
2. Adjust the dado blade to the height needed for the rabbeting operation. When cutting deep rabbets, take more than one pass to reduce the risk of kickback.
3. Adjust the fence and align the workpiece to perform the cutting operation as shown in **Figure 30**.
4. Reconnect the saw to the power source and turn the saw **ON**.
5. When the blade has reached full speed, perform a test cut with a scrap piece of wood.
6. If the cut is satisfactory, repeat the cut with the final workpiece.
7. Immediately reinstall the blade guard and splitter when finished.

⚠ WARNING

The danger of kickback increases relative to the depth and width of a cut. Reduce the risk of kickback by making multiple passes to achieve the desired depth of cut. Failure to follow these warnings could result in serious personal injury.

⚠ CAUTION

You may encounter kickback while cutting rabbets. Stand to the side of the blade and wear safety glasses or a face shield to prevent injury. Always use push sticks, featherboards, push paddles and other safety accessories whenever possible during these types of cuts.

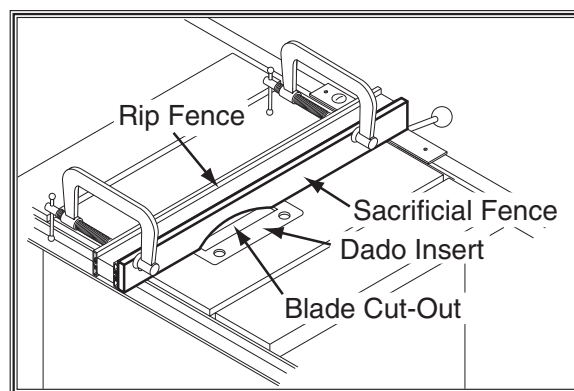


Figure 29. Sacrificial fence.

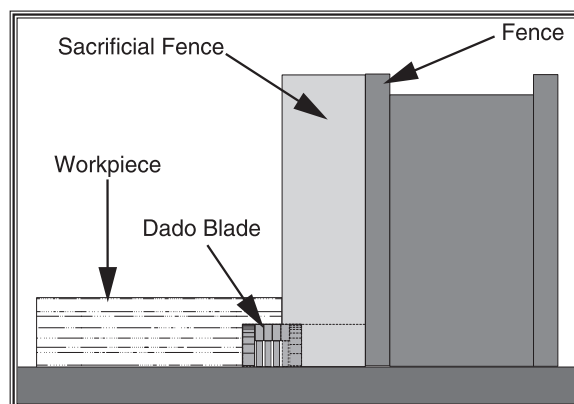


Figure 30. Rabbet cutting.

To cut rabbets with the standard blade, do these steps:

Note: Cutting rabbets with a standard saw blade *DOES NOT* require the use of a sacrificial fence.

Note: Reduce motor overloading and blade wear by using a ripping blade. Ripping blades have between 8 and 30 teeth to clear the sawdust quickly.

1. UNPLUG THE TABLE SAW!

- Clearly mark the width of the rabbet cut on the workpiece.

Note: Include marks on the edge of the workpiece to clearly identify the intended cut while it is laying flat on the saw table.

- Raise the blade up to the desired depth of cut (depth of rabbet channel desired). When cutting deep rabbets, take more than one pass to reduce the risk of kickback.
- Adjust the fence so the blade is aligned with the inside of your rabbet channel as shown in **Figure 31**.
- Reconnect the saw to the power source and turn the saw **ON**.
- When the blade has reached full speed, perform a test cut with a scrap piece of wood.
- If the cut is satisfactory, repeat the cut with the final workpiece.
- Stand the workpiece on edge as shown in **Figure 32**.
- Adjust the saw blade height to intersect with the first cut.
- Perform the second cut to complete the rabbet.
- Immediately reinstall the blade guard and splitter when finished.

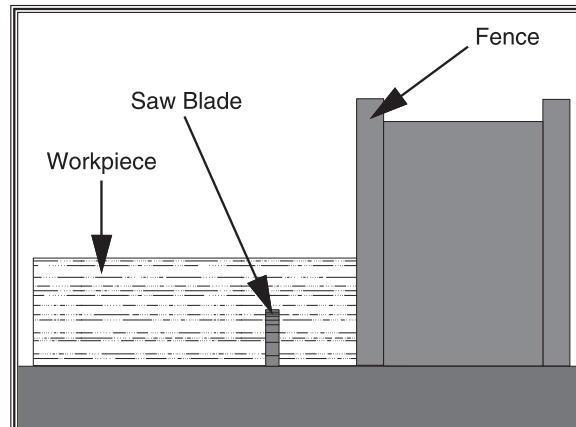


Figure 31. Rabbet cutting with a standard blade.

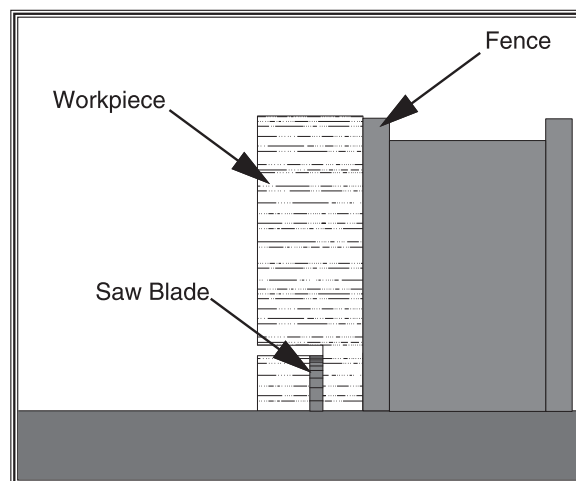


Figure 32. Second cut to create a rabbet.

Resawing

Resawing is the process of cutting a thick piece of stock into one or more thinner pieces. Bandsaws are ideal for resawing and the process is fairly easy and safe. A table saw is not intended for resawing and the process is difficult and extremely dangerous. Resawing on the table saw often binds the blade, causing kickback. The risk of kickback increases relative to the depth of a cut. Kickback is extra dangerous when resawing on a table saw because the anti-kickback devices and blade guard must be removed, leaving no protection between your hands and the saw blade. Kickback can pull the operator's hands into the blade, or the operator or bystanders may be hit by flying stock. DO NOT resaw on a table saw without using a resaw barrier. DO NOT resaw on a table saw without wearing a full face shield.

The following instructions describe how to build a resaw barrier, add an auxiliary fence to your standard fence, and safely perform resawing operations.

Note: *This table saw can only resaw wood that is less than 6" tall.*

Resaw Barrier

The resaw barrier shown in **Figure 33** holds the workpiece vertical, keeps the workpiece aligned with the fence, and keeps your hands away from the blade.

To build the resaw barrier, do these steps:

1. Cut two boards to $\frac{3}{4}$ " x $5\frac{1}{2}$ " x 27" and $\frac{3}{4}$ " x 3" x 27". If you are using hardwood, cut the boards over-size, then joint and plane the boards to the correct size to make sure the boards are square and flat.

Note: *Only use furniture grade plywood or kiln dried hardwood to prevent warping.*

2. Pre-drill and countersink 8 holes approximately $\frac{3}{8}$ " from the bottom of the $5\frac{1}{2}$ " tall board.

WARNING

Resawing on a table saw increases the chances of kickback. Serious injury can be caused by kickback. Kickback is a high-speed expulsion of stock from the tablesaw toward an operator. The operator or bystanders may be struck by flying stock, or the operator's hands can be pulled into the blade during the kickback.

WARNING

Resawing operations require proper procedures to avoid serious injury. Extra care must be taken to prevent kickback when resawing. Any tilting or movement of the workpiece away from the fence will cause kickback. Be certain that stock is flat and straight. Failure to follow these warnings could result in serious personal injury.

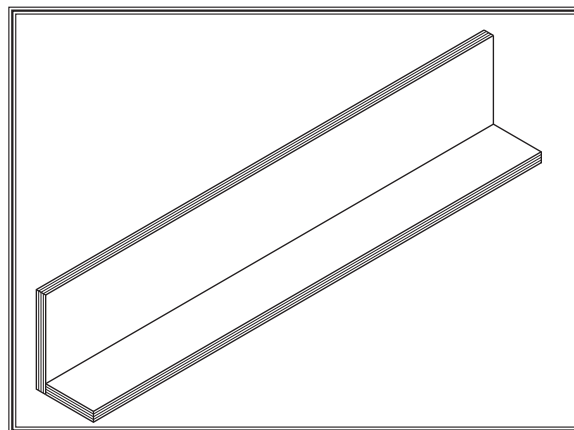


Figure 33. Resawing barrier.

3. Glue the end of the 3" board, then clamp the boards at a 90° angle with the larger board in the vertical position as shown in **Figure 34**.
4. Secure the joint with the wood screws.

Auxiliary Fence

The auxiliary fence is necessary if you are resawing wood that is more than 3" tall. It should be no less than 1/2" shorter than the board to be resawn.

To build the auxiliary fence, do these steps:

1. Cut a 3/4" thick board 27" long, and cut a height no less than 1/2" shorter than the board to be resawn. If you are using hardwood, cut the board oversize, then joint and plane the board to the correct size to make sure the board is square and flat.

Note: Only use furniture grade plywood or kiln dried hardwood to prevent warping.

2. Pre-drill and countersink 8 holes 1 1/4" from the bottom of the board.
3. Pull an end cap off of the standard fence, then slide the hex nuts into the T-slot and replace the end cap.
4. Thread the flat head screws through the auxiliary fence and into the hex nuts in the standard fence, and tighten securely as shown in **Figure 35**.

Resawing Operations

The table saw motor is pushed to its limits when resawing. If the motor starts to bog down, slow down your feed rate. Motor overloading and blade wear can be reduced by using a ripping blade. Ripping blades have between 8 and 30 teeth to clear the sawdust quickly.

WARNING

You may experience kickback during this procedure. Stand to the side of the blade and wear a full face shield to prevent injury when resawing.

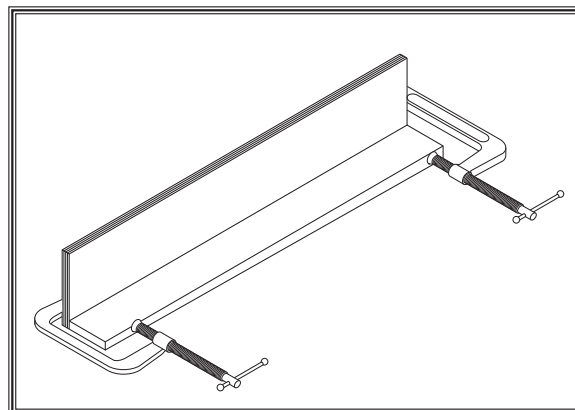


Figure 34. Clamping the resawing barrier.

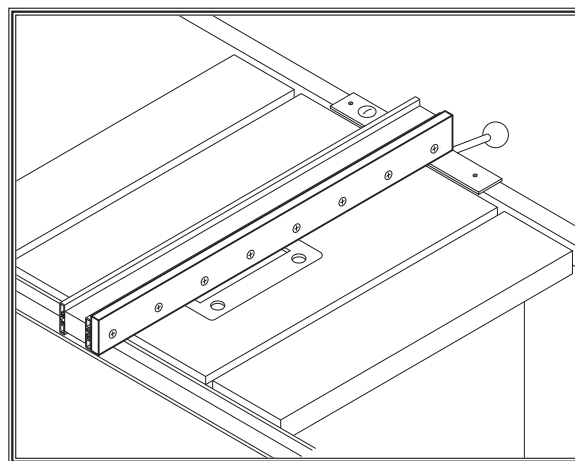


Figure 35. Auxiliary fence.

To perform resawing operations, do these steps:

1. UNPLUG THE TABLE SAW!

2. Remove the standard table insert and the blade guard/splitter. Install a ripping blade and a zero clearance insert. Then lower the blade below the table surface.
3. Attach the auxiliary fence to the standard fence and set it to the desired width.

Note: Account for blade kerf, the rough cut made by the blade, and the inaccuracy of the fence scale when the auxiliary fence is installed when figuring out the correct width.

4. Place the workpiece against the fence and slide the resaw barrier against the workpiece. Now clamp the resaw barrier to the top of the table saw (see **Figure 36**).
5. Slide the workpiece over the blade to make sure it moves smoothly.
6. Raise the blade approximately an inch, or close to half the height of the workpiece (**Figure 36**), whichever is less.
7. Plug in the table saw, turn it **ON**, and use a push stick to feed the workpiece through the blade using a slow, steady feedrate.
8. Flip the workpiece end for end, keeping the same side against the fence, and run the workpiece through the blade.
9. Repeat **Steps 6-8** until the blade is close to half the height of the board to be resawn. The ideal completed resaw cut will leave an $\frac{1}{8}$ " connection when the resawing is complete as shown in **Figure 36**. Leaving an $\frac{1}{8}$ " connection will reduce the risk of kickback.
10. Turn **OFF** the table saw, then separate the parts of the workpiece and hand plane the remaining ridge.
11. When finished resawing, remove the resaw barrier and re-install the blade guard/splitter.

! WARNING

The danger of kickback increases relative to the depth of a cut. Reduce the risk of kickback by making multiple passes to achieve the desired depth of cut. Failure to follow these warnings could result in serious personal injury.

! CAUTION

Always use push sticks or push paddles to increase safety and control during operations which require that the blade guard and splitter must be removed from the saw. **ALWAYS** replace the blade guard after resawing is complete.

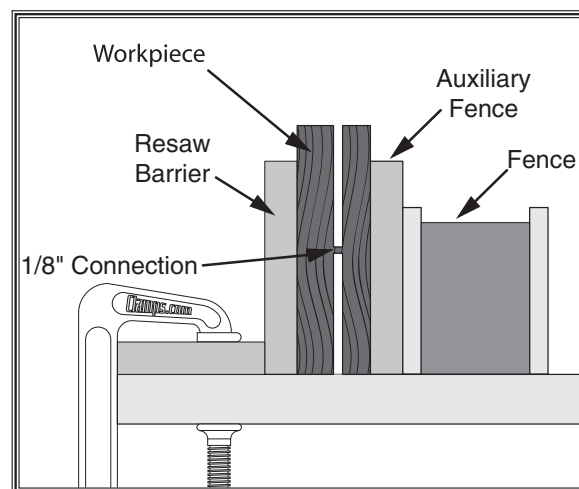
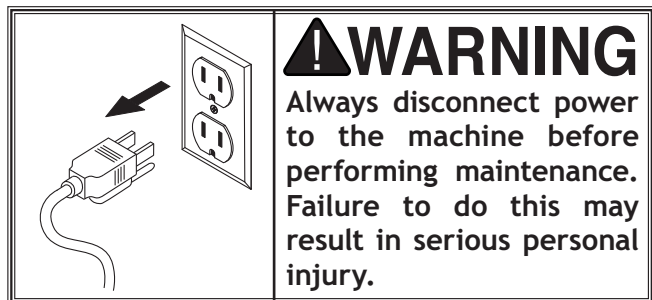


Figure 36. Ideal completed resaw cut.

MAINTENANCE



Schedule

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

Daily

- Check guard alignment and operation.
- Inspect blades for damage.
- Check for loose mounting bolts.
- Check cords, plugs, and switch for damage.
- Any other condition that could hamper the safe operation of this machine.
- Vacuum dust buildup from inside the cabinet and off of the motor after use.
- Wipe the table clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces.

Weekly

- Wipe down the table surface and grooves with a lubricant and rust preventive such as SLIPIT®.
- Clean the pitch and resin from the saw blade with a cleaner like OxiSolv® Blade & Bit Cleaner.

Monthly

- Check the V-belt for damage or wear.

Cleaning

Cleaning the Model W1748 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning.

Occasionally it will become necessary to clean the internal parts with more than a vacuum. To do this, remove the table top and clean the internal parts with citrus cleaner or mineral spirits and a stiff wire brush or steel wool. **DO NOT USE WATER—WATER WILL CAUSE CAST IRON TO RUST.** Make sure the internal workings are dry before using the saw again, so that wood dust will not accumulate. If any essential lubrication is removed during cleaning, re-lubricate those areas.

Lubrication

Lubricate the areas indicated below every 6-12 months, depending on frequency of use. These points can be reached through the motor cover opening or the blade opening. Check all adjustments after lubricating.

1. **Blade height and angling trunnion saddles.** These should be lubricated with 6 or 7 drops of light machine oil.

Note: Go to **Page 42** and refer to **Items 128 and 129** on the parts diagram to find trunnion locations if required.

2. **The leadscrew and shaft teeth** should be lubricated with an automotive wheel bearing grease.

Note: Go to **Page 42** and refer to **Items 112 and 114** on the parts diagram to find worm gear locations if required.

SERVICE

Replacing Flat Belt

To ensure optimum power transmission from the motor to the blade, the flat belt must be in good condition. Replace the belt if it becomes cracked, frayed, or glazed.

To replace the flat belt, do these steps:

1. **UNPLUG THE TABLE SAW!**
2. Adjust the blade all the way up and tilt it to 45°.
3. Remove the table insert, arbor nut, flange, and the saw blade.
4. Remove the belt cover plate shown in **Figure 37**. The cover plate is held in place by two tabs that fit into holes in the trunnion. Pull the ends of the cover plate out to release the tabs from the trunnion.
5. Lower the arbor assembly all the way down, loosen the tensioning screw (**Figure 38**), then rotate the motor to release the tension on the flat belt.
6. Pull the flat belt out through the table and install the new belt, then lower the motor to apply tension and tighten the cap screw loosened in **Step 6**.
7. Replace the belt cover plate and the blade.

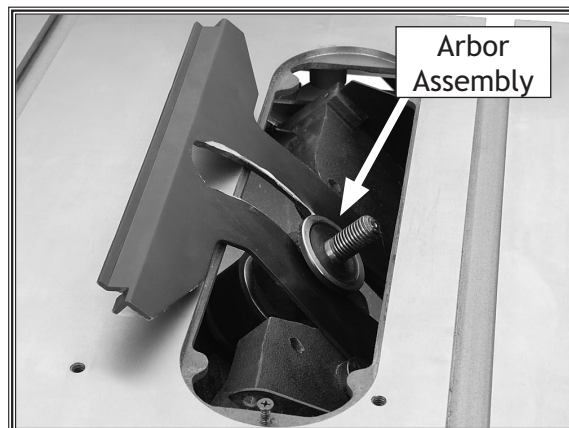


Figure 37. Removing the belt cover plate.

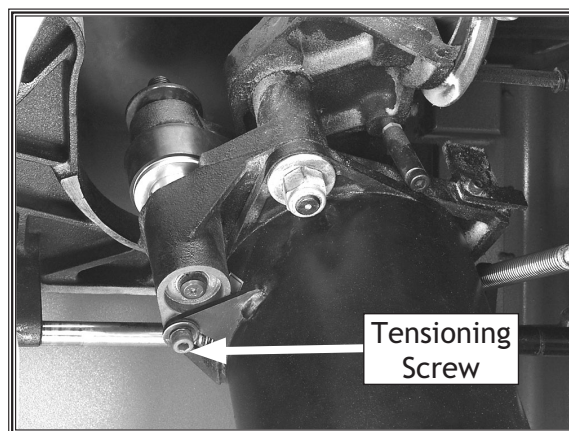


Figure 38. Flat belt tensioning screw.

Blade Parallelism

To check and adjust blade parallelism, do these steps:

1. **UNPLUG THE TABLESAW!**
2. Raise the blade to its highest position and tilt it to 90°.
3. Using an adjustable square, measure the distance (A) between the miter slot and the front of the blade as shown in **Figure 39**.
4. **Rotate the blade 180°** and slide the adjustable square to position B.
5. Measure the difference between the two positions with a feeler gauge. Make note of the difference between the two measurements on a piece of paper.
6. Tilt the blade to 45° and repeat **Steps 3-5**.
 - If the difference was less than 0.004" when the blade was positioned at 90° and 45°, then the blade parallelism is correct. Skip to **45° & 90° Stops** on Page 36.
 - If the difference was greater than 0.004" when the blade was positioned at 90° or 45°, then the trunnion assembly below the table needs to be adjusted. Continue with the next step.
7. Loosen the trunnion bolts shown in **Figure 40**.

Note: *It may be easiest to reach some of the bolts through the hole in the table.*

8. Refer back to the measurements taken in **Steps 3-6**.
 - If the blade was not parallel in the 90° position, then proceed to the set of instructions titled **To Shift The Trunnion** on Page 35.
 - If the blade was not parallel in the 45° position, then proceed to the set of instructions titled **To Shim The Trunnion** on Page 35.

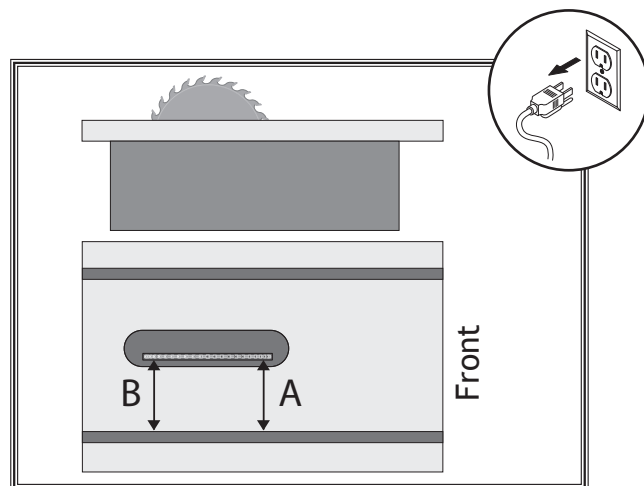


Figure 39. 90° blade parallelism measurement.

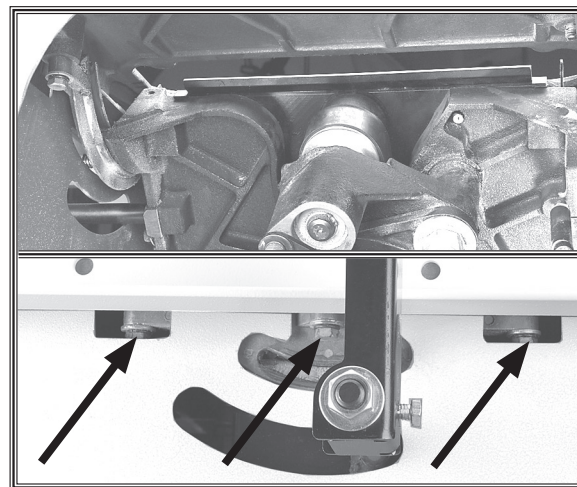


Figure 40. Trunnion bolt locations (not all the trunnion bolts are shown).

To shift the trunnion, do these steps:

1. Loosen the trunnion bolts (Figure 40).
2. Move the trunnion assembly according to the difference measured when the blade was in the 90° position.
3. Tighten down one trunnion bolt a small amount and then move on to each of the others, tightening each down the same amount.
4. Continue to rotate through the bolts, tightening them a little each time until they are all secure.
5. Once the miter slot is adjusted parallel to the blade, recheck all measurements and be sure the table mounting bolts are secure.

To shim the trunnion, do these steps:

1. Loosen the trunnion bolts (Figure 40).
2. Shim the trunnion assembly according to the difference measured when the blade was in the 45° position. See Figure 41 for measurement locations.
 - If the distance of A is shorter than B, shims will need to be placed between the rear trunnion bolts and the table top.
 - If the distance of B is shorter than A, shims will need to be placed between the front trunnion bolts and the table top.

Note: *Very thin shims work best. Make sure they are all the same thickness, and put an equal number under each of the two corners.*

3. Tighten down one trunnion bolt a small amount and then move on to each of the others, tightening each down the same amount.
4. Continue to rotate through the bolts, tightening them a little each time until they are all secure.
5. Once the miter slot is adjusted parallel to the blade, recheck all measurements and be sure the table mounting bolts are secure.

NOTICE

If the trunnion assembly is loosened in the future, make note of the shim locations and re-assemble accordingly.

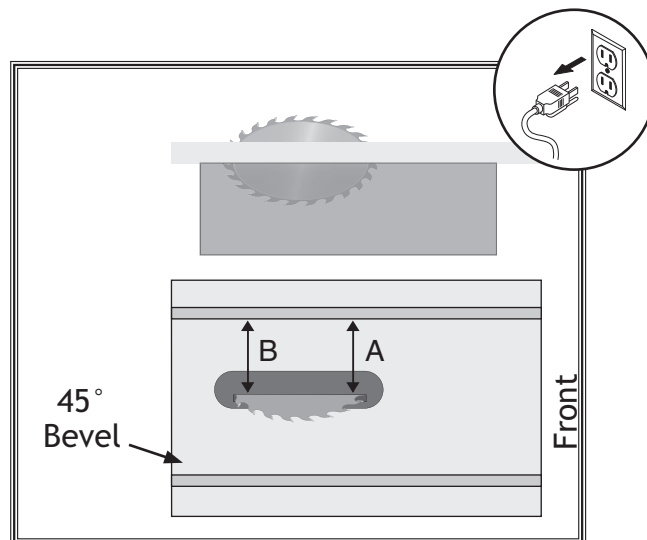


Figure 41. 45° blade parallelism measurement.

45° & 90° Stops

The Model W1748 Table Saw is equipped with positive stops at 45° and 90°. When properly adjusted, they provide quick and precise guides for blade bevel adjustment.

To set the 45° & 90° stops:

1. UNPLUG THE TABLESAW!
2. Raise the saw blade to its maximum height and adjust the blade to the 90° position.
3. Place a 90° machinist's square between the teeth on the blade and on the table surface, as shown in **Figure 42**.
4. With the square in place, inspect for gaps between the blade and the square.
5. If a gap exists at either the top or bottom of the square, turn the handwheel until the blade and square are flush.
6. Loosen the 90° set screw shown in **Figure 43**, and then tighten it until it stops.
7. Recheck the blade with the square to ensure the screw has not been over-tightened.
8. Using the side handwheel, adjust the blade bevel until you hit the 45° positive stop. Check the bevel with an adjustable square set to 45°.
9. If a gap exists at either the top or bottom of the adjustable square, turn the handwheel until the blade and square are flush.
10. Loosen the 90° stop screw shown in **Figure 43**, and then tighten it until it stops.
11. Recheck the bevel by adjusting the blade back to 90°, then back to 45°.

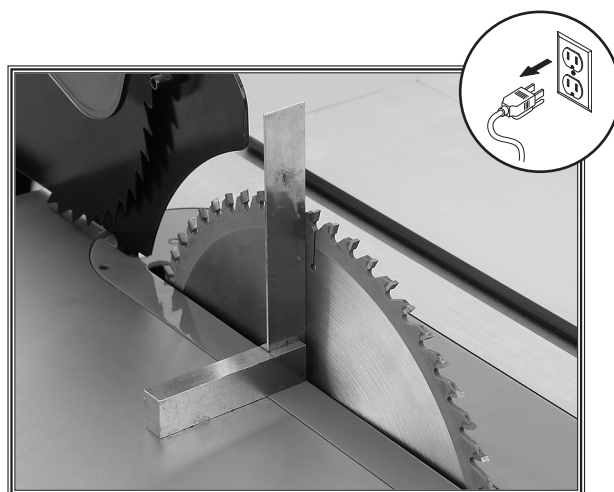


Figure 42. Checking blade angle to table.

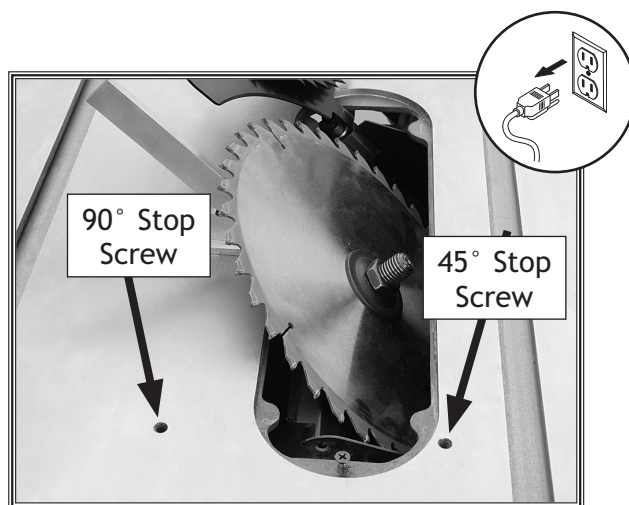
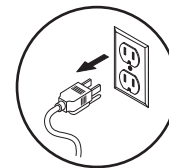


Figure 43. 90° and 45° stop screws.

Troubleshooting

This section is provided for your convenience—it is not a substitute for the Woodstock Service Department. If you need help troubleshooting, you need replacement parts, or you are unsure of how to perform the procedures in this section, then feel free to call our Technical Support at (360) 734-3482.



Motor & Electrical

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> 1. Plug or receptacle is at fault or wired incorrectly. 2. Start capacitor is faulty. 3. The thermal protection relay below the motor contactor is tripped. 4. Contactor not getting energized or has burnt contacts. 5. Wall fuse or circuit breaker is blown or tripped. 6. Motor connection is wired incorrectly. 7. Power supply is faulty, or is switched OFF. 8. Motor ON button. 9. Centrifugal switch is at fault. 10. Cable or wiring is open or has high resistance. 11. Motor is at damaged. 	<ol style="list-style-type: none"> 1. Test power plug and receptacle for good contact and correct wiring. 2. Replace start capacitor. 3. If no short exists, turn the overload cutout dial on the relay to a higher setting (see Page 41, Figure 44) to increase working amps, and push the reset pin, or replace weak relay. 4. Replace contactor. 5. Make sure circuit breaker/fuse is sized correctly for machine load (refer to Page 10), or replace weak breaker. 6. Correct motor wiring (see Pages 40 and 41). 7. Make sure all hot lines and grounds are operational and have correct voltage. 8. Replace faulty ON button. 9. Adjust or repair centrifugal switch. 10. Troubleshoot wires for internal or external breaks, and disconnected or corroded connections; repair or replace wiring. 11. Repair or replace motor.
Machine stalls or is underpowered.	<ol style="list-style-type: none"> 1. Applying too much pressure to workpiece. 2. Low power supply voltage. 3. Run capacitor is faulty. 4. Belt is slipping. 5. Plug or receptacle is at fault. 6. Motor connection is wired incorrectly. 7. Pulley or sprocket is slipping on shaft. 8. Motor bearings are at fault. 9. Motor has overheated. 10. Contactor not getting energized or has poor contacts. 11. Motor is at fault. 12. Centrifugal switch is at fault. 	<ol style="list-style-type: none"> 1. Use sharp blade, and reduce the feed rate. 2. Make sure all hot lines and grounds are operational and have correct voltage. 3. Replace run capacitor. 4. Replace belt and/or re-tension. 5. Test power plug and receptacle for good contact and correct wiring. 6. Correct motor wiring (see Pages 40 and 41). 7. Replace loose pulley and shaft. 8. Rotate motor shaft for noisy or burnt bearings, replace as required. 9. Let motor cool, clean motor fan cover, and reduce workload on machine. 10. Replace contactor. 11. Repair or replace motor. 12. Repair or replace centrifugal switch.

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> 1. Loose arbor nut. 2. Blade is damaged. 3. Blade is too thin. 4. Machine is sitting on an uneven floor. 5. Belt is worn or is loose. 6. Pulley is loose. 7. Cast iron motor mount is damaged. 8. Arbor bearings are damaged. 9. Motor bearings are damaged. 10. Wrong workpiece material (wood). 	<ol style="list-style-type: none"> 1. Tighten the arbor nut. 2. Replace warped/ bent/ or twisted blade. 3. Use blade stabilizers. 4. Relocate machine or shim feet. 5. Inspect belt, replace or re-tension. 6. Remove pulley; replace shaft, pulley, and setscrew as required, and re-align. 7. Carefully using leverage and a small pry bar, carefully look for loose/broken mounts and replace if necessary. 8. Replace arbor housing bearings. 9. Replace motor bearings. 10. Only process wood with correct moisture content, with no pitch, glues, or resins.

Table Saw Operations

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
Blade is not aligned with miter slot or fence.	<ol style="list-style-type: none"> 1. Blade is warped. 2. Blade is not parallel to table top. 3. Fence is not parallel to blade. 	<ol style="list-style-type: none"> 1. Replace blade. 2. Make blade parallel to table. 3. Make fence parallel to blade.
Fence hits table top when sliding.	<ol style="list-style-type: none"> 1. Front rail is bolted too low on table. 2. Rear rail is bolted too low on the table. 	<ol style="list-style-type: none"> 1. Raise front rail. 2. Raise rear rail.
Blade does not reach 90°.	<ol style="list-style-type: none"> 1. 90° stop bolt is out of adjustment. 2. Pointer bracket is hitting before the blade reaches 90°. 	<ol style="list-style-type: none"> 1. Adjust 90° stop bolt. 2. File down the right side of the pointer bracket until the blade can reach 90°.
Blade hits insert at 45°.	<ol style="list-style-type: none"> 1. Hole in insert is inadequate. 2. Table out of alignment. 3. Blade position is incorrect. 	<ol style="list-style-type: none"> 1. File or mill the hole in the insert. 2. Align blade to the table. 3. Adjust blade position.
Blade will not go beneath table surface.	<ol style="list-style-type: none"> 1. Table top too low. 	<ol style="list-style-type: none"> 1. Lower the blade trunnion w/washers.
Board binds or burns when feeding through tablesaw.	<ol style="list-style-type: none"> 1. Dull blade. 2. Blade is warped. 3. Table top is not parallel to blade. 4. Splitter out of alignment. 5. Fence is not parallel to blade. 	<ol style="list-style-type: none"> 1. Replace blade. 2. Replace blade. 3. Make table parallel to blade. 4. Align the splitter with the blade. 5. Make fence parallel to blade.

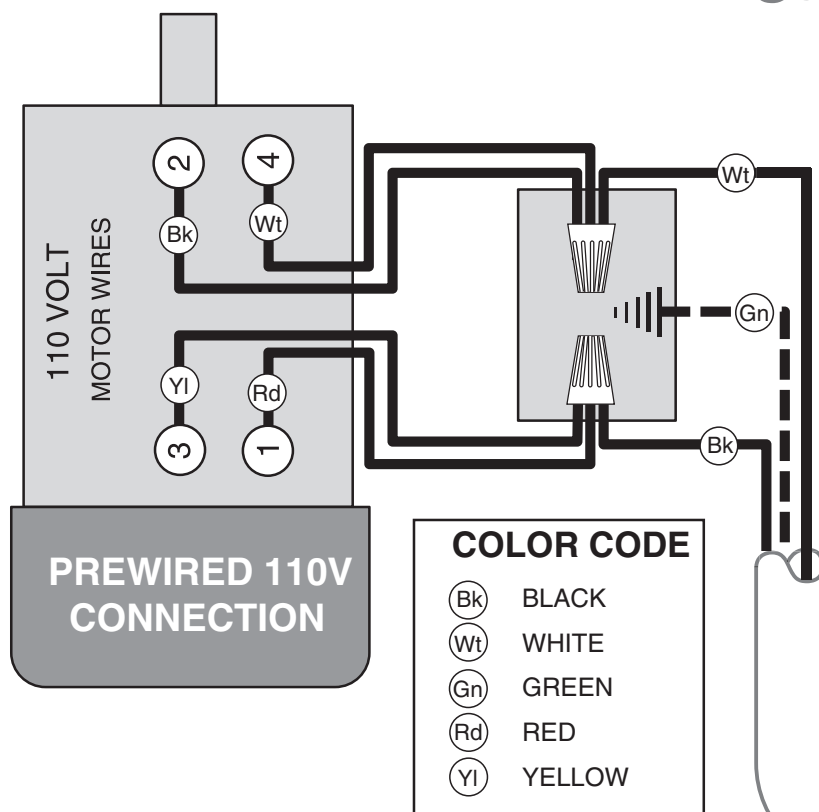
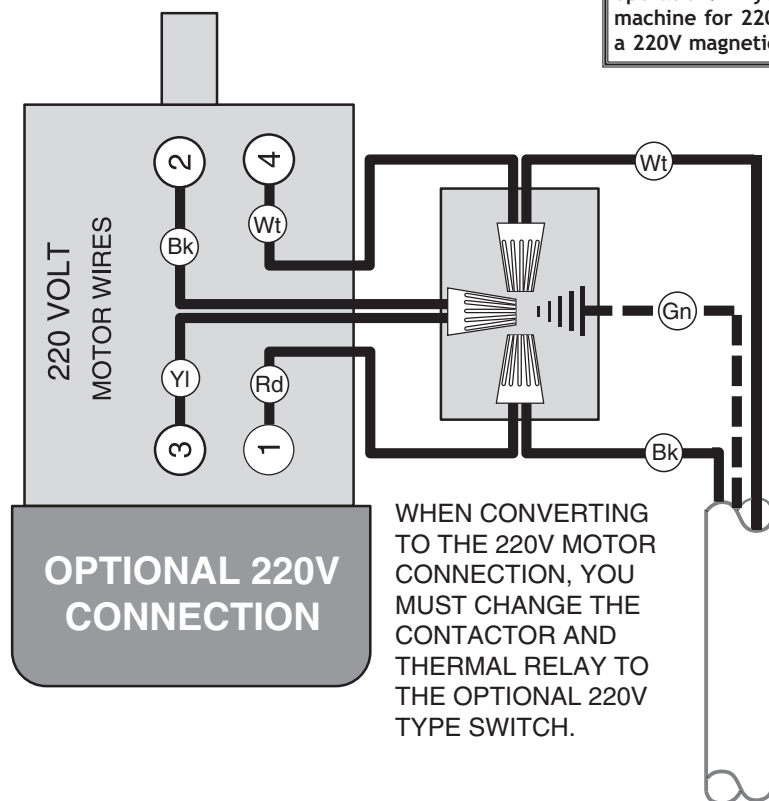
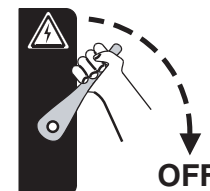
W1748 110/220V Wiring Diagram

⚠ WARNING

The Model W1748 is prewired for 110V operation. If you plan to rewire your machine for 220V, you must convert to a 220V magnetic switch assembly.

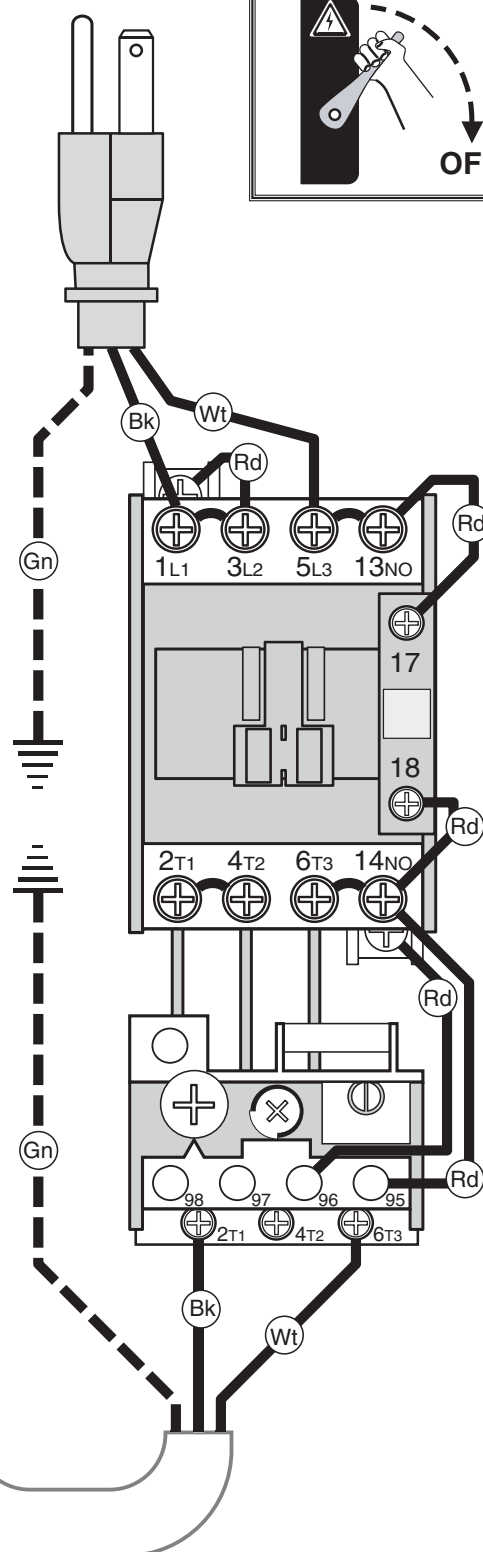
⚠ WARNING

Disconnect power to the machine before performing any electrical work, service, or adjustments.



COLOR CODE

- (Bk) BLACK
- (Wt) WHITE
- (Gn) GREEN
- (Rd) RED
- (Yl) YELLOW



Electrical Components

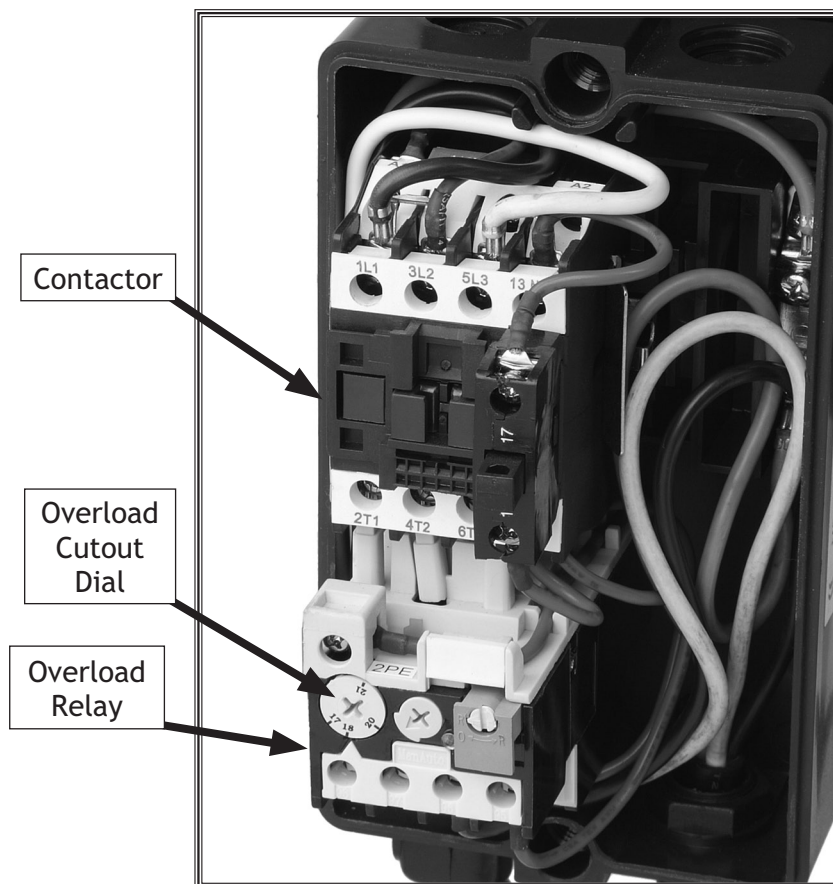
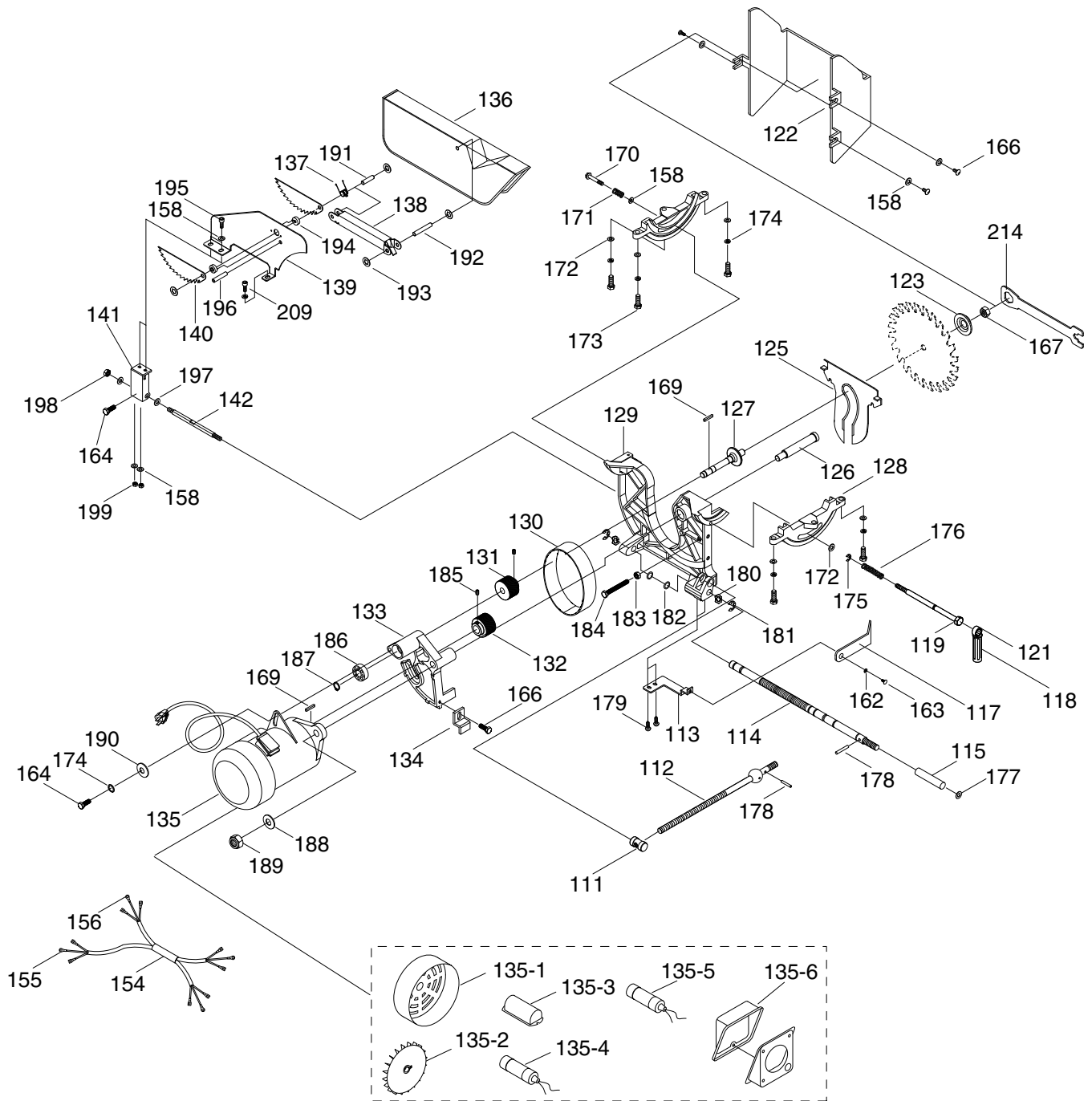


Figure 44. Magnetic switch components.



Figure 45. 110V motor wiring.

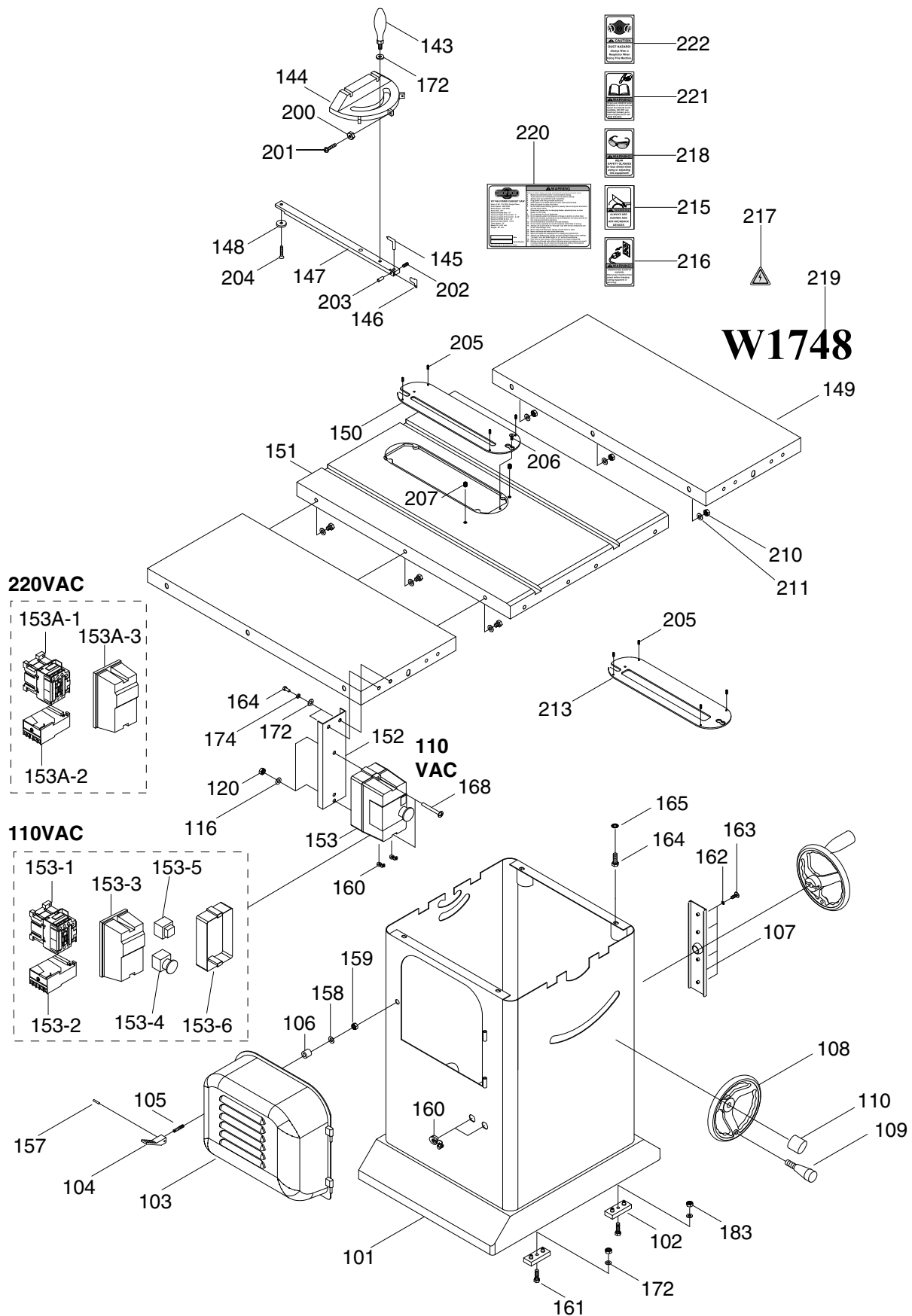


Parts List

REF	PART #	DESCRIPTION
101	X1748101	CABINET
102	X1748102	PLASTIC FOOT
103	X1748103	MOTOR COVER
104	X1748104	DOOR RELEASE LEVER
105	X1748105	THREADED ROD M6-1
106	X1748106	RUBBER BUSHING
107	X1748107	BRACKET
108	X1748108	HANDWHEEL
109	X1748109	HANDWHEEL HANDLE
110	X1748110	LOCK KNOB 1/2-12
111	X1748111	TILT LEADSCREW NUT
112	X1748112	LONG SHAFT
113	X1748113	POINTER BRACKET
114	X1748114	ELEVATION LEADSCREW
115	X1748115	SLEEVE
116	XPW03	FLAT WASHER #10
117	X1748117	POINTER
118	X1748118	LOCK SLEEVE
119	X1748119	LOCK ROD
120	XPN07	HEX NUT 10-24
121	X1748121	LOCK HANDLE
122	X1748122	DUST COLLECTING PLATE
123	X1748123	ARBOR FLANGE
125	X1748125	MOTOR PLATE
126	X1748126	ARBOR BRACKET SHAFT
127	X1748127	MAIN ARBOR
128	X1748128	FRONT TRUNNION BRACKET
129	X1748129	MAIN TRUNNION
130	X1748130	BELT 150J X 12
131	X1748131	ARBOR PULLEY
132	X1748132	MOTOR PULLEY
133	X1748133	ARBOR BRACKET
134	X1748134	UPPER FIXER
135	X1748135	MOTOR

REF	PART #	DESCRIPTION
135-1	X1748135-1	MOTOR FAN COVER
135-2	X1748135-2	MOTOR FAN
135-3	X1748135-3	CAPACITOR COVER
135-4	X1748135-4	CAPACITOR 30MFD 250VAC
135-5	XPC400A	CAPACITOR 400MFD 125VAC
135-6	X1748135-6	WIRING BOX
136	X1748136	BLADE GUARD
137	X1748137	TORSION SPRING
138	X1748138	SUPPORT ARM
139	X1748139	SPLITTER
140	X1748140	ANTI-KICK PLATE
141	X1748141	SPLITTER BRACKET
142	X1748142	SPLITTER ROD
143	X1748143	MITER GAUGE HANDLE
144	X1748144	MITER GAUGE BODY
145	X1748145	POINTER
146	X1748146	LOCATING PLATE
147	X1748147	MITER BAR
148	X1748148	SPECIAL WASHER 1/4
149	X1748149	SOLID EXTENSION WING
150	X1748150	TABLE INSERT
151	X1748151	TABLE
152	X1748152	SWITCH BRACKET
153	X1748153	MAG SWITCH ASSY 110V
153-1	X1748153-1	CONTACTOR 110V
153-2	X1748153-2	RELAY 110V
153-3	X1748153-3	FRONT COVER
153-4	X1748153-4	STOP BUTTON
153-5	X1748153-5	START BUTTON
153-6	X1748153-6	BACK COVER
153A	X1748153A	MAG SWITCH ASSY 220V
153A-1	X1748153A-1	CONTACTOR 220V
153A-2	X1748153A-2	RELAY 220V

Table, Cabinet, and Electrical Switch Diagram



Parts List

REF	PART #	DESCRIPTION
154	X1748154	CORD SLEEVE
155	X1748155	PWR CORD 110V, LNG W/PLUG
156	X1748156	PWR CORD 110V, SHORT
157	XPRP64M	ROLL PIN 3 X 18
158	XPW06	FLAT WASHER 1/4
159	X1748159	NYLON NUT M6-1
160	X1748160	STRAIN RELIEF
161	XPS79	PHLP HD SCR 5/16-18 X 5/8
162	X1748162	FLAT WASHER #8
163	XPS24	PHLP HD SCR 8-32 X 3/8
164	XPB32	HEX BOLT 5/16-18 X 5/8
165	X1748165	EXT TOOTH WASHER 8MM
166	XPS04	PHLP HD SCR 1/4-20 X 1/2
167	X1748167	FLANGE NUT 5/8-12
168	X1748168	FLANGE SCREW 10-24 X 9/16
169	XPB14M	KEY 5 X 5 X 18
170	X1748170	SPECIAL BOLT 1/4-20 X 40
171	X1748171	COMPRESSION SPRING
172	XPLW01	LOCK WASHER 5/16"
173	XPB03	HEX BOLT 5/16-18 X 1
174	XPLW01	LOCK WASHER 5/16"
175	XPR01M	EXT RETAINING RING 10MM
176	X1748176	COMPRESSION SPRING
177	XPW10M	FLAT WASHER 14MM
178	XPRP28M	ROLL PIN 5 X 40
179	XPS103	PHLP HD SCR 1/4-20 X 5/16
180	X1748180	WAVY WASHER 16MM
181	XPR06M	EXT RETAINING RING 16MM
182	X1748182	C RING
183	XPN02	HEX NUT 5/16-18
184	XPB04	HEX BOLT 5/16-18 X 3
185	XPSS07	SET SCREW 1/4-20 X 1/2
186	X1748186	BALL BEARING 6202
187	XPR05M	EXT RETAINING RING 15MM

REF	PART #	DESCRIPTION
188	XPW14	FLAT WASHER 5/8
189	X1748189	NYLON NUT 5/8-11
190	XPW07	FLAT WASHER 5/16"
191	X1748191	SHORT PIN 6 X 33
192	X1748192	LONG PIN 6 X 47
193	X1748193	RETAINER
194	X1748194	SPACER
195	XPSB03	CAP SCREW 5/16-18 X 1
196	XPRP07M	ROLL PIN 6 X 20
197	XPW01	FLAT WASHER 1/2"
198	XPN13	HEX NUT 1/2-13
199	XPN02	HEX NUT 5/16-18
200	XPN14	HEX NUT 8-32
201	X1748201	PHLP HD SCR 8-32 X 1/2
202	XPSS11	SET SCREW 1/4-20 X 1/4
203	XPRP14M	ROLL PIN 3 X 6
204	XPFH19	FLAT HD SCR 1/4-20 X 3/8
205	X1748205	SET SCREW 10-24 X 3/16
206	X1748206	FLAT HD SCR 10-24 X 3/4
207	XPSS38	SET SCREW 5/16-18 X 5/8
209	XPSB03	CAP SCREW 5/16-18 X 1
210	XPB24	HEX BOLT 3/8-16 X 1-1/4
211	XPW02	FLAT WASHER 3/8"
213	X1748213	DADO INSERT
214	X1748214	ARBOR WRENCH 12 X 23
215	X1748215	BLADE GUARD LABEL
216	X1748216	UNPLUG TABLE SAW LABEL
217	X1748217	ELECTRICITY LABEL
218	X1748218	SAFETY GLASSES 2" X 3 5/16"
219	X1748219	MODEL NUMBER LABEL
220	X1748220	MACHINE ID LABEL
221	X1748221	READ MANUAL 2"W X 3 5/16"
222	X1748222	RESPIRATOR 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 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 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: _____

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Place
Stamp
Here



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



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