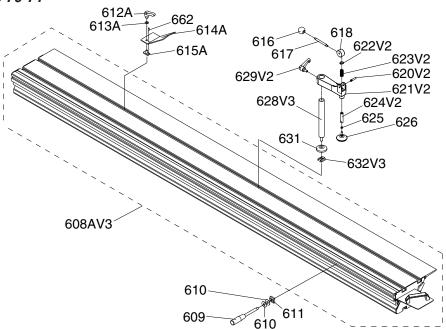


#### MODEL G0451 SLIDING TABLE SAW MANUAL UPDATE

Since the original Model G0451 sliding table was first written, we've redesigned the sliding table and the hold down clamp. As a result, the parts breakdown and list in the original manual do not match your machine. This update includes updated parts breakdowns that match your machine. Please keep it with your owner's manual for future reference. If you have questions, contact Tech Support at (570) 546-9663 or by email at techsupport@grizzly.com.

### Sliding Table Accessories (Since May, 2010)

Replaces Pages 70-71



REF	PART #	DESCRIPTION
608AV3	P04510608AV3	SLIDING TABLE ASSY V3.05.10
609	P04510609	HANDLE M12-1.75
610	PW06M	FLAT WASHER 12MM
611	P04510215	T-NUT M12-1.75
612A	P04510612A	LOCK HANDLE M10-1.5 X 20 V2.08.07
613A	PW04M	FLAT WASHER 10MM
614A	P04510614A	EDGE SHOE PLATE V2.08.07
615A	P04510615A	T-NUT M10-1.5 V2.08.07
616	P04510616	BALL KNOB M8-1.25
617	P04510617	HANDLE SHAFT
618	P04510618	CAM
620V2	P04510620V2	PIN V2.05.10

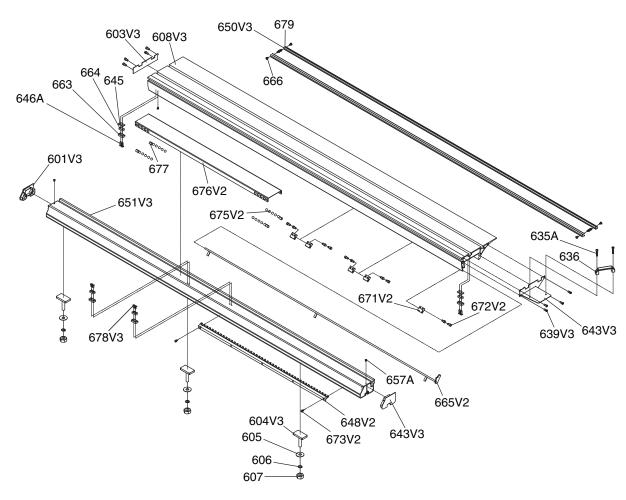
REF	PART #	DESCRIPTION
621V2	P04510621V2	DOWN PRESS V2.05.10
622V2	PR02M	EXT RETAINING RING 14MM
623V2	P04510623V2	COMPRESSION SPRING V2.05.10
624V2	P04510624V2	SHAFT V2.05.10
625	PN02	HEX NUT 5/16-18
626	P04510626	LARGE WASHER
628V3	P04510628V3	SHAFT V3.05.10
629V2	P04510629V2	ADJUST HANDLE V2.05.10
631	P04510631	DISC-GASKET
632V3	P04510632V3	T-NUT M12-1.75 V3.05.10
662	PRP70M	ROLL PIN 5 X 18

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### Sliding Table Parts (Since May, 2010)

Replaces Pages 72-73



REF PART#	DESCRIPTION
-----------	-------------

601V3	P04510601V3	BASE END COVER V3.05.10
603V3	P04510603V3	TABLE END COVER V3.05.10
604V3	P04510604V3	T-BOLT M12-1.75 X 40 V3.05.10
605	PW06M	FLAT WASHER 12MM
606	PLW05M	LOCK WASHER 12MM
607	PN09M	HEX NUT M12-1.75
608V3	P04510608V3	TOP BASE 2500MM V3.05.10
635A	PCAP58M	CAP SCREW M8-1.25 X 12
636	P04510636	HANDLE
639V3	PBHS09M	BUTTON HD CAP SCR M6-1 X 12
640V3	P04510640V3	RIGHT END PLATE V3.05.10
643V3	P04510643V3	BASE END COVER V3.05.10
645	P04510645	HORIZONTAL LOCATE PLATE
646A	PFH26M	FLAT HD SCR M6-1 X 30
648V2	P04510648V2	TEETH LOCATE PLATE V2.05.10

#### REF PART # DESCRIPTION

650V3	P04510650V3	STEEL RAIL V3.05.10
651V3	P04510651V3	BOTTOM BASE 2500MM V3.05.10
657A	PHTEK19M	TAP SCREW M5 X 16
663	P04510663	RUBBER BLOCK
664	P04510664	LOCATE BLOCK
665V2	P04510665V2	LOCATE ROD V2.05.10
666	PFH43M	FLAT HD SCR M6-1 X 10
671V2	P04510671V2	LOCATE BLOCK V2.05.10
672V2	PFH07M	FLAT HD SCR M58 X 10
673V2	PCAP115M	BUTTON HD CAP SCR M6-1 X 16
675V2	P04510675V2	STEEL BALL 16.6MM V2.05.10
676V2	P04510676V2	SLIDING BOTTOM V2.05.10
677	P04510677	COTTON PAD
678V3	PBHS05M	BUTTON HD CAP SCR M6-1 X 20
679	P04510679	ADHESIVE





## MODEL G0451 14" SLIDING TABLE SAW

**OWNER'S MANUAL** 



COPYRIGHT © APRIL, 2005 BY GRIZZLY INDUSTRIAL, INC., REVISED MAY, 2011 (TS) WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC. (FOR MODELS MANUFACTURED SINCE 5/10) #EW6937 PRINTED IN TAIWAN



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

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

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

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

## **WARNING!**

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

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

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

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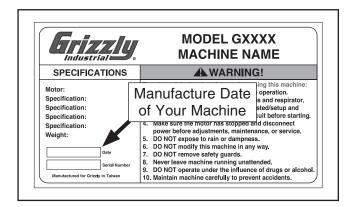
### INTRODUCTION

#### **Manual Accuracy**

We are proud to offer this manual with your new machine! We've made every effort to be exact with the instructions, specifications, drawings, and photographs of the machine we used when writing this manual. However, sometimes we still make an occasional mistake.

Also, owing to our policy of continuous improvement, your machine may not exactly match the manual. If you find this to be the case, and the difference between the manual and machine leaves you in doubt, check our website for the latest manual update or call technical support for help.

Before calling, find the manufacture date of your machine by looking at the date stamped into the machine ID label (see below). This will help us determine if the manual version you received matches the manufacture date of your machine.



For your convenience, we post all available manuals and manual updates for free on our website at **www.grizzly.com**. Any updates to your model of machine will be reflected in these documents as soon as they are complete.

#### **Contact Info**

We stand behind our machines. If you have any questions or need help, use the information below to contact us. Before contacting, please get the serial number and manufacture date of your machine. This will help us help you faster.

Grizzly Technical Support 1203 Lycoming Mall Circle Muncy, PA 17756 Phone: (570) 546-9663 Email: techsupport@grizzly.com

We want your feedback on this manual. What did you like about it? Where could it be improved? Please take a few minutes to give us feedback.

Grizzly Documentation Manager P.O. Box 2069 Bellingham, WA 98227-2069 Email: manuals@grizzly.com



#### **Identification & Basic Controls**

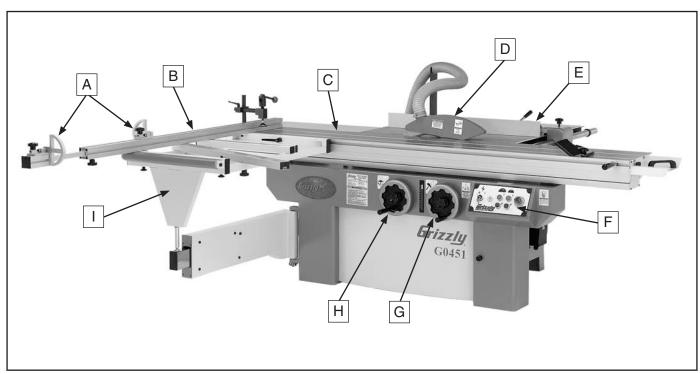


Figure 1. Main view of machine features and controls.

Use **Figures 1–5** and the following descriptions to gain an understanding of the features and basic controls of the table saw. This knowledge will be required to properly set up the machine for the test run.



#### **AWARNING**

To reduce the risk of serious injury when using this machine, read and understand this entire manual before beginning any operations.

- A. Flip Stops. Used for quick crosscutting measurements.
- **B.** Crosscut Fence. Used during crosscutting operations. Features a scale and multiple flip-style stop blocks for precise, repeatable crosscutting operations.
- C. Sliding Table—Conveniently glides the workpiece through the blade with precision and ease.

- D. Blade Guard. Maintains maximum protection around the saw blade, and a 2½" dust port effectively extracts dust from the cutting operation.
- **E. Rip Fence.** Features micro-adjustment knob for precision adjustments. Fence face can be positioned for standard cutting operations, or in the lower position, for blade guard clearance during narrow ripping operations.
- F. Control Panel. Features push-button controls for operating the many features of the saw.
- **G. Blade Angle Handwheel.** Adjusts the angle of the saw blades.
- **H. Blade Elevation Handwheel.** Adjusts the height of the main saw blade.
- Crosscut Table. Provides a wide, stable platform for supporting full-size panels during crosscutting operations.



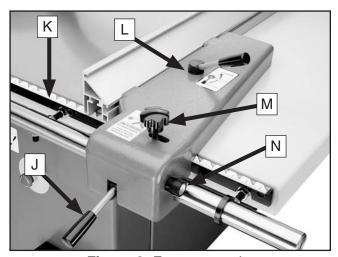


Figure 2. Fence controls.

- J. Fence Assembly Lock Down Lever. Secures the fence assembly in position along the fence rail.
- **K. Rip Fence Scale.** Allows precise measurements for rip cutting operations.
- L. Slide Lock Handle. Secures the aluminum fence piece on its forward/backward slide track.
- M. Micro-Adjustment Lock Knob. Secures the fence after it has been adjusted with the micro-adjustment knob.
- N. Micro-Adjustment Knob. Precisely adjusts the fence.

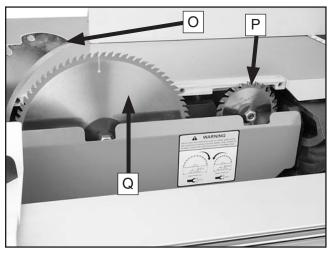


Figure 3. Blades.

- O. Riving Knife—Maintains kerf opening during cutting operations. This function is crucial in preventing kickback caused by the kerf closing behind the blade.
- P. Scoring Blade—Small cutting blade that rotates opposite the main saw blade. The blade scores the workpiece before the actual cutting operation is performed preventing tear-out in laminate materials. The scoring blade is adjustable forward and backward, up and down, and in thickness of kerf.
- **Q. Main Blade**—Performs the cutting operations.

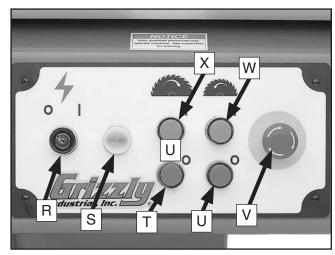


Figure 4. Control panel.

- **R.** Power ON/OFF Switch. Connects power to all motors in the saw, and can be disabled with the key.
- S. Power Indicator Light. Indicates a live power connection to the machine.
- **T. Main Blade OFF Button.** Stops the main saw blade motor.
- U. Scoring Blade OFF Button. Stops the scoring blade motor.
- V. Primary Emergency Stop Button.
  Disconnects power to both motors.
- W. Scoring Blade ON Button. Starts the scoring blade.

**Note:** The main saw blade must be **ON** for the scoring blade to start.

X. Main Blade ON Button. Starts the main saw blade.

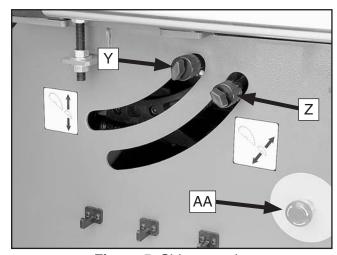


Figure 5. Side controls.

- Y. Scoring Blade Elevation Knob. Adjusts the height of the scoring blade.
- Z. Scoring Blade Alignment Knob. Adjusts the side-to-side alignment of the scoring blade to the main blade.
- **AA. Secondary Emergency Stop Button.**Disconnects power to both motors.



### **Glossary Of Terms**

The following is a list of common definitions, terms and phrases used throughout this manual as they relate to this table saw and woodworking in general. Become familiar with these terms for assembling, adjusting or operating this machine. Your safety is **VERY** important to us at Grizzly!

- **Arbor:** Metal shaft extending from the drive mechanism, to which saw blade is mounted.
- **Bevel Edge Cut:** Tilting the arbor and saw blade to an angle between 0° and 45° to cut a beveled edge onto a workpiece.
- **Blade Guard:** Metal or plastic safety device that mounts over the saw blade. Its function is to prevent the operator from coming into contact with the saw blade.
- **Crosscut:** Cutting operation in which the crosscut fence is used to cut across the grain, or across the shortest width of the workpiece.
- **Dado Blade:** Blade or set of blades that are used to cut grooves and rabbets.
- **Dado Cut:** Cutting operation that uses a dado blade to cut a flat bottomed groove into the face of the workpiece.
- **Featherboard:** Safety device used to keep the workpiece against the rip fence and against the table surface.
- **Kerf:** The resulting cut or gap in the workpiece after the saw blade passes through during a cutting operation.
- **Kickback:** An event in which the workpiece is propelled back towards the operator at a high rate of speed.
- **Parallel:** Being an equal distance apart at every point along two given lines or planes. I.e. the rip fence face is parallel to the face of the saw blade.

- Non-Through Cut: A sawing operation that requires the removal of the blade guard and riving knife. Dado and rabbet cuts are considered Non-Through Cuts because the blade does not protrude above the top face of the wood stock. Always remember to re-install the blade guard and riving knife after performing a non-through cut.
- **Perpendicular:** Lines or planes that intersect and form right angles. I.e. the blade is perpendicular to the table surface.
- **Push Stick:** Safety device used to push the workpiece through a cutting operation. Used most often when rip cutting thin workpieces.
- **Rabbet:** Cutting operation that creates an L-shaped channel along the edge of the workpiece.
- **Riving knife:** Metal plate located behind the blade. It maintains the kerf opening in the wood when performing a cutting operation.
- **Straightedge:** A tool used to check the flatness, parallelism, or consistency of a surface(s).
- **Through Cut:** A sawing operation in which the workpiece is completely sawn through.
- **Rip Cut:** Cutting operation in which the rip fence is used to cut with the grain, or across the widest width of the workpiece.





### MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

#### **MODEL G0451 SLIDING TABLE SAW-10HP**

Weight	
Width (side-to-side) x Depth (front-to-back) x Height	
Footprint (Length x Width)	54-1/2 x 39 i
ipping Dimensions:	
Type	Wood Slat Cra
Content	Machir
Weight	
Length x Width x Height	103 x 46 x 43 i
ectrical:	
Power Requirement	220V or 440V, 3-Phase, 60 F
Minimum Circuit Size	40A at 220V, 20A at 440
Switch	Magnetic with Thermal Overload Protection
Switch Voltage	
Plug Included	
Recommended Plug/Outlet Type	Hardwire Locking Switch
Voltage Conversion Kit	Requires Part# G440VG045
Phase Converter	G797
otors:	
Scoring	
Type	TEFC Induction
Horsepower	1 H
Voltage	
Prewired	
Phase	3-Phas
Amps	3.6A at 220V, 1.8A at 440
Speed	3450 RP
Cycle	60 H
Number of Speeds	
Power Transfer	Belt Driv
Bearings	Shielded and Lubricate
Main	
Type	TEFC Induction
Horsepower	
Voltage	
Prewired	
Phase	3-Phas
Amps	26A at 220V, 13A at 440
Speed	
Cycle	
Number of Speeds	
Power Transfer	
	Shielded and Lubricate



#### **Main Specifications:**

Operation Information	
Main Blade Size	14 in
Main Arbor Size	1 in
Scoring Blade Size	120 mn
Scoring Blade Arbor Size	22 mn
Main Blade Tilt	0 - 45 deg
Main Blade Speed	4200 RPN
Scoring Blade Tilt	0 - 45 deg
Scoring Blade Speed	8000 RPN
Cutting Capacities	
Max Depth of Cut At 90 Deg	4-1/2 in
Max Depth of Cut At 45 Deg	
Table With Rip Fence Max Cut Width	
Sliding Table With Cross Fence Max Cut Width	
Sliding Table With Cross Fence Max Cut Length	126 in
Miter Fence Cut Width At 45 Deg	
Table Information	
Floor To Table Height	
Table Size Length	
Table Size Width	
Table Size Thickness	
Table Size With Ext Wings Length	
Table Size With Ext Wings Width	
Table Size With Ext Wings Thickness	
Sliding Table Length	
Sliding Table Length	
Sliding Table Width	
Sliding Table Trickness	
· · · · · · · · · · · · · · · · · · ·	
Sliding Table T Slot HeightSliding Table T Slot Bottom Width	
Fence Information	
Fence Type	
Fence Size Length	<u> </u>
Fence Size Width	
Fence Size Height	
Fence Stops	
Construction Materials	
Table	Cast Iror
Sliding Table	Aluminun
Base	Stee
Body Assembly	Stee
Cabinet	Stee
Trunnions	
Rollers	Stee
Fence Assembly	
Rails	
Guard	
Spindle Bearing Type	
Paint	
Other Related Information	
No of Dust Ports	
Dust Port Size	2-1/2, 5 in
	•



#### Other Specifications:

Country Of Origin	Taiwan
Warranty	
Serial Number Location	Grizzly ID Label
Assembly Time	2-1/2 hours

#### Features:

Blade Guard with 2 1/2" Dust Port 5" Main Dust Port Adjustable Scoring Knife Kerf Adjustable Riving Knife Mirco Adjustable, Single Lever Locking Fence

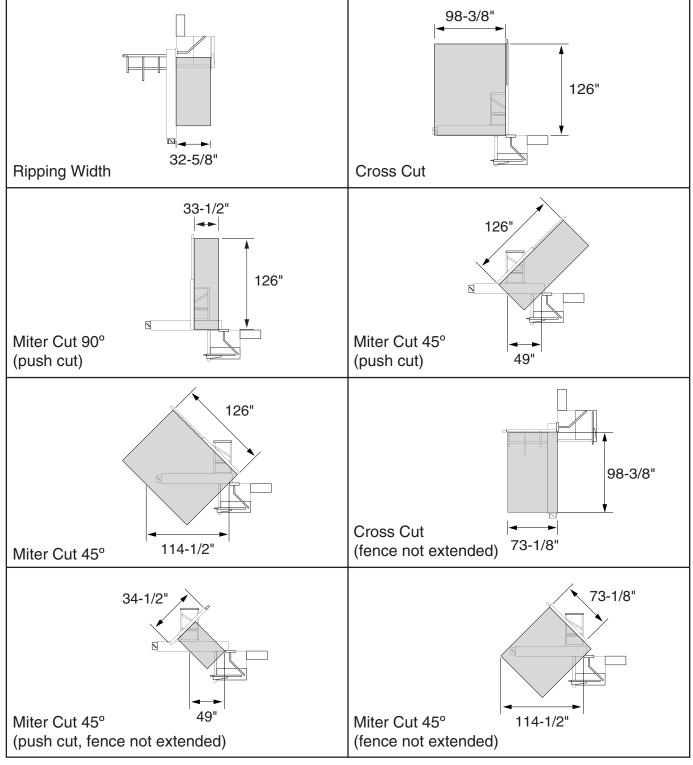




# SLIDING TABLE SAW CAPACITIES

Customer Service #: (570) 546-9663 • To Order Call: (800) 523-4777 • Fax #: (800) 438-5901

#### **MODEL G0451 14" SLIDING TABLE SAW**



### **SECTION 1: SAFETY**

#### **AWARNING**

### 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 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, Indicates an imminently nazardous side 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 machine.

### **AWARNING Safety Instructions for Machinery**

OWNER'S MANUAL. Read and understand this owner's manual BEFORE using machine. Untrained users can be seriously hurt.

**EYE PROTECTION.** Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are not approved safety glasses.

HAZARDOUS DUST. Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material, and always wear a NIOSH-approved respirator to reduce your risk.

WEARING PROPER APPAREL. Do not wear clothing, apparel, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips which could cause a loss of workpiece control.

HEARING PROTECTION. Always wear hearing protection when operating or observiing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

**MENTAL ALERTNESS.** Be mentally alert when running machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.



### **AWARNING**

**DISCONNECTING POWER SUPPLY.** Always disconnect machine from power supply before servicing, adjusting, or changing cutting tools (bits, blades, cutters, etc.). Make sure switch is in OFF position before reconnecting to avoid an unexpected or unintentional start.

**APPROVED OPERATION.** Untrained operators can be seriously hurt by machinery. Only allow trained or properly supervised people to use machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!

**DANGEROUS ENVIRONMENTS.** Do not use machinery in wet or rainy locations, cluttered areas, around flammables, or in poorly-lit areas. Keep work area clean, dry, and well-lighted to minimize risk of injury.

**ONLY USE AS INTENDED.** Only use machine for its intended purpose. Never modify or alter machine for a purpose not intended by the manufacturer or serious injury may result!

**USE RECOMMENDED ACCESSORIES.** Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

**CHILDREN & BYSTANDERS.** Keep children and bystanders a safe distance away from work area. Stop using machine if children or bystanders become a distraction.

**REMOVE ADJUSTING TOOLS.** Never leave adjustment tools, chuck keys, wrenches, etc. in or on machine—especially near moving parts. Verify removal before starting!

**SECURING WORKPIECE.** When required, use clamps or vises to secure workpiece. A secured workpiece protects hands and frees both of them to operate the machine.

**FEED DIRECTION.** Unless otherwise noted, feed work against the rotation of blades or cutters. Feeding in the same direction of rotation may pull your hand into the cut.

**FORCING MACHINERY.** Do not force machine. It will do the job safer and better at the rate for which it was designed.

**GUARDS & COVERS.** Guards and covers can protect you from accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly before using machine.

**NEVER STAND ON MACHINE.** Serious injury or accidental contact with cutting tool may occur if machine is tipped. Machine may be damaged.

**STABLE MACHINE.** Unexpected movement during operations greatly increases the risk of injury and loss of control. Verify machines are stable/ secure and mobile bases (if used) are locked before starting.

**AWKWARD POSITIONS.** Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

**UNATTENDED OPERATION.** Never leave machine running while unattended. Turn machine *OFF* and ensure all moving parts completely stop before walking away.

**MAINTAIN WITH CARE.** Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. An improperly maintained machine may increase the risk of serious injury.

CHECK DAMAGED PARTS. Regularly inspect machine for damaged parts, loose bolts, misadjusted or mis-aligned parts, binding, or any other conditions that may affect safe operation. Always repair or replace damaged or mis-adjusted parts before operating machine.

**EXPERIENCING DIFFICULTIES.** If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact our Technical Support Department at (570) 546-9663.



### **Additional Safety for Table Saws**

### **AWARNING**

HAND POSITIONING. Never purposely touch a saw blade during operation. Always keep hands/ fingers out of the blade path; place them where they cannot slip into the blade accidentally. Never reach around, behind, or over the blade. Touching a spinning saw blade will cause serious laceration or amputation injuries.

**BLADE GUARD.** Use the blade guard for all "through cuts" for which it can be used. (A through cut is an operation where the blade cuts completely through the top of the workpiece.) Make sure the blade guard is installed and adjusted correctly; promptly repair or replace it if damaged. Always re-install blade guard immediately after operations that require its removal. Operating saw with the blade guard removed greatly increases the risk of severe laceration or amputation injuries from accidental blade contact.

RIVING KNIFE. Use the riving knife for all "non-through cuts" for which it can be used. (A non-through cut is an operation where the blade does not cut through the top of the workpiece.) Make sure the riving knife is aligned and positioned correctly; and promptly repair or replace it if damaged. Using the riving knife incorrectly will increase the risk of kickback or accidental blade contact.

**KICKBACK.** Kickback occurs when the saw blade ejects the workpiece back toward the operator. Know how to reduce the risk of kickback, and learn how to protect yourself if it does occur.

**FEEDING WORKPIECE.** Feeding the workpiece incorrectly will increase risk of kickback. Never start the saw with a workpiece touching the blade; allow the blade to reach full speed before cutting. Only feed the workpiece against the direction of blade rotation. Always use some type of guide (fence, miter gauge, sliding table or sled, etc.) to feed the workpiece in a straight line. Never back a workpiece out of a cut or try to move it backwards or sideways after starting a cut. Feed cuts all the way through to completion. Never perform any operation "freehand" (making a cut without using a fence, miter gauge, or other guide).

**FENCE.** Make sure the fence remains properly adjusted and parallel with the blade. Always lock the fence in place before using. Using or adjusting the fence incorrectly will increase risk of kickback.

**PUSH STICKS/BLOCKS.** Use push sticks or push blocks whenever possible to keep your hands farther away from the blade while cutting; in the event of an accident these devices will often take damage that would have happened to hands/fingers.

**CUT-OFF PIECES.** Never use your hands to move cut-offs away from the blade while the saw is running. If a cut-off becomes trapped between the blade and table insert, turn the saw *OFF* and allow the blade to completely stop before removing it.

**BLADE ADJUSTMENTS.** Adjusting the blade height or tilt during operation increases the risk of crashing the blade and sending metal fragments flying with deadly force at the operator or bystanders. Only adjust the blade height and tilt when the blade is completely stopped and the saw is **OFF**.

**CHANGING BLADES.** Always disconnect power before changing blades. Changing blades while the saw is connected to power greatly increases the injury risk if saw is accidentally powered up.

**DAMAGED SAW BLADES.** Never use blades that have been dropped or otherwise damaged. Damaged blades can fly apart and strike the operator with shards of metal.

**DADO AND RABBET OPERATIONS.** DO NOT attempt dado or rabbeting operations without first reading those sections in this manual. Dado and rabbeting operations require special attention because they must be performed with the blade guard removed.

**CUTTING CORRECT MATERIAL.** Never cut materials not intended for this saw; only cut natural and man-made wood products, laminate covered wood products, and some plastics. Cutting metal, glass, stone, tile, etc. increases the risk of operator injury due to kickback or flying particles.



### **SECTION 2: POWER SUPPLY**

#### **Availability**

Before installing the machine, consider the availability and proximity of the required power supply circuit. If an existing circuit does not meet the requirements for this machine, a new circuit must be installed. To minimize the risk of electrocution, fire, or equipment damage, installation work and electrical wiring must be done by a qualified electrician in accordance with all applicable codes and standards.



#### WARNING

Electrocution, fire, or equipment damage may occur if machine is not correctly grounded and connected to the power supply.

#### **Full-Load Current Rating**

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

### Full-Load Current Rating at 220V.. 29.6 Amps Full-Load Current Rating at 440V.. 14.8 Amps

The full-load current is not the maximum amount of amps that the machine will draw. If the machine is overloaded, it will draw additional amps beyond the full-load rating.

If the machine is overloaded for a sufficient length of time, damage, overheating, or fire may result—especially if connected to an undersized circuit. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets the requirements in the following section.

#### **Circuit Information**

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)



For your own safety and protection of property, consult a qualified electrician if you are unsure about wiring practices or electrical codes in your area.

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

#### **Circuit Requirements for 220V**

This machine is prewired to operate on a 220V power supply circuit that has a verified ground and meets the following requirements:

Nominal Voltage	220V/240V
Cycle	60 Hz
Phase	3-Phase
Power Supply Circuit	40 Amps

#### **Circuit Requirements for 440V**

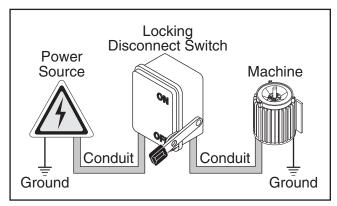
This machine can be converted to operate on a 440V power supply (refer to **Voltage Conversion** instructions) that has a verified ground and meets the following requirements:

Nominal Voltage	440V/480V
Cycle	60 Hz
Phase	3-Phase
Power Supply Circuit	20 Amps



#### **Connection Type**

A power cord is not included, because this machine must be permanently connected to the power supply. A disconnecting means, such as a locking switch (see **Figure** below), must be provided to allow the machine to be disconnected (isolated) from the power supply when required. This installation must be performed by a qualified electrician in accordance with all applicable electrical codes and ordinances.



**Figure 6.** Typical setup of a permanently connected machine.

#### **Grounding Instructions**

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electrical current to reduce the risk of electric shock. A permanently connected machine must be connected to a grounded metal permanent wiring system; or to a system having an equipment-grounding conductor. All grounds must be verified and rated for the electrical requirements of the machine. Improper grounding can increase the risk of electric shock!

### **AWARNING**

Serious injury could occur if you connect the machine to power before completing the setup process. DO NOT connect to power until instructed later in this manual.

#### **Extension Cords**

Since this machine must be permanently connected to the power supply, an extension cord cannot be used.



#### **Voltage Conversion**

The Model G0451 can be rewired for 440V operation. The necessary parts for this procedure can be purchased by calling our customer service at (800) 523-4777 and ordering part #P04510016.

This rewiring job must be inspected by an electrician or qualified service personnel before the saw is connected to the power source. Also, the motors can be accessed easier for rewiring if the blade is moved to 0° (90° to table) before beginning.

#### To rewire the machine for 440V operation:

- DISCONNECT SAW FROM POWER!
- 2. Open the electrical panel and locate the voltage transformer shown in **Figure 7**.

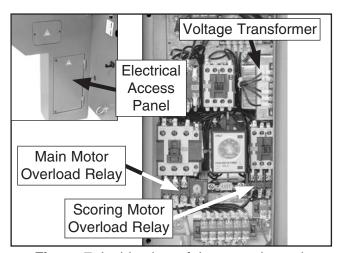


Figure 7. Inside view of the control panel.

**3.** Pull the fuse that is in the "220" slot and push it into the "440" slot (see **Figure 8**).

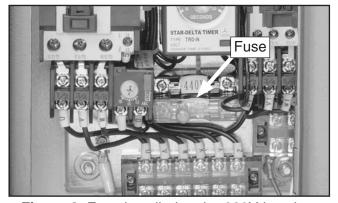


Figure 8. Fuse installed at the 220V location.

4. Remove the main motor overload relay (see Figure 9) and replace it with the overload relay from the 440V conversion kit. Turn the dial on the main motor overload relay to 9A.

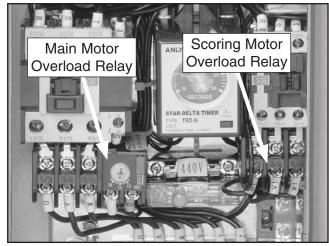


Figure 9. Motor overload relays.

- **5.** On the scoring motor overload relay, change the dial setting to 2.6A.
- Open the motor cabinet door and remove the motor wiring covers from the main motor and the scoring motor (see Figure 10).

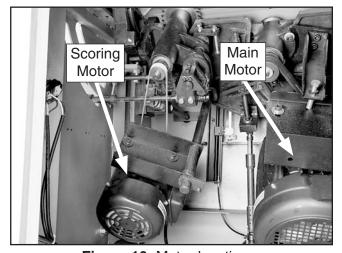
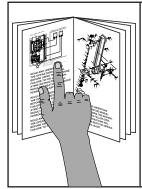


Figure 10. Motor locations.

Re-wire the motors as shown on the diagrams that are placed on the inside of the motor wiring covers.



### **SECTION 3: SETUP**



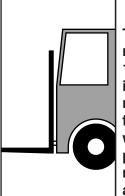
#### **AWARNING**

This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!



#### AWARNING

Wear safety glasses during the entire setup process!



#### WARNING

The Model G0451 is a heavy machine that weighs over 1300 lbs. Serious personal injury may occur if safe moving methods are not followed. To be safe, you will need assistance and power equipment when moving the shipping crate and machine.



#### WARNING

SUFFOCATION HAZARD! Keep children and pets away from plastic bags or packing materials unpacked with this machine. Discard immediately.

#### **Needed for Setup**

The following are needed to complete the setup process, but are not included with your machine.

Des	scription Qty
•	Another Person1
•	Safety Glasses1 for Each Person
•	Cleaner/DegreaserAs Needed
•	Disposable Shop RagsAs Needed
•	Power Lifting Equipment
	(Rated for at least 1500 lbs)1
•	Lifting Straps
	(Rated for at least 1500 lbs. each)2
•	Straightedge 4' (or longer)1
•	Main Blade 12" or 14"1
•	Phillips Screwdriver #21
•	Hex Wrenches 3, 4, 6, & 8mm 1 Each
•	Wrenches or Sockets 16 & 18mm 1 Each
•	Dust Collection System1
•	5" Dust Hose (length as needed)1
•	5" Hose Clamp2
•	2½" Dust Hose (length as needed)1
•	Power Cord (length as needed)1
•	Power Disconnect Box w/Locking Switch 1

### Unpacking

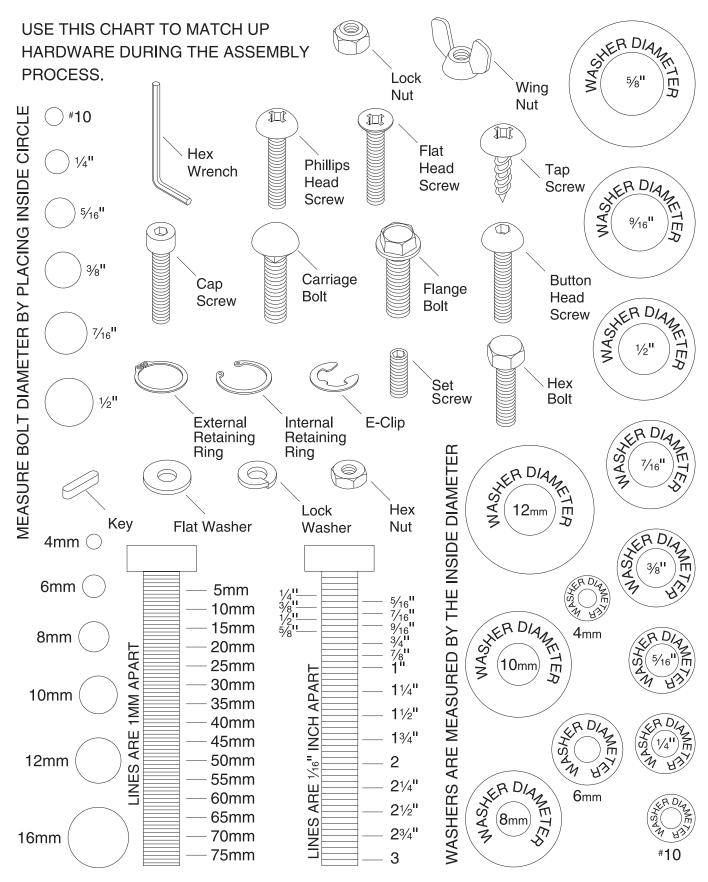
Your machine was carefully packaged for safe transportation. Remove the packaging materials from around your machine and inspect it. If you discover any damage, *please call us immediately at (570) 546-9663 for advice.* 

Save the containers and all packing materials for possible inspection by the carrier or its agent. Otherwise, filing a freight claim can be difficult.

When you are completely satisfied with the condition of your shipment, inventory the contents.



### **Hardware Recognition Chart**



### Inventory

The following is a description of the main components shipped with your machine. Lay the components out to inventory them.

If any non-proprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.

Box	( 1: (Figure 11)	Qty
Α.	Large Extension Table	1
B.	Support Brace	1
C.	Small Extension Table	1

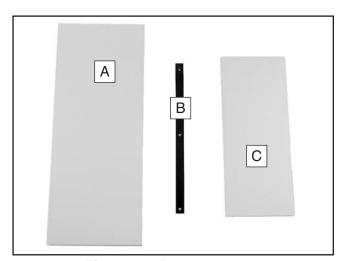


Figure 11. Box 1 contents.

Bo	x 2 & 3: (Figure 12)	Qty
D.	Crosscut Fence	1
E.	Rip Fence Round Rail	1
F.	Crosscut Table Brace	1
G.	Rip Fence Scale	1
H.	Rip Fence	1

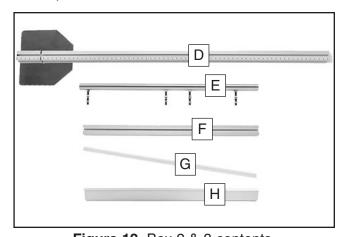


Figure 12. Box 2 & 3 contents.



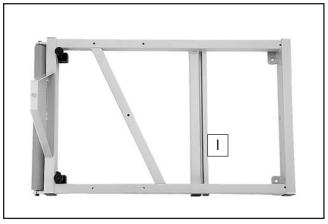


Figure 13. Box 4 contents.

Box	5 & 6: (Figure 14)	Qty
J.	Edge Shoe	1
	Sliding Table Lock Plate	
L.	Flip Stops	2
	Hold Down	
N.	Sliding Table End Handle	1

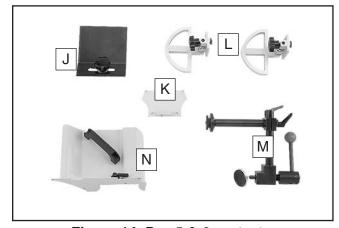


Figure 14. Box 5 & 6 contents.

#### **NOTICE**

If you cannot find an item on this list, check the mounting location on the machine or the packaging materials. Sometimes parts are pre-installed for shipping, or they become hidden by packaging materials.



Box	7: (Figures 15– 16)	Qty
Ο.	Rip Fence Body	1
Q.	Blade Guard/Dust Hood	1
P.	Push Stick	1
R.	Dust Collection Hose Support	1
S.	Toolbox	1
	—Flat Belt 15 x 880mm	1
	—Riving Knife	1
	—Arbor Wrench 30mm	1
	—Hose Clamps 21/2"	2
	—Feet M16-2 x 100	4
	—Arbor Wrench 8mm	1

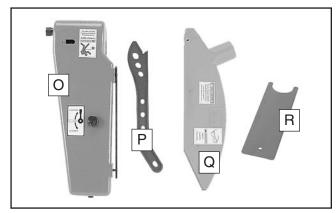


Figure 15. Box 7 contents.

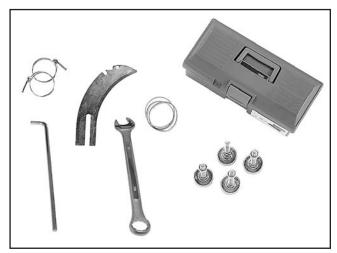


Figure 16. Box 7 contents continued.

Cor	mponent Hardware (Not Shown) Q	tv
•	Push Handle M12-1.75 x 12 (Sliding Table)	
•	Flat Washer 12mm (Push Handle)	
•	T-Nut M12-1.75 (Push Handle)	
•	Set Screw M6-1.0 x 12 (Small Table)	
•	Cap Screw M10-1.5 x 20 (Small Table)	
•	Lock Washer 10mm (Small Table)	
•	Flat Washer 10mm (Small Table)	
•	Cap Screw M10-1.5 x 20 (Large Table)	
•	Lock Washer 10mm (Large Table)	
•	Flat Washer 10mm (Large Table)	
•	Set Screw M6-1.0 x 12 (Large Table)	
•	Cap Screw M10-1.5 x 30 (Support Brace)	
•	Flat Washer 10mm (Support Brace)	
•	Lock Washer 10mm (Support Brace)	
•	Hex Nut M10-1.5 (Support Brace)	
•	Hex Bolts M6-1 x 25 (Scale Bar)	
•	Flat Washers 6mm (Scale Bar)	.3
•	Lock Washers 6mm (Scale Bar)	.3
•	Hex Nuts M6-1 (Scale Bar)	
•	Lock Handles M10-1.5 x 12 (Rip Fence)	.2
•	Knob M10-1.5 x 70 (Rip Fence)	.1
•	Adjustable Ring w/Set Screw (Rip Rail)	.1
•	End Washer 8mm (Rip Rail)	.1
•	Lock Washer 8mm (Rip Rail)	.1
•	Cap Screw M8-1.25 x 16 (R Rail)	.1
•	Adjustable Handle M12-1.75 x 55	
	(Crosscut Table)	
•	Flat Washer 12mm (Crosscut Table)	
•	T-Nut M12-1.75 (Crosscut Table)	
•	T-Nut M8-1.25 (Crosscut Brace)	.2
•	Knob M8-1.25 x 50	
	(Crosscut Brace, Fence)	
•	Flat Washer 8mm (Crosscut Brace)	.2
•	Center Stud M8-1.25 x 10	
	(Crosscut Fence)	
•	Fiber Washer 8mm (Crosscut Fence)	
•	T-Bolt M8-1.25 x 60 (Crosscut Fence)	
•	T-Nut M8-1.25 (Crosscut Fence)	
•	Knob M8-1.25 (Crosscut Fence)	
•	Knob M8-1.25 x 25 (Crosscut Fence)	
•	Flat Washer 8mm (Crosscut Fence)	
•	Block (Crosscut Fence)	
•	Cap Screw M8-1.25 x 35 (Crosscut Fence)	
•	Lock Washer 8mm (Crosscut Fence)	. 1
•	Button Hd Cap Screw M8-1.25 x 40	4
_	(Guard)	
•	Flat Washer 8mm (Guard)	. І

### Cleanup

The unpainted surfaces of your machine are coated with a heavy-duty rust preventative that prevents corrosion during shipment and storage. This rust preventative works extremely well, but it will take a little time to clean.

Be patient and do a thorough job cleaning your machine. The time you spend doing this now will give you a better appreciation for the proper care of your machine's unpainted surfaces.

There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

#### Before cleaning, gather the following:

- Disposable Rags
- Cleaner/degreaser (WD•40 works well)
- Safety glasses & disposable gloves
- Plastic paint scraper (optional)

#### Basic steps for removing rust preventative:

- **1.** Put on safety glasses.
- Coat the rust preventative with a liberal amount of cleaner/degreaser, then let it soak for 5–10 minutes.
- Wipe off the surfaces. If your cleaner/degreaser is effective, the rust preventative will wipe off easily. If you have a plastic paint scraper, scrape off as much as you can first, then wipe off the rest with the rag.
- **4.** Repeat **Steps 2–3** as necessary until clean, then coat all unpainted surfaces with a quality metal protectant to prevent rust.



#### WARNING

Gasoline or products with low flash points can explode or cause fire if used to clean machinery. Avoid cleaning with these products.



### **A**CAUTION

Many cleaning solvents are toxic if concentrated amounts are inhaled. Only work in a well-ventilated area.

#### NOTICE

Avoid chlorine-based solvents, such as acetone or brake parts cleaner, that may damage painted surfaces. Test all cleaners in an inconspicuous area before using to make sure they will not damage paint.



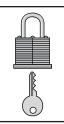
#### **Site Considerations**

#### Weight Load

Refer to the **Machine Data Sheet** for the weight of your machine. Make sure that the surface upon which the machine is placed will bear the weight of the machine, additional equipment that may be installed on the machine, and the heaviest workpiece that will be used. Additionally, consider the weight of the operator and any dynamic loading that may occur when operating the machine.

#### **Space Allocation**

Consider the largest size of workpiece that will be processed through this machine and provide enough space around the machine for adequate operator material handling or the installation of auxiliary equipment. With permanent installations, leave enough space around the machine to open or remove doors/covers as required by the maintenance and service described in this manual. See below for required space allocation.



### **ACAUTION**

Children or untrained people may be seriously injured by this machine. Only install in an access restricted location.

#### **Physical Environment**

The physical environment where your machine is operated is important for safe operation and the longevity of its components. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions. Extreme conditions for this type of machinery are generally those where the ambient temperature range exceeds 41°–104°F; the relative humidity range exceeds 20–95% (non-condensing); or the environment is subject to vibration, shocks, or bumps.

#### **Electrical Installation**

Place this machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure to leave access to a means of disconnecting the power source or engaging a lockout/tagout device.

#### Lighting

Lighting around the machine must be adequate enough that operations can be performed safely. Shadows, glare, or strobe effects that may distract or impede the operator must be eliminated.

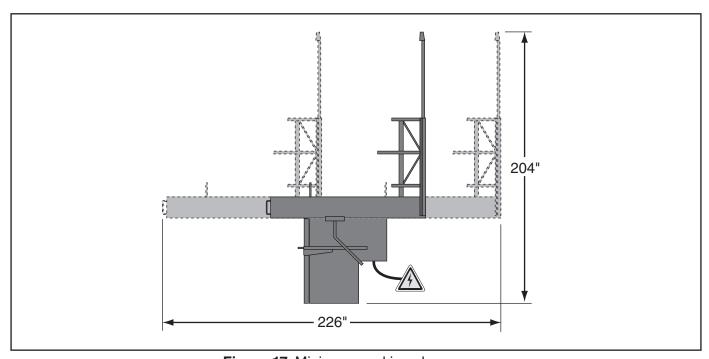
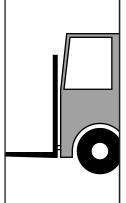


Figure 17. Minimum working clearances.



# Moving & Placing Base Unit



#### **AWARNING**

The Model G0451 is a heavy machine that weighs over 1300 lbs. Serious personal injury may occur if safe moving methods are not followed. To be safe, you will need assistance and power equipment when moving the shipping crate and machine.

#### AWARNING

Use lifting straps with a minimum of 1500 lbs. lifting capacity each. If a lifting strap breaks, serious personal injury may occur.

### To remove the saw base unit from the crate pallet:

- Remove the top of the crate and position the forklift forks together and directly above the saw
- Place two lifting straps over the forks and attach the ends to the lifting bolts, as shown in Figure 18.

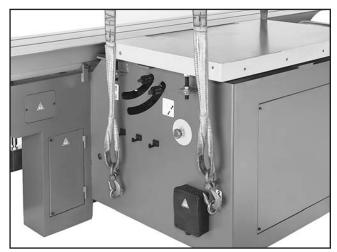
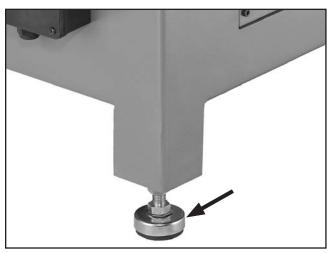


Figure 18. Lifting the saw base unit.

#### **AWARNING**

DO NOT lift the table saw any higher than necessary to clear the floor. Serious personal injury and damage to the machine may occur if safe moving methods are not followed.

- **3.** Lift the saw base unit and move it to your predetermined location.
- 4. Before lowering the saw into position, place safety blocks under the frame and thread the four foot studs into the frame at least half of their length.
- Remove the safety blocks and lower the saw onto the feet as shown in Figure 19 and remove the forklift straps.



**Figure 19.** Foot studs placed in base feet.

- 6. Place a level on the saw table and adjust foot studs so the saw table is level from left-to-right and from front-to-back. This will allow the table to slide smoothly.
- 7. Lock the foot studs in position by tightening their jam nuts against the machine body.

### Assembly & Setup

Before shipping, the sliding table was set at the factory to be even with the main table and parallel with the blade.

#### To assemble the sliding table saw:

 Install the end handle, as shown in Figure 20.

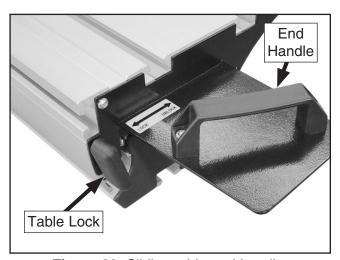


Figure 20. Sliding table end handle.

- Rotate the table lock to unlock the sliding table. The sliding table is locked in place when the table lock is in the position shown in Figure 20.
- Install the push handle into the table, as shown in Figure 21, with a 12mm flat washer and M12-1.75 T-nut.

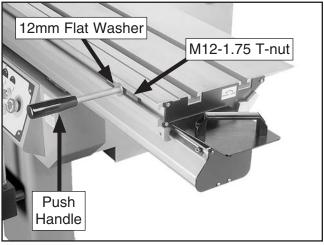


Figure 21. Sliding table push handle installed.

- 4. Thread two M6-1 x 12 set screws into the small holes in the small extension table. Make sure the set screws do not stick out from the mating surface.
- 5. Loosely attach the small extension table with two M10-1.5 x 20 cap screws, two 10mm lock washers, and two 10mm flat washers as shown in **Figure 22**.

**Note:** The cap screws will be tightened during a later step.

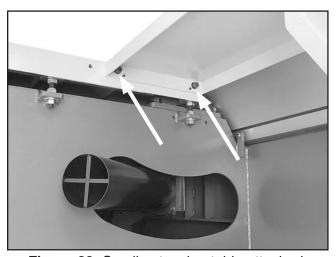


Figure 22. Small extension table attached.

6. Loosely attach the large extension table with four M10-1.5 x 20 cap screws, four 10mm lock washers, and four 10mm flat washers, as shown in **Figure 23**, and thread in four M6-1 x 12 set screws.

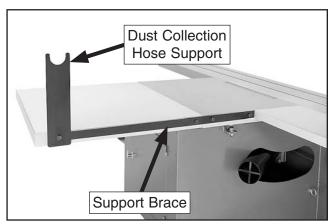
**Note:** The cap screws will be tightened during a later step.



Figure 23. Large extension table attached.



7. Attach the support brace and dust collection hose support to the table with four M10-1.5 x 30 cap screws, four 10mm lock washers, four 10mm flat washers, and two M10-1.5 hex nuts, as shown in Figure 24.



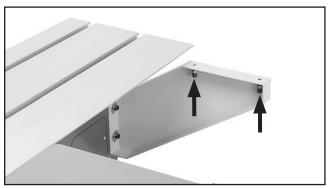
**Figure 24**. Support brace and dust collection hose support installation.

8. Use a straightedge, as shown in **Figure 25**, to make sure the extension table is even with the cast iron table. Use the set screws under the extension tables to level the top surfaces, then tighten all the mounting cap screws.



Figure 25. Checking with a straightedge.

9. Thread an M10-1.5 hex nut all the way onto two M10-1.5 x 20 cap screws, then install the cap screws where shown in **Figure 26** to hold the small extension table level. Tighten the hex nuts against the table support to lock the cap screws in place.



**Figure 26.** Small extension table support cap screws (table removed for photo clarity).

10. Mount the scale bar to the cast iron table and large extension table, making sure it is even with the top of the tables. Use the three M6-1 x 25 hex bolts, three 6mm flat washers, three 6mm lock washers, and three M6-1 hex nuts, as shown in Figure 27, to mount it. (The top of the hex bolts slide into the scale bar.)

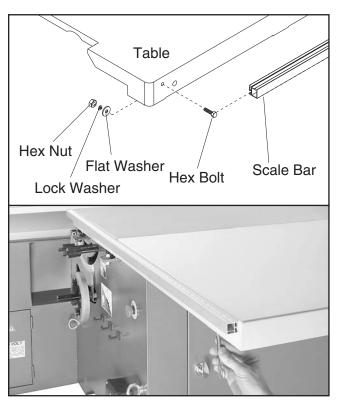
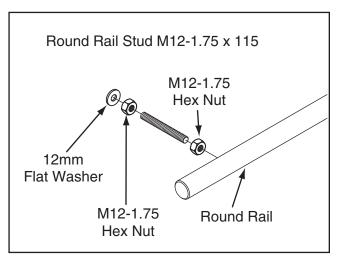


Figure 27. Attaching the scale bar.

11. Make sure each of the four rail studs are preassembled with a 12mm flat washer and two M12-1.75 hex nuts, then thread them into the round rail, as shown in **Figure 28**.



**Figure 28.** Installing studs with hardware into the round rail.

12. Insert the studs into the tables as shown in Figure 29. Put a 12mm flat washer, 12mm lock washer and a M12-1.75 hex nut on the end of each stud to hold the round rail on the tables. Do not tighten the hex nuts at this time.

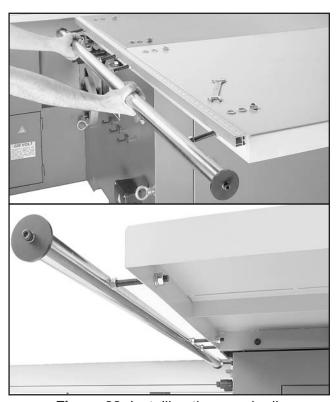


Figure 29. Installing the round rail.

**13.** Slide the rip fence body onto the round rail. Thread the lock handles M10-1.5 x 12 and knob M10-1.5 x 70 into the rip fence body, where shown in **Figure 30**.

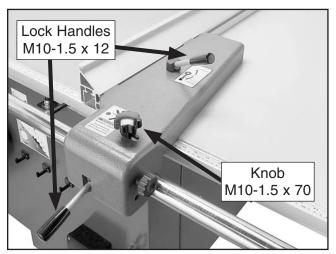


Figure 30. Rip fence handles.

**14.** Slide the aluminum rip fence onto the clamping plate as shown in **Figure 31**, and lock it with the fence lock handle.

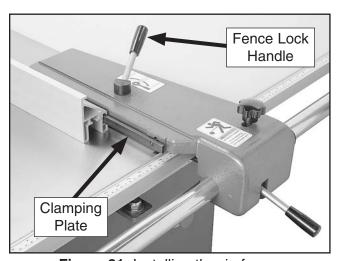


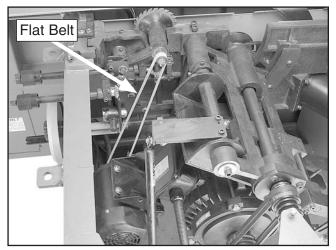
Figure 31. Installing the rip fence.

- **15.** Open the motor compartment and remove the red shipping braces from both motors, then re-install the shipping brace fasteners back into the holes from which they came.
- **16.** Move the blade arbor tilt to 0° and raise it as far as it will go.



**17.** Install the flat belt on the scoring motor and arbor pulley as shown in **Figure 32**.

**Note:** The scoring motor adjusts by lifting it up. The weight of the scoring motor dictates the correct belt tension.



**Figure 32.** Flat belt installed on scoring motor and arbor pulley (table removed for clarity).

**18.** Slide the table all the way forward to access the blade arbor and pull open the blade guard (see **Figure 33**).

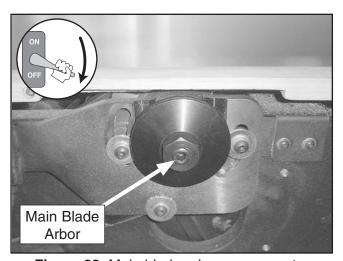


Figure 33. Main blade arbor components.

**19.** Use the arbor wrench to remove the arbor nut and arbor flange.

**Note:** The arbor nut has left hand threads and loosens by turning clockwise.

#### **▲**CAUTION

Before proceeding with the next steps, wear leather gloves to protect your hands when handling and installing the blade.

20. Slide the blade over the arbor with the teeth facing the right side of the saw, and re-install the arbor flange and the arbor nut. The main blade arbor nut has left-hand threads and tightens counterclockwise. Hold the arbor with one arbor wrench and tighten the nut with the other arbor wrench as shown in Figure 34.

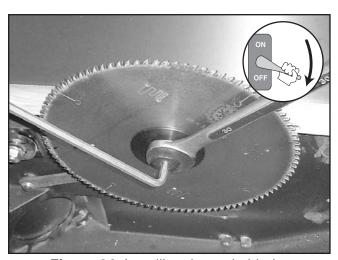


Figure 34. Installing the main blade.

- **21.** Slide the rip fence over until it just touches the blade.
- **22.** Adjust the mounting position of the round rail until the rip fence evenly touches the entire width of the blade from front to back.

**Note:** To adjust the mounting position of the round rail, use the hex nuts (on the round rail studs) that are on both sides of the tables.

**23.** Check if the metal part of the rip fence rests on the surface of the table.

**Note:** The rip fence body will scratch the table surface if the ride height is not adjusted correctly. Only the roller should touch the table surface.

- —If the rip fence body *does not* rest on the table, then the fence is correctly adjusted.
- —If the rip fence body does rest on the table, remove the rip fence and turn it upside down. Loosen the set screw shown in Figure 35 and rotate the hex bolt to raise the roller. Tighten the set screw to lock the ride height and recheck how the rip fence rests on the table.

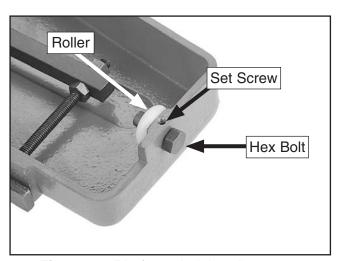


Figure 35. Rip fence height adjustment.

- 24. Check the height of the rip fence rail by sliding the rip fence along the rail and comparing the gap between the rip fence body and the tables.
- **25.** Adjust the height of the rip fence rail, then tighten all of the hex nuts to secure the round rail in place.

**26.** Loosen the riving knife center bolt, slide the riving knife over the bolt as shown in **Figure 36**, and slightly tighten.

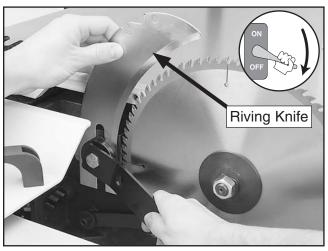


Figure 36. Installing the riving knife.

27. Position the riving knife about 3mm or 1/8" away from the nearest carbide tooth on the main blade.

**Note:** For a quick gauge, use the 3mm hex wrench to find the correct spacing between the blade and the riving knife, as shown in **Figure 37**.

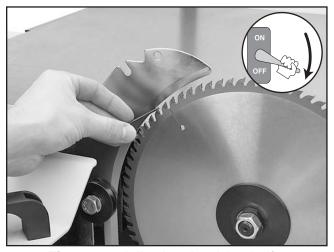


Figure 37. Adjusting the riving knife.

**28.** Tighten the center bolt to secure the riving knife in position.



29. Use both arbor wrenches, as shown in **Figure** 38, to verify that the scoring blade arbor nut is tight. (The scoring blade arbor nut has right-hand threads and tightens clockwise.)

**Note:** If the scoring blade is not pre-installed, install it now, making sure to place the arbor flange between the arbor nut and blade during installation.

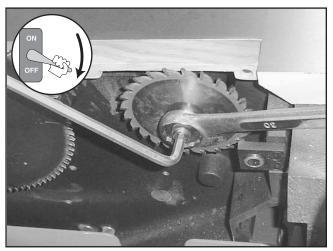


Figure 38. Removing the scoring blade.

**30.** Move the scoring blade tilt to 0° (blade 90° to table), then raise it up, using the vertical adjustment knob (**Figure 39**), until enough of the wedge shaped teeth are exposed from the table surface to equal the same width as the main blade teeth.

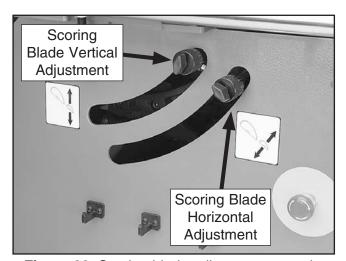


Figure 39. Scoring blade adjustment controls.

**31.** Move the rip fence against the main blade (or scoring blade) as shown in **Figure 40**.

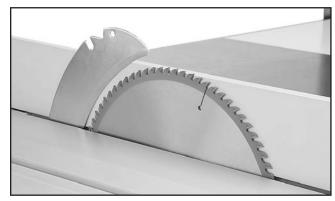


Figure 40. Fence used to align blades.

- **32.** Adjust the scoring blade, using the horizontal adjustment controls, until the rip fence evenly touches both blades.
- **33.** Move the rip fence against the blades again. Loosen the screws securing the scale bar, line up the 0" mark on the scale with the left edge of the rip fence, then tighten the scale bar mounting screws.
- 34. Set the rip fence to ½", slide the adjustable ring with set screw on the round rail against the fence housing. Without moving the ring, move the fence housing out of the way, and secure the set screw on the ring, as shown in **Figure 41**. When installed correctly, this ring will prevent the fence from contacting the blade.

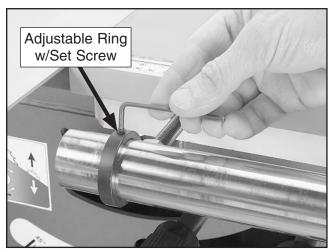


Figure 41. Securing the adjustable ring.

- **35.** Move the blade guard back to its original position, and move the sliding table back to center.
- **36.** Place the end washer (**Figure 42**) on the end of the round rail and secure it with the M8-1.25 x 16 cap screw and 8mm lock washer.

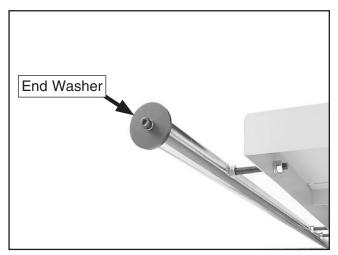


Figure 42. End washer on round rail.

**37.** Thread the M12-1.75 x 55 adjustable handle, with a 12mm flat washer, through the crosscut table and into a M12-1.75 T-nut, as shown in **Figure 43**.

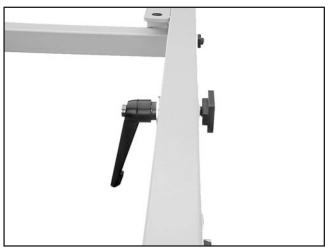


Figure 43. Installing the adjustable handle.

**38.** With the help of an assistant, place the crosscut table on the pivot pin of the swing arm and slide the T-nut into the T-slot in the sliding table (see **Figure 44**).

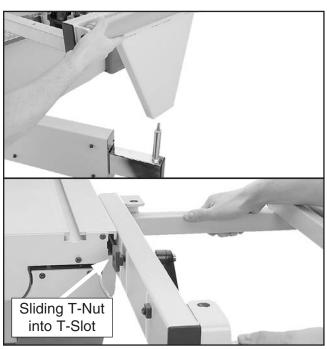


Figure 44. Installing the crosscut table.

**39.** Slide two M8-1.25 T-nuts into the crosscut table brace. Align the T-nuts in the crosscut table brace with the holes in the crosscut table, and thread the two M8-1.25 x 50 knobs, with two 8mm flat washers, into the T-nuts as shown in **Figure 45**.

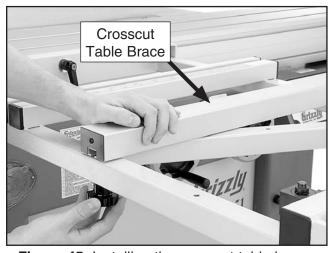


Figure 45. Installing the crosscut table brace.

**40.** Install the components shown in **Figure 46** on the crosscut fence.

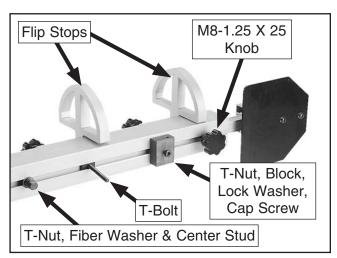


Figure 46. Crosscut fence assembly.

**41.** Position the center stud and the T-bolt over the placement holes shown in **Figure 47**, then tighten the center stud.

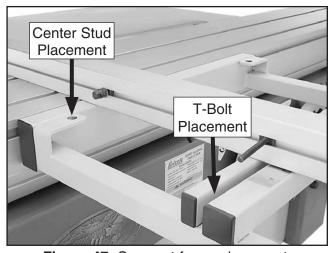


Figure 47. Crosscut fence placement.

- **42.** Thread the M8-1.25 knob with an 8mm flat washer onto the T-bolt to secure the crosscut fence.
- **43.** Slide the blade guard/dust hood over the riving knife, and attach it with an M8-1.25 x 40 button head cap screw and an 8mm flat washer.
- **44.** (Optional) If needed, slide the edge shoe and hold down clamp into the table T-slot, and tighten the respective knob/handle. Position where necessary. (The front cover picture shows these items installed.)

### **A**CAUTION

DO NOT operate the Model G0451 without an adequate dust collection system. This saw creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

Required CFM at 5" Dust Port: 625 CFM Required CFM at 2½" Dust Port: 150 CFM

Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must consider these variables: (1) CFM rating of the dust collector, (2) hose type and length between the dust collector and the machine, (3) number of branches or wyes, and (4) amount of other open lines throughout the system. Explaining how to calculate these variables is beyond the scope of this manual. Consult an expert or purchase a good dust collection "how-to" book.

**45.** Secure a 5" dust hose to the dust port located under the saw table (**Figure 48**).

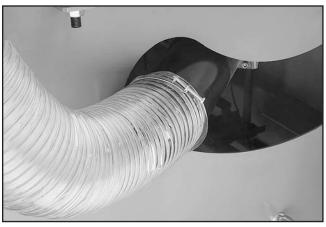


Figure 48. 5" dust port location.

- **46.** Attach the blade guard/dust hood to the riving knife with the M8-1.25 x 40 button head cap screw and 8mm flat washer. (The blade guard/dust hood MUST be installed.)
- **47.** Attach a 2½" dust hose to the dust port, as shown in **Figure 49**.

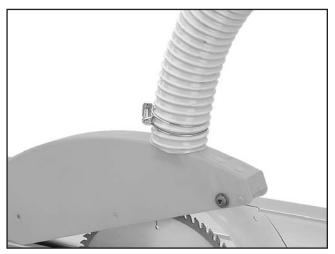


Figure 49. 21/2" Dust port location.

**48.** Run the 2½" hose over the hose support, as shown in **Figure 50**.

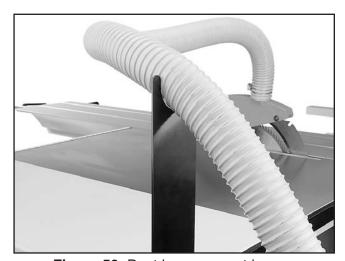


Figure 50. Dust hose support in use.

**49.** Run ground wires through the dust hoses and attach the wires to the machine to protect against static electricity.

#### **Power Connection**

Before connecting the saw to power, read through **SECTION 2: POWER SUPPLY** to check that your setup follows the safety and circuit requirements for this machine.

#### To connect the saw to the power source:

1. Open the power connection box shown in Figure 51.

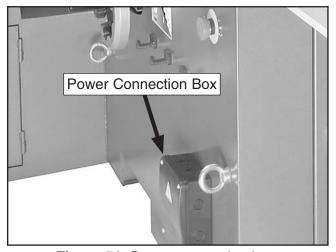


Figure 51. Power connection box.

Connect the power wires to the terminals shown in Figure 52, tighten the strain relief so the wires can't be pulled from the terminals, then close the power connection box.

**Note:** When using a phase converter, connect the manufactured power leg to the S terminal to prevent damage.

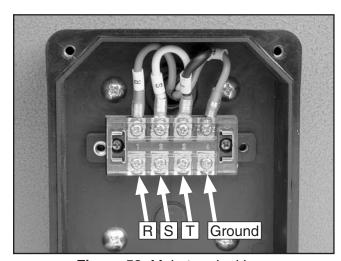


Figure 52. Main terminal box.



## **Test Run**

After the machine has been connected to the power source, the machine MUST be test run to make sure all the controls are working properly.

The test run includes verifying that the safety disabling components on the machine work correctly.

Before beginning the test run, review the controls shown in **Figures 53 & 54**.

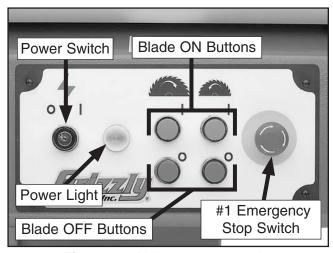


Figure 53. Main power controls.

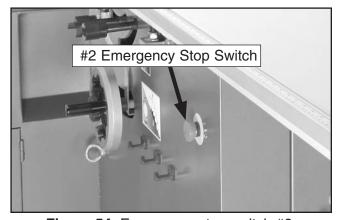


Figure 54. Emergency stop switch #2.

## **AWARNING**

If the machine does not operate as stated in this section, review the troubleshooting section in this manual. If you need additional help, call Tech Support at (570) 546-9663. DO NOT place a machine into regular operation if you suspect that it is malfunctioning or serious injury could occur.

#### To test run the saw:

- Put on safety glasses, make sure any bystanders are out of the way, and that all tools have been removed from the saw.
- 2. Insert the key into the power switch and turn it clockwise.
- Push in, then rotate both emergency stop switches clockwise until they pop out. This resets the emergency stop switches so the machine can operate.
- **4.** One at a time, press the blade ON buttons. The blades should startup and run smoothly without any problems.
  - —If any problems occur, press the nearest emergency stop switch.
- 5. One at a time, press the blade OFF buttons. The blades should stop running. As the main blade comes to a stop, watch the direction that it is spinning.
  - —If the main blade is rotating counterclockwise, disconnect the saw from power and exchange wires R & T in the power connection box.
- **6.** Depress the #1 emergency stop switch.



- **7.** Press the blade ON buttons. Nothing should happen.
  - —If the stop switch is working correctly, reset the switch.
- **8.** Repeat **Steps 6–7** with the #2 emergency stop switch.
- **9.** Make sure both emergency stop buttons are reset before continuing.
- Open the cabinet door at the rear of the machine. This opens the limit switch at the door.
- **11.** Press the blade ON buttons. Nothing should happen.
- **12.** Close and latch the cabinet door.

- **13.** Turn the key switch *OFF* and DISCONNECT SAW FROM POWER!
- **14.** Move the sliding table all the way forward, then open the orange blade guard. This opens the blade guard limit switch.
- **15.** Connect the saw to the power source and turn the power switch key ON.
- **16.** (During this step, be prepared to immediately press the #1 emergency stop switch if the blades start operating.) Press the blade ON buttons. Nothing should happen.
- **17.** Turn the key switch *OFF* and DISCONNECT SAW FROM POWER!
- **18.** Close the orange blade guard and move the sliding table back to the center of the machine.



## **SECTION 4: OPERATIONS**



## **AWARNING**

To reduce the risk of serious injury when using this machine, read and understand this entire manual before beginning any operations.

## **AWARNING**

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







## **AWARNING**

For Your Own Safety Read Instruction Manual Before Operating Saw

- a) Wear eye protection.
- b) Use saw-blade guard and riving knife for every operation for which it can be used, including all through sawing.
- c) Keep hands out of the line of saw blade.
- d) Use a push-stick when required.
- e) Pay particular attention to instructions on reducing risk of kickback.
- f) Do not perform any operation freehand.
- g) Never reach around or over saw blade.

#### NOTICE

If you have never used this type of machine or equipment before, seek training from an experienced machine operator or read "how to" books before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

## **Operation Overview**

The purpose of this overview is to provide the novice machine operator with a basic understanding of how the machine is used during a typical operation, so the controls/components discussed later in this manual are easier to understand.

Due to the generic nature of this overview, it is not intended to be an instructional guide. To learn more about specific operations, read this entire manual, read "how to" books, and seek additional training from experienced machine operators.

## To complete a typical operation, the operator does the following:

- 1. Examines the workpiece to make sure it is suitable for cutting.
- Adjusts the blade tilt, if necessary, to the correct angle of the desired cut.
- **3.** Adjusts the blade height approximately ½" higher than the thickness of the workpiece.
- **4.** Adjusts the fence to the desired width of cut then locks it in place.
- 5. Checks the outfeed side of the machine for proper support and to make sure the workpiece can safely pass all the way through the blade without interference.
- **6.** Puts on safety glasses and a respirator, and locates push sticks if needed.
- 7. Starts the saw.
- 8. Feeds the workpiece all the way through the blade while maintaining firm pressure on the workpiece against the table and fence, and keeping hands and fingers out of the blade path and away from the blade.
- **9.** Stops the machine immediately after the cut is complete.



## Workpiece Inspection

Some workpieces are not safe to cut on this machine or may need to be modified before they can be safely cut. **Before cutting, inspect all workpieces for the following:** 

- Material Type: This machine is intended for cutting natural and man-made wood products, laminate covered wood products, and some plastics. Cutting drywall or cementitious backer board creates extremely fine dust and may reduce the life of the motor bearings. This machine is NOT designed to cut metal, glass, stone, tile, etc.; cutting these materials with a table saw greatly increases the risk of injury and damage to the saw or blade.
- Foreign Objects: Nails, staples, dirt, rocks and other foreign objects are often embedded in wood. While cutting, these objects can become dislodged and hit the operator, cause kickback, or break the blade, which might then fly apart. Always visually inspect your workpiece for these items. If they can't be removed, DO NOT cut the workpiece.
- Large/Loose Knots: Loose knots can become dislodged during the cutting operation. Large knots can cause kickback and machine damage. Choose workpieces that do not have large/loose knots or plan ahead to avoid cutting through them.
- Wet or "Green" Stock: Cutting wood with a moisture content over 20% causes unnecessary wear on the blades, increases the risk of kickback, and yields poor results.
- Excessive Warping: Workpieces with excessive cupping, bowing, or twisting are dangerous to cut because they are unstable and may move unpredictably when being cut.
- Minor Warping: Slightly cupped workpieces
  can be safely supported with cupped side
  facing the table or fence; however, workpieces supported on the bowed side will rock
  during the cut, which could cause kickback.

# Non-Through & Through Cuts

#### 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, as shown in the **Figure** below.

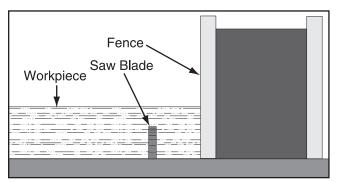


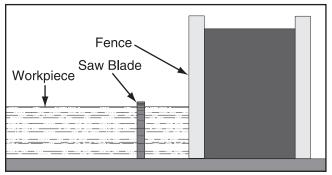
Figure 55. Example of a non-through cut.

Examples of non-through cuts include dadoes and rabbets. Non-through cuts have a higher risk of injury from kickback because the blade guard must be removed. However, the riving knife MUST be installed because it still provides some protection.

**Note:** A dado blade can NOT be used with this table saw.

#### **Through Cuts**

A through cut is a sawing operation in which the workpiece is completely sawn through, as shown in the **Figure** below. Examples of through cuts are rip cuts, cross cuts, miter cuts, and beveled cuts. The blade guard assembly MUST be used when performing through cuts.



**Figure 56.** Example of a through cut (blade guard not shown for illustrative clarity).



# Blade Guard & Riving Knife

The term "blade guard" refers to the assembly that consists of the guard and spreader assembly (see **Figure 57** below). Each of these components have important safety functions.

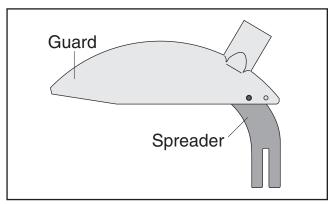


Figure 57. Blade guard assembly components.

#### **Understanding Blade Guard**

The guard encloses the top of the blade to reduce the risk of accidental blade contact and contain flying chips or dust.

The guard is designed to lift as the workpiece is pushed into the blade, remain in contact with the workpiece during the cut, then return to a resting position against the table when the cut is complete. When installed and properly maintained, the guard is an excellent tool for reducing the risk of injury when operating the table saw.

To ensure that the guard does its job effectively, it MUST be installed and adjusted so that it moves up and down properly to accommodate workpieces and maintain coverage over the blade.

## **Understanding Spreader & Riving Knife**

The spreader and riving knife are a metal plates that prevent the freshly cut workpiece from pinching the backside of the blade and causing a kickback. These items also act as a barrier to shield hands from being pulled into the blade if a kickback occurs and the operator is reaching behind the blade. (Reaching behind the blade is a major safety risk and should not be done).

The spreader is used with the blade guard for through cuts. The riving knife is used without the blade guard for non-through cuts.

## **AWARNING**

To ensure that the spreader or riving knife works correctly, it must be correctly aligned and adjusted to the blade.

#### When to Use the Blade Guard

The blade guard MUST be installed on the saw for all normal through cuts (defined on **Page 36**).

Sometimes the blade guard or its components can get in the way when cutting very narrow workpieces or other specialized cuts. Because the blade guard is provided to decrease your risk of injury, it should not be used if it gets in the way of making a safe cut. Use good judgment!

In general, the blade guard MUST remain installed on the saw—unless a specific operation requires its removal. If the blade guard is removed for specific operations, always immediately replace it after those operations are complete.

#### When to Use the Riving Knife Only

Use the riving knife without the blade guard for any non-through cuts (defined on **Page 36**) or narrow/specialized cuts in which the blade guard gets in the way of a safe cut.

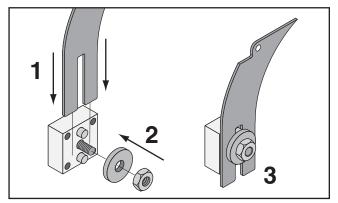
Always immediately replace the blade guard when these cuts are complete!



## Blade Guard Spreader & Riving Knife Installation & Adjustment

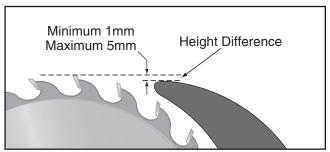
The blade guard spreader and riving knife must be correctly installed, adjusted, and aligned in order to provide the maximum safety benefit. Aside from the height setting, the blade guard spreader should be installed and adjusted in the same manner as described for the riving knife.

The spreader/riving knife attaches to the mounting block, as shown in **Figure 58**.



**Figure 58.** Installing spreader/riving knife on the mounting block.

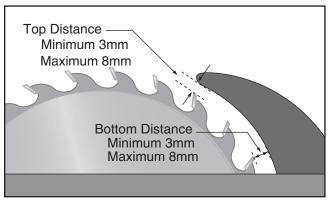
Secure the riving knife so that the top of it is 1–5mm below the top level of the blade, as shown in **Figure 59**.



**Figure 59.** Riving knife height setting below blade.

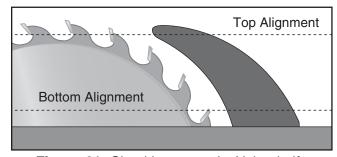
The height difference between the riving knife and the blade allows the workpiece to pass over the blade during non-through cuts (those in which the blade does not cut all the way through the thickness of the workpiece).

The spreader/riving knife prevents the freshly cut workpiece from pinching the blade and causing kickback. For maximum effectiveness, the spreader/riving knife must be positioned 3–8mm from the blade, as shown in **Figure 60**.



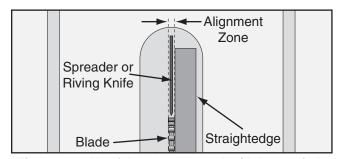
**Figure 60**. Allowable top and bottom distances between spreader/riving knife and blade.

Once the spreader/riving knife is properly positioned behind the blade, verify that it is also aligned with the blade by placing a straightedge along the top and bottom locations shown in **Figure 61**.



**Figure 61.** Checking spreader/riving knife alignment with blade at the top and bottom.

The spreader/riving knife should be parallel with the blade along its length at both positions and should be in the "Alignment Zone" shown in **Figure 62**.



**Figure 62.** Verifying that spreader/riving knife is in the alignment zone behind the blade.

If the spreader/riving knife is not aligned or parallel with the blade, refer to **Adjusting Mounting Block** on **Page 70**.



#### **Guard Installation & Removal**

The guard may need to be removed from the spreader in order to make room to properly adjust the position of the spreader. The guard is secured in place with a mounting screw (see **Figure 63**). Remove the mounting screw to pull the guard off of the spreader.

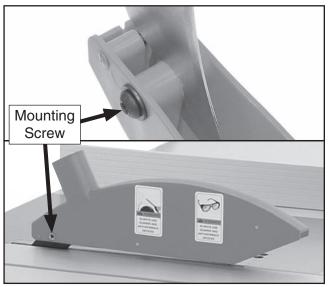


Figure 63. Blade guard mounted to spreader.

When re-installing the guard, the mounting screw must be left loose enough that the guard can freely pivot up and down, but not so loose that there is side-to-side play when pivoting.

#### **Testing Guard for Correct Operation**

After installing the blade guard, you must verify that it functions correctly before making a cut. To test the blade guard operation, lift up the front end about 4" then release it.

- If the blade guard freely drops down against the table surface, then it is functioning correctly and is ready for operation.
- If the blade guard remains in the position where you released it, or it does not drop down against the surface of the table, then the mounting screw is too tight. Loosen it a little and repeat this test until the guard functions correctly.
- If the blade guard feels loose and easily moves back and forth as you raise it, then the mounting screw is too loose. Tighten it a little and repeat this test until the guard functions correctly.

## **Blade Requirements**

The riving knife included with this machine is 0.1" (2.5mm) thick and is only designed for 14" diameter blades.

When choosing a main blade, make sure the blade size meets the requirements listed below. The thickness of the blade body and teeth can be measured with calipers or any precision measuring device.

#### **Blade Size Requirements:**

- Body Thickness: 0.09"-0.1" (2.3mm-2.5mm)
- Kerf (Tooth) Thickness: 0.102"-0.128" (2.6mm-3.2mm)

## **Blade Selection**

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 Blade Features:**

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

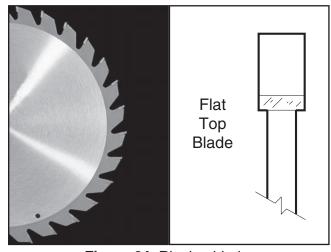


Figure 64. Ripping blade.



#### Crosscut blade features:

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

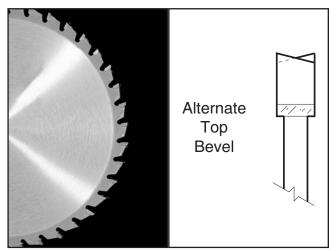


Figure 65. Crosscutting blade.

#### Combination blade features:

- Designed to cut both with and across grain
- 40-50 teeth
- Alternate top bevel and flat, or alternate top bevel and raker tooth profile
- Teeth are arranged in groups
- Gullets are small and shallow (similar to a cross-cut blade), then large and deep (similar to a ripping blade

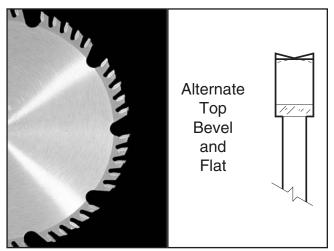


Figure 66. Combination blade.

#### Laminate blade features:

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

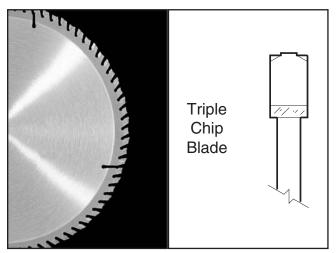


Figure 67. Laminate blade.

Thin Kerf Blade: A blade with thinner kerf than a standard blade. Since the spreader/riving knife included with this table saw is sized for standard blades, thin kerf blades cannot be used on this saw unless they meet the Blade Requirements specified in this manual; otherwise, they will increase the risk of kickback.

## Changing Main Blade

The Model G0451 performs best when using high quality, sharp blades. Whenever the main blade starts to get dull, resharpen or replace it with a new blade.

Any time you change blade size, adjust the riving knife to appropriately to the blade (see **Page 38**).

#### To change the main blade:

- 1. DISCONNECT SAW FROM POWER!
- 2. Move the blade tilt to 0° (blade 90° to table) and raise the main blade as far as it will go.
- 3. Move the sliding table all the way forward to expose the internal blade cover, as shown in Figure 68.

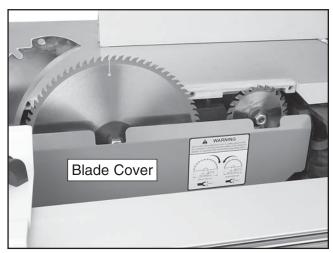


Figure 68. Internal blade cover exposed.

4. Pull the blade cover away from the blades to expose the mounting assembly. (The internal blade cover is held in place with a magnet.)

## **A**CAUTION

Before proceeding with the next step, wear gloves to protect your hands while handling and installing the blade.

**5.** Use the arbor wrenches, as shown in **Figure 69**, to remove the arbor nut and arbor flange, then pull the old blade off the arbor. *The arbor nut has left hand threads and loosens by turning clockwise.* 

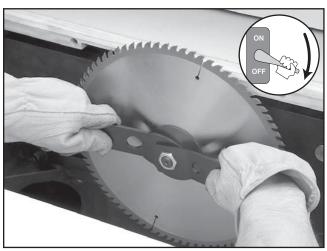
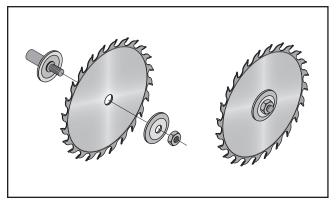


Figure 69. Replacing the main blade.

6. Install the blade as shown in **Figure 70**, making sure the teeth face toward the scoring blade. DO NOT overtighten the arbor nut.



**Figure 70.** Main blade installation and order of assembly.

- If you changed the diameter of the blade during this procedure, adjust the riving knife the blade.
- Move the blade cover back into its original position next to the blades, then center the sliding table.



# Changing & Adjusting Scoring Blade

The scoring blade included with the Model G0451 has wedge shaped teeth. With this style of scoring blade, the kerf thickness is adjusted by changing the height of the scoring blade. Raising the scoring blade higher increases the kerf thickness.

#### **Changing Scoring Blade**

- 1. DISCONNECT SAW FROM POWER!
- 2. Move the blade tilt to 0° (blade 90° to table), and raise the scoring blade all the way up.
- **3.** Move the sliding table all the way forward to expose the internal blade cover that covers the blades and riving knife.
- 4. Pull the blade guard away from the riving knife to expose the mounting assembly. (The internal blade cover is held in place with a magnet.)
- 5. To remove the scoring blade, use the arbor wrenches to remove the arbor nut and arbor flange (see Figure 71). Note: The arbor nut has right-hand threads and loosens by turning counterclockwise.

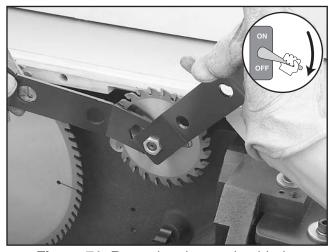


Figure 71. Removing the scoring blade.

Adjust the width of the scoring blade to equal the kerf thickness of the main blade. The scoring blade included with the sliding table saw has wedge shaped teeth. The kerf thickness is adjusted by changing the height of the scoring blade until enough of the tooth is exposed to equal the main blade kerf. If you are re-installing this style of blade, adjust the kerf after **Step 7** with the scoring blade vertical adjustment controls.

- 7. Install the new scoring blade, re-install the arbor flange and the arbor nut, and tighten them against the blade set.
- 8. Move the blade cover back into its original position next to the blades, then center the sliding table.

#### **Adjusting Scoring Blade**

- DISCONNECT SAW FROM POWER!
- Place a straightedge across the body of the main blade (not the teeth) and align the body of the scoring blade to the main blade, by turning the horizontal adjustment control shown in Figure 72.

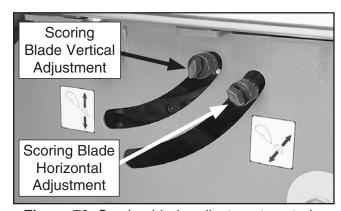


Figure 72. Scoring blade adjustment controls.

- 2. Adjust the height of the scoring blade, by turning the vertical adjustment control (see Figure 72), until the exposed portion equals the kerf thickness of the main blade.
- **3.** Move the blade cover back into its original position, then center the sliding table.
- 4. Perform a test cut and check for chip-out. If there is chip-out, re-adjust the scoring blade and repeat the test/adjustment until correct.



## **Rip Cutting**

The Model G0451 has the capability of rip cutting full size panels (**Figure 73**). The sliding table removes the burden of sliding a large and heavy panel over a stationary table surface.

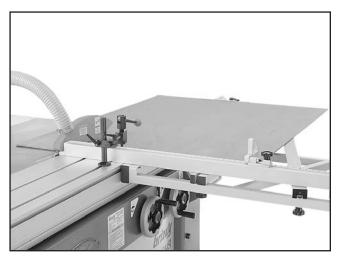


Figure 73. Rip cutting with the sliding table.

This saw also has the capability of rip cutting smaller boards, using the machine as a traditional table saw (**Figure 74**). Smaller, lighter boards are easier to slide across the stationary cast iron table surface to the right of the saw blade.



Figure 74. Traditional rip cutting.

Determine which cutting operation will be best suited for the workpiece to be ripped.

- —To use the sliding table, read the instructions titled "Rip Cutting w/Sliding Table."
- —To use the machine as a traditional table saw, skip ahead to "Rip Cutting w/Rip Fence."

#### **Rip Cutting with Sliding Table**

- 1. Drop the crosscut fence into the center stud hole and rotate it until the block shown in **Figure 75** touches the 90° stop bolt.
- Check to make sure the fence is at 90° and adjust it as described in Squaring Crosscut Fence to Blade on Page 69 if necessary.

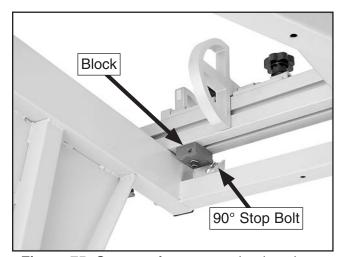


Figure 75. Crosscut fence mounting locations.

3. Slide the protection block next to the blade teeth to calibrate the scale, then tighten the lock knob.

**Note:** The scale will not be accurate if the protection block is cut.

- **4.** Set a flip stop to the desired width-of-cut.
- **5.** Position the blade guard to the correct height for your workpiece.
- 6. Load the workpiece onto the table saw. The set up should look similar to **Figure 73**.
- **7.** Take all the necessary safety precautions, then perform the cutting operation.



#### **Rip Cutting with Rip Fence**

- **1.** Slide the crosscut table out of the way.
- **2.** Lock the sliding table into a stationary position (see **Figure 76**).

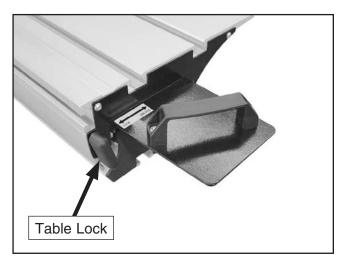


Figure 76. Sliding table lock.

**3.** Place the fence in the vertical position for larger workpieces, or in the horizontal position for angled cuts and for small workpieces (see **Figure 77**).

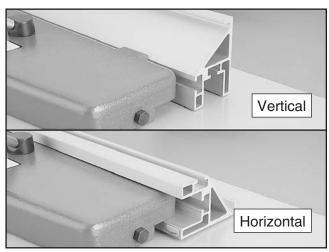
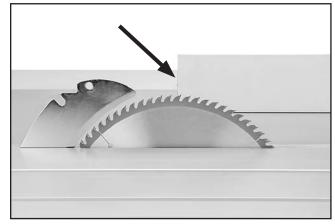


Figure 77. Rip fence positions.

**4.** Slide the leading end of the rip fence so it is even with the center of the main saw blade as shown in **Figure 78**.

**Note:** This technique allows the finished cutoff piece to "fall" away from the blade when the cutting operation is complete; reducing the possibility of kickback.



**Figure 78.** Rip fence even with center of blade (guard removed from spreader for clarity).

- **5.** Lift the lock lever and position the rip fence to approximately the desired width-of-cut.
- 6. Tighten down the micro-adjust lock knob (Figure 79) and turn the micro-adjust knob to zero in on the desired width-of-cut.

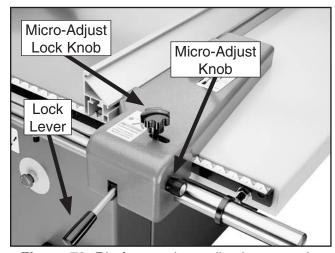


Figure 79. Rip fence micro-adjusting controls.

**7.** Push down the lock lever, then perform the cutting operation.



## Crosscutting

The Model G0451 can crosscut full size panels with the fence in the forward or rear position, although it is easier to load full size panels with the crosscut fence mounted in the forward position (see **Figure 80**).

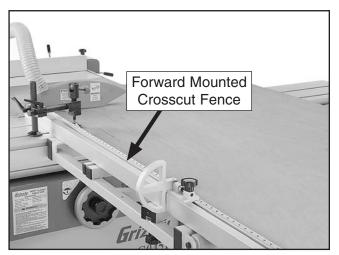


Figure 80. Crosscutting full size panel.

Mounting the crosscut fence in the rear position (**Figure 81**) gives greater stability for crosscutting smaller panels.

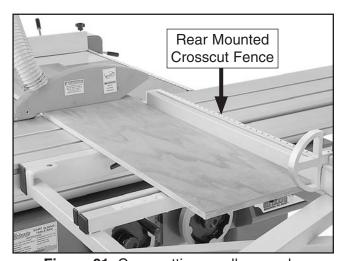
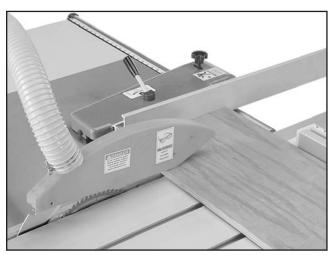


Figure 81. Crosscutting smaller panels.

Lastly, this machine has the capability of crosscutting workpieces while using the rip fence as a cut-off gauge (**Figure 82**).



**Figure 82.** Crosscutting workpieces using the rip fence as a cut-off gauge.

Determine which cutting operation will be best suited for the workpiece to be crosscut.

- —If you will be crosscutting full size panels, then skip ahead to "Crosscutting Full Size Panels."
- —If you will be crosscutting smaller panels, then skip ahead to "Crosscutting Smaller Panels."
- —If you will be crosscutting workpieces using the rip fence as a cut-off gauge, then skip ahead to "Crosscutting Using Rip Fence as a Cut-Off Gauge."

#### **Crosscutting Full Size Panels**

- Install the crosscut fence in the forward mounting location shown in Figure 83 and lock it in place.
- 2. Check to make sure the fence is at 90° and adjust it as described in "Squaring Crosscut Fence to Blade" on **Page 69** if necessary.

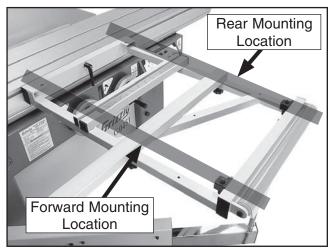


Figure 83. Crosscut fence mounting points.

- 3. Set either flip stop to the desired width-of-cut. Note: Extend the crosscut fence slide if the workpiece is more than 74".
- **4.** Load the workpiece onto the table saw. The set up should look similar to **Figure 80**.
- Once all the necessary safety precautions have been taken, perform the cutting operation.

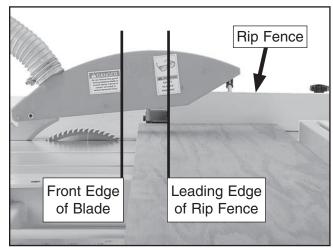
#### **Crosscutting Smaller Panels**

- Install the crosscut fence in the rear mounting points shown in Figure 83 and lock it in place.
- 2. Check to make sure the fence is at 90° and adjust it as described in "Squaring Crosscut Fence to Blade" on **Page 69** if necessary.
- 3. Set either flip stop to the desired width-of-cut. Note: Extend the crosscut fence slide if the workpiece is more than 74".

- **4.** Load the workpiece onto the table saw. The set up should look similar to **Figure 81**.
- **5.** Once all the necessary safety precautions have been taken, perform the cutting operation.

## **Crosscutting Using Rip Fence as a Cut-Off Gauge**

- Install the crosscut fence in the rear mounting points shown in Figure 83 and lock it in place.
- Check to make sure the fence is at 90° and adjust it as described in Squaring Crosscut Fence to Blade on Page 69 if necessary.
- **3.** Position the rip fence for the desired width.
- **4.** Load the workpiece onto the table saw. The setup should look similar to **Figure 82**.
- 5. Slide the leading end of the rip fence behind the front edge of the blade as shown in Figure 84. (This step is critical to reduce the risk of blade binding and kickback.)



**Figure 84.** Correct rip fence position when using it as a cut-off gauge.

**6.** Take all the necessary safety precautions, then perform the cutting operation.



## **Miter Cutting**

The crosscut fence allows miter cuts from 0° through 135°. The table mounted miter scale has a resolution of 1°.

#### To perform a miter cut:

- 1. Slide the crosscut table to the front edge of the sliding table and lock it in place.
- 2. Place the crosscut fence center stud in the center stud hole of the crosscut table. The fence can be installed as shown in **Figure 85** for 90° to 135° cuts, or as shown in **Figure 86** for 0° to 90° cuts.

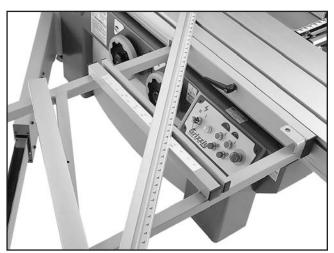


Figure 85. Fence set-up for 90° to 135° cuts.

- 3. Rotate the fence to the desired angle and use the lock knob to lock the fence in place.
- **4.** Position the flip stop according to the length of the workpiece you want to cut off to the left of the blade.
- **5.** Load the workpiece onto the table saw. The set up should look similar to **Figure 86**.

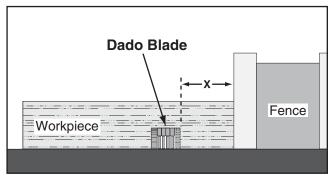


Figure 86. Example of miter cutting operation.

**6.** Once all the necessary safety precautions have been taken, perform the cutting operation.

## **Dado Cutting**

Commonly used in furniture joinery, a dado is a straight channel cut in the face of the workpiece. Typically, dadoes can be cut using either a dedicated dado blade or a standard saw blade. **Figure 87** shows a cutaway view of a dado cut being made with a dado blade.



**Figure 87.** Example of a dado cut with a dado blade.

**IMPORTANT:** A dado blade cannot be used with this machine; therefore, all dadoes cut with this machine must be done with a standard blade.

#### **Cutting Dadoes with Standard Blade**

A ripping blade (described on **Page 39**) is typically the best blade to use for cutting dadoes when using a standard blade, because it removes sawdust very efficiently.

#### To use a standard saw blade to cut dadoes:

- 1. DISCONNECT SAW FROM POWER!
- **2.** Ensure that the riving knife is installed and properly adjusted.
- 3. 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.
- **4.** Raise the blade up to the desired depth of cut (depth of dado channel desired).

- **5.** Set up the saw for the type of cut you need to make, depending on if it is a rip cut.
- **6.** Align the blade to cut one of the dado sides, as shown in **Figure 88**.

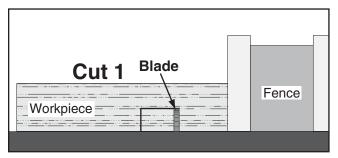


Figure 88. First cut for a single-blade dado.

- Reconnect the saw to the power source and turn the saw ON. Allow the blade to reach full speed, then perform the cutting operation.
- Repeat the cutting operation on the other side of the dado channel, as shown in Figure 89.

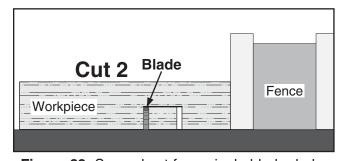


Figure 89. Second cut for a single blade dado.

9. Make additional cuts (see Figure 90) in the center of the dado to clear out the necessary material. The dado is complete when the channel is completely cleared out.

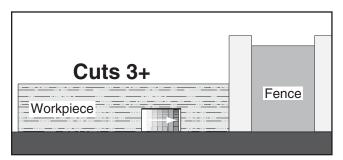


Figure 90. Additional single blade dado cuts.



## **Rabbet Cutting**

Commonly used in furniture joinery, a rabbet is an L-shaped groove cut in the edge of the workpiece. Typically, rabbets can be cut with either a dado blade or a standard saw blade; however, because the Model G0453 cannot accept dado blades, rabbets must be cut with a standard saw blade only.

## **A**CAUTION

Always use push sticks, featherboards, push paddles and other safety accessories whenever possible to increase safety and control during operations which require that the blade guard be removed from the saw. ALWAYS replace the blade guard after the operation is complete.

## **Cutting Rabbets with a Standard Blade**

A ripping blade is typically the best blade to use for cutting rabbets when using a standard blade because it removes sawdust very efficiently. (See **Page 39** for blade details.) Also, a sacrificial fence is not required when cutting rabbets with a standard blade.

#### To cut rabbets with the standard blade:

- 1. DISCONNECT SAW FROM POWER!
- **2.** Ensure that the riving knife and standard table insert are installed.
- Mark the width of the rabbet cut on the edge of the workpiece, so you can clearly identify the intended cut while it is laying flat on the saw table.
- **4.** Raise the blade up to the desired depth of cut (depth of rabbet channel desired).
- Stand the workpiece on edge, as shown in Figure 91, then adjust the fence so the blade is aligned with the inside of your rabbet channel.

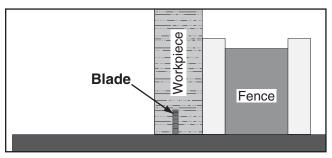
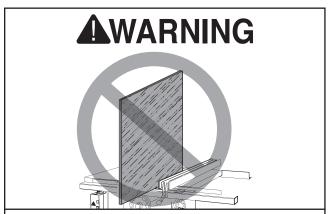


Figure 91. Rabbet cutting with a standard blade.



DO NOT place a tall board on edge when cutting a rabbet. Overly tall workpieces cannot be properly supported with the fence and can easily shift during operation, causing kickback or loss of control. Instead, use another tool to cut these types of rabbets.

- **6.** Reconnect the saw to the power source, then perform the cut.
- 7. Lay the workpiece flat on the table, as shown in Figure 92, adjust the saw blade height to intersect with the first cut, then perform the second cut to complete the rabbet.

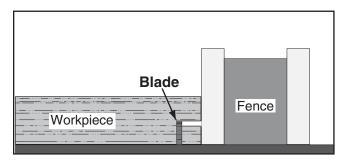


Figure 92. Second cut to create a rabbet.



## Resawing

## **AWARNING**

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.

Resawing is the process of cutting a thick piece of stock into one or more thinner pieces. Although resawing can be done with a table saw, we strongly recommend that you use a bandsaw instead.

A bandsaw is the ideal machine for resawing, and resawing with one is fairly easy and safe. A table saw is not intended for resawing, and resawing with one is difficult and dangerous due to the increased risk of kickback from binding and deep cuts, and the increased risk of injury from having to remove the guard.

If you insist on resawing with a table saw, DO NOT do so without using a resaw barrier and wearing a full face shield. The following instructions describe how to build a resaw barrier.

IMPORTANT: This table saw can only resaw wood that is less than 8" tall, and the rip fence must be used (rather than the sliding table).

#### **Making Resaw Barrier**

The resaw barrier acts in tandem with the rip fence when resawing to provide tall support for the workpiece to minimize the probability of it binding against the blade and causing kickback.

Tools Needed: Table Saw	Qty 1
Jointer and Planer	Recommended
Drill and Drill Bits	
Components Needed for Res Wood* 3/4" x 71/2" x (Length of F Wood* 3/4" x 3" x (Length of Fe Wood Screws #8 x 2"	Fence)1 ence)1

<sup>\*</sup> Only use furniture grade plywood, kiln dried hardwood, or HDPE plastic to prevent warping.

#### To build the resaw barrier:

- 1. Cut your wood pieces to the size specified above. If you are using hardwood, cut the pieces oversize, then joint and plane them to the correct size to make sure they are square and flat.
- Pre-drill and countersink four holes approximately 3/8" from the bottom of the 71/2" tall wood piece.
- 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 93. then fasten together with the wood screws.

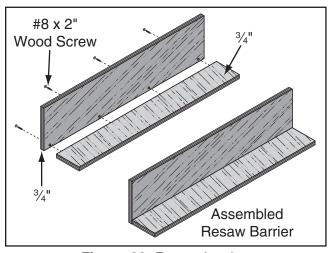


Figure 93. Resaw barrier.



#### **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 are designed to clear the sawdust quickly.

#### **Components Needed for Resawing:**

Ripping Blade1
Clamps2
Shop Made Resaw Barrier1

## **AWARNING**

You may experience kickback during this procedure. Stand to the side of the blade path and wear safety glasses or a face shield to prevent injury.

#### To perform resawing operations:

- 1. DISCONNECT SAW FROM POWER!
- 2. Install the rip fence in the vertical position, and remove the blade guard so only the riving knife will be used during the cut.
- 3. Place the workpiece against the rip fence and slide the resaw barrier against the workpiece. Now clamp the resaw barrier to the top of the table saw (see **Figure 94**).

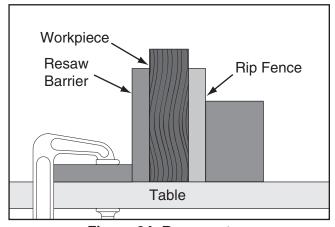


Figure 94. Resaw setup.

4. Lower the blade completely below the table, and slide the workpiece over the blade to make sure it moves smoothly and fits between the resaw barrier and fence.

Raise the blade approximately an inch, or close to half the height of the workpiece, whichever is less.

## **AWARNING**

Operations requiring the blade guard to be removed increase the risk of accidental contact with the blade. To reduce this risk, use push sticks/paddles and featherboards to keep your hands at a safe distance from the blade throughout the entire cut. Always replace guard after completing the cut!

- **6.** Plug in the table saw, turn it **ON**, and use a push stick to feed the workpiece through the blade using a slow, steady feed rate.
- 7. Flip the workpiece end for end, keeping the same side against the fence, and run the workpiece through the blade.
- 8. Repeat Steps 4–6 until the blade is close to half of the height of the board to be resawn. The ideal completed resaw cut will leave a ½" connection when the resawing is complete as shown in Figure 94. Leaving a ½" connection will reduce the risk of kickback.

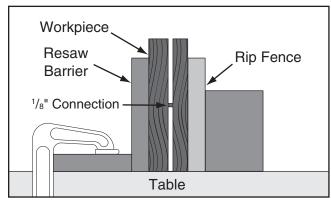


Figure 95. Resaw cut completed.

- Turn OFF the table saw, then separate the parts of the workpiece and hand plane the remaining ridge.
- **10.** When finished resawing, remove the resaw barrier and re-install the blade guard.



# SECTION 5: SHOP MADE SAFETY ACCESSORIES

## **Featherboards**

Easily made from scrap stock, featherboards provide an added degree of protection against kickback, especially when used together with push sticks. They also maintain pressure on the workpiece to keep it against the fence or table while cutting, which makes the operation easier and safer because the cut can be completed without the operator's hands getting near the blade. The angled ends and flexibility of the fingers allow the workpiece to move in only one direction.

#### Making a Featherboard

This sub-section covers the two basic types of featherboards: 1) Those secured by clamps to the table or fence, or 2) those secured by a wood runner that mounts in the table saw miter slot.

## Material Needed for Featherboard Mounted with Clamps

## Material Needed for Featherboard Mounted in Miter Slot

#### To make a featherboard:

1. Cut a hardwood board approximately ¾" thick to size. The length and width of the board can vary according to your design. Most featherboards are 10"–28" long and 3"–6" wide. Make sure the wood grain runs parallel with the length of the featherboard, so the fingers you will create in Step 3 will bend without breaking.

- 2. Cut a 30° angle at one end of the board.
- 3. Make a series of end cuts with the grain %"-1/4" apart and 2"-3" long, as shown in Figure 96 (A). Alternatively, start cuts at 2"-3" deep, then make them progressively deeper, as shown in Figure 96 (B). Cuts made across the grain will result in weak fingers that will easily break.

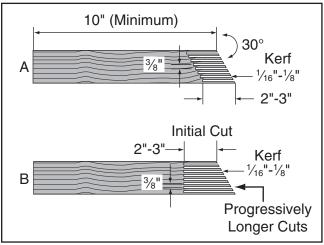


Figure 96. Patterns for featherboards (top view shown).

When complete, the fingers should flex when pushed with moderate pressure. If the fingers do not flex, they are too thick.

**Note:** We recommend using a bandsaw for making fingers because it tends to be safer. A table saw can be used, but it will over-cut the underside of the ends, produce a thicker kerf, and require you to stop the blade half-way through the cut, which can be dangerous.

If you are securing the featherboard with clamps, no further steps are necessary. Your featherboard is complete! If you are making a featherboard that mounts in the miter slot, continue with **Step 4**.



**4.** Rout a  $\frac{1}{4}$ "- $\frac{3}{8}$ " wide slot 4"-5" long in the workpiece and 1"-2" from the short end of the featherboard (see **Figure 97**).

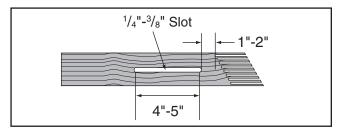


Figure 97. Slot routed in featherboard.

5. Cut a miter bar that will fit in the table miter slot approximately 5" long, as shown in Figure 98.

**Tip:** Consider making the miter bar longer for larger featherboards—approximately half the length of the total featherboard—to support the force applied to the featherboard during use.

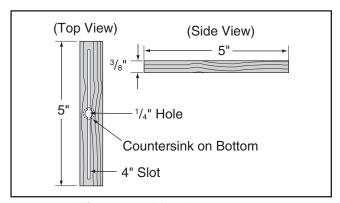
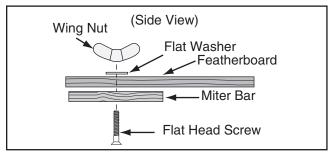


Figure 98. Miter bar pattern.

- **6.** Drill a ¼" hole in the center of the bar, then countersink the bottom to fit a ¼"-20 flat head screw.
- 7. Mark a 4" line through the center of the countersunk hole in the center, then use a jig saw with a narrow blade to cut it out.
- 8. Assemble the miter bar and featherboard with a ¼"-20 x flat head screw, flat washer, and a wing nut or a star knob (see Figure 99). Congratulations! Your featherboard is complete.



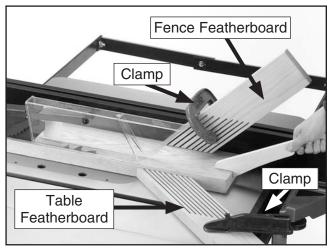
**Figure 99.** Assembling miter slot featherboard components.

**Tip:** The length of the flat head screw depends on the thickness of the featherboard—though 1½" to 2" lengths usually work.

Now, proceed to **Mounting Featherboard in Miter Slot** on **Page 54**.

#### **Mounting Featherboards w/Clamps**

- 1. Lower the saw blade, then adjust the fence to the desired width and secure it.
- 2. Place the workpiece against the fence, making sure it is 1" in front of the blade.
- 3. Place a featherboard on the table away from the blade so all fingers point forward and contact the workpiece (see **Figure 100**).

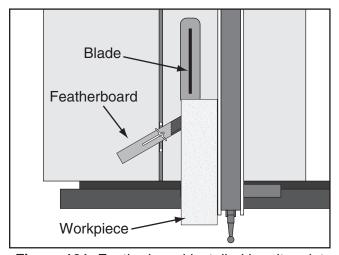


**Figure 100.** Example of featherboards secured with clamps.

- **4.** Secure the featherboard to the table with a clamp.
- **5.** Check the featherboard by pushing it with your thumb to ensure it is secure.
  - —If the featherboard moves, tighten the clamp more.
- Mount a second featherboard to the fence with another clamp (see Figure 100), then repeat Step 5 to ensure it is secure.

#### **Mounting Featherboard in Miter Slot**

- 1. Lower the saw blade, then adjust the fence to the desired width and secure it.
- 2. Place the workpiece evenly against the fence, making sure it is 1" in front of the blade.
- 3. Slide the featherboard miter bar into the miter slot, making sure the fingers slant toward the blade, as shown in **Figure 101**.



**Figure 101.** Featherboard installed in miter slot and supporting workpiece for ripping cut.

- 4. Position the fingered edge of the feather-board against the edge of the workpiece, so that all of the fingers contact the workpiece. Slide the featherboard toward the blade until the first finger is nearly even with the end of the workpiece, which should be 1" away from the blade.
- 5. Double check the workpiece and the feather-board to ensure they are properly positioned as described in Step 4. Then secure the featherboard to the table. Check the featherboard by hand to make sure it is tight.

**Note:** The featherboard should be placed firmly enough against the workpiece to keep it against the fence but not so tight that it is difficult to feed the workpiece.



#### **Push Sticks**

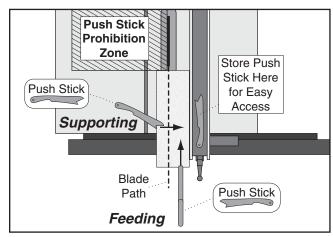
When used correctly, push sticks reduce the risk of injury by keeping hands away from the blade while cutting. In the event of an accident, a push stick can also absorb damage that would have otherwise happened to hands or fingers.

#### **Using a Push Stick**

Use push sticks whenever your hands will get within 12" of the blade. To maintain control when cutting large workpieces, start the cut by feeding with your hands then use push sticks to finish the cut, so your hands are not on the end of the workpiece as it passes through the blade.

**Feeding:** Place the notched end of the push stick against the end of the workpiece (see inset **Figure** below), and move the workpiece into the blade with steady downward and forward pressure.

**Supporting:** A second push stick can be used to keep the workpiece firmly against the fence while cutting. When using a push stick in this manner, only apply pressure before the blade; otherwise, pushing the workpiece against or behind the blade will increase the risk of kickback (see "Push Stick Prohibition Zone" in the **Figure** below).



**Figure 102.** Using push sticks to rip narrow stock.

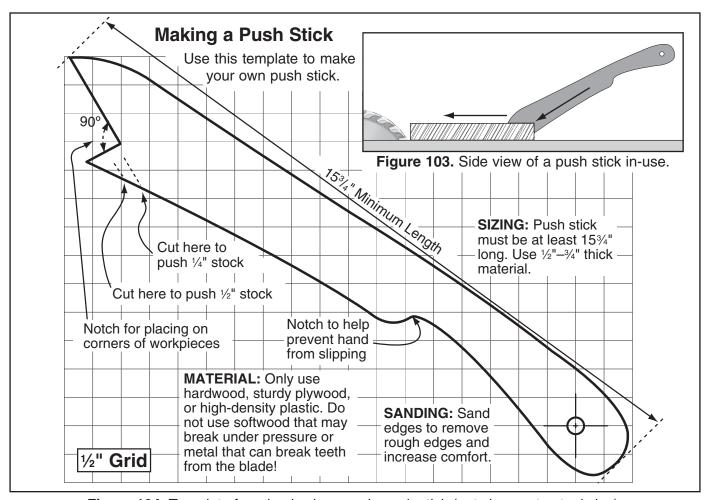


Figure 104. Template for a basic shop-made push stick (not shown at actual size).



## **Push Blocks**

When used correctly, a push block reduces the risk of injury by keeping hands away from the blade while cutting. In the event of an accident, a push block often takes the damage that would have otherwise happened to hands or fingers.

#### **Using a Push Block**

A push block can be used in place of or in addition to a push stick for feeding workpieces into the blade. Due to their design, push blocks allow the operator to apply firm downward pressure on the workpiece that could not otherwise be achieved with a push stick.

The push block design on this page can be used in two different ways (see inset **Figure** below). Typically, the bottom of the push block is used until the end of the workpiece reaches the blade.

The notched end of the push block is then used to push the workpiece the rest of the way through the cut, keeping the operator's hands at a safe distance from the blade. A push stick is often used at the same time in the other hand to support the workpiece during the cut (see "Using a Push Stick" on previous page).

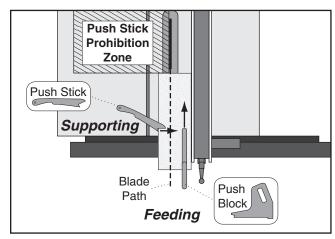


Figure 106. Using a push block and push stick to make a rip cut.

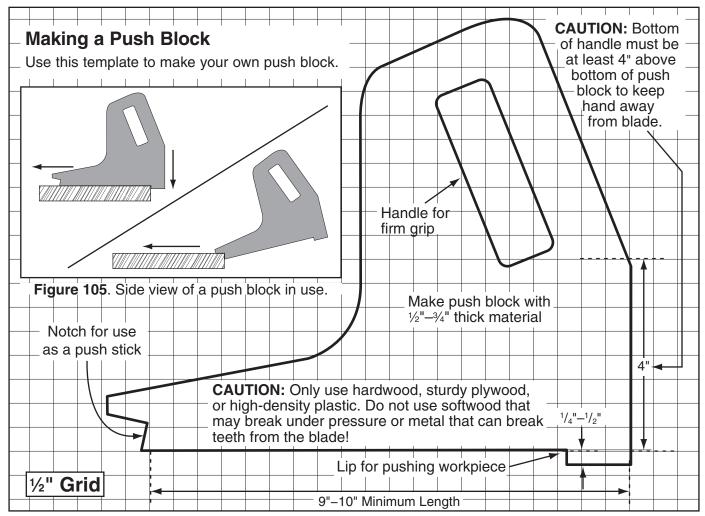


Figure 107. Template for a shop-made push block (shown at 50% of full size).

## Narrow-Rip Auxiliary Fence & Push Block

There are designs for hundreds of specialty jigs that can be found in books, trade magazines, and on the internet. These types of jigs can greatly improve the safety and consistency of cuts. They are particularly useful during production runs when dozens or hundreds of the same type of cut need to be made.

The narrow-rip auxiliary fence and push block system shown in this section is an example of a specialty jig that can be made to increase the safety of very narrow rip cuts.

## Material Needed for Narrow Rip Auxiliary Fence & Push Block

Hardwood <sup>3</sup> / <sub>4</sub> " x 3" x Length of Fence1
Plywood 3/4" x 51/4" x Length of Fence1
Wood Screws #8 x 1½"8

#### **Material Needed for Push Block**

Hardwood or Plywood %" x 15"	X 5%"1
Hardwood or Plywood 3/4" x 10"	' x 5"–9"1
Cyanoacrylate Wood Glue	Varies
Wood Screws #8 x 1½"	As Needed

## Making a Narrow-Rip Push Block for an Auxiliary Fence

1. Cut a piece of ¾" thick plywood 5¼" wide and as long as your table saw fence; cut a piece of ¾" thick hardwood 3" wide and as long as your table saw fence, as shown in **Figure** 108.

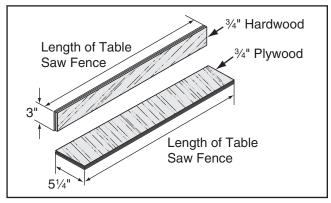


Figure 108. Auxiliary fence dimensions.

**Note:** We recommend cutting the hardwood board oversize, then jointing and planing it to the correct size to make sure the board is square and flat. Only use furniture grade plywood or kiln dried hardwood to prevent warping.

2. Pre-drill and countersink eight pilot holes \(^3\)\s^" from the bottom of the 3" wide board, then secure the boards together with eight #8 x 1\(^1\)\(^2\)" wood screws, as shown in **Figure 109**.

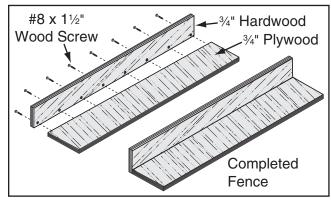
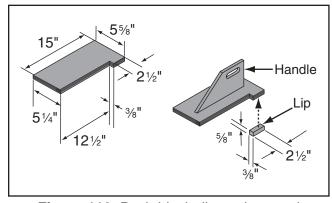


Figure 109. Location of pilot holes.

3. Using the <sup>3</sup>/<sub>4</sub>" material you used in the previous steps, cut out pieces for the push block per the dimensions shown in **Figure 110**; for the handle, cut a piece 10" long by 5"–9" high and shape it as desired to fit your hand.

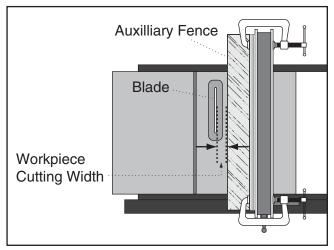


**Figure 110.** Push block dimensions and construction.

4. Attach the handle to the base with #8 x 1½" wood screws, and attach the lip to the base with cyanoacrylate type wood glue.

## Using the Auxiliary Fence and Push Block

 Place the auxiliary fence on the table and clamp it to the fence at both ends, then adjust the distance between the auxiliary fence and the blade—this determines how wide the workpiece will be ripped (see Figure 111).



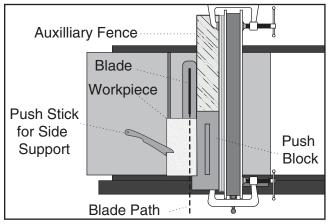
**Figure 111.** Adjusting ripping distance between blade and auxiliary fence.

**2.** Install the blade guard.



Keep the blade guard installed and in the down position. Failure to do this could result in serious personal injury or death.

**3.** Place the workpiece 1" behind the blade and evenly against the table and the auxiliary fence.



**Figure 112.** Push block in position to push workpiece through blade.

 Turn the saw ON, then begin ripping the workpiece using a push stick for side support.

As the workpiece nears the end of the cut, place the push block on the auxiliary fence with the lip directly behind the workpiece, then release the push stick just before it is even with the blade (see **Figure 113**).

Guide the workpiece the rest of the way through the cut with the push block.

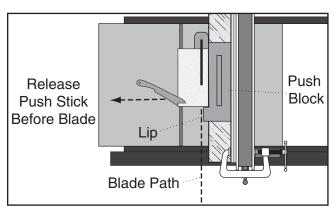


Figure 113. Ripping with push block.

## WARNING

Turn the saw *OFF* 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.



# SECTION 6: AFTERMARKET ACCESSORIES FROM GRIZZLY

## **AWARNING**

Some aftermarket accessories can be installed on this machine that could cause it to function improperly, increasing the risk of serious personal injury. To minimize this risk, only install accessories recommended for this machine by Grizzly.

## NOTICE

Refer to the newest copy of the Grizzly Catalog for other accessories available for this machine.

#### Call 1-300-523-4777 To Order

#### H7833—Fully Enclosed Blade Guard

This fully enclosed blade guard was specially designed for the Model G0451, and dramatically improves dust collection over the standard dust hood. This is important if the saw will be used for cutting a lot of OSB, MDF, or other engineered sheet goods that contain formaldehyde or other VOC's, which can result in more toxic dust than natural wood alone. Proper collection of this dust is especially important in workplace settings where exposure occurs daily. Includes a sturdy mounting arm constructed from steel tube and 2.5" dust port for superb dust collection.



**Figure 114.** H7833 fully enclosed blade guard for Model G0451.

## H3388—14" Carbide Tipped Saw Blade, 80T H3389—14" Carbide Tipped Saw Blade, 100T

These blades are designed especially for sliding table saws and manufactured for heavy-duty use.

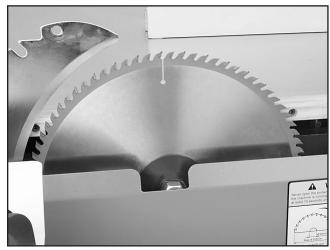


Figure 115. Carbide-tipped saw blade.

#### H4935—Stackable Scoring Blade Set

The scoring blade set consists of an inner and outer blade and four internal shims. Two shims are 0.008" thick and two are 0.004". The shims are provided so the scoring blade set can match the kerf thickness of the main blade.

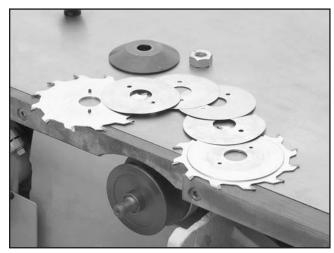


Figure 116. H4935 Scoring Blade Set.

G5562—SLIPIT® 1 Qt. Gel G5563—SLIPIT® 12 oz Spray

G2871—Boeshield® T-9 12 oz Spray

G2870—Boeshield® T-9 4 oz Spray

H3788—G96® Gun Treatment 12 oz Spray

H3789—G96<sup>®</sup> Gun Treatment 4.5 oz Spray



**Figure 117.** Recommended products for protecting unpainted cast iron/steel part on machinery.

H2499—Small Half-Mask Respirator

H3631—Medium Half-Mask Respirator

H3632—Large Half-Mask Respirator

H3635—Disposable Cartridge Filter Pair P100

Wood dust is now considered a known carcinogen and has been linked to nasal cancer and severe respiratory illnesses. If you work around dust everyday, a half-mask respirator can be a lifesaver. Also compatible with safety glasses!



**Figure 118.** Half-mask respirator and disposable cartridge filters.

T20501—Face Shield Crown Protector 4"

T20502—Face Shield Crown Protector 7"

T20503—Face Shield Window

T20452—"Kirova" Anti-Reflective S. Glasses

T20451—"Kirova" Clear Safety Glasses

H0736—Shop Fox® Safety Glasses

H7194—Bifocal Safety Glasses 1.5

H7195—Bifocal Safety Glasses 2.0

H7196—Bifocal Safety Glasses 2.5



Figure 119. Eye protection assortment.

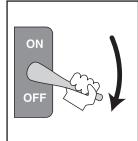
#### H8003—Hydraulic Lifting Table - 450 lbs.

This rugged and affordable lifting table allows you to lift stacks of sheet goods right up to the table saw table with minimal effort. Features 393/8" x 193/4" table, 391/2" maximum table height, 8" fixed and swivel casters with brakes.



**Figure 120.** Model H8003 Hydraulic Lifting Table.

## **SECTION 7: MAINTENANCE**



## WARNING

Always disconnect power to the machine before performing maintenance. Failure to do this may result in serious personal injury.

### **Schedule**

The frequency of maintenance necessary for any machine will always depend on the operating conditions and environment. The schedule below is a basic guideline for keeping your machine in proper operating condition. Always repair any adverse conditions immediately upon discovery.

#### Daily (Ongoing)

- Loose mounting bolts.
- Worn or damaged saw blades.
- Worn or damaged switches or wires.
- Any other unsafe condition.

#### Weekly

- Clean sliding table surface and grooves.
- Lubricate sliding table ways (Figure 121).
- Clean the cast iron saw table.
- Clean the sliding table roller guideways.
- Clean the rip fence.
- Clean the rip fence bracket and rail.

#### Monthly

- Clean/vacuum dust buildup from inside cabinet and off motor.
- Check V-belt tension, damage, or wear.

#### **Every 6–12 Months**

- Lubricate the trunnions (Page 62).
- Lubricate the elevation and tilt leadscrews (Page 62).

**Note:** To ensure optimum power transmission from the motor to the blades, the V-belts must be in good condition (free from cracks, fraying and wear) and operate under proper tension.

## Cleaning

Cleaning the Model G0451 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. Use compressed air to blow dust from between the two sections of the sliding table. 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.

## **Unpainted Cast Iron**

Protect the unpainted cast iron surfaces on the table by wiping the table clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces. DO NOT clean cast iron with water or it will rust!

Keep tables rust-free with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9 (see **SECTION 5: ACCESSORIES** for more details).



## Lubrication

The bearings are sealed and pre-lubricated and require no lubrication during their usable life. However, your saw components will operate at their best if the bearing surfaces are kept clean—this is especially important for the trunnion bearings. ALWAYS DISCONNECT POWER BEFORE DOING MAINTENANCE!

Lubricate the areas indicated below with general purpose grease every 6–12 months, depending on frequency of use (see Figure 122):

- Blade Angling Trunnions (can be accessed from front of machine)
- Bevel Gears and Leadscrew
- Blade Height Trunnion

**Sliding Table Ways:** Spray or wipe on a light machine oil (such as those shown on **Page 60**) the entire length of the steel rods (see **Figure 121**).

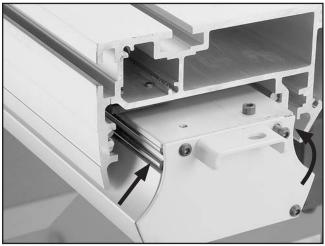


Figure 121. Sliding table ways.

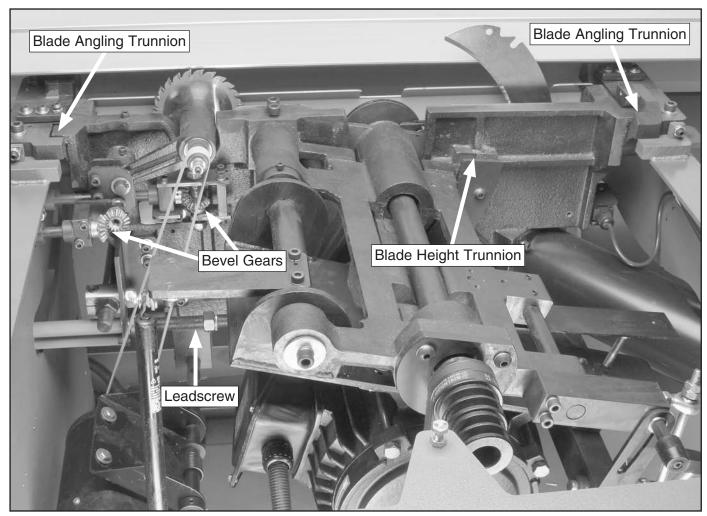


Figure 122. Lubrication locations (table removed for clarity).



## **SECTION 8: SERVICE**

Review the troubleshooting and procedures in this section if a problem develops with your machine. If you need replacement parts or additional help with a procedure, call our Technical Support at (570) 546-9663. **Note:** *Please gather the serial number and manufacture date of your machine before calling.* 

## **Troubleshooting**



#### **Motor & Electrical**

Symptom	Possible Cause	Possible Solution
Machine does not	Switch disabling key is removed.	Install switch disabling key.
start or a breaker trips.	Emergency stop push-button is engaged/ faulty.	2. Rotate clockwise slightly until it pops out/replace it.
	3. Power supply switched OFF or is at fault.	Ensure power supply is switch on; ensure power supply has the correct voltage.
	4. Blade guard limit switch engaged/at fault.	Move blade guard to the working position; replace faulty limit switch.
	Electrical box door is open/door safety switch is at fault.	5. Close door/replace faulty safety switch.
	6. Motor connection wired incorrectly.	Correct motor wiring connections.
	7. Thermal overload relay has tripped.	7. Turn cut-out dial to increase working amps and push the reset pin. Replace if tripped multiple times (weak relay).
	8. Wall fuse/circuit breaker is blown/tripped.	8. Ensure circuit size is suitable for this machine; replace weak breaker.
	Contactor not getting energized/has burnt contacts.	Test for power on all legs and contactor operation.  Replace unit if faulty.
	10. Wiring is open/has high resistance.	Check for broken wires or disconnected/corroded connections, and repair/replace as necessary.
	11. Motor ON button or ON/OFF switch is at fault.	11. Replace faulty ON button or ON/OFF switch.
	12. Start delay module is at fault.	12. Adjust to correct delay; replace module.
	13. Motor is at fault.	13. Test/repair/replace.
Machine stalls or is	Feed rate/cutting speed too fast for task.	Decrease feed rate/cutting speed.
underpowered.	2. Workpiece material is not suitable for this	2. Only cut wood products; make sure moisture
	machine.	content is below 20% and there are no foreign materials in the workpiece.
	3. Belt(s) slipping.	3. Replace bad belt(s) as a matched set, align pulleys, and re-tension.
	4. Motor connection is wired incorrectly.	Correct motor wiring connections.
	5. Motor bearings are at fault.	5. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.
	6. Start delay module is at fault.	6. Adjust to correct delay; replace module.
	7. Motor is at fault.	7. Test/repair/replace.

Symptom	Possible Cause	Possible Solution
Machine has vibration or noisy operation.	Motor or component is loose.	Inspect/replace stripped or damaged bolts/ nuts, and re-tighten with thread locking fluid.
	2. Blade is at fault.	Replace warped, bent, or twisted blade; resharpen dull blade.
	3. V-belt(s) worn or loose.	3. Inspect/replace belts with a new matched set (refer to <b>Page 65</b> ).
	4. Pulley is loose.	Realign/replace shaft, pulley, setscrew, and key as required.
	5. Motor mount loose/broken.	5. Tighten/replace.
	Machine is incorrectly mounted or sits unevenly.	Tighten/replace anchor studs in floor; relocate/shim machine.
	7. Arbor pulley is loose.	Retighten/replace arbor pulley with shaft and thread locking liquid.
	8. Motor fan is rubbing on fan cover.	Replace dented fan cover; replace loose/ damaged fan.
	9. Arbor bearings are at fault.	Replace arbor housing bearings; replace arbor.
	10. Motor bearings are at fault.	10. Test by rotating shaft; rotational grinding/ loose shaft requires bearing replacement.
Main blade runs backwards.	Two of the power wires are reversed.	Exchange wires R & T in the terminal box.

## Operation

Symptom	Possible Cause	Possible Solution	
Workpiece has burned edges, binds, or kicks back.	<ol> <li>Sliding table is not parallel to blade.</li> <li>Riving knife is not aligned with the</li> </ol>	Make sliding table parallel to the blade ( <b>Page 67</b> ).     Shim the riving knife to align it with the main	
	blade.  3. Blade is warped.	blade.  3. Replace the blade.	
Workpiece has chip out on the bottom edge.	<ol> <li>Scoring blade height is incorrect.</li> <li>Scoring blade is not aligned with the main blade.</li> <li>Scoring blade kerf does not match the main blade.</li> </ol>	<ol> <li>Adjust the height of the scoring blade.</li> <li>Align the scoring blade (Page 42).</li> <li>Adjust the scoring blade kerf (Page 42).</li> </ol>	
Sliding table saw does not cut square.	<ol> <li>Sliding table is not parallel to blade.</li> <li>Rip fence is not parallel to blade.</li> <li>Crosscut fence is not perpendicular to the blade.</li> </ol>	<ol> <li>Adjust the sliding table (Page 67).</li> <li>Adjust the rip fence parallel to blade.</li> <li>Adjust the crosscut fence perpendicular to the blade (Page 69).</li> </ol>	
Fence hits table top when sliding across table.	<ol> <li>Front rail is too low.</li> <li>Rip fence roller is too low.</li> </ol>	Raise the front rail.     Adjust the rip fence roller.	
Blade does not reach 90°, or blade does not reach 45°.	Blade stop bolts are out of adjustment.	Adjust the stop bolts (Page 66).	
The rip fence scale is not accurate.	The rip fence scale is out of calibration or was not set up correctly.	Adjust the rip fence scale.	
Tilt or blade height handwheels difficult to turn.	Lock knob is tight.     Gears caked with dust.	<ol> <li>Release the lock knob.</li> <li>Clean out dust and grease the gears.</li> </ol>	



## **Belt Service**

#### Main Belt Replacement/Tension

- 1. DISCONNECT SAW FROM POWER!
- 2. Move the blade tilt to 0° (blade 90° to table), and raise the main blade and scoring blade up as far as they will go.
- 3. Open the motor cabinet door.
- **4.** Loosen the lock handle (**Figure 123**), rotate the pivot handle down 180°, then tighten the lock handle.

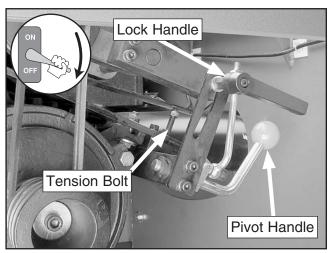


Figure 123. Main blade belt tension controls.

- **5.** Remove the old V-belts and replace them with new belts. Always replace all of the belts as a matched set.
- **6.** Loosen the lock handle, rotate the pivot handle up 180°, the tighten the lock handle.
- Check the belt tension by pushing on belt in the center, as shown in Figure 124, and noting the amount of deflection.

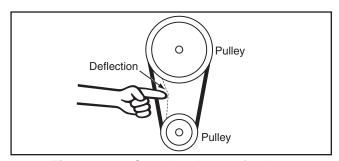


Figure 124. Checking belt deflection.

The correct range of belt deflection for this machine is \( \frac{1}{4}\)"-\( \frac{1}{2}\)".

- —If the belt deflection is correct, continue to Step 8.
- —If the belt deflection is incorrect, use the tension bolt to adjust the belt to the proper range of tension. Turning the bolt clockwise loosens the tension; turning the bolt counterclockwise increases the tension. After adjusting, tighten the jam nut on the tension bolt against the motor plate to secure it in position. Repeat **Step 7**.
- 8. Close the motor cabinet door.

#### Scoring Belt Replacement/Tension

- DISCONNECT SAW FROM POWER!
- 2. Move the blade tilt to 0° (blade 90° to table), and raise the main blade and scoring blade set up as far as they will go.
- **3.** Open the motor cabinet door.
- Push the scoring blade motor up and remove the flat belt.
- Place the flat belt on the scoring blade arbor as shown in Figure 125, lift the scoring motor, and slide the flat belt over the scoring motor pulley.

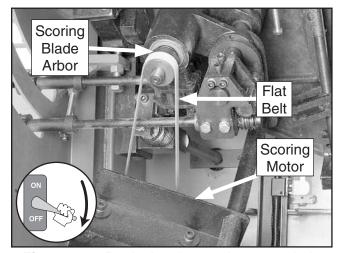


Figure 125. Replacing the scoring motor belt.

Close and secure the motor cabinet door.



## **Blade Tilt Calibration**

The blade tilt is calibrated at the factory, but can be calibrated if it changes during the life of the machine.

#### 90° Stop

- DISCONNECT SAW FROM POWER!
- Move the blade tilt to 90° according to the gauge, and raise the main blade as far as it will go.
- **3.** Use a machinist's square to inspect if the blade is square to the table.
  - —If the blade is not square to the table, loosen the two set screws that secure the 90° tilt stop nut shown in **Figure 126.**

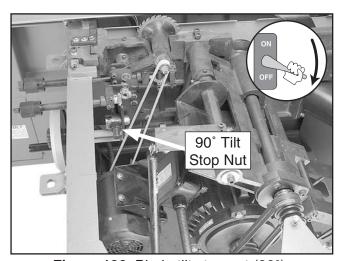


Figure 126. Blade tilt stop nut (90°).

- **4.** Adjust the stop nut and recheck the blade tilt as many times as necessary until the blade is 90° to the table.
- 5. Tighten the two set screws in the stop nut.
- **6.** Check the blade tilt pointer mechanism to ensure that it points to 90°.
  - —If the blade tilt pointer shows an incorrect tilt, adjust it by loosening the mounting screws, rotating the pointer until it points to 90°, then tightening the mounting screws.

#### 45° Stop

- DISCONNECT SAW FROM POWER!
- 2. Adjust the blade angle until you hit the 45° positive stop and check the blade angle with a 45° square.
  - —If the blade is not 45° to the table, loosen the two set screws that secure the 45° tilt stop nut shown in **Figure 127.** (This nut can also be accessed from the front of the saw by moving the sliding table all the way forward.)

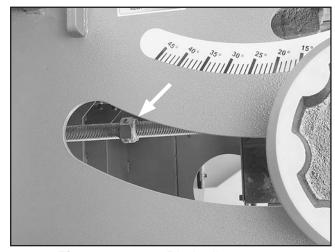


Figure 127. 45° Blade tilt stop nut.

- Adjust the stop nut and recheck the blade tilt as many times as necessary until the blade is 45° to the table.
- **4.** Tighten the two set screws in the stop nut.



## Sliding Table Parallel Adjustment

The table is calibrated at the factory, but can be adjusted slightly if it is not parallel to the blade.

Tools Needed:	Qty
Felt Tip Pen	1
90° Square	1
Precise Measuring Tool	1
Wrench 17mm	1
Hex Wrench 5mm	

## To adjust the sliding table parallel with the main blade:

- DISCONNECT SAW FROM POWER!
- 2. Move the blade tilt to 0° (blade 90° to table), and raise the main blade up to the maximum height.
- 3. Mark one of the blade teeth with a felt tip pen. This will be your reference point when taking measuring points, so you take them in the same location each time.
- 4. Move the sliding table all the way back, and measure the distance "A" in Figure 128, between the marked tooth and the edge of the miter slot.

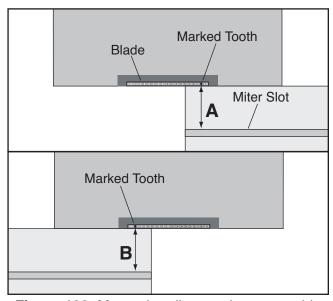


Figure 128. Measuring distance between table and blade.

- **5.** Rotate the blade 180°, move the sliding table all the way forward, and measure the distance between "B" in **Figure 128**.
- **6.** Note the difference between the two positions.
  - —If the gap is the same on both sides or the difference is 0.004" or less, no adjustments to the table parallelism need to be made.
  - —If the difference is greater than 0.004", then the sliding table parallelism must be adjusted. Proceed to **Step 7**.
- 7. Loosen the nuts on T-bolts that are used to mount the sliding table to the base.
- 8. Loosen the hex nut on the parallel adjustment screw (see **Figure 129**), then adjust the screw as necessary to move the table. If you move the adjustment screw away from the table, then push the table against the screw before proceeding.

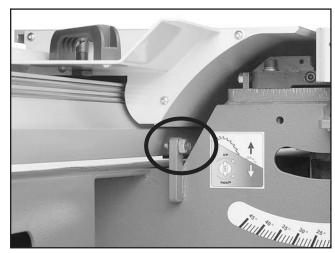


Figure 129. Table parallelism adjustment screw.

9. Tighten the hex nut on the parallel adjustment screw to secure it in place, then tighten the table mounting nuts. Repeat Steps 4–6 as necessary until the sliding table is parallel with the blade.

# Table Movement Adjustment

The sliding table features an adjustment bar with bolts that control how easily the sliding table moves across the base (see **Figure 130**). These adjustment bolts are factory set. They can only be accessed by removing the end covers from both ends of the sliding table base and sliding the thin plate out of the way.

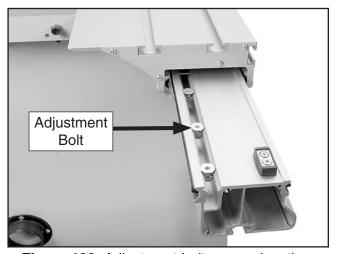


Figure 130. Adjustment bolt access location.

If the adjustment bolts do require adjustments, turning them counterclockwise increases and clockwise decreases pressure against the steel rails. Increasing pressure against the rails reduces table movement slop, which increases accuracy, but makes it harder to slide the table. Decreasing pressure against the rails makes it easier to slide the table, but increases table movement slop, which reduces accuracy.

Adjusting this part of the sliding table correctly is a matter of trial-and-error by making adjustments, moving the sliding table, then making additional adjustments and repeating the process until the sliding table moves as desired. Ideally, the table will move easily but without any slop.



## Squaring Crosscut Fence to Blade

Squaring the crosscut fence to the blade ensures that cuts made with the crosscut fence will be square. This procedure can be done by using a piece of scrap plywood as a test piece and making five test cuts, then adjusting the fence as necessary.

#### To square the crosscut fence with the blade:

- Make sure the blade is parallel with the sliding table and that the block on the crosscut fence is resting against the 90° stop bolt (see Figure 132 for locations).
- 2. Prepare the scrap test piece by cutting it to 32" x 32", then number all four sides of the test piece.
- 3. Use the crosscut fence to cut ½" off of each side of the test piece, then cut side 1 again (make five cuts total).
- **4.** Measure the test piece diagonally from corner-to-corner as shown in **Figure 131**.
  - —If both measurements are not within ½6", then the crosscut fence needs to be adjusted. Proceed to **Steps 5–8**.
  - —If both measurements are within 1/16" then you are finished with this procedure.

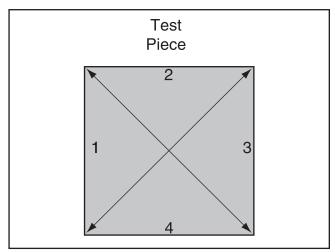


Figure 131. Fence adjustment test piece.

- Loosen the knob on the crosscut fence to allow it to pivot (make sure the block remains against the 90° stop bolt during adjustments).
- 6. Loosen the hex nut on the 90° stop bolt shown in **Figure 132**, and rotate the 90° stop bolt to square the crosscut fence.

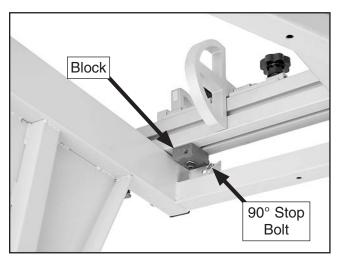


Figure 132. Crosscut fence adjustment cam.

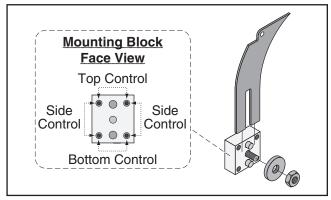
- 7. Tighten the hex nut on the 90° stop bolt, then tighten the crosscut fence knob, making sure the block is touching the 90° stop bolt.
- 8. Repeat Steps 3-4.

# Adjusting Riving Knife Mounting Block

The spreader/riving knife must be aligned with the blade when installed. If the spreader/riving knife is not aligned with the blade, then the workpiece will be forced sideways during the cut, which will increase the risk of kickback.

The spreader/riving knife mounts to a block that can be repositioned to correctly align the spreader/riving knife to the blade.

The mounting block adjusts by turning the set screws in each corner of the block. **Figure 133** shows the set screws associated with controlling the mounting block position. Have patience when adjusting the mounting block, because it requires trial-and-error to perform with accuracy.



**Figure 133.** Riving knife mounting block adjustment controls.

All adjustment and alignment positions for the riving knife are covered on **Page 38** in the subsection **Riving Knife Installation & Removal**; the mounting block should not be adjusted unless you have been unable to mount the riving knife as instructed by these procedures.

Tools Needed	Qty
Straightedge	1
Wrench 17mm	1
Hex Wrench 4mm	1

#### To adjust the mounting block:

- DISCONNECT SAW FROM POWER!
- 2. Raise the blade all the way up, move the sliding table to the side, and open the lower blade cover to gain access to the mounting block.
- Loosen the lock nut that secures the spreader/riving knife to the mounting block, and remove the spreader/riving knife.
- 4. Adjust the each pair of set screws that controls the direction required to move the mounting block so the spreader/riving knife can be aligned with the blade. Make sure to move both set screws in even increments.
- 5. Reinstall the spreader/riving knife and check the alignment with the blade. Repeat Step 4 as necessary until the spreader/riving knife is properly aligned to the blade.

Note: If you discover that the spreader/riving knife is bent and cannot be properly aligned with the blade, it is possible to bend it into alignment, but make sure that the final result is precisely aligned so the risk of kickback is not increased. If the spreader/riving knife is bent, and you cannot easily bend it back into alignment, we recommend replacing it with a new one.

6. Properly re-install the spreader/riving knife as described on Page 38, close the blade cover, and move the sliding table back to the center position.



## **SECTION 9: WIRING**

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Compare the manufacture date of your machine to the one stated in this manual, and study this section carefully.

If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine. An updated wiring diagram may be available. **Note:** Please gather the serial number and manufacture date of your machine before calling. This information can be found on the main machine label.

# **▲**WARNING Wiring Safety Instructions

**SHOCK HAZARD.** Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

**MODIFICATIONS.** Modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire. This includes the installation of unapproved aftermarket parts.

WIRE CONNECTIONS. All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.

**CIRCUIT REQUIREMENTS.** You MUST follow the requirements at the beginning of this manual when connecting your machine to a power source.

**WIRE/COMPONENT DAMAGE.** Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components.

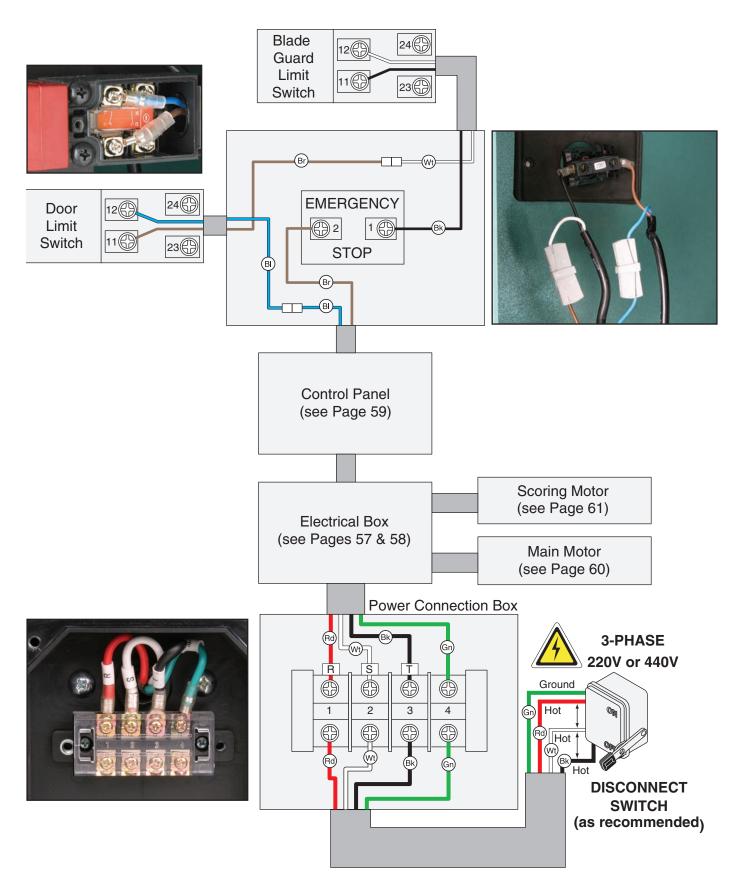
**MOTOR WIRING.** The motor wiring shown in these diagrams is current at the time of printing but may not match your machine. If you find this to be the case, use the wiring diagram inside the motor junction box.

**CAPACITORS/INVERTERS.** Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

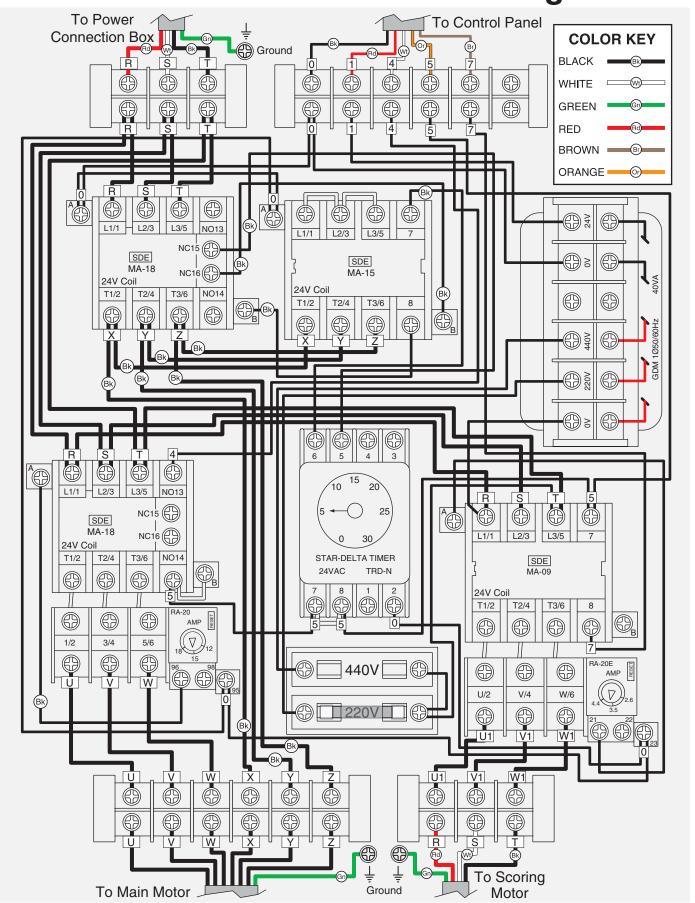
**EXPERIENCING DIFFICULTIES.** If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

#### **NOTICE COLOR KEY** BLACK . **BLUE** YELLOW LIGHT The photos and diagrams BLUE included in this section are YELLOW WHITE = **BROWN** GREEN best viewed in color. You GREEN : GRAY **PURPLE** can view these pages in TUR-QUOISE color at www.grizzly.com. RED ORANGE **PINK**

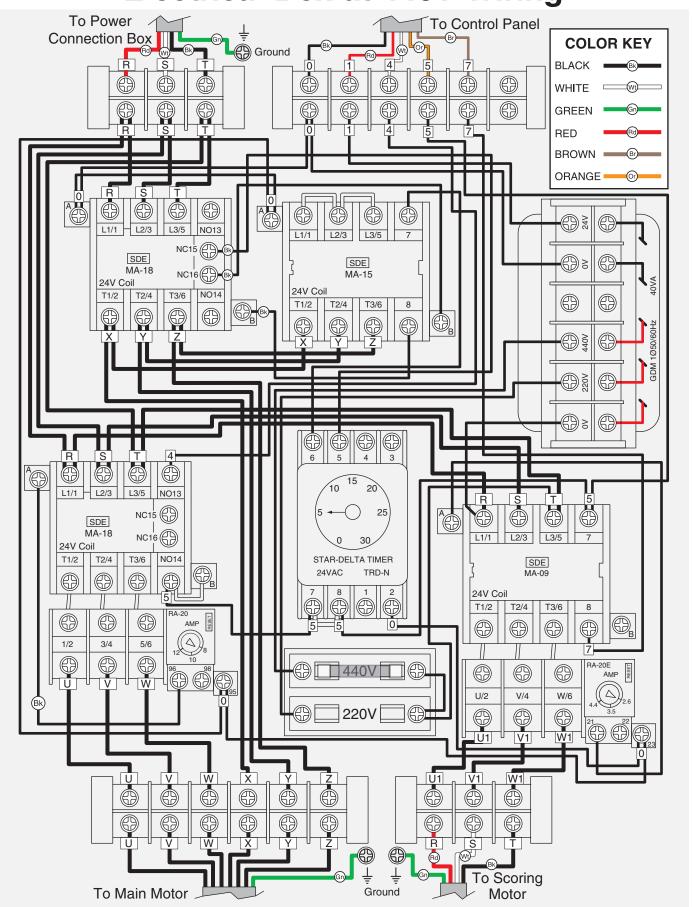
## **Wiring Overview**



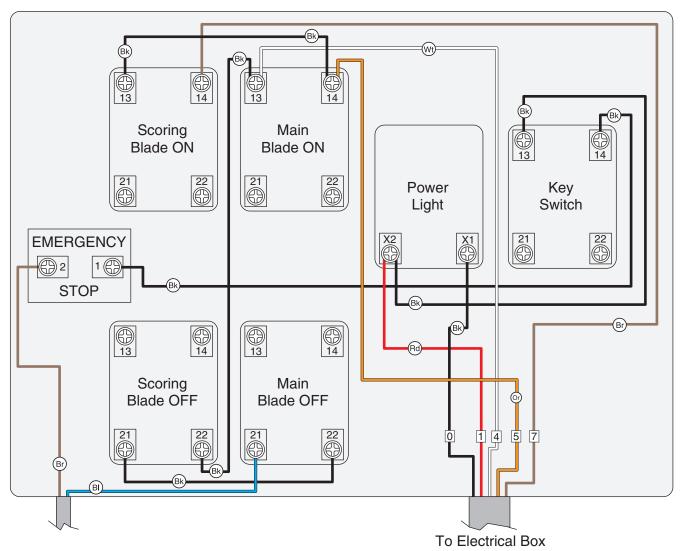
## **Electrical Box at 220V Wiring**

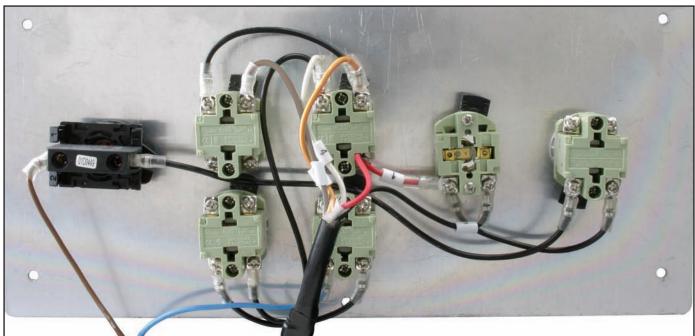


## **Electrical Box at 440V Wiring**

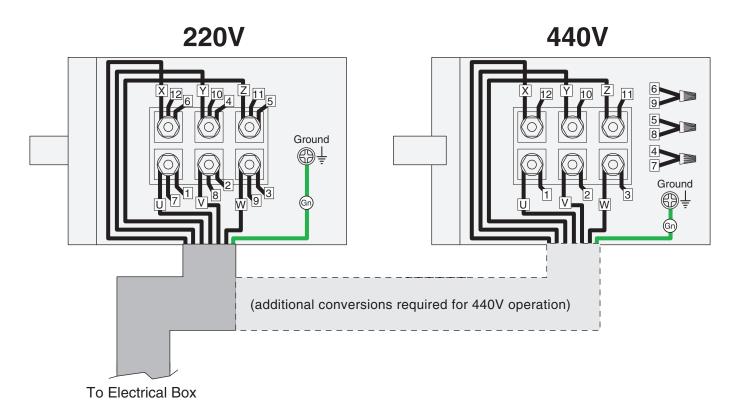


## **Control Panel Wiring**



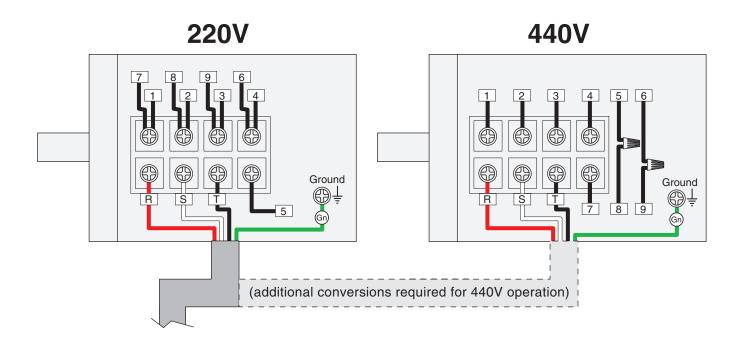


## **Main Motor Wiring**





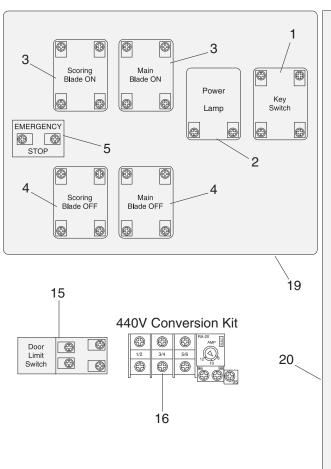
## **Scoring Motor Wiring**

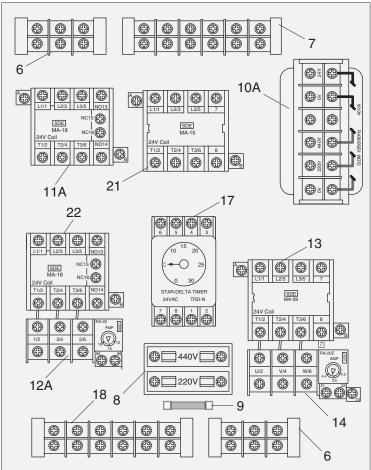




## **SECTION 10: PARTS**

## **Electrical Components**



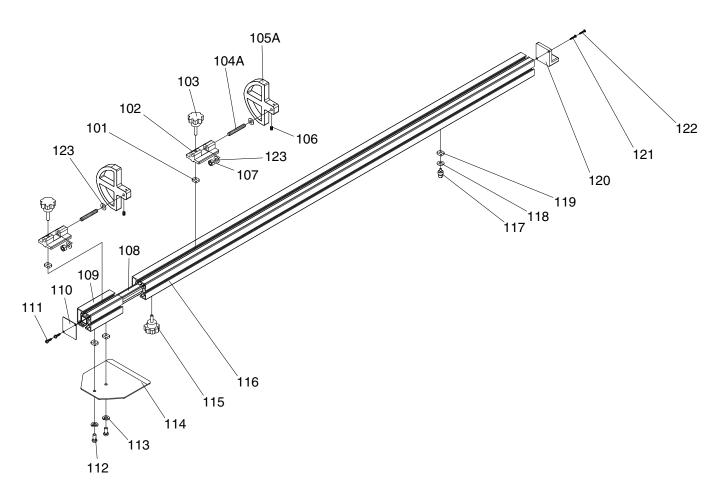


REF	PART #	DESCRIPTION
1	P04510001	KEY SWITCH
2	P04510002	POWER LAMP
3	P04510003	ON BUTTON
4	P04510004	OFF BUTTON
5	P04510005	EMERGENCY STOP BUTTON
6	P04510006	TERMINAL BAR 3P
7	P04510007	TERMINAL BAR 7P
8	P04510008	FUSE BASE
9	P04510009	FUSE 250V 10A
10A	P04510010A	TRANSFORMER V2.03.07
11A	P04510011A	MAGNETIC CONTACTOR MA-18 24V

REF	PART #	DESCRIPTION
12A	P04510012A	OL RELAY SDE RA-20 12-18A
13	P04510013	CONTACTOR SDE MA-09 24V
14	P04510014	OL RELAY SDE RA-20E 2.6-4.4A
15	P04510015	LIMIT SWITCH
16	P04510016	CONVERSION KIT 440V OLR RA-20 8-12A
17	P04510017	STAR DELTA TIMER 24V
18	P04510018	TERMINAL 6 CIRCUIT 25A
19	P04510019	CONTROL PANEL ASSY
20	P04510020	ELECTRICAL BOX ASSY
21	P04510021	MAGNETIC CONTACTOR MA-15 24V
22	P04510022	MAGNETIC CONTACTOR MA-18 24V



## **Crosscut Fence**



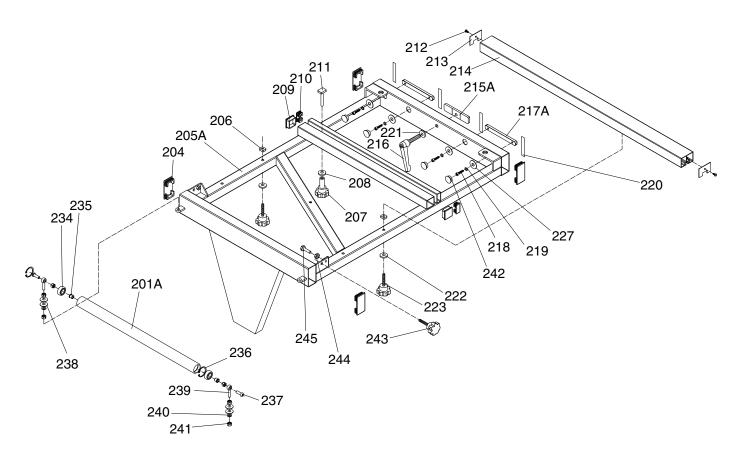
REE	PART#	DESCRIPTION
KEL	PARI#	DESCRIPTION

101	P04510101	T-NUT M8-1.25
102	P04510102	STOP BRACKET
103	P04510103	KNOB M8-1.25 X 40
104A	P04510104A	STUD-FT M10-1.5 X 70 V2.06.07
105A	P04510105A	FLIP STOP V2.06.07
106	PSS01M	SET SCREW M6-1 X 10
107	PLN05M	LOCK NUT M10-1.5
108	P04510108	SQUARE TUBE
109	P04510109	FENCE EXTENSION
110	P04510110	COVER
111	PHTEK7	TAP SCREW #8 X 3/8"
112	PBHS03M	BUTTON HD CAP SCR M8-1.25 X 16

#### REF PART # DESCRIPTION

113	PLW04M	LOCK WASHER 8MM
114	P04510114	LOCATE PLATE
115	P04510115	KNOB SCREW M8-1.25 X 25
116	P04510116	SQUARE FENCE
117	P04510117	CENTER BOLT M8-1.25 X 10
118	P04510118	FIBER WASHER 10 X 18
119	P04510101	T-NUT M8-1.25
120	P04510120	ROTATE BLOCK
121	PS38M	PHLP HD SCR M47 X 10
122	PS25M	PHLP HD SCR M47 X 35
123	P04510118	FIBER WASHER 10 X 18

## **Crosscut Table**



REF	PART #	DESCRIPTION
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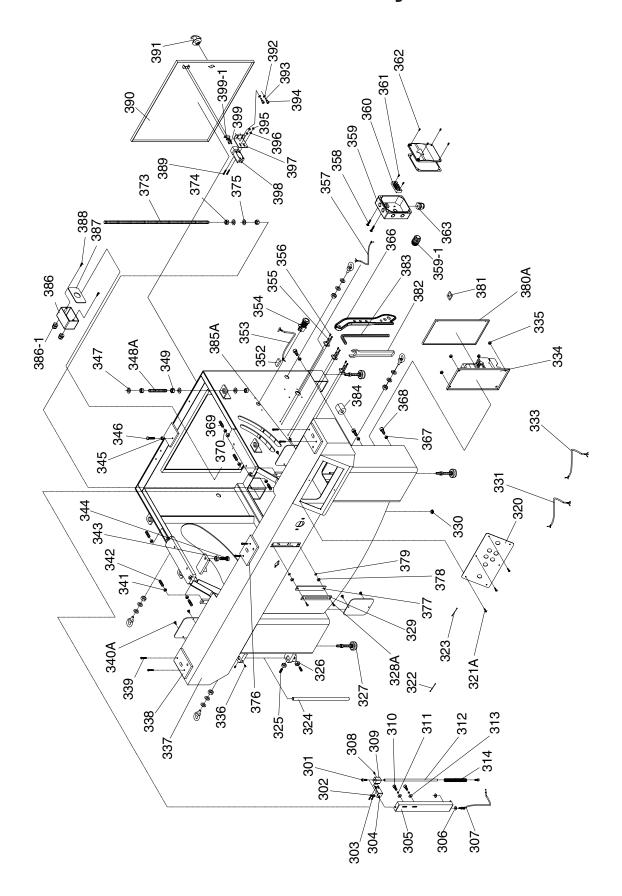
201A         P04930103         ROLLER V2.06.06           204         P04510204         PLUG 80 X 40MM           205A         P04930105         SUPPORT FRAME V2.06.06           206         P04510101         T-NUT M8-1.25           207         P04510207         KNOB W/M8-1.25 X 25 SHOULDER           208         PWF08M         FENDER WASHER 8MM           209         P04510209         PLUG 38 X 38MM           210         P04510210         PLUG 40 X 20MM           211         P04510211         T-BOLT M8-1.25 X 60           212         PHTEK7         TAP SCREW #8 X 3/8"	
205A         P04930105         SUPPORT FRAME V2.06.06           206         P04510101         T-NUT M8-1.25           207         P04510207         KNOB W/M8-1.25 X 25 SHOULDER           208         PWF08M         FENDER WASHER 8MM           209         P04510209         PLUG 38 X 38MM           210         P04510210         PLUG 40 X 20MM           211         P04510211         T-BOLT M8-1.25 X 60	201A
206         P04510101         T-NUT M8-1.25           207         P04510207         KNOB W/M8-1.25 X 25 SHOULDER           208         PWF08M         FENDER WASHER 8MM           209         P04510209         PLUG 38 X 38MM           210         P04510210         PLUG 40 X 20MM           211         P04510211         T-BOLT M8-1.25 X 60	204
207         P04510207         KNOB W/M8-1.25 X 25 SHOULDER           208         PWF08M         FENDER WASHER 8MM           209         P04510209         PLUG 38 X 38MM           210         P04510210         PLUG 40 X 20MM           211         P04510211         T-BOLT M8-1.25 X 60	205A
208         PWF08M         FENDER WASHER 8MM           209         P04510209         PLUG 38 X 38MM           210         P04510210         PLUG 40 X 20MM           211         P04510211         T-BOLT M8-1.25 X 60	206
209 P04510209 PLUG 38 X 38MM 210 P04510210 PLUG 40 X 20MM 211 P04510211 T-BOLT M8-1.25 X 60	207
210 P04510210 PLUG 40 X 20MM 211 P04510211 T-BOLT M8-1.25 X 60	208
211 P04510211 T-BOLT M8-1.25 X 60	209
	210
212 PHTEK7 TAP SCREW #8 X 3/8"	211
	212
213 P04510213 COVER	213
214 P04510214 SQUARE BRACE	214
215A P04930115A T-NUT M12-1.75 V2.06.06	215A
216 P04510216 LOCK HANDLE M12-1.75 X 55	216
217A P04930117A T-NUT M8-1.25 V2.06.06	217A
218 PCAP115M BUTTON HD CAP SCR M6-1 X 16	218
219 PLW03M LOCK WASHER 6MM	219

REF PART # DESCRIPTION	N
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220	P04510220	PAD
221	PWF12M	FENDER WASHER 12MM
222	PWF08M	FENDER WASHER 8MM
223	P04510223	KNOB SCREW M8-1.25 X 50
227	PW03M	FLAT WASHER 6MM
234	P6201ZZ	BALL BEARING 6201ZZ
235	P04510235	BUSHING
236	PR29M	INT RETAINING RING 32MM
237	PBHS23M	BUTTON HD CAP SCR M8-1.25 X 25
238	PW18M	FLAT WASHER 18MM
239	P04510239	EYE BOLT M8-1.25 X 40
240	PLW04M	LOCK WASHER 8MM
241	PN03M	HEX NUT M8-1.25
242	P04510242	PLUG
243	P04510223	KNOB SCREW M8-1.25 X 50
244	PN03M	HEX NUT M8-1.25
245	PB26M	HEX BOLT M8-1.25 X 30



## **Cabinet Body**





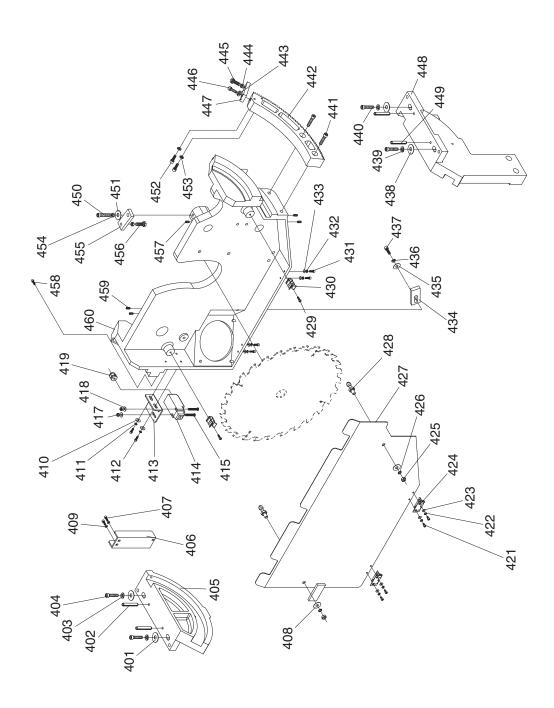
## **Cabinet Body Parts List**

REF	PART #	DESCRIPTION
301	PCAP50M	CAP SCREW M58 X 10
302	PWF05M	FENDER WASHER 5MM
303	PS09M	PHLP HD SCR M58 X 10
304	P04510304	POINTER
305	P04510305	FIX PLATE
306	PW03M	FLAT WASHER 6MM
307	P04510307	STEEL CABLE
308	PSS05M	SET SCREW M58 X 10
309	P04510309	INDICATOR BLOCK
310	PCAP26M	CAP SCREW M6-1 X 12
311	PLW03M	LOCK WASHER 6MM
312	P04510312	SHAFT
313	PW03M	FLAT WASHER 6MM
314	P04510314	COMPRESSION SPRING 13.6 X 300
320	P04510320	CONTROL PANEL FACE
321A	PHTEK14M	TAP SCREW M4 X 6
322	P04510322	CORD FOR GUARD LIMIT SWITCH
323	P04510323	CORD FOR DOOR LIMIT SWITCH
324	P04510324	SHAFT
325	PSS10M	SET SCREW M10-1.5 X 20
326	PN02M	HEX NUT M10-1.5
327	P04510327	ADJUST FOOT M16 X 100
328A	PHTEK8M	TAP SCREW M4 X 20
329	P04510329	TILT SCALE
330	P04510330	PLUG
331	P04510331	CONTROL PANEL POWER CORD
333	P04510333	POWER CORD
334	P04510334	ELECTRIC PANEL
335	PFN02M	FLANGE NUT M6-1
336	PSS04M	SET SCREW M6-1 X 12
337	P04510337	MACHINE BODY
338	P04510338	LOCATE BLOCK
339	PCAP11M	CAP SCREW M8-1.25 X 16
340A	PFS04M	FLANGE SCREW M47 X 6
341	PN02M	HEX NUT M10-1.5
342	PSS84M	SET SCREW M10-1.5 X 35
343	PN09M	HEX NUT M12-1.75
344	PB33M	HEX BOLT M12-1.75 X 50
345	PN03M	HEX NUT M8-1.25
346	PB26M	HEX BOLT M8-1.25 X 30
347	PWF14M	FENDER WASHER 14MM
348A	P04510348A	STUD-FT M14-2 X 110 V2.06.07
349	PN32M	HEX NUT M14-2
352	P04510352	WIRE CONNECTOR
353	P04510353	CORD FOR STOP BUTTON

REF	PART #	DESCRIPTION
354	P04510005	EMERGENCY STOP BUTTON
355	P04510355	HANGER
356	PFS08M	FLANGE SCREW M58 X 16
357	P04510357	POWER CORD
358	PBHS05M	BUTTON HD CAP SCR M6-1 X 20
359	P04510359	POWER BOX
359-1	P04510359-1	STRAIN RELIEF
360	P04510360	TERMINAL 4C
361	PS05M	PHLP HD SCR M58 X 8
362	PBHS06M	BUTTON HD CAP SCR M58 X 12
363	P04510363	STRAIN RELIEF M20
366	P04510366	PUSH STICK
367	PLN03M	LOCK NUT M6-1
368	PCAP02M	CAP SCREW M6-1 X 20
369	PSS39M	SET SCREW M10-1.5 X 50
370	PN02M	HEX NUT M10-1.5
373	P04510373	STUD-FT M12-1.75 X 720
374	PN09M	HEX NUT M12-1.75
375	PW06M	FLAT WASHER 12MM
376	P04510376	LOCATE BLOCK
377	P04510377	PLATE
378	PW05M	FLAT WASHER 4MM
379	PN04M	HEX NUT M47
380A	P04510380A	PLATE V2.03.08
381	P04510381	BLOCK
382	P04510382	ARBOR WRENCH 30MM
383	P04510383	ARBOR WRENCH 8 X 45 X 205
384	P04510384	CUSHION
385A	P04510385A	ACCESS PLATE V2.03.08
386	P04510386	SWITCH BOX
386-1	P04510386-1	STRAIN RELIEF
387	P04510387	PAD
388	PS06M	PHLP HD SCR M58 X 20
389	PS25M	PHLP HD SCR M47 X 35
390	P04510390	PLATE
391	P04510391	DOOR KNOB
392	PW03M	FLAT WASHER 6MM
393	PLW03M	LOCK WASHER 6MM
394	PCAP04M	CAP SCREW M6-1 X 10
395	PN04M	HEX NUT M47
396	PW05M	FLAT WASHER 4MM
397	P04510397	SAFETY SWITCH BRACKET
398	P04510398	DOOR SAFETY SWITCH
399	PS02M	PHLP HD SCR M47 X 12
399-1	PLW02M	LOCK WASHER 4MM



## Main Blade





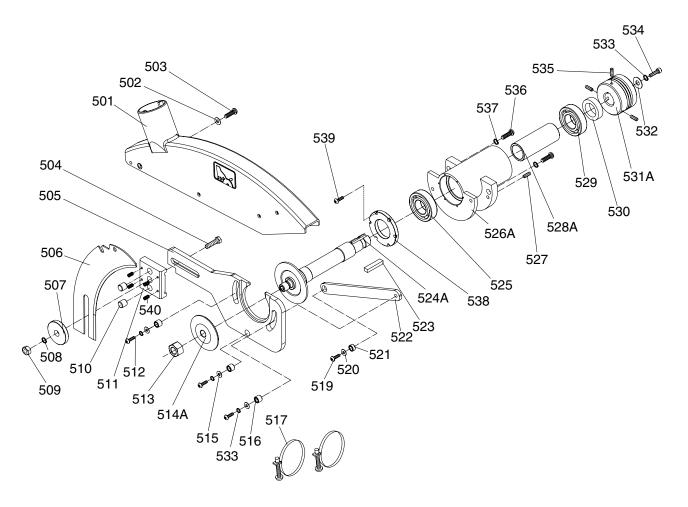
## **Main Blade Parts List**

REF	PART#	DESCRIPTION
401	PW04M	FLAT WASHER 10MM
402	PRP58M	ROLL PIN 6 X 45
403	PLW06M	LOCK WASHER 10MM
404	PCAP84M	CAP SCREW M10-1.5 X 35
405	P04510405	TRUNNION BRACKET LEFT
406	P04510406	LOCATE PLATE
407	PCAP26M	CAP SCREW M6-1 X 12
408	PW01M	FLAT WASHER 8MM
409	PLW03M	LOCK WASHER 6MM
410	PW03M	FLAT WASHER 6MM
411	PLW03M	LOCK WASHER 6MM
412	PCAP04M	CAP SCREW M6-1 X 10
413	P04510413	SAFETY SWITCH BRACKET
414	P04510414	DOOR SAFETY SWITCH
415	PS25M	PHLP HD SCR M47 X 35
417	PN04M	HEX NUT M47
418	PW05M	FLAT WASHER 4MM
419	P04510419	STRAIN RELIEF PG11
421	PCAP97M	CAP SCREW M58 X 6
422	PLW01M	LOCK WASHER 5MM
423	PW02M	FLAT WASHER 5MM
424	P04510424	HINGE
425	PN03M	HEX NUT M8-1.25
426	PLW04M	LOCK WASHER 8MM
427	P04510427	COVER
428	P04510428	LATCH BOLT
429	PCAP50M	CAP SCREW M58 X 10
430	P04510430	CATCH
431	PCAP50M	CAP SCREW M58 X 10

REF	PART #	DESCRIPTION
432	PLW01M	LOCK WASHER 5MM
433	PW02M	FLAT WASHER 5MM
434	P04510434	FIX BLOCK
435	PWF08M	FENDER WASHER 8MM
436	PLW04M	LOCK WASHER 8MM
437	PCAP31M	CAP SCREW M8-1.25 X 25
438	PW04M	FLAT WASHER 10MM
439	PLW06M	LOCK WASHER 10MM
440	PCAP84M	CAP SCREW M10-1.5 X 35
441	PCAP72M	CAP SCREW M10-1.5 X 30
442	P04510442	TRUNNION
443	PLW04M	LOCK WASHER 8MM
444	PN03M	HEX NUT M8-1.25
445	PB26M	HEX BOLT M8-1.25 X 30
446	PCAP14M	CAP SCREW M8-1.25 X 20
447	P04510447	LOCATE BLOCK
448	P04510448	TRUNNION BRACKET RIGHT
449	PRP58M	ROLL PIN 6 X 45
450	PCAP12M	CAP SCREW M8-1.25 X 40
451	PW01M	FLAT WASHER 8MM
452	PCAP07M	CAP SCREW M6-1 X 30
453	PLW03M	LOCK WASHER 6MM
454	PN03M	HEX NUT M8-1.25
455	P04510455	LOCATE BLOCK
456	PB28M	HEX BOLT M8-1.25 X 60
457	PSS06M	SET SCREW M8-1.25 X 16
458	PCAP33M	CAP SCREW M58 X 12
459	PSS75M	SET SCREW M10-1.5 X 16
460	P04510460	TRUNNION BASE



## **Main Blade Arbor**



REF	PART #	DESCRIPTION
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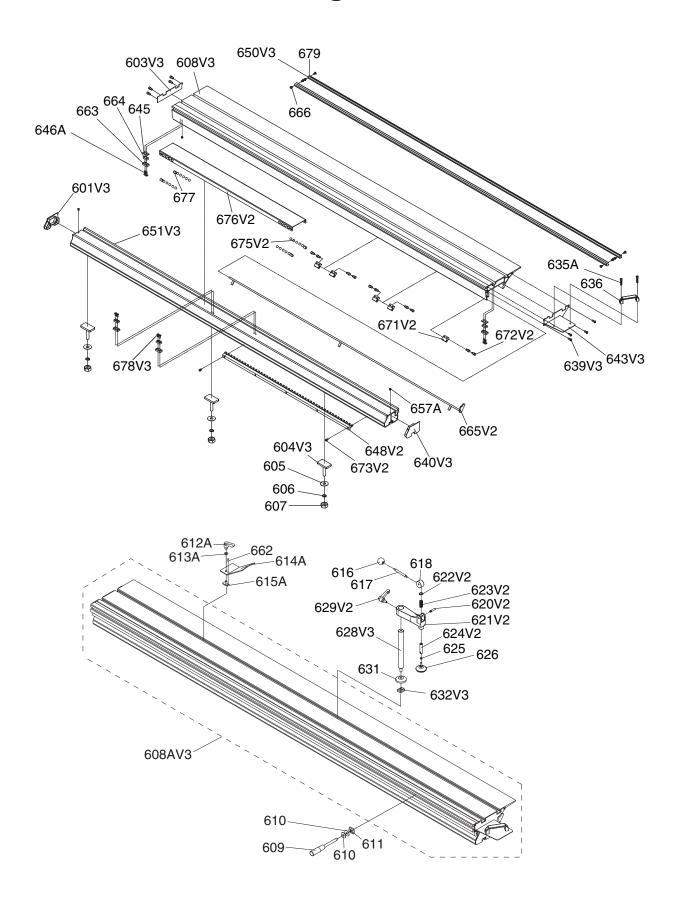
501	P04510501	BLADE GUARD
502	PWF08M	FENDER WASHER 8MM
503	PBHS07M	BUTTON HD CAP SCR M8-1.25 X 40
504	PB35M	HEX BOLT M12-1.75 X 40
505	P04510505	ARBOR BRACKET
506	P04510506	RIVING KNIFE
507	P04510507	RIVING KNIFE FLAT WASHER 12MM
508	PLW05M	LOCK WASHER 12MM
509	PN09M	HEX NUT M12-1.75
510	P04510510	LOCATING PIN
511	P04510511	FIX BLOCK
512	PBHS23M	BUTTON HD CAP SCR M8-1.25 X 25
513	PN21M	HEX NUT M16-2 LH
514A	P04510514A	ARBOR FLANGE V2.06.07
515	PWF08M	FENDER WASHER 8MM
516	P04510516	BUSHING
517	P04510517	HOSE CLAMP 2-1/2"
519	PBHS23M	BUTTON HD CAP SCR M8-1.25 X 25
520	PWF08M	FENDER WASHER 8MM
521	P04510521	BUSHING

#### REF PART # DESCRIPTION

522	P04510522	LINK PLATE
523	P4185072	KEY 8 X 7 X 35
524A	P04510524A	MAIN ARBOR 1" V2.06.07
525	P6206-2RS	BALL BEARING 6206 2RS
526A	P04510526A	MAIN HOUSING V2.06.07
527	PSS06M	SET SCREW M8-1.25 X 16
528A	P04510528A	BUSHING V2.06.07
529	P6206-2RS	BALL BEARING 6206 2RS
530	P04510530	LOCATE RING
531A	P04510531A	ARBOR PULLEY V2.06.07
532	PWF08M	FENDER WASHER 8MM
533	PLW04M	LOCK WASHER 8MM
534	PCAP31M	CAP SCREW M8-1.25 X 25
535	PSS11M	SET SCREW M6-1 X 16
536	PBHS08M	BUTTON HD CAP SCR M10-1.5 X 35
537	PLW06M	LOCK WASHER 10MM
538	P04510538	COVER
539	PCAP164M	CAP SCREW M35 X 12
540	P04510540	PLATE



## **Sliding Table**



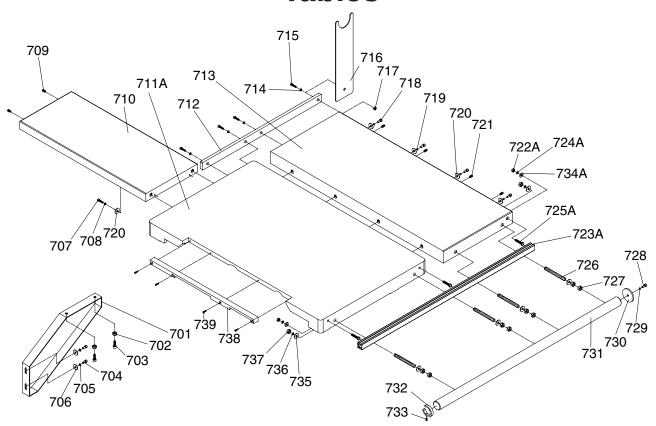
## **Sliding Table Parts List**

REF	PART#	DESCRIPTION
	ı	
601V3	P04510601V3	BASE END COVER V3.05.10
603V3	P04510603V3	TABLE END COVER V3.05.10
604V3	P04510604V3	T-BOLT M12-1.75 X 40 V3.05.10
605	PW06M	FLAT WASHER 12MM
606	PLW05M	LOCK WASHER 12MM
607	PN09M	HEX NUT M12-1.75
608AV3	P04510608AV3	SLIDING TABLE ASSY V3.05.10
608V3	P04510608V3	TOP BASE 2500MM V3.05.10
609	P04510609	HANDLE M12-1.75
610	PW06M	FLAT WASHER 12MM
611	P04510215	T-NUT M12-1.75
612A	P04510612A	LOCK HANDLE M10-1.5 X 20 V2.08.07
613A	PW04M	FLAT WASHER 10MM
614A	P04510614A	EDGE SHOE PLATE V2.08.07
615A	P04510615A	T-NUT M10-1.5 V2.08.07
616	P04510616	BALL KNOB M8-1.25
617	P04510617	HANDLE SHAFT
618	P04510618	CAM
620V2	P04510620V2	PIN V2.05.10
621V2	P04510621V2	ELBOW BLOCK V2.05.10
622V2	PR02M	EXT RETAINING RING 14MM
623V2	P04510623V2	COMPRESSION SPRING V2.05.10
624V2	P04510624V2	SHAFT V2.05.10
625	PN02	HEX NUT 5/16-18
626	P04510626	CLAMP FOOT
628V3	P04510628V3	SHAFT V3.05.10
629V2	P04510629V2	ADJUST HANDLE V2.05.10

REF	PART #	DESCRIPTION
631	P04510631	SHAFT WASHER
632V3	P04510632V3	T-NUT M12-1.75 V3.05.10
635A	PCAP58M	CAP SCREW M8-1.25 X 12
636	P04510636	HANDLE
639V3	PBHS09M	BUTTON HD CAP SCR M6-1 X 12
640V3	P04510640V3	RIGHT END PLATE V3.05.10
643V3	P04510643V3	BASE END COVER V3.05.10
645	P04510645	HORIZONTAL LOCATE PLATE
646A	PFH26M	FLAT HD SCR M6-1 X 30
648V2	P04510648V2	TEETH LOCATE PLATE V2.05.10
650V3	P04510650V3	STEEL RAIL V3.05.10
651V3	P04510651V3	BOTTOM BASE 2500MM V3.05.10
657A	PHTEK19M	TAP SCREW M5 X 16
662	PRP70M	ROLL PIN 5 X 18
663	P04510663	RUBBER BLOCK
664	P04510664	LOCATE BLOCK
665V2	P04510665V2	LOCATE ROD V2.05.10
666	PFH43M	FLAT HD SCR M6-1 X 10
671V2	P04510671V2	LOCATE BLOCK V2.05.10
672V2	PFH07M	FLAT HD SCR M58 X 10
673V2	PCAP115M	BUTTON HD CAP SCR M6-1 X 16
675V2	P04510675V2	STEEL BALL 16.6MM V2.05.10
676V2	P04510676V2	SLIDING BOTTOM V2.05.10
677	P04510677	COTTON PAD
678V3	PBHS05M	BUTTON HD CAP SCR M6-1 X 20
679	P04510679	ADHESIVE



## **Tables**



REF	PART #	DESCRIPTION
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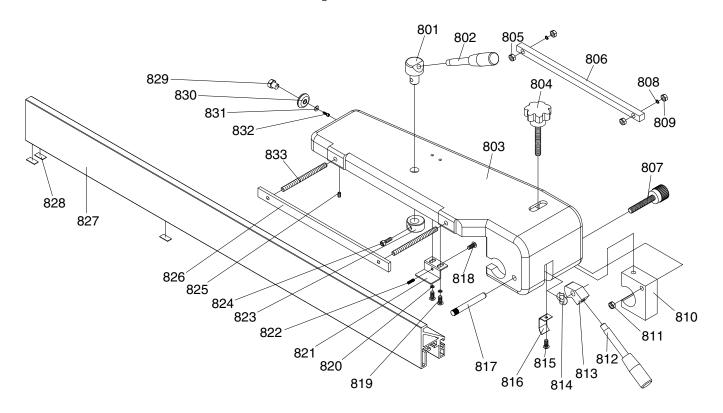
		<b>5200</b> 1111 11011
701	P04510701	SUPPORT BRACE
702	PN03M	HEX NUT M8-1.25
703	PCAP14M	CAP SCREW M8-1.25 X 20
704	PCAP14M	CAP SCREW M8-1.25 X 20
705	PLW04M	LOCK WASHER 8MM
706	PWF08M	FENDER WASHER 8MM
707	PB56M	CAP SCREW M10-1.5 X 20
708	PLW06M	LOCK WASHER 10MM
709	PSS04M	SET SCREW M6-1 X 12
710	P04510710	OUTFEED EXTENSION TABLE
711A	P04510711A	TABLE V2.09.05
712	P04510712	SUPPORT PLATE LEFT
713	P04510713	EXTENSION TABLE
714	PLW06M	LOCK WASHER 10MM
715	PCAP72M	CAP SCREW M10-1.5 X 30
716	P04510716	HOSE SUPPORT PLATE
717	PN02M	HEX NUT M10-1.5
718	PB56M	CAP SCREW M10-1.5 X 20
719	PLW06M	LOCK WASHER 10MM
720	PW04M	FLAT WASHER 10MM

#### REF PART # DESCRIPTION

721	PSS04M	SET SCREW M6-1 X 12
722A	PN01M	HEX NUT M6-1
723A	P04510723A	SCALE BAR V2.09.05
724A	PLW03M	LOCK WASHER 6MM
725A	PB10M	HEX BOLT M6-1 X 25
726	P04510726	STUD-FT M12-1.75 X 115
727	PN09M	HEX NUT M12-1.75
728	PCAP11M	CAP SCREW M8-1.25 X 16
729	PLW04M	LOCK WASHER 8MM
730	P04510730	END WASHER
731	P04510731	ROUND RAIL
732	P04510732	RING STOP
733	PSS01M	SET SCREW M6-1 X 10
734A	PW03M	FLAT WASHER 6MM
735	PW06M	FLAT WASHER 12MM
736	PLW05M	LOCK WASHER 12MM
737	PN09M	HEX NUT M12-1.75
738	P04510738	TABLE INSERT
739	PCAP38M	CAP SCREW M58 X 25



## **Rip Fence**



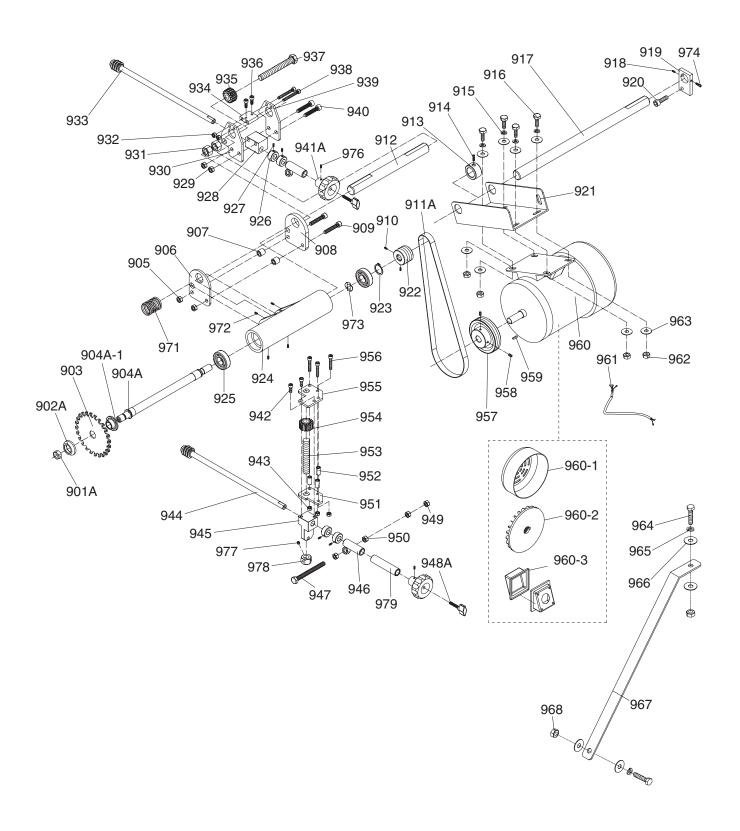
REF	PART #	DESCRIPTION

801	P04510801	ROTATE SHAFT
802	P04510802	HANDLE M10-1.5 X 12
803	P04510803	RIP FENCE HOUSING
804	P04510804	KNOB M10-1.5 X 70
805	PN03M	HEX NUT M8-1.25
806	P04510806	LOCATE PLATE
807	P04510807	MICRO ADJUSTING KNOB
808	PLW04M	LOCK WASHER 8MM
809	PN03M	HEX NUT M8-1.25
810	P04510810	LOCATE BLOCK
811	PLN05M	LOCK NUT M10-1.5
812	P04510802	HANDLE M10-1.5 X 12
813	P04510813	CAM
814	P04510814	WAVE WASHER 10 X 15
815	PFS12M	FLANGE SCREW M58 X 12
816	P04510816	SPRING PIECE
817	P04510817	PIN

#### REF PART # DESCRIPTION

PCAP115M	BUTTON HD CAP SCR M6-1 X 16
PBHS09M	BUTTON HD CAP SCR M6-1 X 12
PW03M	FLAT WASHER 6MM
P04510821	PLATE
P04510822	COMPRESSION SPRING
P04510823	CAM
PCAP11M	CAP SCREW M8-1.25 X 16
PSS05M	SET SCREW M58 X 10
P04510826	CLAMP PLATE
P04510827	FENCE PLATE
P04510828	BEARING PAD
P04510829	ECCENTRIC SHAFT
P04510830	PLASTIC ROLLER
PW03M	FLAT WASHER 6MM
PCAP01M	CAP SCREW M6-1 X 16
P04510833	STUD-FT M8-1.25 X 110
	PBHS09M PW03M P04510821 P04510822 P04510823 PCAP11M PSS05M P04510826 P04510827 P04510828 P04510829 P04510830 PW03M PCAP01M

## **Scoring Motor**



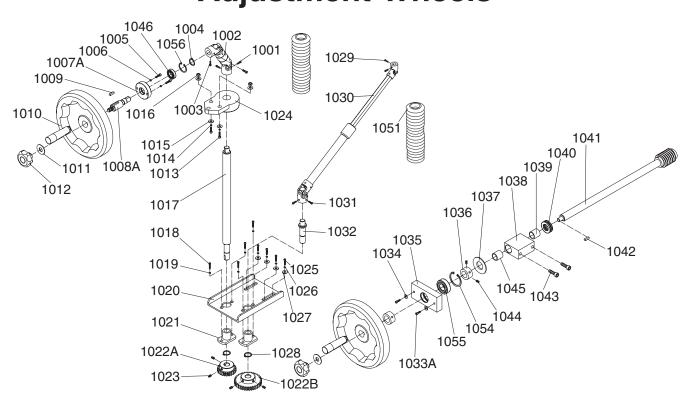
## **Scoring Motor Parts List**

REF	PART#	DESCRIPTION
901A	PN13M	HEX NUT M16-2
902A	P04510902A	OUTER SCORING FLANGE V2.08.07
903	P04510903	SCORING BLADE 22MM
904A	P04510904A	SCORING ARBOR 22MM V2.08.07
904A-1	P04510904A-1	INNER SCORING FLANGE
905	PLN04M	LOCK NUT M8-1.25
906	P04510906	FIX PLATE
907	P04510907	BUSHING
908	P04510908	FIX PLATE
909	PCAP12M	CAP SCREW M8-1.25 X 40
910	PSS01M	SET SCREW M6-1 X 10
911A	P04510911A	FLAT BELT 15 X 800 V2.08.07
912	P04510912	SHAFT
913	P04510913	COLLAR
914	PCAP04M	CAP SCREW M6-1 X 10
915	PLW04M	LOCK WASHER 8MM
916	PB07M	HEX BOLT M8-1.25 X 25
917	P04510917	SHAFT
918	PSS01M	SET SCREW M6-1 X 10
919	P04510919	LOCATE PLATE
920	PCAP130M	CAP SCREW M10-1.5 X 16
921	P04510921	MOTOR PLATE
922	P04510922	SCORING ARBOR PULLEY
923	PR09M	EXT RETAINING RING 20MM
924	P04510924	SCORING HOUSING
925	P6204ZZ	BALL BEARING 6204ZZ
926	P04510926	COLLAR
927	PSS02M	SET SCREW M6-1 X 6
928	P04510928	FIX BLOCK
929	PLN04M	LOCK NUT M8-1.25
930	P04510930	FIX PLATE
931	PN32M	HEX NUT M14-2
932	PLN03M	LOCK NUT M6-1
933	P04510933	ADJUST SHAFT
934	P04510934	FIX BLOCK
935	P04510935	GEAR 15T
936	PCAP01M	CAP SCREW M6-1 X 16
937	PB100M	HEX BOLT M14-2 X 100
938	PCAP37M	CAP SCREW M6-1 X 50
939	P04510939	FIX PLATE

REF	PART #	DESCRIPTION
940	PCAP60M	CAP SCREW M8-1.25 X 55
941A	P04510941A	ADJUST KNOB V2.08.07
942	PCAP01M	CAP SCREW M6-1 X 16
943	PLN03M	LOCK NUT M6-1
944	P04510944	ADJUST SHAFT
945	P04510945	FIX BRACKET
946	P04510946	SLEEVE
947	PB45M	HEX BOLT M8-1.25 X 100
948A	P04510948A	KNOB M6-1 X 40 V2.08.07
949	PLN04M	LOCK NUT M8-1.25
950	PN03M	HEX NUT M8-1.25
951	P04510951	FIX PLATE
952	P04510952	BUSHING
953	P04510953	LEADSCREW 5/8-16 X 4"
954	P04510935	GEAR 15T
955	P04510955	FIX PLATE
956	PCAP29M	CAP SCREW M6-1 X 40
957	P04510957	MOTOR PULLEY
958	PSS01M	SET SCREW M6-1 X 10
959	PK23M	KEY 5 X 5 X 25
960	P04510960	SCORING MOTOR 1HP 220/440V 3PH
960-1	P04510960-1	FAN COVER
960-2	P04510960-2	MOTOR FAN
960-3	P04510960-3	MOTOR WIRING BOX
961	P04510961	SCORING MOTOR CORD
962	PN03M	HEX NUT M8-1.25
963	PWF08M	FENDER WASHER 8MM
964	PB01M	HEX BOLT M10-1.5 X 30
965	PLW06M	LOCK WASHER 10MM
966	PW04M	FLAT WASHER 10MM
967	P04510967	FIX PLATE
968	PN02M	HEX NUT M10-1.5
971	P04510971	COMPRESSION SPRING
972	PSS04M	SET SCREW M6-1 X 12
973	P04510973	WAVY WASHER 34 X 47
974	PCAP04M	CAP SCREW M6-1 X 10
976	PSS05M	SET SCREW M58 X 10
977	PSS02M	SET SCREW M6-1 X 6
978	P04510978	LOCK COLLAR
979	P04510979	LONG SLEEVE



## **Adjustment Wheels**



REF PART # DESC	RIPTION
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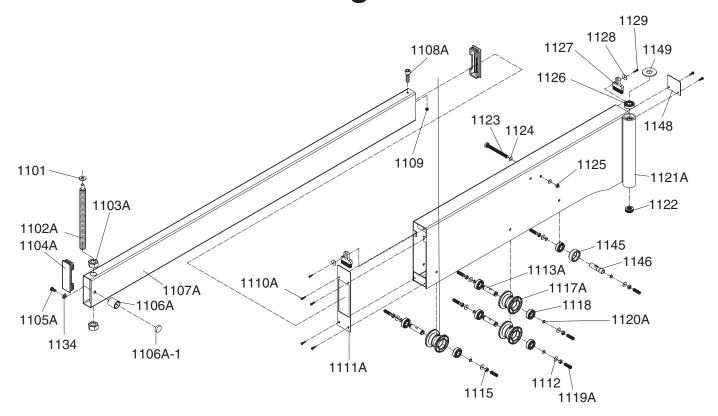
1001	PCAP26M	CAP SCREW M6-1 X 12
1002	P04511002	UNIVERSAL JOINT
1003	PCAP04M	CAP SCREW M6-1 X 10
1004	PR05M	EXT RETAINING RING 15MM
1005	PCAP11M	CAP SCREW M8-1.25 X 16
1006	PLW04M	LOCK WASHER 8MM
1007A	P04511007A	LOCATE RING V2.04.06
1008A	P04511008A	HANDWHEEL SHAFT V2.03.07
1009	PK25M	KEY 7 X 7 X 20
1010	P04511010	HANDWHEEL 8"
1011	PW04M	FLAT WASHER 10MM
1012	P04511012	KNOB M10-1.5
1013	PCAP40M	CAP SCREW M8-1.25 X 35
1014	PLW04M	LOCK WASHER 8MM
1015	PWF08M	FENDER WASHER 8MM
1016	PLN04M	LOCK NUT M8-1.25
1017	P04511017	LONG SHAFT
1018	PCAP58M	CAP SCREW M8-1.25 X 12
1019	PLW04M	LOCK WASHER 8MM
1020	P04511020	LOCATE PLATE
1021	P04511021	BEARING SET
1022A	P04511022A	GEAR 24T V2.07.05
1022B	P04511022B	GEAR 36T V2.07.05
1023	PSS01M	SET SCREW M6-1 X 10
1024	P04511024	UNIVERSAL JOINT BRACKET
1025	PCAP14M	CAP SCREW M8-1.25 X 20

#### REF PART # DESCRIPTION

1026	PLW04M	LOCK WASHER 8MM
1027	PWF08M	FENDER WASHER 8MM
1028	PR05M	EXT RETAINING RING 15MM
1029	PCAP50M	CAP SCREW M58 X 10
1030	P04511030	CONNECTING ROD ASSEMBLY
1031	PCAP04M	CAP SCREW M6-1 X 10
1032	P04511032	SHAFT
1034	PW03M	FLAT WASHER 6MM
1033A	PCAP02M	CAP SCREW M6-1 X 20
1035	P04511035	SUPPORT PLATE
1036	P04511036	LOCK COLLAR
1037	P04511037	THRUST BEARING LFW-2015
1038	P04511038	LOCATE BLOCK
1039	P04511039	BUSHING
1040	P51104	THRUST BEARING 51104
1041	P04511041	WORM SHAFT
1042	PK25M	KEY 7 X 7 X 20
1043	PCAP84M	CAP SCREW M10-1.5 X 35
1044	PSS01M	SET SCREW M6-1 X 10
1045	P04511045	BUSHING
1046	P6902ZZ	BALL BEARING 6902 ZZ
1051	P04511051	EXPANSION JOINT
1054	PR24M	INT RETAINING RING 42MM
1055	P6004ZZ	BALL BEARING 6004 ZZ
1056	PR20M	INT RETAINING RING 28MM



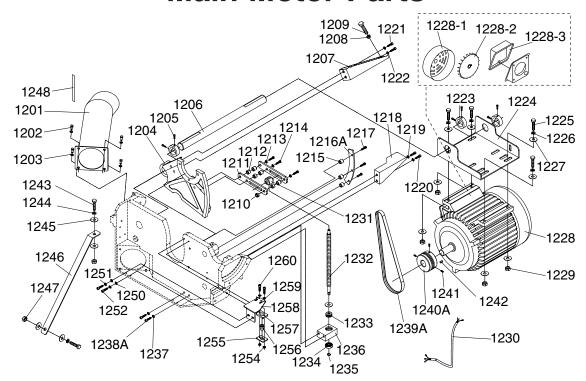
## **Swing Arm**



REF	PART#	DESCRIPTION
1101	P04511101	NYLON WASHER M10 X 25
1102A	P04511102A	SUPPORT SHAFT V2.01.08
1103A	PN28M	HEX NUT M20-2.5
1104A	P04511104A	PLUG 40 X 120 V2.06.07
1105A	PBHS03M	BUTTON HD CAP SCR M8-1.25 X 16
1106A	P04511106A	MAGNETIC BRACKET V2.04.07
1106A-1	P04511106A-1	MAGNET V2.06.07
1107A	P04511107A	SLIDING TUBE V2.06.07
1108A	PCAP11M	CAP SCREW M8-1.25 X 16
1109	PN03M	HEX NUT M8-1.25
1110A	PFS04M	FLANGE SCREW M47 X 6
1111A	P04511111A	COVER V2.06.07
1112	PW01M	FLAT WASHER 8MM
1113A	P04511113A	SHAFT V2.06.06
1115	PN03M	HEX NUT M8-1.25
1117A	P04511117A	ROLLER V2.11.06
1118	P6202ZZ	BALL BEARING 6202ZZ

REF	PART #	DESCRIPTION
1119A	PSS21M	SET SCREW M8-1.25 X 25
1120A	PR05M	EXT RETAINING RING 15MM
1121A	P04511121A	SWING ARM V2.10.06
1122	P51102	THRUST BEARING 51102
1123	PB82M	HEX BOLT M8-1.25 X 80
1124	PW01M	FLAT WASHER 8MM
1125	PLN04M	LOCK NUT M8-1.25
1126	P6202ZZ	BALL BEARING 6202ZZ
1127	P04511127	BRUSH
1128	PW03M	FLAT WASHER 6MM
1129	PCAP02M	CAP SCREW M6-1 X 20
1134	PLW04M	LOCK WASHER 8MM
1145	P04511145	RING
1146	P04511146	SHAFT
1148	P04511148	PLATE
1149	PW08M	FLAT WASHER 16MM

## **Main Motor Parts**



REF		DESCRIPTION
1201	P04511201	DUST PORT

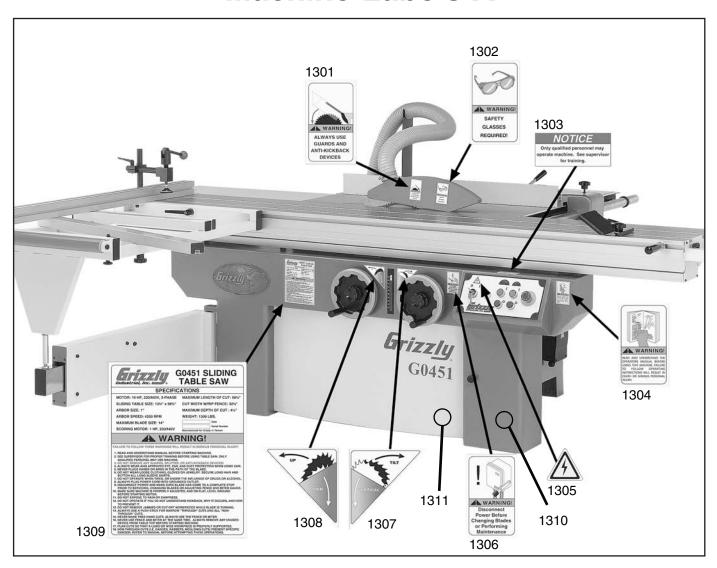
1001	D0.4544.004	DUOT DODT
_	P04511201	DUST PORT
1202	PCAP52M	CAP SCREW M8-1.25 X 10
1203	PLW04M	LOCK WASHER 8MM
1204	P04511204	ROTATE PLATE
1205	PSS01M	SET SCREW M6-1 X 10
1206	P04511206	SHAFT
1207	P04511207	LOCATE PLATE
1208	PN09M	HEX NUT M12-1.75
1209	PB33M	HEX BOLT M12-1.75 X 50
1210	PN02M	HEX NUT M10-1.5
1211	P04511211	SUPPORT PLATE
1212	P04511212	SPACER
1213	PLW06M	LOCK WASHER 10MM
1214	PCAP134M	CAP SCREW M10-1.5 X 65
1215	P04511215	SPACER
1216A	P04511216A	GIB PLATE V2.10.05
1217	PBHS10M	BUTTON HD CAP SCR M10-1.5 X 25
1218	P04511218	LOCATE PLATE
1219	PLW04M	LOCK WASHER 8MM
1220	PCAP11M	CAP SCREW M8-1.25 X 16
1221	PCAP130M	CAP SCREW M10-1.5 X 16
1222	PLW06M	LOCK WASHER 10MM
1223	P04511223	LOCK COLLAR
1224	P04511224	MAIN MOTOR PLATE
1225	PB31M	HEX BOLT M10-1.5 X 40
1226	PLW06M	LOCK WASHER 10MM
1227	PW04M	FLAT WASHER 10MM
1228	P04511228	MAIN MOTOR 10HP 220/440V 3PH
1228-1	P04511228-1	FAN COVER
1228-2	P04511228-2	MOTOR FAN
1228-3	P04511228-3	MOTOR WIRING BOX

#### REF PART # DESCRIPTION

1229	PN02M	HEX NUT M10-1.5
1230	P04511230	MAIN MOTOR CORD
1231	P04511231	LOCK COLLAR
1232	P04511232	ELEVATION SCREW M16-2 X 335
1233	P51200	THRUST BEARING 51200
1234	P6200ZZ	BALL BEARING 6200ZZ
1235	PR01M	EXT RETAINING RING 10MM
1236	P04511236	FIX BLOCK
1237	PLW06M	LOCK WASHER 10MM
1238A	PCAP84M	CAP SCREW M10-1.5 X 35
1239A	P04511239A	BELT 3R-5MS-670 V2.06.07
1240A	P04511240A	MAIN MOTOR PULLEY V2.06.07
1241	PSS01M	SET SCREW M6-1 X 10
1242	PK118M	KEY 8 X 7 X 50
1243	PB01M	HEX BOLT M10-1.5 X 30
1244	PLW06M	LOCK WASHER 10MM
1245	PW04M	FLAT WASHER 10MM
1246	P04511246	FIX PLATE
1247	PN02M	HEX NUT M10-1.5
1248	P04511248	SPONGE
1250	PW03M	FLAT WASHER 6MM
1251	PLW03M	LOCK WASHER 6MM
1252	PCAP02M	CAP SCREW M6-1 X 20
1254	PLN02M	LOCK NUT M58
1255	P04511255	FIX PLATE
1256	P04511256	BUSHING
1257	P04511257	PLATE
1258	P04511258	FIX PLATE
1259	PW02M	FLAT WASHER 5MM
1260	PCAP38M	CAP SCREW M58 X 25



## **Machine Labels A**



REF	PART #	DESCRIPTION

1301	PLABEL-40	BLADE GUARD LABEL
1302	PLABEL-11A	SAFETY GLASSES LABEL VL
1303	P04511303	QUALIFIED PERSONNEL LABEL
1304	PLABEL-12A	READ MANUAL LABEL VL
1305	PLABEL-14A	ELECTRICITY LABEL
1306	PLABEL-53	DISCONNECT LABEL VL

REF	PART #	DESCRIPTION

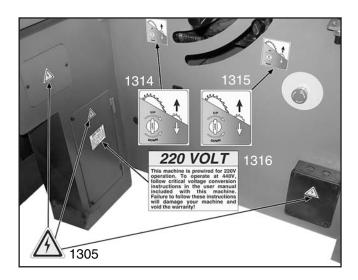
1307	P04511307	TILT DIRECTION LABEL
1308	P04511308	ELEVATION DIRECTION LABEL
1309	P04511309	MACHINE ID LABEL
1310	PPAINT-1	GRIZZLY GREEN TOUCH-UP PAINT
1311	PPAINT-11	GRIZZLY PUTTY TOUCH-UP PAINT

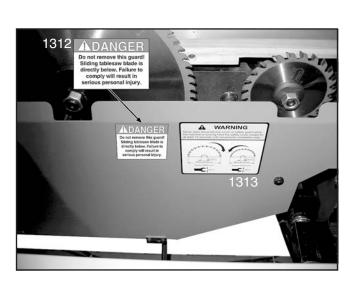
## **AWARNING**

Safety labels help reduce the risk of serious injury caused by machine hazards. If any label comes off or becomes unreadable, the owner of this machine MUST replace it in the original location before resuming operations. For replacements, contact (800) 523-4777 or www.grizzly.com.



## **Machine Labels B**







1312	P04511312	DO NOT REMOVE GUARD LABEL
1313	P04511313	BLADE ROTATION DIRECTION LABEL
1314	P04511314	SCORING BLADE ELEVATION LABEL
1315	P04511315	SCORING BLADE ALIGNMENT LABEL

1316	P04511316	220V LABEL
1317	P04511317	FENCE LOCK DIRECTION
1318	P04511318	KICKBACK WARING LABEL



# CUT ALONG DOTTED LINE

### Grizzia WARRANTY CARD

Cit	,	_ State	<i>7</i> in
		_ Email	
		Order #	
		n a voluntary basis. It will be used for I urse, all information is strictly confi	
1.	How did you learn about us' Advertisement Card Deck	•	Catalog Other:
		<del></del>	Other.
2.	Which of the following maga	zines do you subscribe to?	
	Cabinetmaker & FDM Family Handyman Hand Loader Handy Home Shop Machinist Journal of Light Cont. Live Steam Model Airplane News Old House Journal Popular Mechanics	Popular Science Popular Woodworking Precision Shooter Projects in Metal RC Modeler Rifle Shop Notes Shotgun News Today's Homeowner Wood	<ul> <li>Wooden Boat</li> <li>Woodshop News</li> <li>Woodsmith</li> <li>Woodwork</li> <li>Woodworker West</li> <li>Woodworker's Journal</li> <li>Other:</li> </ul>
3.	What is your annual househ \$20,000-\$29,000 \$50,000-\$59,000	old income? \$30,000-\$39,000 \$60,000-\$69,000	\$40,000-\$49,000 \$70,000+
4.	What is your age group? 20-29 50-59	30-39 60-69	40-49 70+
5.		voodworker/metalworker? 2-8 Years8-20 Ye	ears20+ Years
6.	How many of your machines	or tools are Grizzly? 3-5 6-9	10+
7.	Do you think your machine r	epresents a good value?	YesNo
8.	Would you recommend Griz	zly Industrial to a friend?	No
9.	Would you allow us to use y <b>Note:</b> We never use names	our name as a reference for Grizzly more than 3 times.	y customers in your area? _YesNo
10.	Comments:		
		<del></del>	

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GRIZZLY INDUSTRIAL, INC. P.O. BOX 2069 BELLINGHAM, WA 98227-2069

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## **WARRANTY & RETURNS**

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly'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 or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly 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.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.



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