

Grizzly **Industrial, Inc.**®

MODEL G0452 Series 6" x 46" MOBILE JOINTER

OWNER'S MANUAL

(Models G0452, G0452P, G0452Z)

(For models manufactured since 08/12)



COPYRIGHT © JUNE, 2005 BY GRIZZLY INDUSTRIAL, INC. REVISED DECEMBER, 2017 (HE)

**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE
OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.**

#PC7250 PRINTED IN CHINA



WARNING!

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

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

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

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



WARNING!

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

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

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

Table of Contents

INTRODUCTION	2	SECTION 4: OPERATIONS	29
Machine Description	2	Operation Overview	29
Contact Info.....	2	Infeed Table Adjustment.....	30
Manual Accuracy	2	Stock Inspection and Requirements	31
Identification.....	3	Squaring Stock.....	32
Machine Data Sheet	4	Surface Planing.....	32
SECTION 1: SAFETY	7	Edge Jointing	33
Safety Instructions for Machinery	7	Bevel Cutting.....	34
SECTION 2: POWER SUPPLY	10	Rabbit Cutting.....	35
Availability	10	SECTION 5: ACCESSORIES	37
Full-Load Current Rating	10	SECTION 6: MAINTENANCE	41
Circuit Information.....	10	Schedule	41
Grounding Requirements.....	10	V-Belt	41
Circuit Requirements for G0452/P.....	11	Cleaning.....	41
G0452Z Circuit Requirements for 120V	11	Unpainted Cast Iron.....	41
G0452Z Circuit Requirements for 240V	12	Lubrication	41
Voltage Conversion (G0452Z Only).....	12	SECTION 7: SERVICE	42
Extension Cords.....	13	Troubleshooting	42
SECTION 3: SETUP	14	Motor & Machine Operation.....	42
Unpacking	14	Table	43
Needed for Setup.....	14	Cutting.....	43
Inventory	15	About Service.....	44
Cleanup.....	16	Inspecting Knives.....	44
Site Considerations.....	17	G0452/G0452P Setting Knives.....	44
Locking Foot Pedal.....	18	G0452Z Replacing Carbide Inserts	46
Mounting Joints	19	Calibrating Depth Scale	47
V-Belt	20	Setting Fence Stops	48
Carriage Mounting Bracket	21	Adjusting Gibs.....	49
Fence Carriage Assembly	22	SECTION 8: WIRING	50
Fence Assembly	22	Wiring Safety Instructions	50
Cutterhead Guard	23	Wiring Diagram	51
Dust Port.....	24	Electrical Components.....	51
Dust Collection.....	24	Motor Junction Box	51
Power Switch	25	Switch	51
Handwheels	25	SECTION 9: PARTS	53
Infeed Table Lever.....	26	Table	53
Setting Outfeed Table Height	26	G0452 Fence	55
For Models G0452/G0452P	26	G0452 Base	56
For Model G0452Z.....	27	WARRANTY AND RETURNS	61
Test Run	28		
Recommended Adjustments.....	28		

INTRODUCTION

Machine Description

We are proud to offer the Grizzly Jointer G0452, G0452P and G0452Z Models. The G0452P Model offers the same outstanding quality as the G0452 only produced in Polar Bear white. The Model G0452Z features a 1.5 H.P. motor and spiral cutterhead, whereas the G0452 and G0452P Models feature a 1 H.P. with a 3 knife cutterhead.

When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

A number of accessories for jointer Models G0452/G0452P/G0452Z are available through the Grizzly catalog.

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


Manual Accuracy

We are proud to provide a high-quality owner's manual with your new machine!

We made every effort to be exact with the instructions, specifications, drawings, and photographs in this manual. Sometimes we make mistakes, but our policy of continuous improvement also means that **sometimes the machine you receive is slightly different than shown in the manual.**

If you find this to be the case, and the difference between the manual and machine leaves you confused or unsure about something, check our website for an updated version. We post current manuals and manual updates for free on our website at www.grizzly.com.

Alternatively, you can call our Technical Support for help. Before calling, make sure you write down the **Manufacture Date** and **Serial Number** from the machine ID label (see below). This information is required for us to provide proper tech support, and it helps us determine if updated documentation is available for your machine.

		MODEL GXXXX	
		MACHINE NAME	
SPECIFICATIONS		▲ WARNING!	
Motor:		To reduce risk of serious injury when using this machine:	
Specification:		Read manual before operation.	
Specification:		Wear safety glasses and respirator.	
Specification:		Ensure machine is properly adjusted/setup and	
Specification:		power is connected to grounded circuit before starting.	
Weight:		4. Make sure the motor has stopped and disconnect	
		power before adjustments, maintenance, or service.	
		5. DO NOT expose to rain or dampness.	
		6. DO NOT modify this machine in any way.	
		7.	
		8.	
		9. Do not use while intoxicated or tired.	
		10. Maintain machine carefully to prevent accidents.	

Manufactured for Grizzly in Taiwan

Manufacture Date:

Serial Number:



Identification





MACHINE DATA SHEET

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

MODEL G0452, G0452P, G0452Z 6" x 46" Jointer

Model Number	G0452	G0452P	G0452Z
Product Dimensions			
Weight	257 lbs.		
Width (side-to-side)/Depth (front-to-back)/Height	46" x 27-½" x 49"		
Foot Print (Width/Depth)	18" x 13-½"		
Shipping Dimensions Box 1			
Type	Cardboard		
Weight	174 lbs.		
Width (side-to-side)/Depth (front-to-back)/Height	49" x 21" x 15"		
Shipping Dimensions Box 2			
Type	Cardboard		
Weight	94		
Width (side-to-side)/Depth (front-to-back)/Height	21" x 16" x 29"		
Electrical			
Power Requirement	120V, Single-Phase, 60 Hz	120V/240V, Single-Phase, 60 Hz	
Full-Load Current Rating	13A	15A at 120V/7.5A at 240V	
Switch	Push Button with Oversized OFF Button		
Switch Voltage	120V	120V/240V	
Cord Length	6 ft		
Cord Gauge	14 AWG		
Recommended Circuit Size at 120V	15A		
Recommended Circuit Size at 240V	N/A	15A	
Plug Included	Yes		
Included Plug Type for 120V	NEMA 5-15 for 120V		
Recommended Plug Type for Rewired 240V Operation (not included)	N/A	NEMA 6-15 for 240V	



Model Number	G0452	G0452P	G0452Z
Main Motor			
Type	TEFC Capacitor Start Induction		
Horsepower	1 HP		1½ HP
Voltage	120V		120V/240V
Phase	Single		
Amps	13A at 120V		15A/7.5A
Speed	3450 RPM		
Cycle	60 Hz		
Power Transfer	V-Belt Drive		
Bearings	Sealed and Lubricated Ball Bearings		
Main Specifications:			
Cutting Capacities			
Bevel Jointing	Left and Right 45 deg.		
Maximum Width of Cut	6 in.		
Maximum Depth of Cut	⅛ in.		
Minimum Workpiece Length	8 in.		
Minimum Workpiece Thickness	½ in.		
Maximum Rabbeting Depth	½ in.		
Number of Cuts Per Minute	14,400		19,200
Fence Information			
Fence Length	35 in.		
Fence Width	1½ in.		
Fence Height	5 in.		
Fence Stop	45, 90, and 135 deg.		
Cutterhead Information			
Cutterhead Type	3 Knife		Spiral
Cutterhead Diameter	2½ in.		
Cutterhead Speed	4800 RPM		
Knife Information for G0452/G0452P			
Number of Knives	3		N/A
Knife Type	HSS, Single-Sided		N/A
Knife Length	6 in.		N/A
Knife Width	⅝ in.		N/A
Knife Thickness	⅛ in.		N/A
Knife Adjustment	Jack Screws		N/A
Cutter Insert Information for G0452Z			
Cutter Insert Type	N/A		Indexible Carbide
Cutter Insert length	N/A		14mm
Cutter Insert Width	N/A		14mm
Cutter Insert Thickness	N/A		2mm



Model Number	G0452	G0452P	G0452Z
Table Information			
Table Length	46 in.		
Table Width	7½ in.		
Table Thickness	1 in.		
Floor to Table Height	32½ in.		
Table Adjustment Type	Handwheel/Lever		
Table Movement Type	Dovetailed Ways		
Construction			
Body Assembly	Cast Iron		
Cabinet	Pre-Steel Cabinet		
Fence Assembly	Cast Iron		
Guard	Die Cast Metal		
Table	Precision Ground Cast Iron		
Paint	Powder Coated		
Other Information			
Number of Dust Ports	1		
Dust Port Size	4 in.		
Other Specifications			
Country of Origin	China		
Warranty	1 Year		
Serial Number Location	ID Label		
Customer Assembly & Setup Time	1 Hour		
CSA Certified	Yes		




SECTION 1: SAFETY

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. Always use common sense and good judgment.

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

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

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

Safety Instructions for Machinery

WARNING

OWNER'S MANUAL. Read and understand this owner's manual **BEFORE** using machine.

TRAINED OPERATORS ONLY. Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make your workshop kid proof!

DANGEROUS ENVIRONMENTS. Do not use machinery in areas that are wet, cluttered, or have poor lighting. Operating machinery in these areas greatly increases the risk of accidents and injury.

MENTAL ALERTNESS REQUIRED. Full mental alertness is required for safe operation of machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

ELECTRICAL EQUIPMENT INJURY RISKS. You can be shocked, burned, or killed by touching live electrical components or improperly grounded machinery. To reduce this risk, only allow qualified service personnel to do electrical installation or repair work, and always disconnect power before accessing or exposing electrical equipment.

DISCONNECT POWER FIRST. Always disconnect machine from power supply **BEFORE** making adjustments, changing tooling, or servicing machine. This prevents an injury risk from unintended startup or contact with live electrical components.

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.



WARNING

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 reduce risk of slipping and losing control or accidentally contacting cutting tool or moving parts.

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

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

REMOVE ADJUSTING TOOLS. Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!

USE CORRECT TOOL FOR THE JOB. Only use this tool for its intended purpose—do not force it or an attachment to do a job for which it was not designed. Never make unapproved modifications—modifying tool or using it differently than intended may result in malfunction or mechanical failure that can lead to personal injury or death!

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.

CHILDREN & BYSTANDERS. Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.

GUARDS & COVERS. Guards and covers reduce accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly **BEFORE** operating machine.

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

NEVER STAND ON MACHINE. Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.

STABLE MACHINE. Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.

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

UNATTENDED OPERATION. To reduce the risk of accidental injury, turn machine **OFF** and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

DAMAGED PARTS. Regularly inspect machine for damaged, loose, or mis-adjusted parts—or any condition that could affect safe operation. Immediately repair/replace **BEFORE** operating machine. For your own safety, **DO NOT** operate machine with damaged parts!

MAINTAIN POWER CORDS. When disconnecting cord-connected machines from power, grab and pull the plug—**NOT** the cord. Pulling the cord may damage the wires inside. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

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



WARNING

Additional Safety for Jointers

JOINTER INJURY RISKS. Familiarize yourself with the main injury risks associated with jointers—always use common sense and good judgment to reduce your risk of injury. **Main injury risks from jointers:** amputation/lacerations from contact with the moving cutterhead, entanglement/crushing injuries from getting caught in moving parts, blindness or eye injury from flying wood chips, or impact injuries from workpiece kickback.

KICKBACK. Know how to reduce the risk of kickback and kickback-related injuries. “Kickback” occurs during the operation when the workpiece is ejected from the machine at a high rate of speed. Kickback is commonly caused by poor workpiece selection, unsafe feeding techniques, or improper machine setup/maintenance. Kickback injuries typically occur as follows: (1) operator/bystanders are struck by the workpiece, resulting in impact injuries (i.e., blindness, broken bones, bruises, death); (2) operator’s hands are pulled into blade, resulting in amputation or severe lacerations.

GUARD REMOVAL. Except when rabbeting, never remove guards during operation or while connected to power. Always replace guard after rabbeting. You could be seriously injured if you accidentally touch the spinning cutterhead or get entangled in moving parts. Before removing sawdust, turn jointer **OFF** and disconnect power before clearing. Immediately replace guards.

DULL/DAMAGED KNIVES/INSERTS. Only use sharp, undamaged knives/inserts. Dull, damaged or rusted knives/inserts increase risk of kickback.

OUTFEED TABLE ALIGNMENT. To reduce the risk of kickback and personal injuries, keep the outfeed table even with the knives/inserts at top dead center (the highest point during rotation). If the outfeed table is set too low, the workpiece may rock against the cutterhead. If the table is set too high, the workpiece may hit the outfeed table and get stuck over the cutterhead.

INSPECTING STOCK. To reduce the risk of kickback injuries or machine damage, thoroughly inspect and prepare the workpiece before cutting. Verify the workpiece is free of nails, staples, loose knots or other foreign material. Workpieces with minor warping should be surface planed first with the cupped side facing the infeed table.

GRAIN DIRECTION. Jointing against the grain or end grain increases the required cutting force, which could produce chatter or excessive chip out, and lead to kickback.

CUTTING LIMITATIONS. To reduce the risk of accidental cutterhead contact or kickback, never perform jointing, planing, or rabbeting cuts on pieces smaller than 8" long, $\frac{3}{4}$ " wide, or $\frac{1}{4}$ " thick.

MAXIMUM CUTTING DEPTH. To reduce the risk of kickback, never cut deeper than $\frac{1}{8}$ " per pass.

PUSH BLOCKS. To reduce the risk of accidental cutterhead contact, always use push blocks when planing materials less than 3" high or wide. Never pass your hands directly over the cutterhead without a push block.

WORKPIECE SUPPORT. To reduce accidental cutterhead contact and kickback, support workpiece continuously during operation. Position and guide workpiece with fence; support long or wide stock with auxiliary stands.

FEED WORKPIECE PROPERLY. To reduce the risk of kickback, never start jointer with workpiece touching cutterhead. Allow cutterhead to reach full speed before feeding. Never back work toward the infeed table.

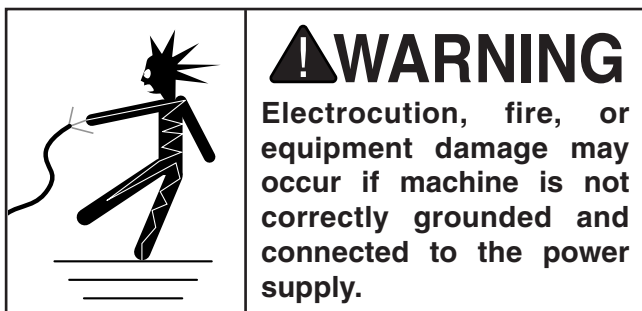
SECURE KNIVES/INSERTS. Loose knives or improperly set inserts can become dangerous projectiles or cause machine damage. Always verify knives/inserts are secure and properly adjusted before operation. Straight knives should never project more than $\frac{1}{8}$ " (0.125") from cutterhead body.



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 an electrician or qualified service personnel in accordance with all applicable codes and standards.



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.

G0452/P Current Rating at 120V 13 Amps

G0452Z Current Rating at 120V 15 Amps

G0452Z Current Rating at 240V 7.5 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.)

! CAUTION

For your own safety and protection of property, consult an 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.*

Grounding Requirements

This machine **MUST** be grounded. In the event of certain malfunctions or breakdowns, grounding reduces the risk of electric shock by providing a path of least resistance for electric current.

Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.



G045/P/Z Circuit Requirements for 120V Operation (Prewired)

Nominal Voltage 120V
Cycle 60 Hz
Phase Single-Phase
Power Supply Circuit 15 Amps
Plug/Receptacle NEMA 5-15

This machine is equipped with a power cord that has an equipment-grounding wire and a grounding plug (similar to the figure below). The plug must only be inserted into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances.

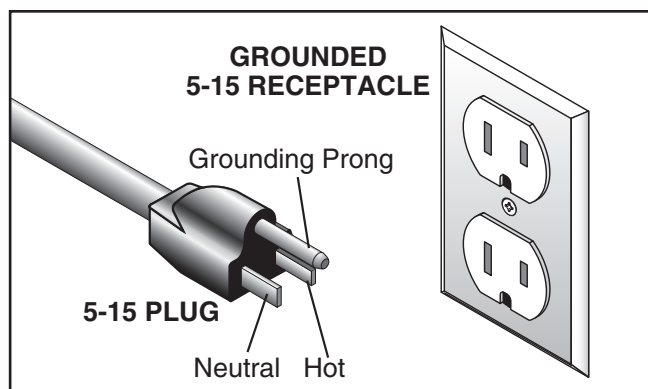
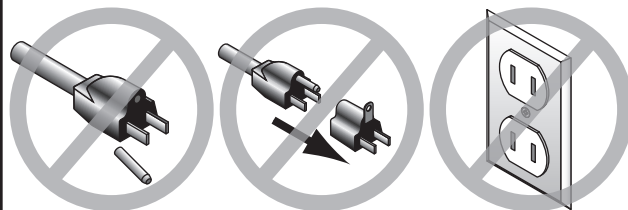


Figure 2. Typical 5-15 plug and receptacle.

⚠ CAUTION



SHOCK HAZARD!

Two-prong outlets do not meet the grounding requirements for this machine. Do not modify or use an adapter on the plug provided—if it will not fit the outlet, have a qualified electrician install the proper outlet with a verified ground.



G0452Z Circuit Requirements for 240V Operation (Rewired)

This machine can be converted to operate on a 240V power supply (refer to **Voltage Conversion** instructions) that has a verified ground and meets the following requirements:

Nominal Voltage240V
Cycle.....60 Hz
Phase..... Single-Phase
Power Supply Circuit 15 Amps
Plug/Receptacle NEMA 6-15

For 240V operation: The plug specified under “Circuit Requirements for 240V” on the previous page has a grounding prong that must be attached to the equipment-grounding wire on the included power cord. The plug must only be inserted into a matching receptacle (see following figure) that is properly installed and grounded in accordance with all local codes and ordinances.

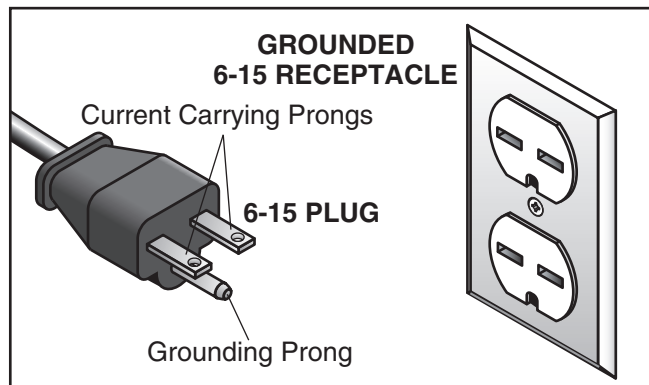


Figure 3. Typical 6-15 plug and receptacle.

⚠ WARNING

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

We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

Extension cords cause voltage drop, which may damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must contain a ground wire, match the required plug and receptacle, and meet the following requirements:

Minimum Gauge14 AWG
Maximum Length (Shorter is Better).....50 ft.



Voltage Conversion (G0452Z Only)

The voltage conversion **MUST** be performed by an electrician or qualified service personnel.

The voltage conversion procedure consists of rewiring the motor and installing the correct plug. A wiring diagram is provided on **Page 52** for your reference.

IMPORTANT: If the diagram included on the motor conflicts with the one on **Page 52**, the motor may have changed since the manual was printed. Use the diagram included on the motor junction box cover instead.

Items Needed

Qty

- Phillips Head Screwdriver #2 1
- Electrical Tape As Needed
- Wire Nut (14 AWG x 3) 1
- Plug 6-15 1

To convert the Model G0452Z to 240V:

1. DISCONNECT JOINTER FROM POWER!
2. Cut off the included plug.
3. Open the motor junction box, then remove the wire nuts indicated in **Figure 4**.

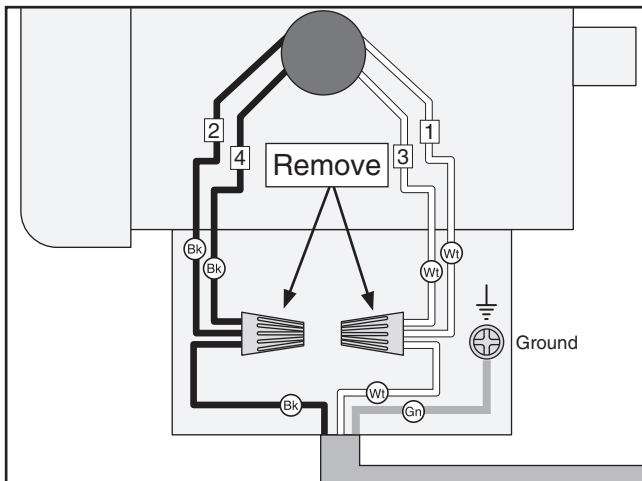


Figure 4. Location of wire nuts to be removed.

4. Connect the motor wires, as shown in **Figure 5**, with wire nuts. Once snug, wrap electrical tape around each wire nut and the connected wires to reduce the likelihood of the wire nut vibrating loose during motor operation.

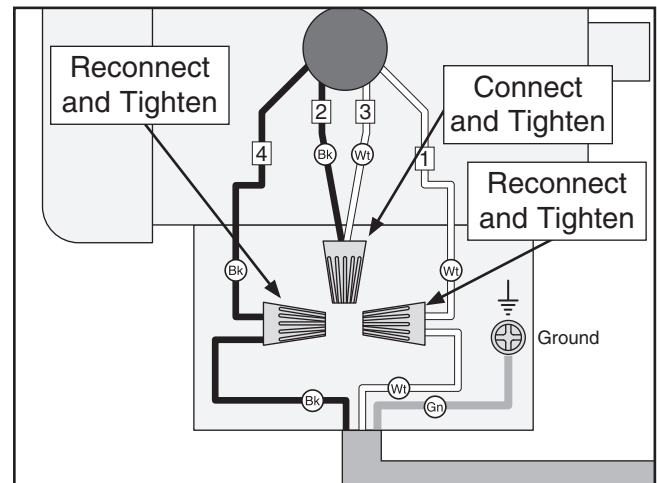


Figure 5. Motor wires repositioned for 240V.

5. Close and secure the motor junction box.
6. Install a 6-15 plug on the end of the cord, according to the instructions and wiring diagrams provided by the plug manufacturer.

—If the plug manufacturer did not include instructions, the wiring of a generic NEMA 6-15 plug is illustrated on **Page 52**.



SECTION 3: SETUP

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.

	<p>! WARNING SUFFOCATION HAZARD! Keep children and pets away from plastic bags or packing materials shipped with this machine. Discard immediately.</p>
--	---

Needed for Setup

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

Description	Qty
• Straightedge 4' (or longer)	1
• Safety Glasses (for each person)	1
• Dust Collection System (optional)	1
• 4" Dust Hose (optional)	1
• 4" Hose Clamp (optional)	1
• Phillips Head Screwdriver.....	1
• Wrench 13mm	1
• Wrench 17mm	1
• Wrench 19mm	1
• Socket Wrench 17mm	1
• Level	1



Inventory

The following is a list of items shipped with your machine. Before beginning setup, lay these items out and 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.

NOTICE

If you cannot find an item on this list, carefully check around/inside the machine and packaging materials. Often, these items get lost in packaging materials while unpacking or they are pre-installed at the factory.

Hardware and Tools (Not shown)	Qty
• Wrenches 8/10mm & 12/14mm	1 each
• Hex Wrenches 2.5, 3, 4, 6, & 8mm...	1 each
• Cap Screws M10-1.5 x 20	3
• Cap Screws M10-1.5 x 25	2
• Hex Bolts M10-1.5 x 55	2
• Lock Washers 10mm.....	3
• Flat Washers 10mm	5
• Hex Nuts M10-1.5	2
• Hex Bolt M8-1.25 x 50.....	1
• Cap Screws M8-1.25 x 60	4
• Cap Screws M8-1.25 x 25	4
• Cap Screws M8-1.25 x 20	2
• Lock Washers 8mm.....	8
• Flat Washers 8mm	11
• Phillip Head Screws M5-.8 x 15	4
• Flat Washers 5mm	4

Box 1 (Figure 6):	Qty
A. Table Assembly	1
B. Fence Carriage Assembly	1
C. Cutterhead Jig	1
D. Carriage Mounting Bracket.....	1
E. Infeed Table Lever	1
F. Fence Tilt Handles	2
G. Cutterhead Guard.....	1
H. Push Blocks.....	2
I. Outfeed Table Handwheel.....	1
J. Fence Assembly.....	1

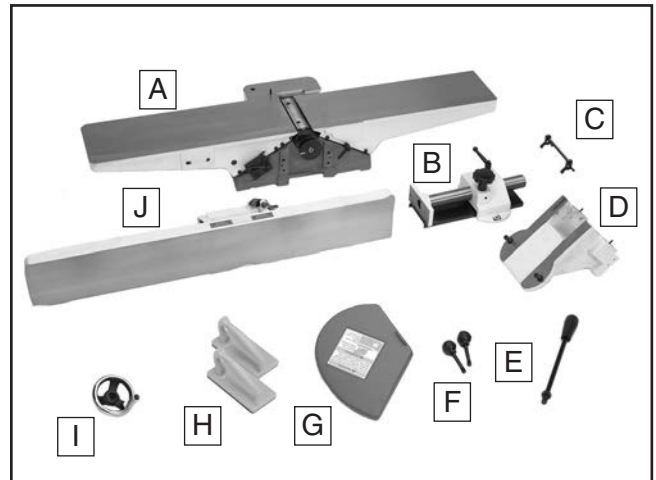


Figure 6. Box 1 inventory.

Box 2 (Figure 7):	Qty
K. Cabinet	1
L. Power Switch and Support Arm	1
M. V-Belt	1
N. Locking Foot Pedal Assembly	1
O. Dust Port.....	1



Figure 7. Box 2 inventory.



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.

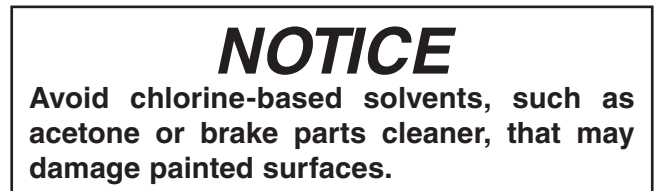
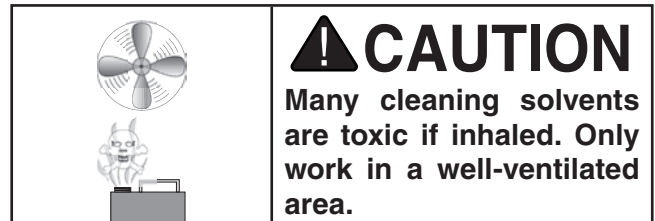
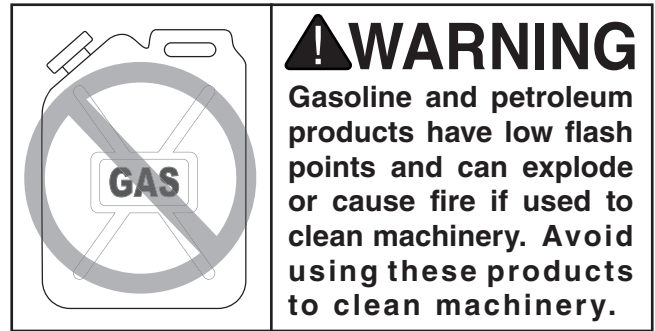
There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

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.
2. Coat the rust preventative with a liberal amount of cleaner/degreaser, then let it soak for 5–10 minutes.
3. 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.



T23692—Orange Power Degreaser

A great product for removing the waxy shipping grease from your machine during clean up.



Figure 4. T23692 Orange Power Degreaser.



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.**



Physical Environment

The physical environment where the machine is operated is important for safe operation and longevity of machine 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, if required.

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.

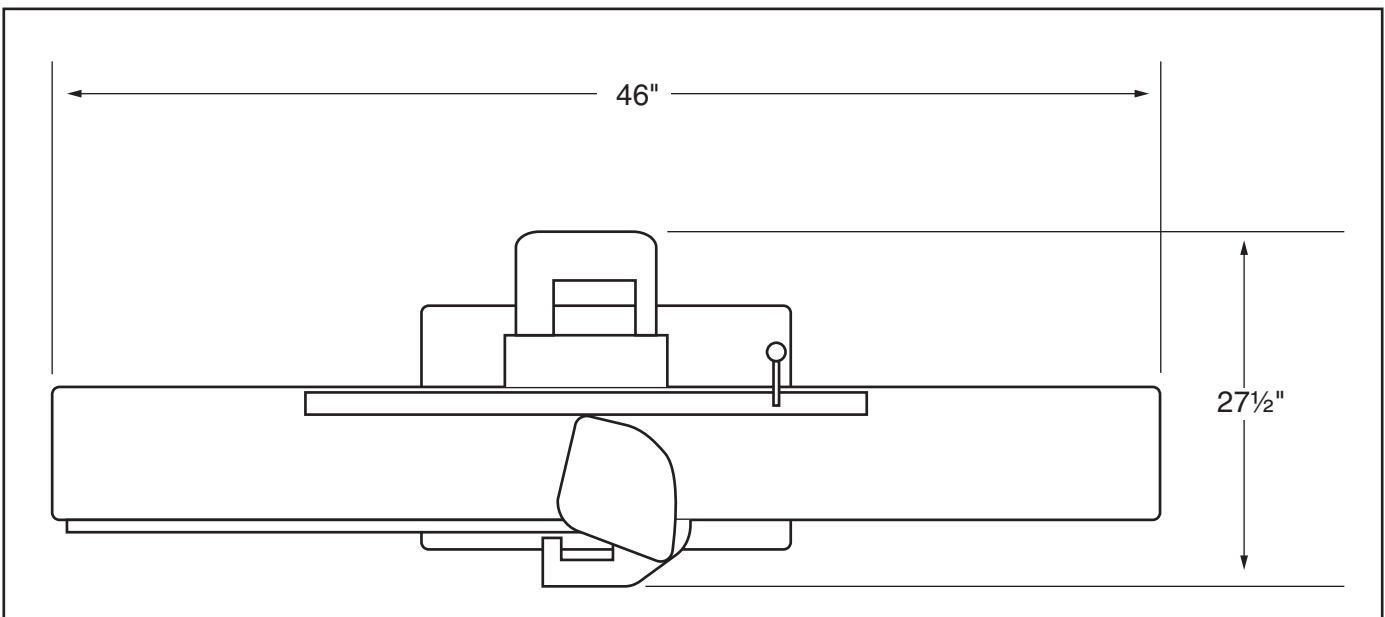


Figure 9. Minimum working clearances.



Locking Foot Pedal

Components and Hardware Needed:	Qty
Cabinet	1
Locking Foot Pedal Assembly	1
Hex Bolts M10-1.5 x 55	2
Flat Washers 10mm	2
Hex Nuts M10-1.5	2
Hex Bolt M8-1.25 x 50	1
Flat Washer 8mm	1

Tools Needed:	Qty
Wrench 17mm	1
Socket Wrench 17mm	1
Wrench 13mm	1
Level	1

To install the locking foot pedal:

1. Lay the cabinet on its side as shown in **Figure 10**.



Figure 10. Cabinet.

2. Place the locking foot pedal assembly onto the cross brace.

3. Use a 13mm wrench to install the M8-1.25 x 50mm hex bolt and washer as shown in **Figure 11**.

Note: *The hex bolt installs from inside.*

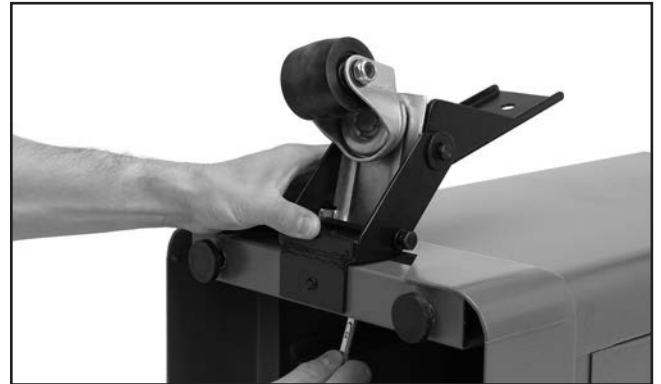


Figure 11. Installing locking foot pedal.

4. Install the M10-1.5 x 55 hex bolts, flat washers, and hex nuts through the front of the locking foot pedal assembly as shown in **Figure 12**.

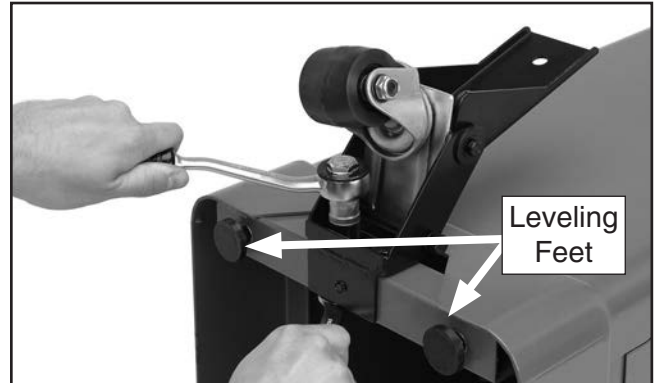


Figure 12. Installing locking foot pedal.

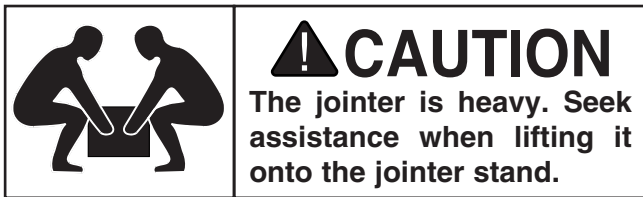
5. Raise the cabinet upright.
6. Lock the foot pedal down.
7. Level the cabinet front-to-back and side-to-side by adjusting the leveling feet (see **Figure 12**).



Mounting Jointer

Components and Hardware Needed:	Qty
Table Assembly	1
Cabinet	1
Cap Screws M10-1.5 x 20.....	3
Lock Washers 10mm.....	3
Flat Washers 10mm	3

Tools Needed:	Qty
Hex Wrench 8mm	1
Extra Person for Lifting Help	1



To mount the jointer to the stand:

1. Remove the access cover from the cabinet.
2. With the help of an assistant, lift the jointer onto the cabinet.
3. Align the three bolt holes on the jointer with the three holes on the cabinet (**Figure 13**).

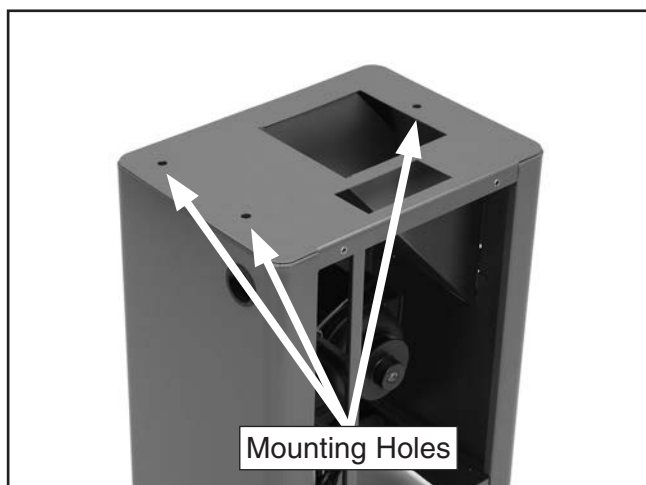


Figure 13. Mounting holes.

4. Using the 8mm hex wrench, secure the jointer to the cabinet with the M10-1.5 x 20 cap screws, 10mm flat washers, and 10mm lock washers.

Note: Reach through the dust vent for access to the forward mounting hole as shown in **Figure 14**.

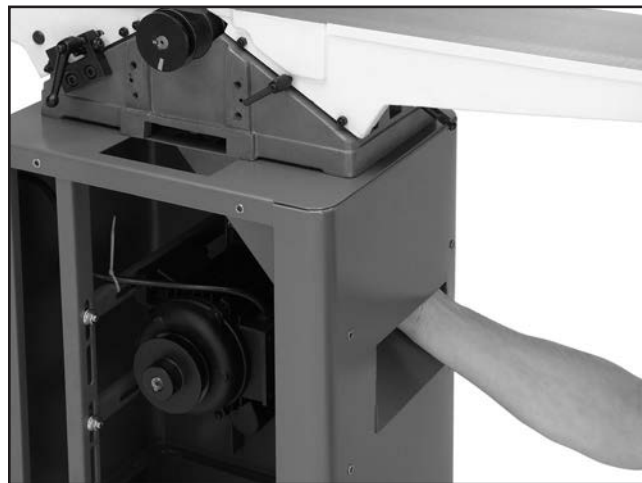


Figure 14. Installing forward mounting bolt.



V-Belt

Components and Hardware Needed:		Qty
V-Belt.....		1

Tools Needed:		Qty
Wrench or Socket 13mm		1
Hex Wrench 6mm.....		1

To install the V-belt:

- Using a 13mm wrench, loosen, but DO NOT remove the motor mount bolts.
- Lift the motor up far enough to allow the V-belts to be placed around the cutterhead pulley and the motor pulley (see **Figure 15**).

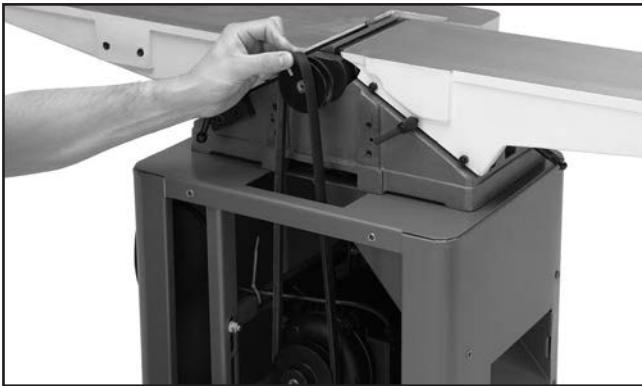


Figure 15. Installing V-belt.

- Carefully allow the motor to slide down, tensioning the V-belts with the weight of the motor.
- Looking from the top, sight down the V-belt and pulleys and check to see that the pulleys are parallel and aligned with each other (see **Figure 16**).
 - If the pulleys are aligned, tighten the motor mounts loosened in **Step 1** and go to **Step 7**.
 - If the pulleys are NOT aligned, perform **Steps 5 & 6**.
- Remove the V-belt, loosen the set screws on the end of the motor pulley, and align the motor pulley with the cutterhead pulley. If needed, the motor can be loosened and moved in or out to bring the motor pulley into alignment with the cutterhead pulley.
- Tighten the set screws, replace the V-belts, and repeat **Step 4**. Belts should be parallel and aligned as shown in **Figure 16**.

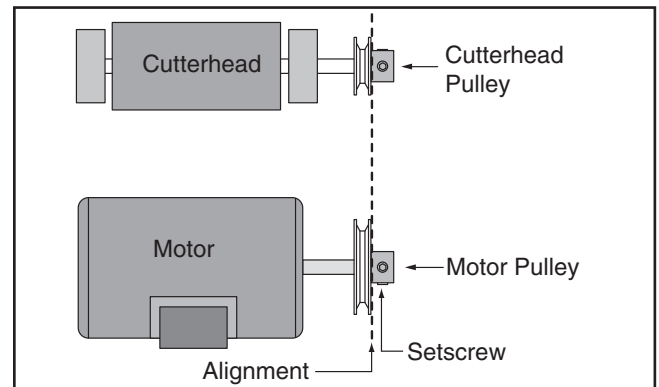


Figure 16. The pulleys should be parallel and aligned.

- Replace the access cover on the cabinet.



Carriage Mounting Bracket

Components and Hardware Needed:		Qty
Carriage Mounting Bracket.....		1
Cap Screws M8-1.25 x 60		4
Lock Washers 8mm.....		4
Flat Washers 8mm		4

Tools Needed:		Qty
Hex Wrench 6mm		1

To install the carriage mounting bracket:

1. Align the locating pins on the back of the carriage mounting bracket with the sockets on the jointer table (see **Figure 17**).

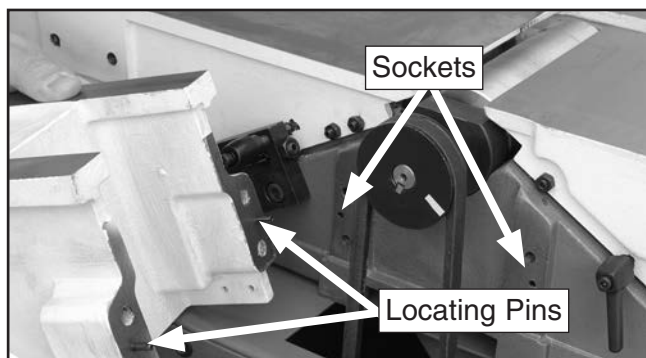


Figure 17. Locating pins.

2. Tighten the carriage mounting bracket to the jointer table with the cap screws, lock washers, and flat washers (see **Figure 18**).



Figure 18. Assembled carriage mounting bracket.



Fence Carriage Assembly

Components and Hardware Needed:		Qty
Fence Carriage Assembly		1
Cap Screws M8-1.25 x 20		2
Lock Washers 8mm.....		2
Flat Washers 8mm		2

Tools Needed:		Qty
Hex Wrench 6mm		1

To install the fence carriage assembly:

1. Use the M8-1.25 x 20 cap screws, lock washers, and flat washers to secure the fence carriage assembly to the carriage mounting bracket (see **Figure 19**).

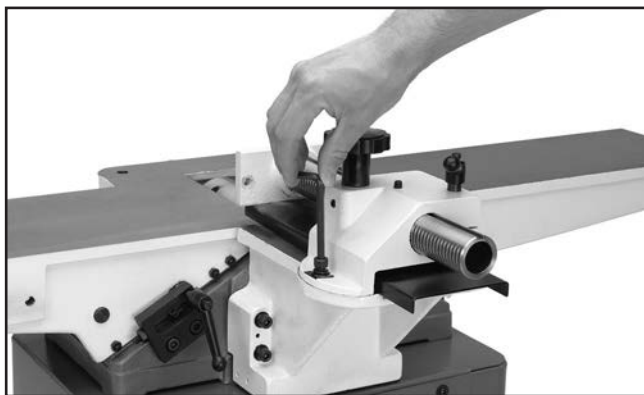


Figure 19. Fence carriage assembly.

Fence Assembly

Components and Hardware Needed:		Qty
Fence Assembly		1
Cap Screws M8-1.25 x 25		2
Lock Washers 8mm.....		2
Flat Washers 8mm		2
Fence Tilting Handles.....		2

To install the fence carriage assembly:

1. Use the M8-1.25 x 25 cap screws, lock washers, and flat washers to secure the fence assembly to the fence carriage assembly (see **Figure 20**).

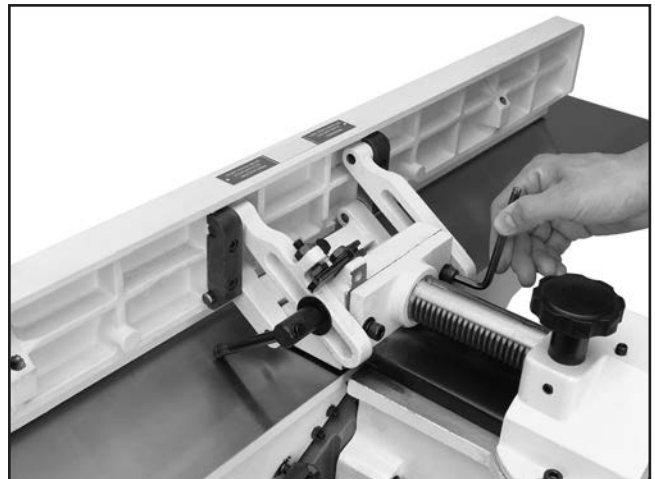


Figure 20. Installing fence assembly.

2. Thread the fence tilting handles into the fence (see **Figure 21**).

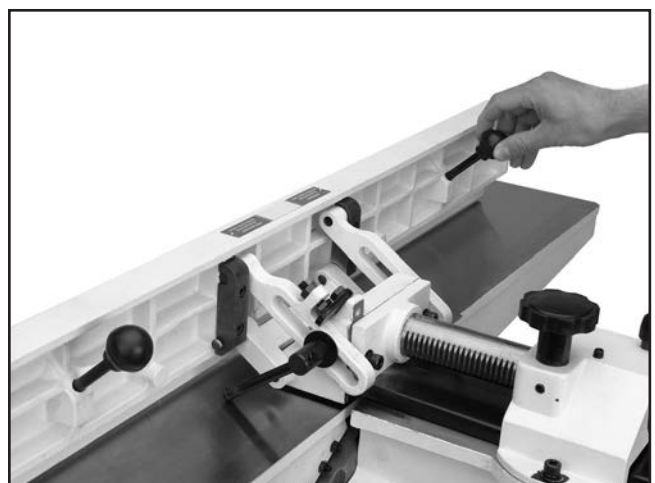


Figure 21. Installing fence tilting handles.



Cutterhead Guard

CAUTION

The cutterhead guard is a critical safety feature on this machine. A torsion spring is mounted on the cutterhead guard shaft to help it return to its proper position over the cutterhead after a cutting operation. This torsion spring must have spring pressure during guard installation to work properly.

Components and Hardware Needed: Qty
Cutterhead Guard..... 1

Tools Needed: Qty
Hex Wrench 2.5mm 1

To install the cutterhead guard:

1. Remove the set screw in the cutterhead guard shaft (see **Figure 22**).

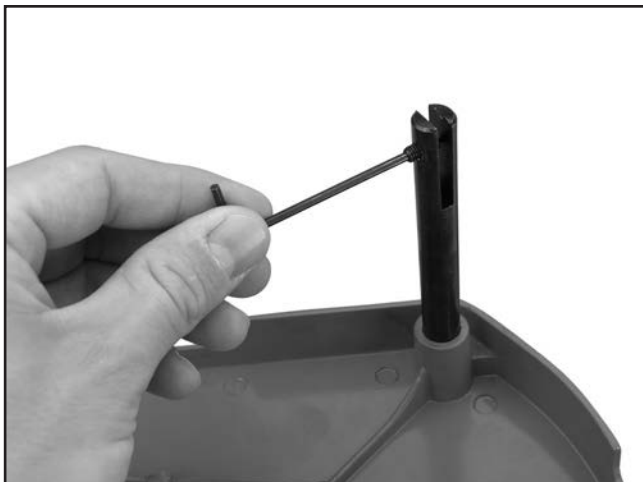


Figure 22. Set screw location.

2. Wind the torsion spring knob back counter-clockwise a half turn, and slide the guard shaft into the casting shown in **Figure 23**. Make sure the slot on the cutterhead guard shaft fits over the pin that sits inside the spring knob barrel (hidden from view).



Figure 23. Setting torsion spring knob.

3. Test the guard by pulling it back and letting go.

—The guard should snap back over the cutterhead. If it does, re-insert the set screw (see **Figure 24**).

—If the guard is slow to return across the table, remove the shaft, and add a half turn to the spring knob and test again. Repeat this step as necessary.



Figure 24. Re-installing set screw.



Dust Port

Components and Hardware Needed:		Qty
Dust Port		1
Phillips Head Screws M5-.8 x 15.....		4
Flat Washers 5mm		4

Tools Needed:		Qty
Phillips Head Screwdriver.....		1

To install the dust port:

Note: *If you choose to not use a dust collection system, don't install the dust port. Chips will build up inside the cabinet and clog.*

1. Place the dust port over the dust vent in the side of the cabinet.
2. Use the M5-.8 x 15 Phillips head screws and flat washers to secure the dust port to the cabinet (see **Figure 25**).



Figure 25. Dust port installation.

3. Attach to dust collection system.

Dust Collection

⚠ CAUTION

This machine creates a lot of wood chips/dust during operation. Breathing airborne dust on a regular basis can result in permanent respiratory illness. Reduce your risk by wearing a respirator and capturing the dust with a dust collection system.

Recommended CFM at Dust Port: 400 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.

To connect a dust collection hose:

1. Fit the 4" dust hose over the dust port, as shown in **Figure 25**, and secure in place with a hose clamp.
2. Tug the hose to make sure it does not come off. **Note:** *A tight fit is necessary for proper performance.*



Power Switch

Components and Hardware Needed:	Qty
Power Switch & Support Arm.....	1
Cap Screws M8-1.25 x 25	2
Flat Washers 8mm	2

Tools Needed:	Qty
Hex Wrench 6mm.....	1

To install the power switch & support arm:

1. Install the support arm with the M8-1.25 x 25 cap screws and flat washers as shown in **Figure 26**.

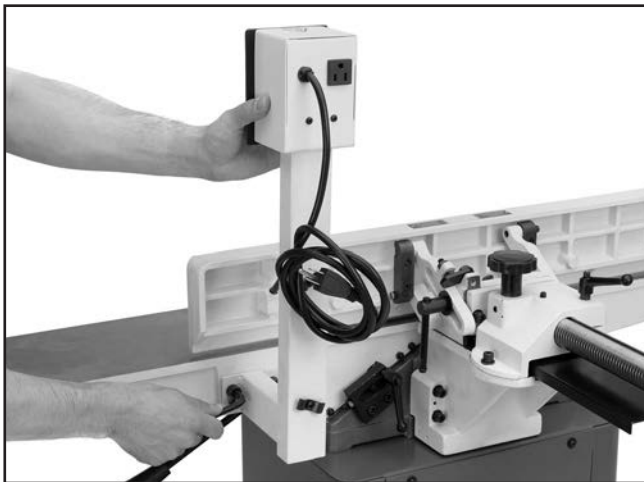


Figure 26. Installing support arm.

2. Plug the motor cord into the back of the switch box, then secure the loose cords with the hold downs shown in **Figure 27**.

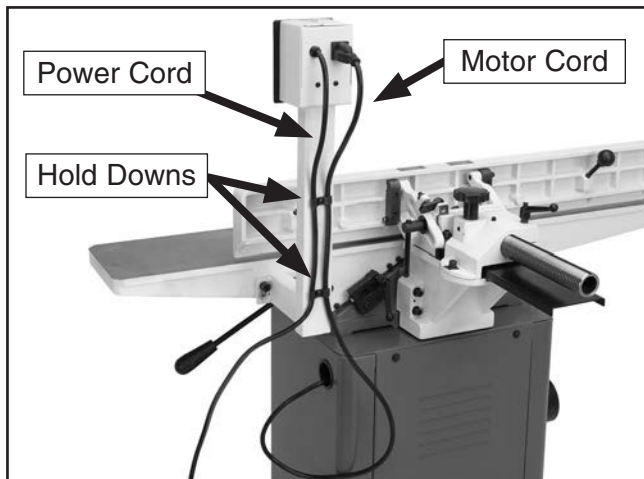


Figure 27. Cord locations.

Handwheels

Components and Hardware Needed:	Qty
Outfeed Table Handwheel.....	1
Phillips Head Screw M5-.8 x 15	1
Flat Washer 5mm	1

Tools Needed:	Qty
Phillips Head Screwdriver.....	1

To install the handwheel:

1. Remove the screw and flat washer already mounted to the handwheel shaft.
2. Secure the handwheel to the shaft with the hardware removed in **Step 1**.



Figure 28. Securing the handwheel.



Infeed Table Lever

Components and Hardware Needed: Qty
Infeed Table Lever..... 1

Tools Needed: Qty
Wrench 19mm 1

To install the infeed table lever:

1. Thread the infeed table lever into the hole shown in **Figure 29**.
2. Tighten the locknut with a 19mm wrench.



Figure 29. Installing infeed table lever.

Setting Outfeed Table Height

For Models G0452/G0452P

The outfeed table must be level with the knives when they are at top-dead-center. This adjustment has been made at the factory but should be checked again before operating your jointer. This adjustment will also have to be made any time you perform maintenance on the cutterhead or knives.

To set the outfeed table height for knives:

1. Place a straightedge on the outfeed table so it extends over the cutterhead.
2. Rotate the cutterhead pulley until one of the knives is at top-dead-center (TDC), as illustrated in **Figure 30**.

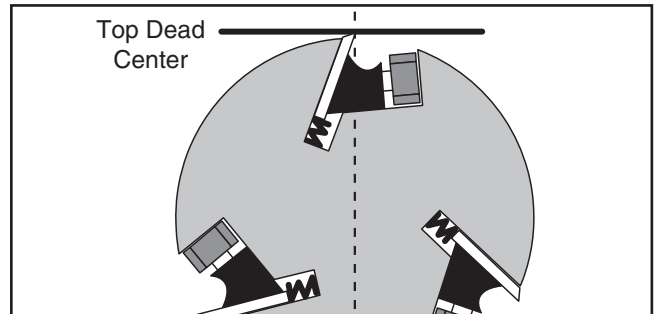


Figure 30. Cutterhead knife at top-dead-center.

3. Raise or lower the outfeed table until the knife just touches the straightedge (**Figure 31**).

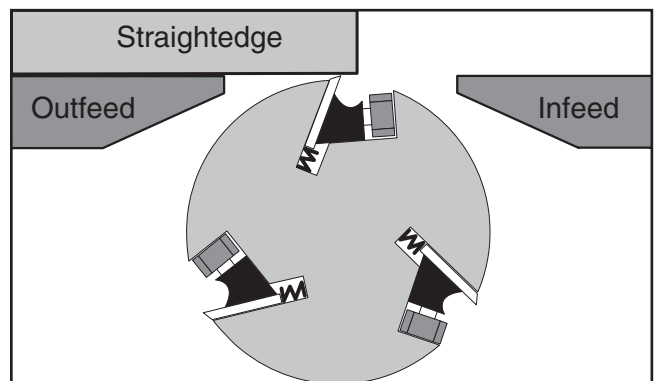


Figure 31. Using a straightedge to align outfeed table height with knife at TDC.

4. Lock the outfeed table in **Figure 32**.



Figure 32. Outfeed table lock.



For Model G0452Z

The outfeed table height **MUST** be level with the carbide inserts when they are at top-dead-center. If the outfeed table is set too low, the workpiece will be tapered from front to back. If the outfeed table is set too high, the workpiece will hit the edge of the outfeed table during operation, increasing the chance of kickback.

To set the outfeed table height:

1. DISCONNECT JOINTER FROM POWER!
2. Move the cutterhead guard out of the way or remove it, and open the rear access panel.
3. Place a straightedge on the outfeed table so it extends over the cutterhead and rotate the cutterhead pulley until one of the carbide inserts is at top-dead-center (TDC), as shown in **Figure 33**.

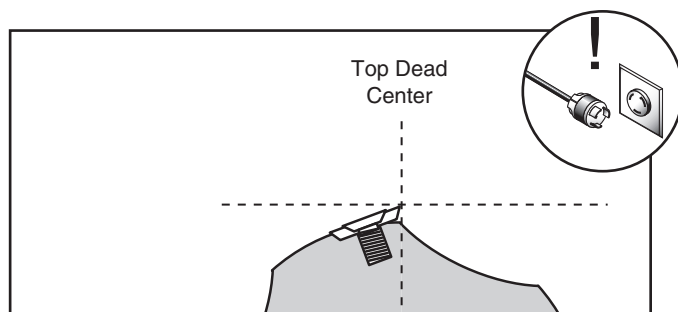


Figure 33. Cutterhead insert at top-dead-center.

4. When correctly set, the carbide insert will just touch the straightedge when the insert is at its highest point of rotation (see **Figure 34**).

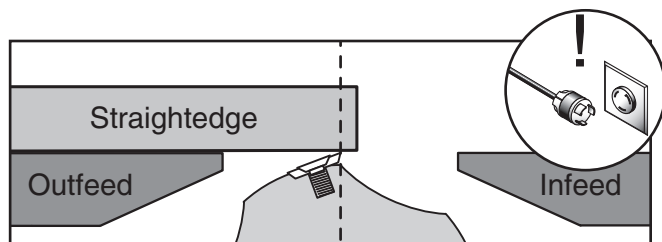


Figure 34. Using a straightedge to align the outfeed table height with insert at TDC.

—If your outfeed table is correctly set, no adjustments are necessary.

—If the insert lifts the straightedge off the table or is below the straightedge, loosen outfeed table lock and adjust table height until straightedge just touches an insert at its highest point of rotation.

Tip: Some advanced woodworkers have found that they can virtually eliminate snipe by setting the outfeed table in the following manner: Repeat **Steps 1-4** using a freshly exposed insert. Place two pencil marks on the straightedge $\frac{5}{32}$ " apart, and place the outward mark on the edge of the outfeed table, as shown in **Figure 35**.

Lower the outfeed table slightly so the insert lifts the straightedge off the table. Rotate the cutterhead clockwise—the straightedge should move $\frac{5}{32}$ " toward the infeed table and the inward mark should be directly over the edge of the outfeed table, as shown in **Figure 36**. Continue adjusting the outfeed table until the cutterhead moves the straightedge $\frac{5}{32}$ " toward the infeed table.

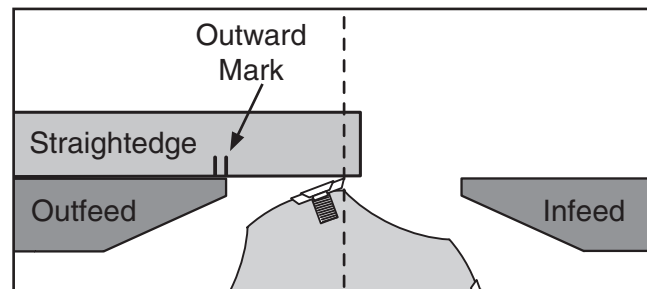


Figure 35. Straightedge outward mark at edge of outfeed table.

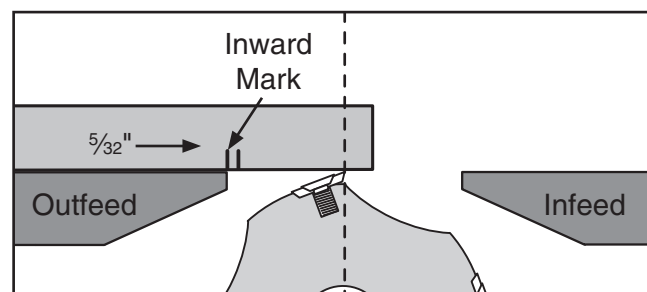


Figure 36. Straightedge inward mark at edge of outfeed table.

5. Lock the outfeed table, re-install the cutterhead guard, and close the rear access panel.



Test Run

Once assembly is complete, test run the machine to ensure it is properly connected to power and safety components are functioning correctly.

If you find an unusual problem during the test run, immediately stop the machine, disconnect it from power, and fix the problem **BEFORE** operating the machine again. The **Troubleshooting** table in the **SERVICE** section of this manual can help.

!WARNING

Serious injury or death can result from using this machine BEFORE understanding its controls and related safety information. DO NOT operate, or allow others to operate, machine until the information is understood.

!WARNING

DO NOT start machine until all preceding setup instructions have been performed. Operating an improperly set up machine may result in malfunction or unexpected results that can lead to serious injury, death, or machine/property damage.

To test run machine:

1. Clear all setup tools away from machine.
2. Make sure the cutterhead guard is installed and correctly adjusted (**Page 23**).
3. Connect machine to power supply.
4. Turn machine **ON**. Verify motor operation, and then turn machine **OFF**.

The motor should run smoothly and without unusual problems or noises.

5. Insert disabling pin through switch button (see **Figure 37**).

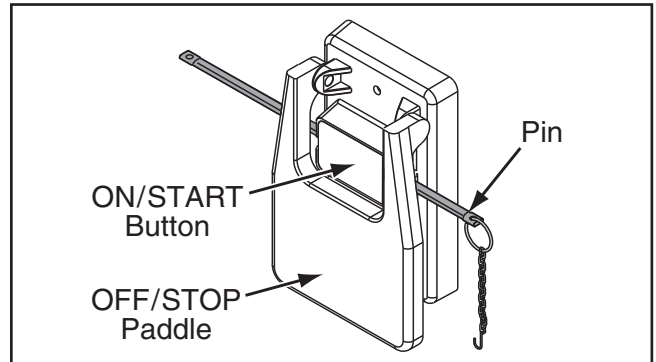


Figure 37. Disabling pin through switch button.

6. Try to start machine by pressing switch button.

Machine should **NOT** start. If it does start, the switch disabling feature is not functioning properly and the switch must be replaced.

Recommended Adjustments

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

However, because of the many variables involved with shipping, we recommend that you at least verify the following adjustments to ensure the best possible results from your new machine.

Step-by-step instructions for these adjustments can be found in **SECTION 7: SERVICE** on **Page 42**.

Factory adjustments that should be verified:

1. Knife Settings (**Page 44**).
2. Insert Settings (**Page 46**).
3. Depth Scale Calibration (**Page 47**).
4. Fence Stop Accuracy (**Page 48**).

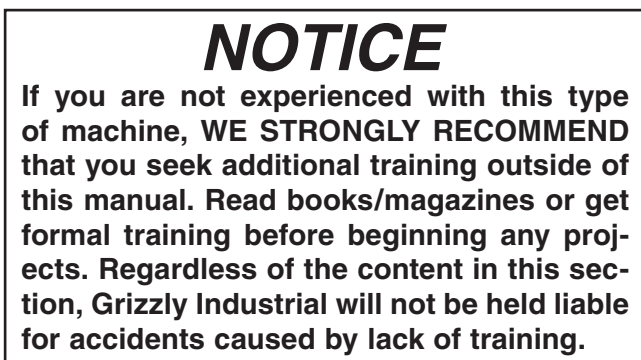
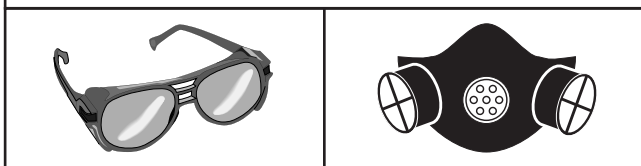


SECTION 4: OPERATIONS

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 operation, so the machine 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 and seek additional training from experienced machine operators, and do additional research outside of this manual by reading "how-to" books, trade magazines, or websites.



This overview gives you the basic process that happens during an operation with this machine. Familiarize yourself with this process to better understand the remaining parts of the **Operation** section.

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

1. Examines the workpiece to make sure it is suitable for cutting.
2. Adjusts the fence for the width of the workpiece and then locks it in place.
3. Adjusts the fence tilt, if necessary, to the correct angle.
4. Adjusts the infeed table height for the initial cut.
5. Checks the outfeed side of the machine for proper support and to make sure the workpiece can safely pass all the way beyond the cutterhead without interference from other objects.
6. Wears safety glasses, respirator, and ear protection, and locates the push blocks.
7. Starts the machine.
8. Using the push blocks, holds the workpiece firmly and flatly against both the infeed table and fence, and then pushes the workpiece past the cutterhead at a steady and controlled rate until the workpiece moves completely beyond the cutterhead.
9. Repeats **Steps 5–8** until satisfied with the results.
10. Stops the machine.



Infeed Table Adjustment

Proper infeed table adjustment must be made to safely and efficiently use the jointer. DO NOT set the infeed table depth greater than $\frac{1}{16}$ " on your first pass and never greater than $\frac{1}{8}$ " when rabbeting.

⚠ WARNING

Serious personal injury could occur in the event of a kickback. Kickback can occur if excessive depth of cut is made. Limit a single pass from $\frac{1}{16}$ " to $\frac{1}{8}$ ".

To adjust the infeed table:

1. Loosen the infeed table lock in **Figure 38**.

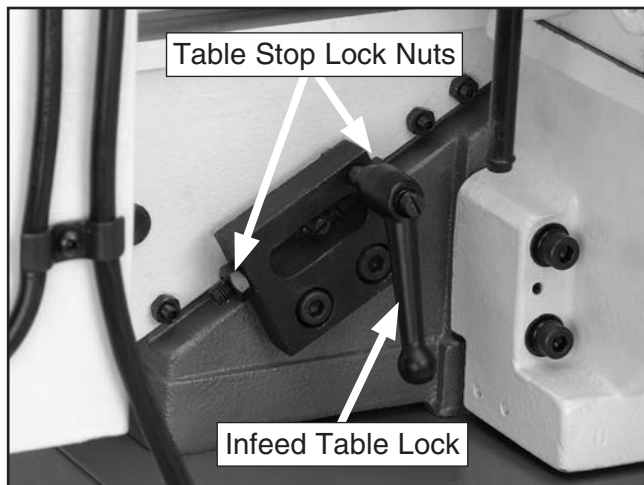


Figure 38. Infeed table lock.

2. Use the infeed table lever to raise or lower the infeed table (**Figure 39**).



Figure 39. Adjusting infeed table height.

3. Use the depth of cut scale to set the infeed table to the desired depth and lock the table in position.

Note: *The infeed table stops can be adjusted to return the table height to the same height every time by loosening the lock nuts and adjusting the set screws.*



Stock Inspection and Requirements

Here are some rules to follow when choosing and jointing stock:

- **DO NOT joint or surface plane stock that contains knots.** Injury to the operator or damage to the workpiece can occur if the knots become dislodged during the cutting operation.
- **DO NOT joint or surface plane against the grain direction.** Cutting against the grain increases the likelihood of stock kickback, as well as tear-out on the workpiece.
- **Jointing and surface planing with the grain produces a better finish and is safer for the operator.** Cutting with the grain is described as feeding the stock on the jointer so the grain points down and toward you as viewed on the edge of the stock (**Figure 40**).

Note: If the grain changes direction along the edge of the board, decrease the cutting depth and make additional passes.

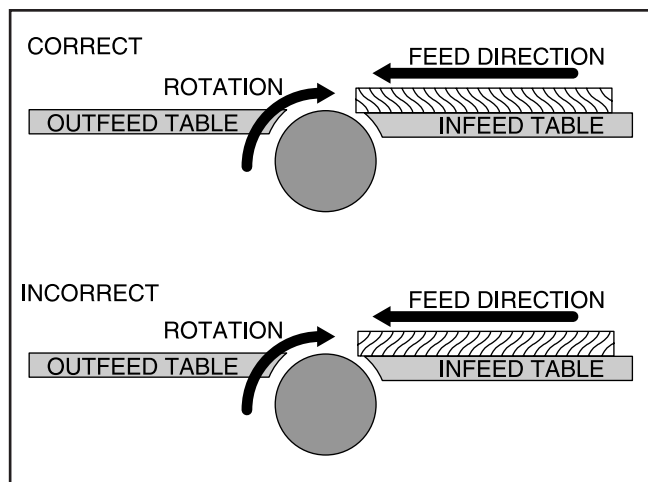


Figure 40. Correct and incorrect grain alignment to cutterhead.

- **Remove foreign objects from the stock.** Make sure that any stock you process with the jointer is clean and free of any dirt, nails, staples, tiny rocks or any other foreign objects that may damage the jointer blades.
- **Only process natural wood fiber through your jointer.** Never joint MDF, particle board, plywood, laminates or other synthetically made materials.
- **Make sure all stock is sufficiently dried before jointing.** Wood with a moisture content over 20% will cause unnecessary wear on the knives and poor cutting results.
- **Make sure your workpiece exceeds the minimum dimension requirements (Figures 41 & 42) before edge jointing or surface planing, or it may break or kick back during the operation!**

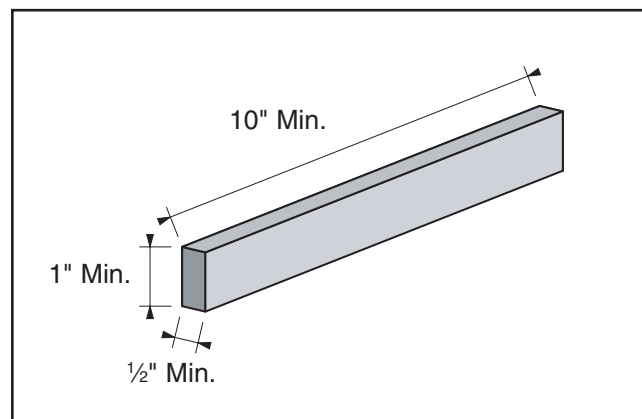


Figure 41. Minimum dimensions for edge jointing.

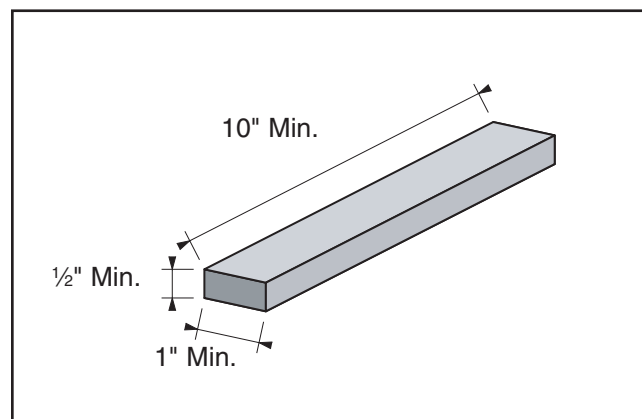


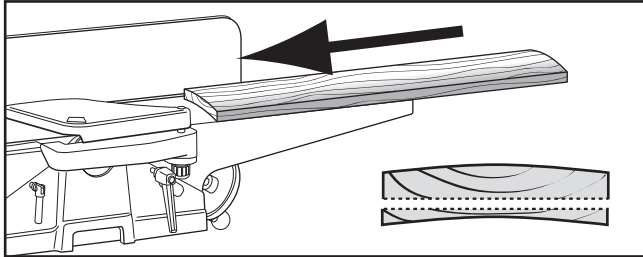
Figure 42. Minimum dimensions for surface planing.



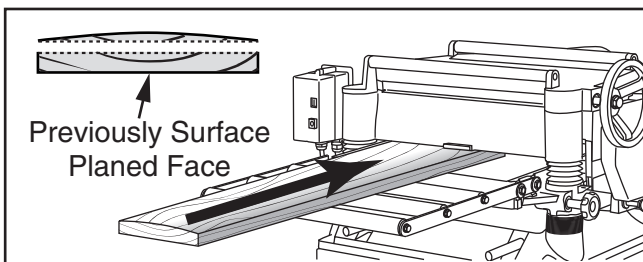
Squaring Stock

Squaring stock involves four steps performed in the order below:

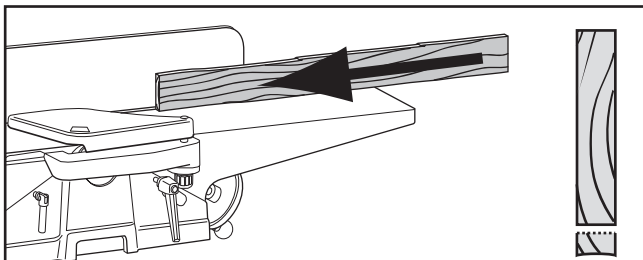
1. Surface Plane on the Jointer—The concave face of the workpiece is surface planed flat with the jointer.



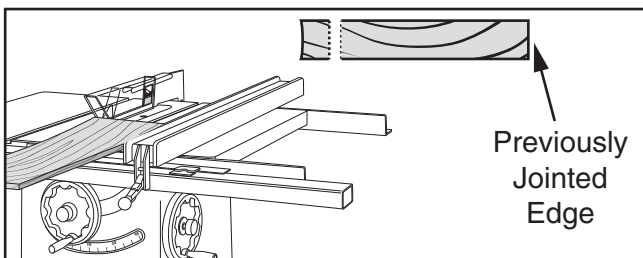
2. Surface Plane on a Thickness Planer—The opposite face of the workpiece is surface planed flat with a thickness planer.



3. Edge Joint on the Jointer—The concave edge of the workpiece is jointed flat with the jointer.



4. Rip Cut on a Table Saw—The jointed edge of the workpiece is placed against a table saw fence and the opposite edge cut off.



Surface Planing

NOTICE

If you are not experienced with a jointer, set the depth of cut to 0", and practice feeding the workpiece across the tables as described. This procedure will better prepare you for the actual operation.

The purpose of surface planing on the jointer is to make one flat face on a piece of stock (see **Figures 43 & 44**) to prepare it for thickness planing on a planer.



Figure 43. Typical surface planing operation.

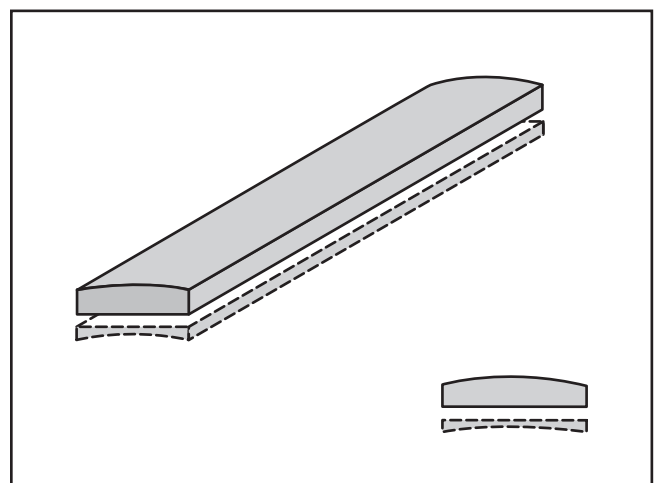


Figure 44. Illustration of surface planing results.



To surface plane on the jointer:

1. Read and understand **SECTION 1: SAFETY**, beginning on **Page 7**.
2. Make sure your stock has been inspected for dangerous conditions as described in the **Stock Inspection & Requirements** instructions, beginning on **Page 31**.
3. Set the cutting depth for your operation. (We suggest $\frac{1}{32}$ " for surface planing, using a more shallow depth for hard wood species or for wide stock.)
4. Make sure your fence is set to 90° .
5. If your workpiece is cupped (warped), place it so the concave side is face down (**Figure 44**) on the surface of the infeed table.
6. Start the jointer.

WARNING

Failure to use push blocks when surface planing may result in cutterhead contact, which will cause serious personal injury. Always use push blocks to protect your hands when surface planing on the jointer.

7. With a push block in each hand, press the workpiece against the table and fence with firm pressure, and feed the workpiece over the cutterhead (see **Figure 43**).

Note: When your leading hand (with push block) gets within 4" of the cutterhead, lift it up and over the cutterhead, and place the push block on the portion of the workpiece that is on the outfeed table. Now, focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same action with your trailing hand when it gets within 4" of the cutterhead. To keep your hands safe, **DO NOT** let them get closer than 4" from the cutterhead when it is moving!

8. Repeat **Step 7** until the entire surface is flat. **Note:** If 2nd surface is jointed it will not likely be parallel with the 1st, so the best approach is to joint one surface, then plane the other with a thickness planer.

Edge Jointing

NOTICE

If you are not experienced with a jointer, set the depth of cut to 0", and practice feeding the workpiece across the tables as described below. This procedure will better prepare you for the actual operation.

The purpose of edge jointing is to produce a finished, flat-edged surface (see **Figures 45 & 46**) that is suitable for joinery or finishing. It is also a necessary step when squaring rough or warped stock.



Figure 45. Typical edge jointing operation.

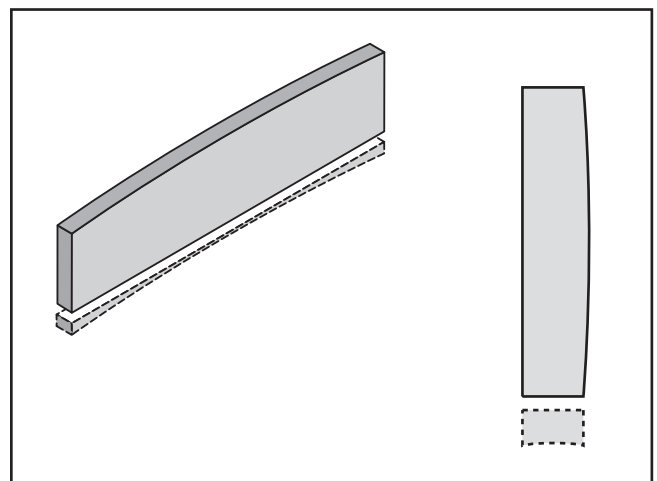


Figure 46. Illustration of edge jointing results.



To edge joint on the jointer:

1. Read and understand **SECTION 1: SAFETY**, beginning on **Page 7**.
2. Make sure your stock has been inspected for dangerous conditions as described in the **Stock Inspection** instructions, beginning on **Page 31**.
3. Set the cutting depth for your operation. (We suggest between $\frac{1}{16}$ " and $\frac{1}{8}$ " for edge jointing, using a more shallow depth for hard wood species or for wide stock.)
4. Make sure the fence is set to 90° .
5. If your workpiece is cupped (warped), place it so the concave side is face down (**Figure 46**) on the surface of the infeed table.
6. Start the jointer.
7. Press the workpiece against the table and fence (**Figure 45**) with firm pressure. Use your trailing hand to guide the workpiece through the cut, and feed the workpiece over the cutterhead.

Note: When your leading hand gets within 4" of the cutterhead, lift it up and over the cutterhead, and place it on the portion of the workpiece that is over the outfeed table. Now, focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same action with your trailing hand when it gets within 4" of the cutterhead. To keep your hands safe, **DO NOT** let them get closer than 4" from the cutterhead when it is moving!

8. Repeat **Step 7** until the entire edge is flat.

Note: If 2nd edge is jointed it will not likely be parallel with the 1st, so instead of jointing the second edge, trim it with a table saw. This will ensure both edges are parallel with each other.

Bevel Cutting

NOTICE

If you are not experienced with a jointer, set the depth of cut to 0", and practice feeding the workpiece across the tables as described below. This procedure will better prepare you for the actual operation.

The purpose of bevel cutting is to cut a specific angle into the edge of a workpiece (see **Figures 47 & 48**).

The Model G0452 has preset fence stops at 45° inward, 90° , and 45° outward (135°). If your situation requires a different angle, the preset fence stops can be easily adjusted for your needs.



Figure 47. Typical bevel cutting operation.

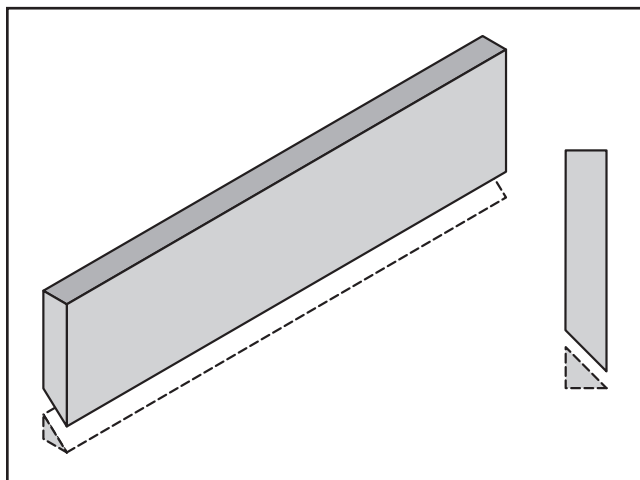


Figure 48. Illustration of bevel cutting results.



To bevel cut on the jointer:

1. Read and understand **SECTION 1: SAFETY**, beginning on **Page 7**.
2. Make sure your stock has been inspected for dangerous conditions as described in the **Stock Inspection** instructions, beginning on **Page 31**.
3. Set the cutting depth for your operation. (We suggest between $\frac{1}{16}$ " and $\frac{1}{8}$ " for bevel cutting, using a more shallow depth for hard wood species or for wide stock.)
4. Make sure your fence is set to the angle of your desired cut.
5. If your workpiece is cupped (warped), place it so the concave side is face down on the surface of the infeed table.
6. Start the jointer.
7. With a push block in your leading hand, press the workpiece against the table and fence with firm pressure, and feed the workpiece over the cutterhead.

Note: *When your leading hand gets within 4" of the cutterhead, lift it up and over the cutterhead, and place the push block on the portion of the workpiece that is on the outfeed table. Now, focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same action with your trailing hand when it gets within 4" of the cutterhead. To keep your hands safe, DO NOT let them get closer than 4" from the cutterhead when it is moving!*

8. Repeat **Step 7** until the angled cut is satisfactory to your needs.

Rabbet Cutting

NOTICE

If you are not experienced with a jointer, set the depth of cut to 0", and practice feeding the workpiece across the tables as described below. This procedure will better prepare you for the actual operation.

The purpose of rabbet cutting is to remove a section of the workpiece edge (see **Figures 49 & 50**). When combined with another rabbet cut edge, the rabbet joints create a simple, yet strong method of joining stock.



Figure 49. Typical rabbet cutting operation.

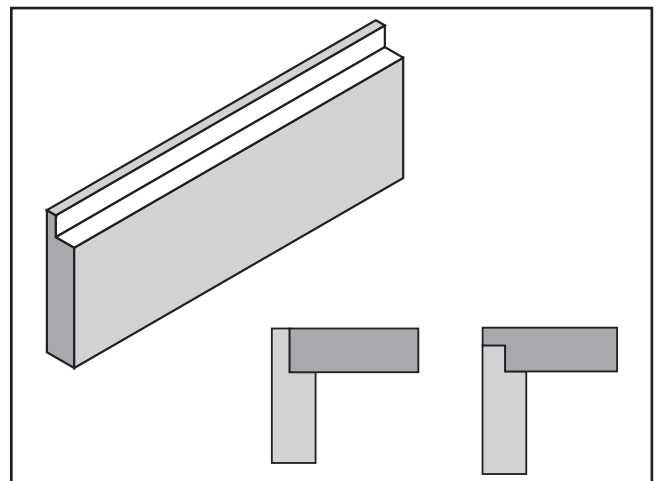


Figure 50. Illustration of rabbet cutting effects and a few sample joints.



WARNING

When the cutterhead guard is removed, attempting any other cut besides a rabbet directly exposes the operator to the moving cutterhead. Always replace the cutterhead guard after rabbet cutting!

To rabbet cut on the jointer:

1. Read and understand **SECTION 1: SAFETY**, beginning on **Page 7**.
2. Make sure your stock has been inspected for dangerous conditions as described in the **Stock Inspection** instructions, beginning on **Page 31**.
3. Set the cutting depth for your operation. (We suggest between $\frac{1}{16}$ " and $\frac{1}{8}$ " for rabbet cutting, using a more shallow depth for hard wood species or for wide stock.)
4. Remove the cutterhead guard.
5. Make sure your fence is moved forward, so the amount of infeed/outfeed table exposed is the same as the size of your rabbet. Also, make sure your fence is set to 90° .
6. Start the jointer.
7. With a push block in each hand, press the workpiece against the table and fence with firm pressure, and feed the workpiece over the cutterhead.

Note: *When your leading hand gets within 4" of the cutterhead, lift it up and over the cutterhead, and place the push block on the portion of the workpiece that is on the outfeed table. Now, focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same action with your trailing hand when it gets within 4" of the cutterhead. To keep your hands safe, DO NOT let them get closer than 4" from the cutterhead when it is moving!*
8. Repeat **Step 7** until the your rabbet is cut to depth.



SECTION 5: ACCESSORIES

! WARNING

Installing unapproved accessories may cause machine to malfunction, resulting in serious personal injury or machine damage. To reduce this risk, only install accessories recommended for this machine by Grizzly.

NOTICE

Refer to our website or latest catalog for additional recommended accessories.

W1212—Woodstock Jointer Pal

This knife-setting system lets you set jointer knives in perfect alignment every time! It also allows you to shift nicked knives to get a perfect cut to an accuracy of + or - .001".



Figure 51. Jointer knife jig.

G3631—Jointer/Planer Knife Hone

Add a razor hone to your planer and jointer knives with this hand-held sharpening device. This handy tool sharpens flat and beveled surfaces quickly and easily. Great for touch-ups.



Figure 52. Jointer knife hone.

T23246—The Missing Shop Manual: Jointer

Dedicated to providing integral information about woodworking tools and techniques that other manuals overlook, the books in this series contain safety facts, explanations about basic project set-up, and tips for maximizing tool performance.

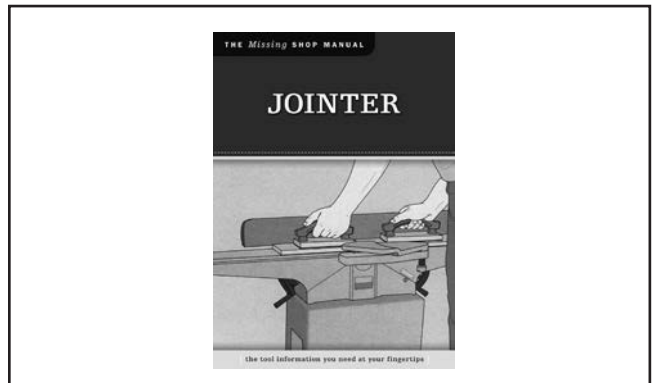


Figure 57. Instructional reference book.

order online at www.grizzly.com or call 1-800-523-4777



T21992—1/2" x 4' Power Twist V-Belt

Perfect for lathes, table saws, bandsaws and other powered tools. Smooth running with less vibration than solid belts. Power Twist® V-Belts can be customized in minutes to any size—just add or remove sections to fit your needs. Carry a Power Twist® V-Belt in your vehicle for a fix anywhere solution to broken fan belts.

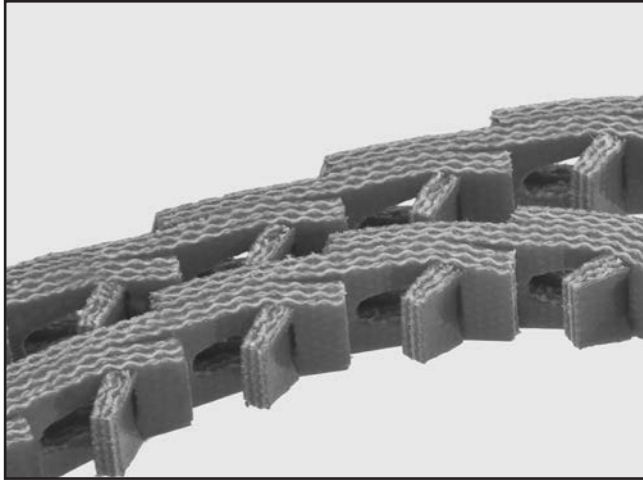


Figure 54. Power Twist V-Belt.

G5562—SLIPIT 1 Qt. Gel

G5563—SLIPIT 12 oz Spray

Use on cast iron table surfaces and other unpainted metal surfaces to reduce sliding friction and hangups. This product also reduces rust and prevents resin build-up.



Figure 55. Table gel and spray.

H9876—6" x 5/8" x 1/8" HSS Jointer Knives

These 6" x 5/8" x 1/8" Jointer Knives are made from HSS steel and are for our G0452 6" Jointer.

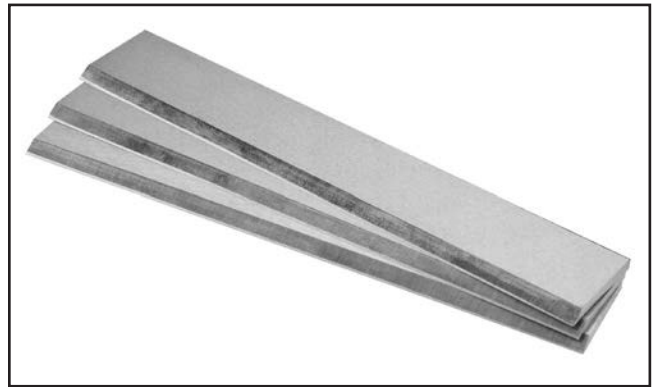


Figure 56. Jointer Knives.

T21146—Self-Set System

(Includes 3 Holders & Knife Inserts)

G6665—Dispoz-A-Blade Knife Inserts

(Set of 3)

Install a Dispoz-A-Blade® Knife system in your new jointer and save up to 70% on knife replacements for the life of your jointer. Each knife insert is double-edged, so you get two knives in one, and is indexed so that all knife inserts can be installed at the same height in just minutes. Yes, that means you can throw away the knife jig!

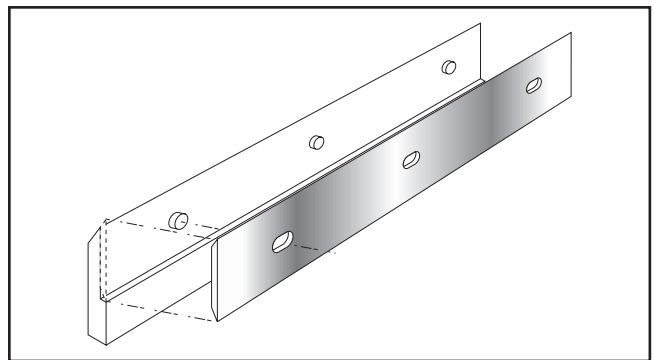


Figure 53. Blade holder and knife.



T10125—6" Spiral Cutterhead

We've found yet another source for high quality Spiral Cutterheads. These Cutterheads feature 4 spirals and German-made carbide inserts for an incredible finish.

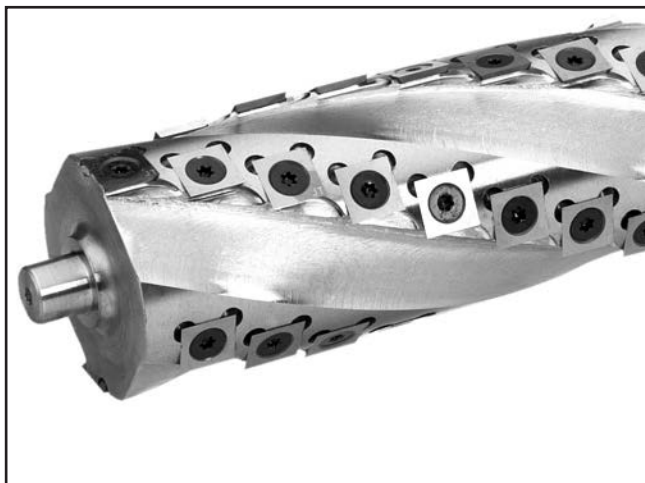


Figure 58. Spiral Cutterhead.

H7653—6" Spiral Cutterhead

This cutterhead replaces the standard straight knife cutterheads on our Grizzly jointers. It has four spirals with indexable, four-sided carbide inserts, so each insert can be rotated for a new factory sharp edge. Cutterhead includes cast iron pulleys, bearing blocks, mounting studs, 5 extra inserts, T-handle wrench, Torx bits and spare insert screws. Has an incredible finish, and is comparable to Byrd cutterheads in quality of cut as well as the quality of the cutterhead itself.



Figure 59. Spiral Cutterhead.

H7764—Byrd Tool 6" Shelix Cutterhead

Made in the USA by Byrd, these indexable carbide insert cutterheads are very well made and leave a great finish. The inserts are positioned along a spiral pattern, and rotate at a slight angle for a shearing action that leaves a glassy smooth cut on the toughest of woods. Comes with all 30 inserts on the cutterhead, plus 5 extras.

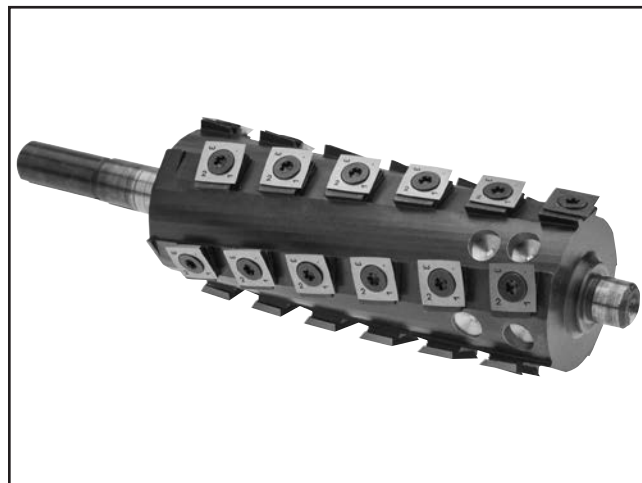


Figure 60. Shelix Cutterhead.

T21348—Carbide Replacement Inserts

Solid Carbide Indexable Inserts for Cutterheads.
Size: 14 x 14 x 2mm (10 pack).



Figure 61. Replacement inserts.



G9643—8" Precision Straightedge
G9644—12" Precision Straightedge
H2675—16" Precision Straightedge

Is your straightedge really straight? These grade 00 heavy-duty stainless steel straightedges are manufactured to DIN874 standards for professional results in set-up and inspection work.



Figure 62. Straightedges.

H8029—5 Piece Safety Kit

This kit has four essential jigs. Includes two push blocks, push stick, featherboard and combination saw and router gauge. Featherboard fits 3/8" x 3/4" miter slots. Made of high visibility yellow plastic.



Figure 63. 5-Piece Safety Kit.

G9256—6" Dial Caliper
G9257—8" Dial Caliper
G9258—12" Dial Caliper

Required for jointing, planing, or sanding to critical tolerances. These traditional dial calipers are accurate to 0.001" and can measure outside surfaces, inside surfaces, and heights/depths. Features stainless steel, shock resistant construction and a dust proof display. An absolute treat for the perfectionist!

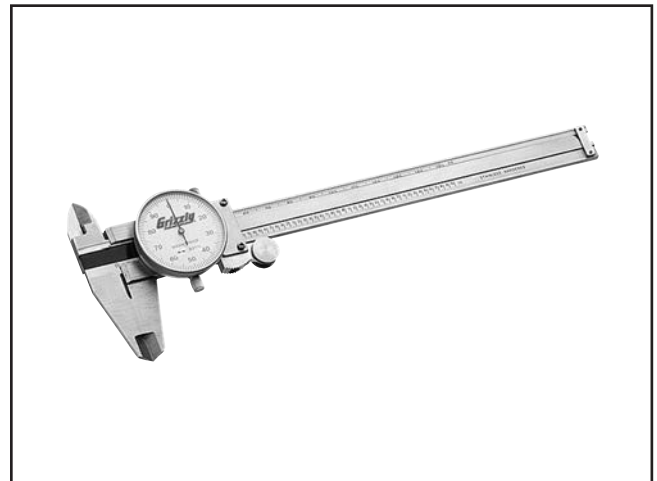


Figure 64. Grizzly® Dial Calipers.

- 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**
- H7194—Bifocal Safety Glasses 1.5**
- H7195—Bifocal Safety Glasses 2.0**
- H7196—Bifocal Safety Glasses 2.5**

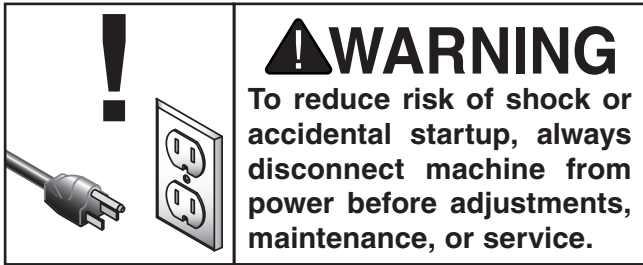


Figure 65. Eye protection assortment.

order online at www.grizzly.com or call 1-800-523-4777



SECTION 6: MAINTENANCE



Schedule

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

Daily:

- Vacuum all dust on and around the machine.
- Wipe down tables and all other unpainted cast iron with a metal protectant.

Monthly Check:

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

V-Belt

To ensure optimum power transmission from the motor to the blade, the V-belt must be in good condition (free from cracks, fraying and wear) and properly aligned and tensioned (refer to the instructions on **Page 20**).

Cleaning

Cleaning the Model G0452/P/Z is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning.

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.

Keep tables rust-free with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9 (see **Section 5: Accessories** on **Page 37** for more details).

Lubrication

Since all bearings are sealed and permanently lubricated, simply leave them alone until they need to be replaced. DO NOT lubricate them.

Table ways and the fence assembly should not be lubricated. If the tables appear to be stuck, disassemble and clean any foreign materials from the ways. Re-assemble and reset the gibs.

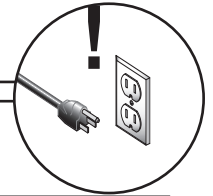


SECTION 7: SERVICE

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.

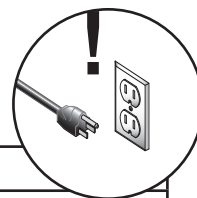
Troubleshooting



Motor & Machine Operation

Symptom	Possible Cause	Possible Solution
Motor will not start.	<ol style="list-style-type: none"> Emergency stop button depressed. Low voltage. Open circuit in motor or loose connections. 	<ol style="list-style-type: none"> Lift the cover on the emergency stop button to allow it to pop out. Check power line for proper voltage. Inspect all lead connections on motor for loose or open connections.
Fuses or circuit breakers blow.	<ol style="list-style-type: none"> Short circuit in line cord or plug. 	<ol style="list-style-type: none"> Repair or replace cord or plug for damaged insulation and shorted wires.
Motor fails to develop full power (output of motor decreases rapidly with decrease in voltage at motor terminals).	<ol style="list-style-type: none"> Power supply circuit overloaded with lights, appliances, and other motors. Undersized wires or circuits too long. 	<ol style="list-style-type: none"> Reduce load on circuit. Increase wire sizes or reduce length of the circuit.
Motor overheats.	<ol style="list-style-type: none"> Motor overloaded during operation. Air circulation through the motor restricted. 	<ol style="list-style-type: none"> Reduce load on motor; take lighter cuts. Clean out motor to provide normal air circulation.
Motor stalls or shuts off during a cut.	<ol style="list-style-type: none"> Motor overloaded during operation. Short circuit in motor or loose connections. Circuit breaker tripped. 	<ol style="list-style-type: none"> Reduce load on motor; take lighter cuts. Repair or replace connections on motor for loose or shorted terminals or worn insulation. Install correct circuit breaker; reduce # of machines running on that circuit.
Blade slows when cutting or makes a squealing noise, especially on start-up.	<ol style="list-style-type: none"> V-belt loose. V-belt worn out. 	<ol style="list-style-type: none"> Tighten V-belt (Page 20). Replace V-belt (Page 20).
Loud repetitious noise coming from machine.	<ol style="list-style-type: none"> Pulley setscrews or keys are missing or loose. Motor fan is hitting the cover. V-belts are damaged. 	<ol style="list-style-type: none"> Inspect keys and setscrews. Replace or tighten if necessary. Adjust fan cover mounting position, tighten fan, or shim fan cover. Replace V-belts (Page 20).
Vibration when running or cutting.	<ol style="list-style-type: none"> Loose or damaged blade. Damaged V-belt. Worn cutterhead bearings. 	<ol style="list-style-type: none"> Tighten or replace blade. Replace. Check/replace cutterhead bearings.





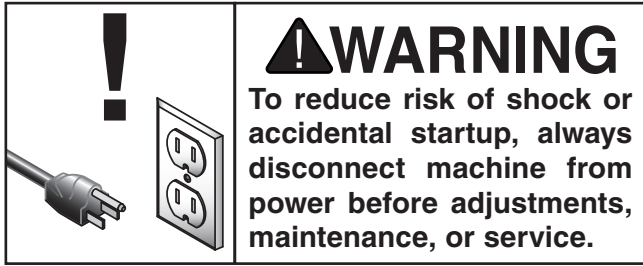
Table

Symptom	Possible Cause	Possible Solution
Tables are hard to adjust.	<ol style="list-style-type: none"> 1. Table lock is engaged or partially engaged. 2. Table gibs are too tight. 	<ol style="list-style-type: none"> 1. Completely loosen the table lock. 2. Re-adjust the table gibs (Page 49).
Excessive play in table movement.	<ol style="list-style-type: none"> 1. Table gibs are too loose. 	<ol style="list-style-type: none"> 1. Re-adjust the table gibs (Page 49).

Cutting

Symptom	Possible Cause	Possible Solution
Excessive snipe (gouge in the end of the board that is uneven with the rest of the cut).	<ol style="list-style-type: none"> 1. Outfeed table is set too low. 2. Operator pushing down on end of workpiece. 	<ol style="list-style-type: none"> 1. Align outfeed table with cutterhead knife at top dead center (Page 26). 2. Reduce/eliminate downward pressure on that end of workpiece.
Workpiece stops in the middle of the cut.	<ol style="list-style-type: none"> 1. Outfeed table is set too high. 	<ol style="list-style-type: none"> 1. Align outfeed table with cutterhead knife at top dead center (Page 26).
Chipping.	<ol style="list-style-type: none"> 1. Knots or conflicting grain direction in wood. 2. Nicked or chipped blades. 3. Feeding workpiece too fast. 4. Taking too deep of a cut. 	<ol style="list-style-type: none"> 1. Inspect workpiece for knots and grain (Page 31); only use clean stock. 2. Adjust one of the nicked knives sideways; or replace knives (Page 44). 3. Slow down the feed rate. 4. Take a smaller depth of cut. (Always reduce cutting depth when surface planing or working with hard woods.)
Long lines or ridges that run along the length of the board.	<ol style="list-style-type: none"> 1. Nicked or chipped knives. 	<ol style="list-style-type: none"> 1. Adjust one of the nicked knives sideways; or replace knives (Page 44).
Uneven cutter marks, wavy surface, or chatter marks across the face of the board.	<ol style="list-style-type: none"> 1. Feeding workpiece too fast. 2. Knives not adjusted at even heights in the cutterhead. 	<ol style="list-style-type: none"> 1. Slow down the feed rate. 2. Adjust the knives so they are set up evenly in the cutterhead (Page 44).
Board edge is concave or convex after jointing.	<ol style="list-style-type: none"> 1. Board not held with even pressure on infeed and outfeed table during cut. 2. Board started too uneven. 3. Board has excessive bow or twist along its length. 4. Insufficient number of passes. 	<ol style="list-style-type: none"> 1. Hold board with even pressure as it moves over the cutterhead. 2. Take partial cuts to remove the extreme high spots before doing a full pass. 3. Surface plane one face so there is a good surface to position against the fence. 4. It may take 3 to 5 passes to achieve a perfect edge, depending on the starting condition of the board and the depth of cut.
Uneven cut or breakout when rabbeting.	<ol style="list-style-type: none"> 1. Uneven feed rate. 2. Depth of cut too deep. 3. Knives not adjusted evenly with each other in the cutterhead. 4. Nicked or chipped knives. 	<ol style="list-style-type: none"> 1. Feed the board evenly and smoothly during the cut. 2. Raise the infeed table to take a smaller depth of cut. Never exceed $\frac{1}{16}$" per pass when rabbeting. 3. Adjust the knives so they are set up evenly in the cutterhead (Page 44). 4. Adjust one of the nicked knives sideways; replace knives (Page 44).





About Service

This section is designed to help the operator with adjustments that were made at the factory and that might also need to be made during the life of the machine.

This section is provided for your convenience—it is not a substitute for the Grizzly Service Department.

If any adjustments arise that are not described in this manual or you are unsure of how to perform the procedures in this section, then feel free to call Technical Support at (570) 546-9663.

G0452/G0452P Inspecting Knives

The height of the knives can be easily and quickly inspected with the knife setting jig. This inspection will ensure that the knives are set in the cutterhead as they should be. Usually this is done before calibrating the outside table or when troubleshooting.

To inspect the knives:

1. DISCONNECT JOINTER FROM POWER!
2. Remove the cutterhead guard or block it out of the way.

3. Lower the infeed table to the ½" scale mark.
4. Place the knife jig on the cutterhead, directly over a knife, as shown in **Figure 66**.

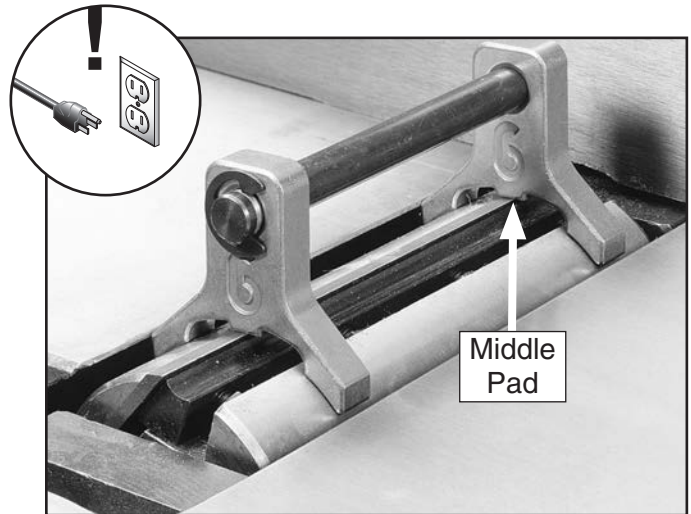


Figure 66. Jig positioned over cutterhead knife.

5. Carefully inspect how the jig touches the cutterhead and the knife.
 - If both outside legs of the jig sit firmly on the cutterhead and the middle pad just touches the knife, then that knife is set correctly. (Repeat this inspection with the other knives.)
 - If the jig does not sit firmly on the cutterhead and touch the knife edge as described, then reset that knife. (Repeat this inspection with the other knives before resetting.)

G0452/G0452P Setting Knives

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

The knife jig included with the jointer is designed to set the knives at the correct height.



The G0452/P Jointer uses jack screws for cutterhead knife height adjustments (see **Figure 67**).

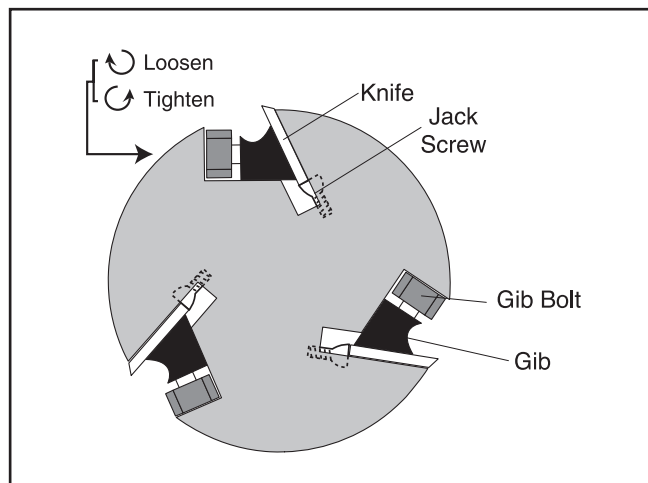


Figure 67. Cutterhead profile diagram.

To set the knives:

1. DISCONNECT JOINTER FROM POWER!
2. Remove the cutterhead guard from the table and lower the infeed and outfeed tables as far as they go. This will give you unrestricted access to the cutterhead.
3. Remove the cabinet cover to expose the V-belt.
4. Use the V-belt to rotate the cutterhead to access the cutterhead knives.
5. Loosen the cutterhead gib bolts, starting in the middle, and alternating back and forth until all of the gib bolts are loose, but not falling out.
6. Position the knife gauge over the knife as shown in **Figure 66** and loosen the gib bolts until the knife is completely loose.

7. Using a 3mm hex wrench, access the jack screws through the holes in the cutterhead (**Figure 68**) and rotate the jack screws to raise or lower the knife. When the knife is set correctly, it will barely touch the middle pad of the knife setting jig. Snug the gib bolts tight enough to just hold the knife in place. Repeat **Steps 5-7** with the rest of the knives.

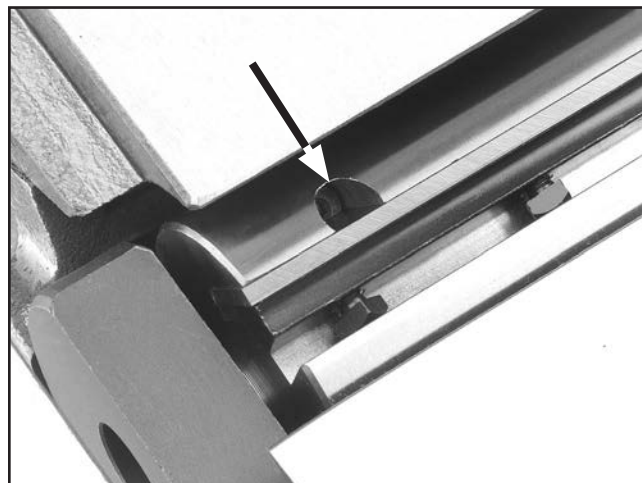


Figure 68. Jack screw access hole.

8. Rotate the cutterhead to the first knife you started with. Slightly tighten all the gib bolts, starting at the ends and working your way to the middle by alternating left and right. Repeat this step on the rest of the knives.
9. Final tighten each gib bolt.
10. Adjust the outfeed table to match the new knife heights.



G0452Z Replacing Carbide Inserts

Tools Needed:	Qty
L-Wrench Torx with T20 Torx Driver	1

The Model G0452Z cutterhead is equipped with 32 indexable carbide inserts. Each insert can be rotated to reveal any one of its four cutting edges. Therefore, if one cutting edge becomes dull or damaged, simply rotate it 90° to reveal a fresh cutting edge (**Figure 69**).

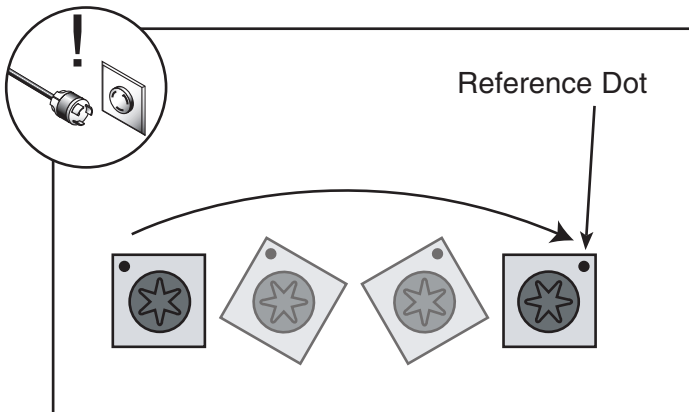


Figure 69. Insert rotating sequence.

In addition, each insert has a reference dot on one corner. As the insert is rotated, the reference dot location can be used as an indicator of which edges are used and which are new. When the reference dot revolves back around to its starting position, the insert should be replaced.

Replacement carbide inserts should be included with the cutterhead. If you need additional inserts, call Grizzly Customer Service at (800) 523-4777 and order Model T21348, Replacement Indexable Carbide Inserts for G0452Z, 10 pack.

To rotate or change a carbide insert:

1. DISCONNECT JOINTER FROM POWER!
2. Move the cutterhead guard out of the way, or remove it.
3. Remove any sawdust from the head of the carbide insert Torx screw.
4. Remove the Torx screw and carbide insert.
5. Clean all dust and dirt off of the insert and the cutterhead pocket from which the insert was removed, and replace the insert so a fresh, sharp edge is facing outward. Make sure the insert is seated in the pocket on the cutterhead.

Note: Proper cleaning is critical to achieving a smooth finish. Dirt or dust trapped between the insert and cutterhead will slightly raise the insert, and make noticeable marks on your workpieces the next time you cut.

6. Lubricate the Torx screw threads with a light machine oil, wipe the excess oil off the threads, and torque the Torx screw to 48-50 inch/pounds.

Note: Excess oil may squeeze between the insert and cutterhead or at the bottom of the screw hole, causing hydrostatic lock and preventing the screw from fully tightening, thereby lifting the insert or screw slightly and affecting workpiece finishes. Make sure to carefully clean off any excess oil to prevent this from happening.



Calibrating Depth Scale

The depth scale on the infeed table can be calibrated or "zeroed" if it is not correct.

To calibrate the depth scale:

1. Set the outfeed table height as described in the **Setting Outfeed Table Height** subsection.
2. Place a straightedge across the infeed and outfeed tables.
3. Adjust the infeed table until it is level with the outfeed table, as illustrated in **Figure 70**.

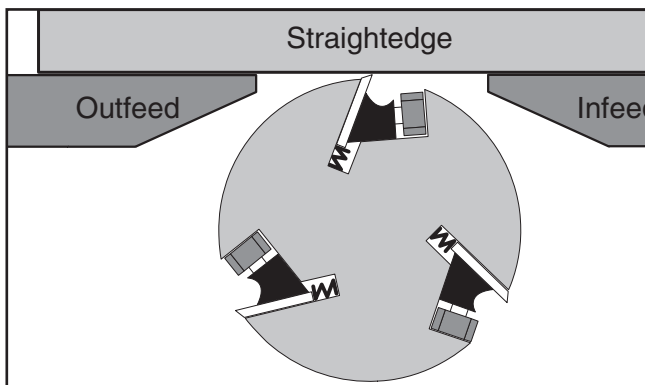


Figure 70. Infeed table adjusted even with outfeed table and knife at TDC.

4. Using a screwdriver, adjust the scale pointer exactly to "0" (**Figure 71**).

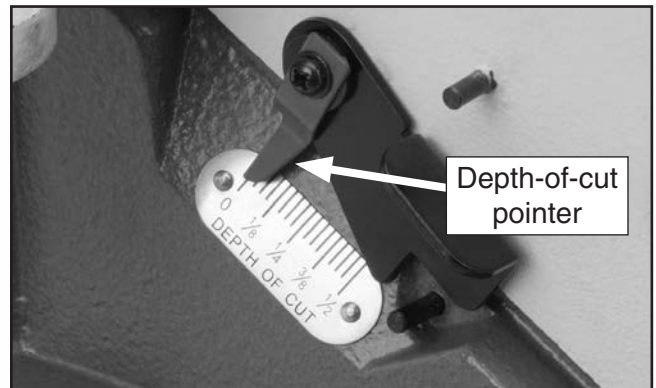


Figure 71. Depth-of-cut pointer adjusted to "0" position.



Setting Fence Stops

The fence stops are adjustable nuts and bolts that simplify the task of adjusting the fence to 45° inward, 90°, and 45° outward (135°).

To set the 45° inward fence stop:

1. Using a 45° square, adjust the fence to the 45° inward position, as shown in **Figure 72**.



Figure 72. Adjusting fence 45° inward.

2. Loosen the jam nut shown in **Figure 73**.

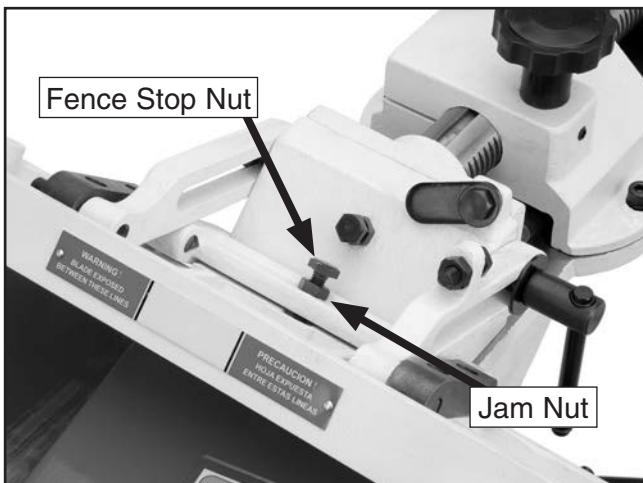


Figure 73. 45° inward fence stop jam nut.

3. Adjust the 45° inward fence stop nut until it makes contact with the back of the fence bracket.
4. Retighten the jam nut loosened in **Step 2** and recheck.

To set the 90° fence stop:

1. Flip the 90° swing stop into the position shown in **Figure 74**.

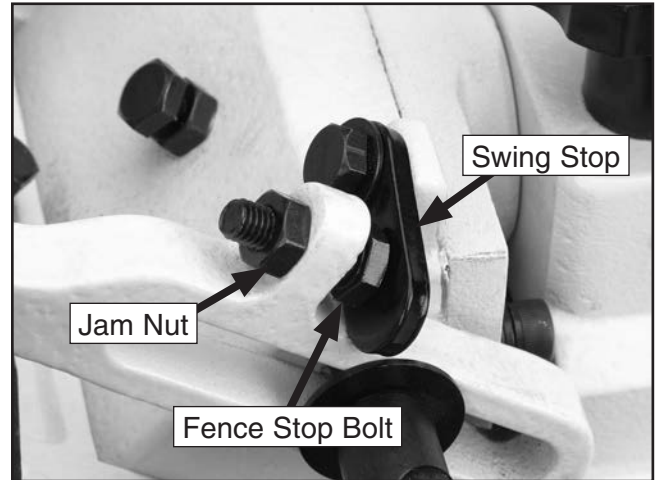


Figure 74. 90° swing stop engaged.

2. Using a 90° square, adjust the fence to the 90° position in **Figure 75** using the fence stop bolt and jam nut.

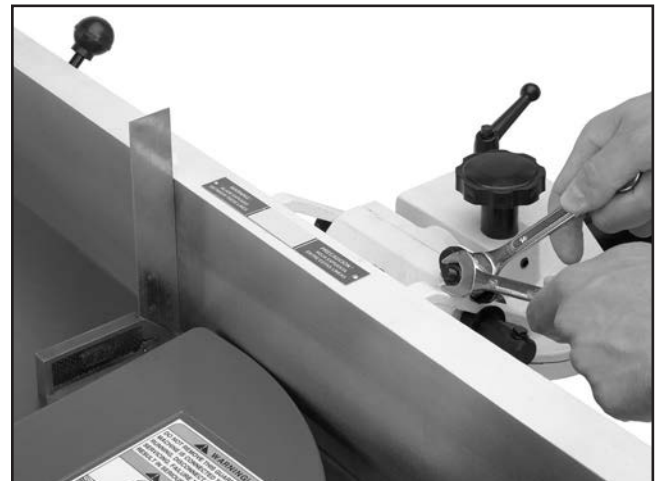


Figure 75. Adjusting fence to 90°.

3. Loosen the jam nut on the 90° fence stop bolt (**Figure 74**).
4. Adjust the 90° fence stop bolt until it makes contact with the 90° swing stop.
5. Retighten the jam nut loosened in **Step 3** and recheck.



To set the 45° outward fence stop:

1. Flip the 90° swing stop out of the way as shown in **Figure 76**.
2. Using a sliding bevel adjusted to 135°, adjust the fence to the 135° (45° outward) position.

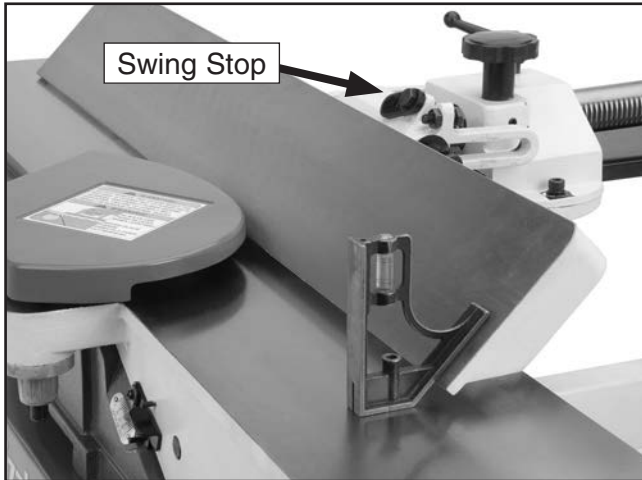


Figure 76. Adjusting fence 45° outward.

3. Loosen the jam nut on the 45° outward fence stop bolt (**Figure 77**).

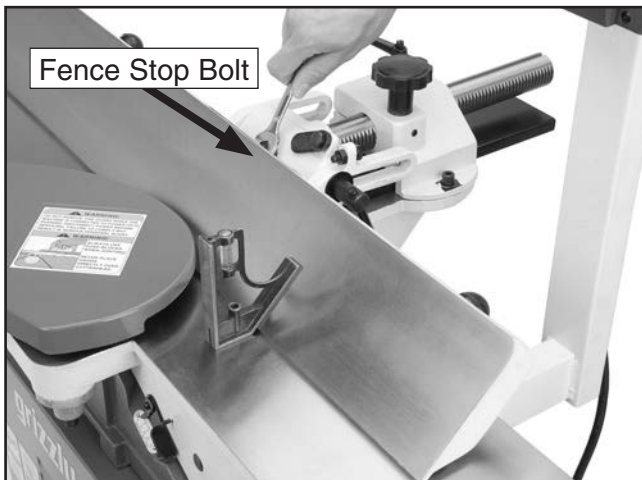


Figure 77. 45° outward fence stop jam nut.

4. Adjust the 45° outward fence stop bolt until it makes contact with the back of the fence.
5. Retighten the jam nut loosened in **Step 3** and recheck.

Adjusting Gibs

The function of the table gibs is to eliminate excessive play in the table movement. The gibs also control how easy it will be to move the tables up and down.

To adjust the table gibs:

1. Using a 10mm wrench, loosen the two outfeed table gib nuts on the side of the jointer base (**Figure 78**).

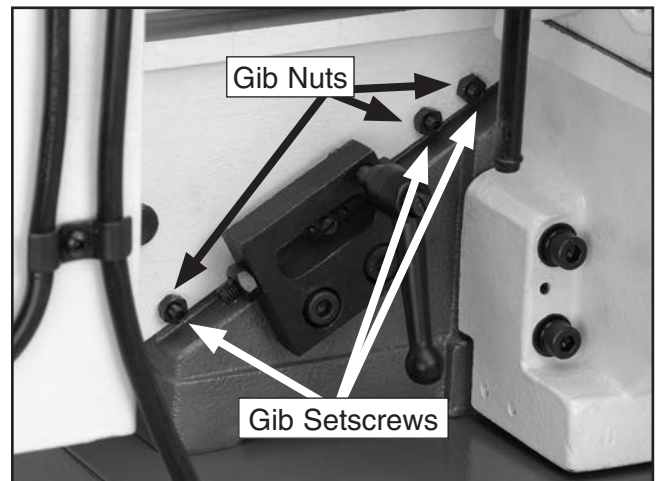


Figure 78. Outfeed table gib controls.

2. Using a 3mm hex wrench, evenly tighten the gib setscrews a small amount, then check the table by moving it up and down. Adjust the setscrews as needed until the friction of the table movement is balanced between minimal play and ease of movement.

Note: *Tighter gibs reduce play but make it harder to adjust the tables.*

3. Repeat **Steps 1-2** with the other table.
4. Set the outfeed table height as described in **Setting Outfeed Table Height** on **Page 26**.



SECTION 8: 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 after-market 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

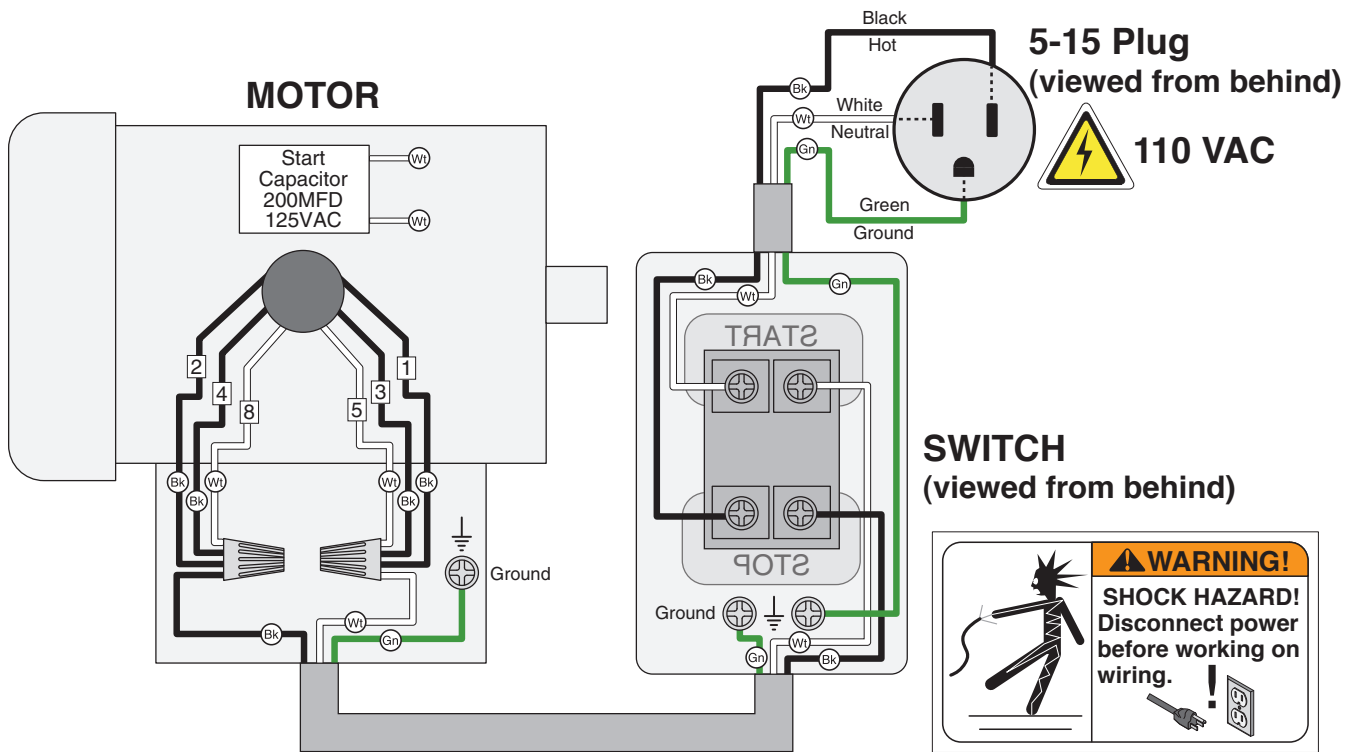
The photos and diagrams included in this section are best viewed in color. You can view these pages in color at www.grizzly.com.

COLOR KEY

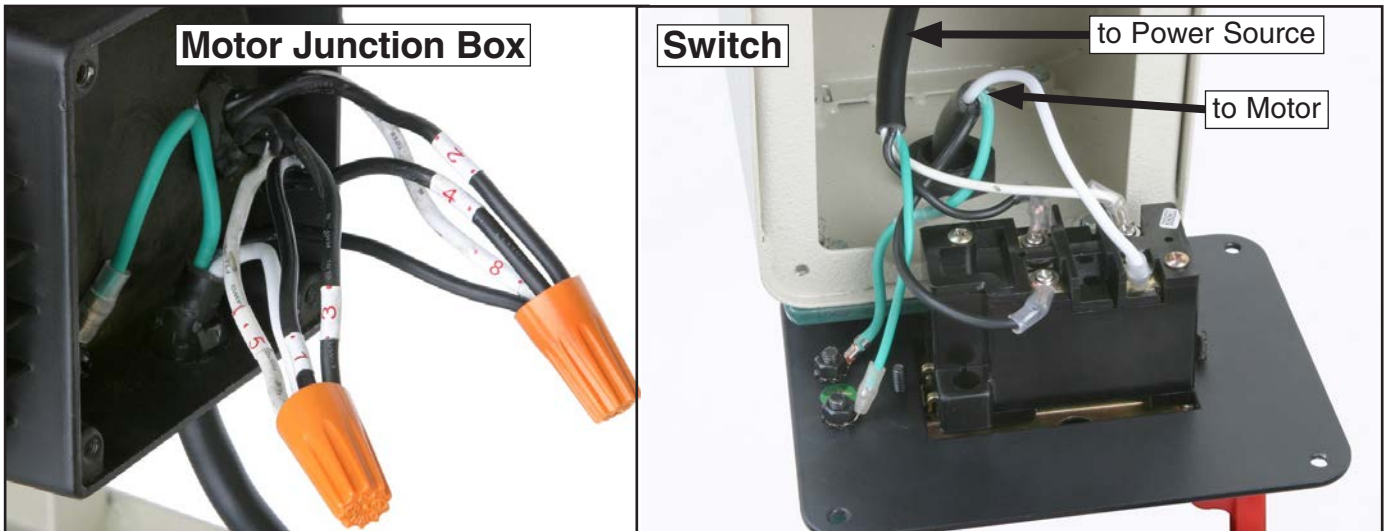
BLACK		BLUE		YELLOW		LIGHT BLUE	
WHITE		BROWN		YELLOW GREEN		BLUE WHITE	
GREEN		GRAY		PURPLE		TURQUOISE	
RED		ORANGE		PINK			



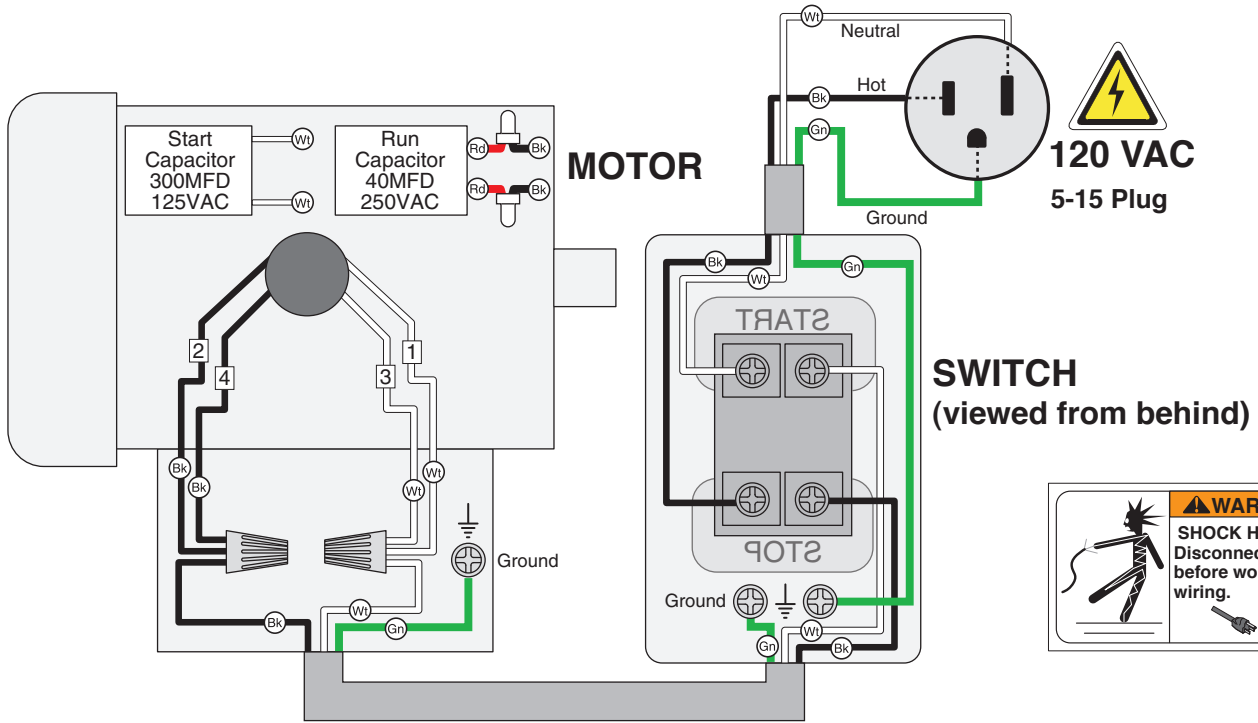
Wiring Diagram



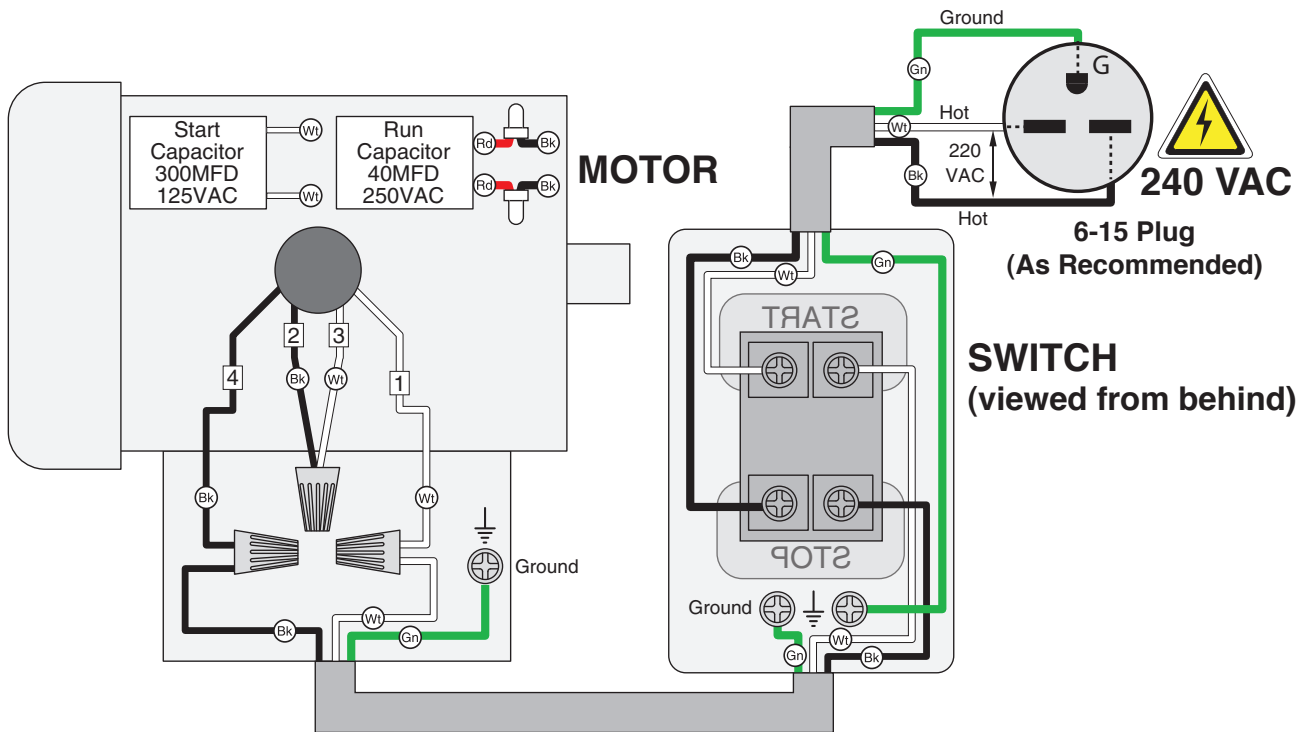
Electrical Components



G0452Z 120V Wiring Diagram

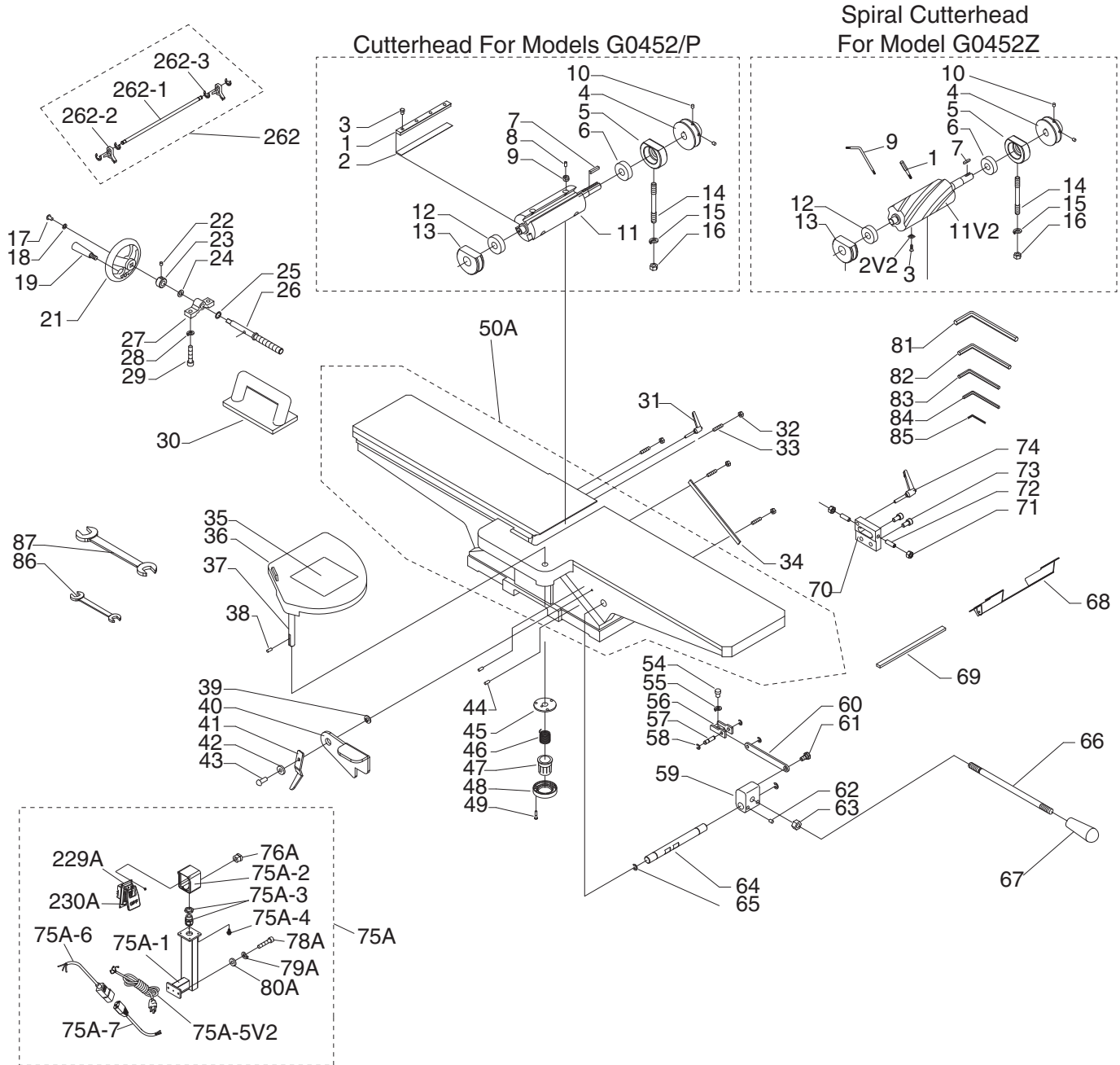


G0452Z 240V Wiring Diagram



SECTION 9: PARTS

Table



Please Note: We do our best to stock replacement parts whenever possible, but we cannot guarantee that all parts shown here are available for purchase. Call (800) 523-4777 or visit our online parts store at www.grizzly.com to check for availability.



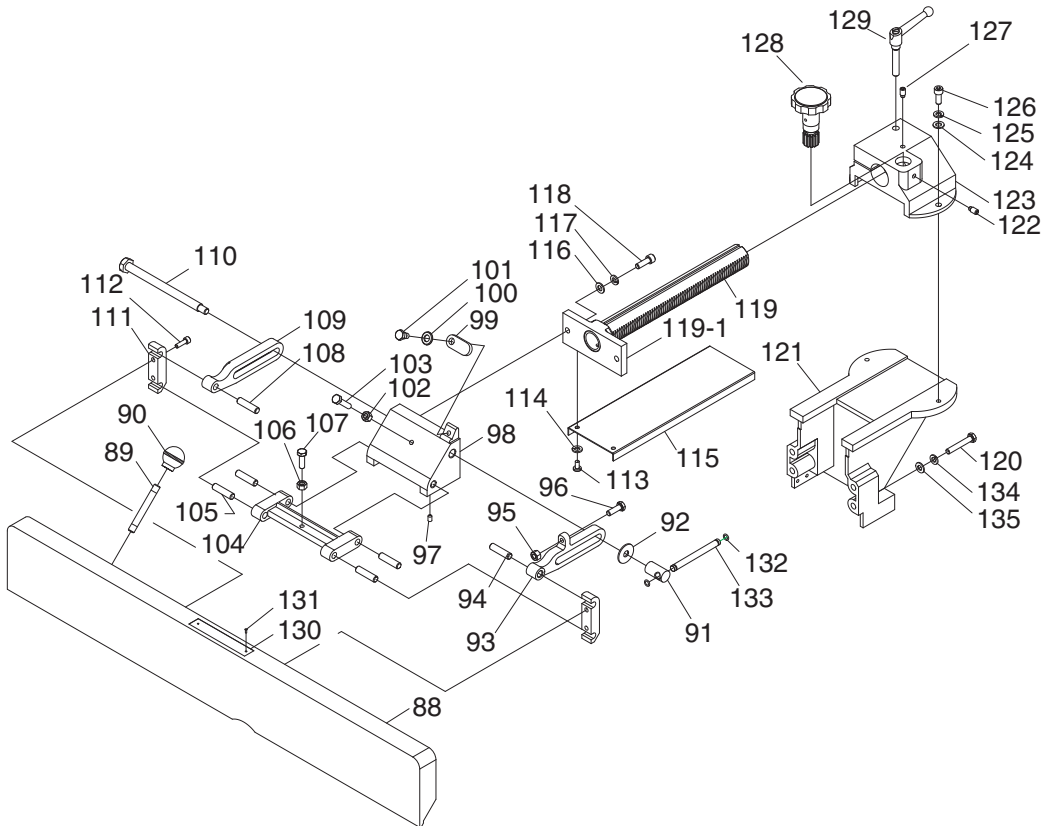
G0452 Table

REF	PART #	DESCRIPTION
1	P0452001	GIB
1	P0452Z001	DRIVER BIT TORX T20
2	P0452002	KNIVES 6 X 5/8 X 1/8 3-PC SET
2V2	P0452Z002V2	INDEXABLE CARBIDE INSERT 10PK
3	P0452003	GIB SCREW
3	P0452Z003	INSERT SCREW TORX T20 M6-1 X 15
4	P0452004	CUTTERHEAD PULLEY
5	P0452005	RIGHT PILLOW BLOCK
6	P0452006	BALL BEARING 6203-2RS
7	P0452007	KEY 5 X 5 X 30
8	P0452008	SET SCREW M5-.8 X 12
9	P0452009	CUTTERHEAD NUT
9	P0452Z009	L-WRENCH TORX T20
10	P0452010	SET SCREW M6-1 X 10
11	P0452011	CUTTERHEAD 6" 3-KNIFE
11V2	P0452Z011V2	SPIRALCUTTERHEAD 6" V2.04.15
12	P0452012	BALL BEARING 6202-2RS
13	P0452013	LEFT PILLOW BLOCK
14	P0452014	STUD-DE M10-1.5 X 100, 24
15	P0452015	LOCK WASHER 10MM
16	P0452016	HEX NUT M10-1.5
17	P0452017	BUTTON HD CAP SCR M6-1 X 12
18	P0452018	FLAT WASHER 6MM
19	P0452019	HANDLE
21	P0452021	HANDWHEEL
22	P0452022	SET SCREW M6-1 X 6
23	P0452023	LOCK COLLAR
24	P0452024	FLAT WASHER 12MM
25	P0452025	FLAT WASHER 12MM
26	P0452026	LEADSCREW
27	P0452027	LEADSCREW BRACKET
28	P0452028	LOCK WASHER 8MM
29	P0452029	CAP SCREW M8-1.25 X 50
30	P0452030	PUSH BLOCK
31	P0452031	LOCK HANDLE
32	P0452032	HEX NUT M6-1
33	P0452033	SET SCREW M6-1 X 25
34	P0452034	TABLE GIB
35	P0452035	CUTTERHEAD GUARD LABEL
36	P0452036	CUTTERHEAD GUARD
37	P0452037	POST W/SLOT
38	P0452038	SET SCREW M3-.5 X 10
39	P0452039	SPACER
40	P0452040	INFEED TABLE STOP
41	P0452041	POINTER
42	P0452042	FLAT WASHER 4MM
43	P0452043	BUTTON HD CAP SCR M4-.7 X 16
44	P0452044	ROLL PIN 4 X 20
45	P0452045	END PLATE
46	P0452046	TORSION SPRING
47	P0452047	SPRING HOUSING
48	P0452048	RETAINER
49	P0452049	BUTTON HD CAP SCR M4-.7 X 16

REF	PART #	DESCRIPTION
50A	P0452050A	TABLE ASSY W/BASE
54	P0452054	CAP SCREW M8-1.25 X 15
55	P0452055	LOCK WASHER 8MM
56	P0452056	PIVOT ARM BRACKET
57	P0452057	CAPTIVE PIN
58	P0452058	EXT RETAINING RING 5MM
59	P0452059	LEVER HUB
60	P0452060	PIVOT LINK
61	P0452061	PIVOT LINK STEP BOLT
62	P0452062	SET SCREW M8-1.25 X 8
63	P0452063	HEX NUT M12-1.75
64	P0452064	INFEED PIVOT SHAFT
65	P0452065	E-CLIP 12MM
66	P0452066	LEVER ROD
67	P0452067	HANDLE
68	P0452068	DUST CHUTE
69	P0452069	SEAL
70	P0452070	CLAMP PLATE
71	P0452071	HEX NUT M8-1.25
72	P0452072	SET SCREW M8-1.25 X 25
73	P0452073	CAP SCREW M8-1.25 X 16
74	P0452074	LOCK LEVER
75	P0452075	SWITCH MOUNTING BRACKET V1.03.05
75A	P0452075A	CONTROL PEDESTAL ASSY V2.07.07
75A-1	P0452075A-1	PEDESTAL ARM V2.07.07
75A-2	P0452075A-2	SWITCH BOX V2.07.07
75A-3	P0452075A-3	STRAIN RELIEF 13.5MM V2.07.07
75A-4	P0452075A-4	FLANGE BOLT M6-1 X 16
75A-5	P0452075A-5	POWER CORD 14G 3W 72" 5-15P
75A-6	P0452075A-6	SWITCH CORD
75A-7	P0452075A-7	MOTOR CORD
76	P0452076	STRAIN RELIEF V1.03.05
76A	P0452076A	STRAIN RELIEF V2.07.07
77	P0452077	BUTTON HD CAP SCR M5-.8 X 12
78	P0452078	CAP SCREW M10-1.5 X 25
78A	P0452078A	CAP SCREW M8-1.25 X 25
79	P0452079	LOCK WASHER 10MM
79A	P0452079A	LOCK WASHER 8MM
80	P0452080	FLAT WASHER 10MM
80A	P0452080A	FLAT WASHER 8MM
81	P0452081	HEX WRENCH 8MM
82	P0452082	HEX WRENCH 6MM
83	P0452083	HEX WRENCH 4MM
84	P0452084	HEX WRENCH 3MM
85	P0452085	HEX WRENCH 2.5MM
86	P0452086	WRENCH 8 X 10MM OPEN-END
87	P0452087	WRENCH 12 X 14MM OPEN-END
229A	P0452229A	SWITCH PLATE V2.07.07
230A	P0452230A	START/STOP SWITCH KEDU HY56 V2.07.07
262	P0452262	KNIFE SETTING JIG ASSEMBLY
262-1	P0452262-1	KNIFE JIG ROD
262-1	P0452262-1	KNIFE JIG ROD
262-3	P0452262-3	E-CLIP 9MM



G0452 Fence



REF	PART #	DESCRIPTION
88	P0452088	FENCE
89	P0452089	LEVER ROD
90	P0452090	BALL KNOB
91	P0452091	HANDLE HUB
92	P0452092	FLAT WASHER 4MM
93	P0452093	RIGHT BRACKET
94	P0452094	DOWEL PIN
95	P0452095	HEX NUT M8-1.25
96	P0452096	HEX BOLT M8-1.25 X 25
97	P0452097	SET SCREW M6-1 X 10
98	P0452098	FENCE BRACKET
99	P0452099	ANGLE STOP
100	P0452100	FLAT WASHER 8MM
101	P0452101	SHOULDER BOLT M8-1.25 X 15
102	P0452102	HEX NUT M8-1.25
103	P0452103	HEX BOLT M8-1.25 X 25
104	P0452104	FENCE SUPPORT
105	P0452105	DOWEL PIN
106	P0452106	HEX NUT M8-1.25
107	P0452107	HEX BOLT M8-1.25 X 25
108	P0452108	DOWEL PIN
109	P0452109	LEFT BRACKET
110	P0452110	FENCE BRACKET BOLT
111	P0452111	REAR CLAMP
112	P0452112	CAP SCREW M6-1 X 20

REF	PART #	DESCRIPTION
113	P0452113	PHLP HD SCR M6-1 X 12
114	P0452114	LOCK WASHER 6MM
115	P0452115	FENCE CUTTERHEAD GUARD
116	P0452116	FLAT WASHER 8MM
117	P0452117	LOCK WASHER 8MM
118	P0452118	CAP SCREW M8-1.25 X 25
119	P0452119	FENCE RAM
119-1	P0452119-1	RAM PLATE
120	P0452120	CAP SCREW M8-1.25 X 60
121	P0452121	FENCE SUPPORT BRACKET
122	P0452122	SET SCREW M8-1.25 X 12
123	P0452123	RAM BRACKET
124	P0452124	FLAT WASHER 8MM
125	P0452125	LOCK WASHER 8MM
126	P0452126	CAP SCREW M8-1.25 X 20
127	P0452127	SET SCREW M8-1.25 X 12
128	P0452128	KNOB BOLT
129	P0452129	LOCK LEVER
130	P0452130	FENCE WARNING LABEL
131	P0452131	ALUMINUM RIVET
132	P0452132	O-RING 5.8 X 1.9 P6
133	P0452133	LOCK LEVER BAR
134	P0452134	LOCK WASHER 8MM
135	P0452135	FLAT WASHER 8MM



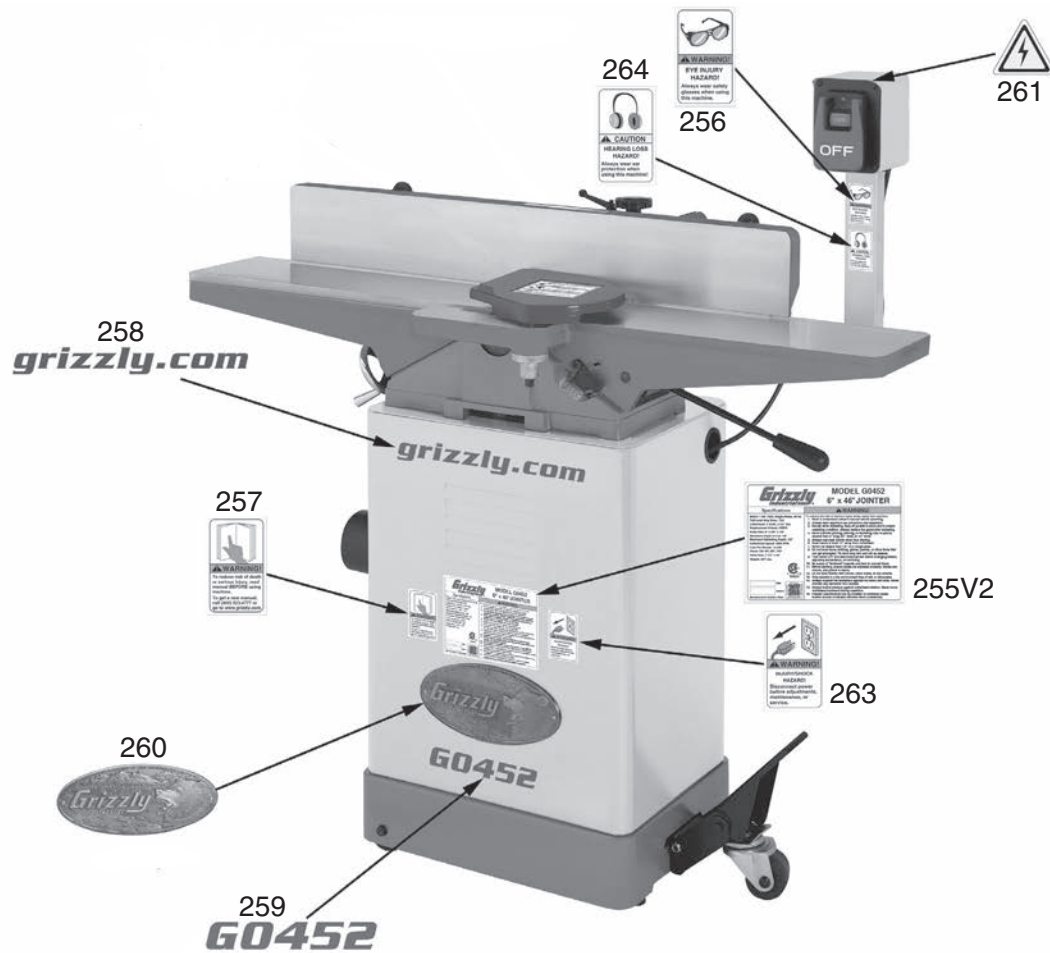
G0452 Base

REF	PART #	DESCRIPTION
201A	P0452201A	WHITE CABINET V2.08.07
202	P0452202	HEX NUT M8-1.25
203	P0452203	FLAT WASHER 8MM
204	P0452204	UNIVERSAL WHEEL 78MM DIA
205	P0452205	SLEEVE
206	P0452206	CAP SCREW M5-.8 X 10
207	P0452207	STRAIN RELIEF
208	P0452208	HEX NUT 3/8-16
209	P0452209	RUBBER FOOT
210	P0452210	HEX NUT 5/16-18
211	P0452211	FLAT WASHER 10MM
212	P0452212	MOTOR MOUNT BRACKET
213	P0452213	DUST CHUTE
214	P0452214	FLAT WASHER 3MM
215	P0452215	BUTTON HD CAP SCR M5-.8 X 16
216	P0452216	BUTTON HD CAP SCR M5-.8 X 16
217	P0452217	FLAT WASHER 5MM
218	P0452218	CABINET REAR COVER
219	P0452219	HEX BOLT 5/16-18 X 3/4
220	P0452220	HEX NUT 5/16-18
221	P0452221	CARRIAGE BOLT 5/16-18 X 1
222	P0452222	LOCK WASHER 10MM
223	P0452223	CAP SCREW M10-1.5 X 20
224	P0452224	MOTOR 1HP 120V 1-PH
224-1	P0452224-1	FAN COVER
224-2	P0452224-2	MOTOR FAN
224-3	P0452224-3	CAPACITOR COVER
224-4	P0452224-4	S CAPACITOR 200M 125V 1-1/2 X 2-3/4
224-5	P0452224-5	JUNCTION BOX
224-6	P0452224-6	BALL BEARING 6204ZZ

REF	PART #	DESCRIPTION
224-7	P0452224-7	BALL BEARING 6204ZZ
224-8	P0452224-8	CENTRIFUGAL SWITCH 20MM-3450
224-9	P0452224-9	CONTACT PLATE 20MM
225	P0452225	KEY 5 X 5 X 30
226	P0452226	V-BELT A38
227	P0452227	MOTOR PULLEY
228	P0452228	SET SCREW M6-1 X 6
234	P0452234	EXT RETAINING RING 9MM
235	P0452235	FLAT WASHER 12MM
236	P0452236	SHAFT 12MM
237	P0452237	HEX BOLT M8-1.25 X 50
238	P0452238	FLAT WASHER 8MM
239	P0452239	HEX NUT M10-1.5
240	P0452240	FLAT WASHER 10MM
241	P0452241	HEX NUT M8-1.25
242	P0452242	LOCK NUT M12-1.75
243	P0452243	FLAT WASHER 8MM
244	P0452244	HEX BOLT M8-1.25 X 100
245	P0452245	TROLLEY WHEEL BOLT
246	P0452246	TROLLEY WHEEL
247	P0452247	BALL BEARING 6202-2RS
248	P0452248	INT RETAINING RING 35MM
249	P0452249	TROLLEY WHEEL SLEEVE
250	P0452250	TROLLEY UNIVERSAL KIT
251	P0452251	FLAT WASHER 10MM
252	P0452252	HEX BOLT M10-1.5 X 55
253	P0452253	BRACKET
254	P0452254	PEDAL
254A	P0452254A	PEDAL ASSEMBLY



G0452 Labels



REF	PART #	DESCRIPTION
255V2	P0452255V2	MACHINE ID LABEL CSA V2.08.12
256	P0452256	SAFETY GLASSES LABEL
257	P0452257	READ MANUAL LABEL
258	P0452258	GRIZZLY.COM LABEL 9-3/4 X 2
259	P0452259	MODEL NUMBER LABEL

REF	PART #	DESCRIPTION
260	P0452260	GRIZZLY NAMEPLATE, SMALL
261	P0452261	ELECTRICITY LABEL
263	P0452263	DISCONNECT LABEL
264	P0452264	EAR PROTECTION LABEL





WARRANTY CARD

Name _____
 Street _____
 City _____ State _____ Zip _____
 Phone # _____ Email _____
 Model # _____ Order # _____ Serial # _____

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

1. How did you learn about us?

Advertisement Friend Catalog
 Card Deck Website Other:

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

<input type="checkbox"/> Cabinetmaker & FDM	<input type="checkbox"/> Popular Science	<input type="checkbox"/> Wooden Boat
<input type="checkbox"/> Family Handyman	<input type="checkbox"/> Popular Woodworking	<input type="checkbox"/> Woodshop News
<input type="checkbox"/> Hand Loader	<input type="checkbox"/> Precision Shooter	<input type="checkbox"/> Woodsmith
<input type="checkbox"/> Handy	<input type="checkbox"/> Projects in Metal	<input type="checkbox"/> Woodwork
<input type="checkbox"/> Home Shop Machinist	<input type="checkbox"/> RC Modeler	<input type="checkbox"/> Woodworker West
<input type="checkbox"/> Journal of Light Cont.	<input type="checkbox"/> Rifle	<input type="checkbox"/> Woodworker's Journal
<input type="checkbox"/> Live Steam	<input type="checkbox"/> Shop Notes	<input type="checkbox"/> Other:
<input type="checkbox"/> Model Airplane News	<input type="checkbox"/> Shotgun News	
<input type="checkbox"/> Old House Journal	<input type="checkbox"/> Today's Homeowner	
<input type="checkbox"/> Popular Mechanics	<input type="checkbox"/> Wood	

3. What is your annual household income?

\$20,000-\$29,000 \$30,000-\$39,000 \$40,000-\$49,000
 \$50,000-\$59,000 \$60,000-\$69,000 \$70,000+

4. What is your age group?

20-29 30-39 40-49
 50-59 60-69 70+

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

0-2 Years 2-8 Years 8-20 Years 20+ Years

6. How many of your machines or tools are Grizzly?

0-2 3-5 6-9 10+

7. Do you think your machine represents a good value? Yes No

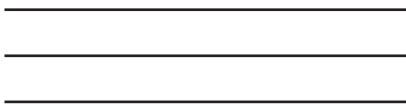
8. Would you recommend Grizzly Industrial to a friend? Yes No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?
Note: We never use names more than 3 times. Yes No

10. Comments: _____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE



Place
Stamp
Here



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



FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name	_____
Street	_____
City	_____ State _____ Zip _____

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY AND 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.

grizzly.com[®]
TOOL WEBSITE

Buy Direct and Save with Grizzly[®] – Trusted, Proven and a Great Value!
~Since 1983~

*Visit Our Website Today For
Current Specials!*

**ORDER
24 HOURS A DAY!
1-800-523-4777**

