READ THIS FIRST

Model G0495X

IMPORTANT UPDATE

For Machines Mfd. Since 05/16
and Owner's Manual Revised 11/13

For questions or help with this product contact Tech Support at (570) 546-9663 or techsupport@grizzly.com

The following changes were recently made to this machine since the owner's manual was printed:

- Redesigned front digital readout and rear digital sensor.
- Front digital readout takes AA batteries instead of AAA batteries. Rear sensor requires no battery.
- Updated instructions for using digital readout. Rear sensor no longer has separate controls.
- Changed magnetic switch contactor appearance, color of capacitor and motor wires, and wiring diagram.

Aside from this information, all other content in the owner's manual applies and MUST be read and understood for your own safety. **IMPORTANT: Keep this update with the owner's manual for future reference.**

For questions or help, contact our Tech Support at (570) 546-9663 or techsupport@grizzly.com.

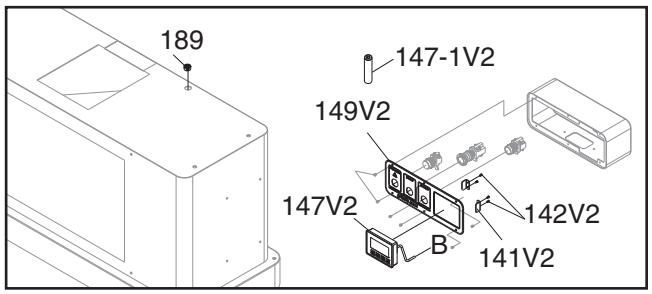
Revised Inventory

Box 1		Qty
N.	AA Batteries (not shown)	2

Digital Readout Batteries

Two AA batteries install into the control panel for the digital readout to function. Follow the instructions on **Page 18** in the Owner's Manual in the same manner for AAA batteries.

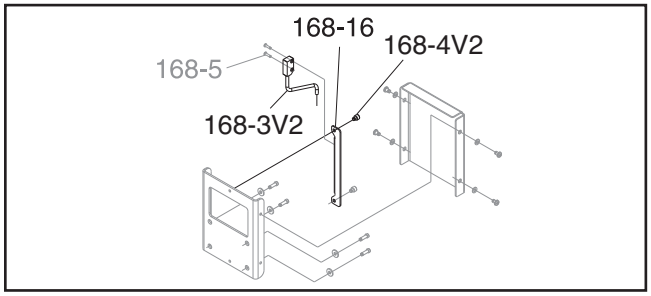
Revised Stand Parts



REF	PART #	DESCRIPTION
141V2	P0495X141V2	DIGITAL READOUT BRACKET V2.03.15
142V2	P0495X142V2	FLAT HD SCR M3-.5 X 6
147V2**	P0495X147V2	DIGITAL READOUT ASSEMBLY V2.03.15
147-1V2	P0495X147-1V2	BATTERY AA V2.03.15
149V2	P0495X149V2	SWITCH PLATE V2.03.15
189	P0495X189	STRAIN RELIEF 1/2"-3/4" SNAP-IN ST

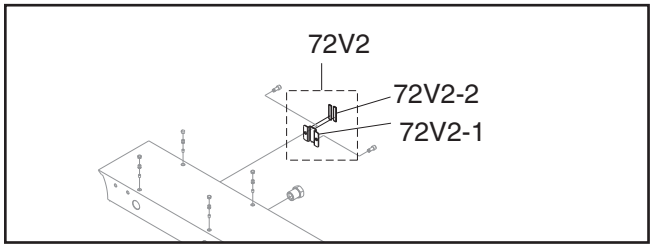
** PART 147V2 INCLUDES PART 168-3V2.

Revised Base Parts



REF	PART #	DESCRIPTION
168-3V2**	P0495X168-3V2	DIGITAL SENSOR V2.03.15
168-4V2	P0495X168-4V2	CAP SCREW M5-.8 X 6
168-5	P0495X168-5	PHLP HD SCR M3-.5 X 12
168-16	P0495X168-16	DIGITAL SENSOR BRACKET

Revised Table Parts

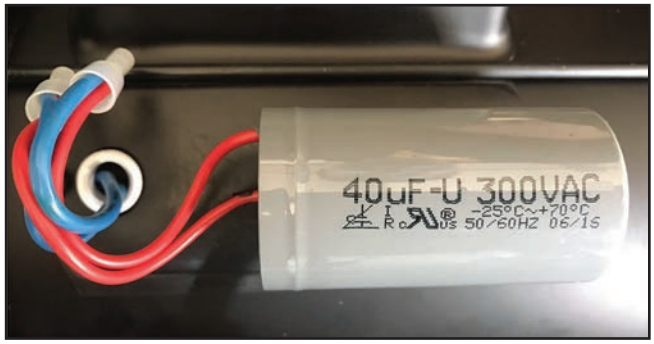


REF	PART #	DESCRIPTION
72V2	P0495X072V2	MAGNETIC DRO BRACKET ASSY V2.03.15
72V2-1	P0495X072V2-1	MAGNETIC DRO BRACKET
72V2-2	P0495X072V2-2	MAGNETIC STRIP (SET OF 2)

#BL17352 PRINTED IN TAIWAN

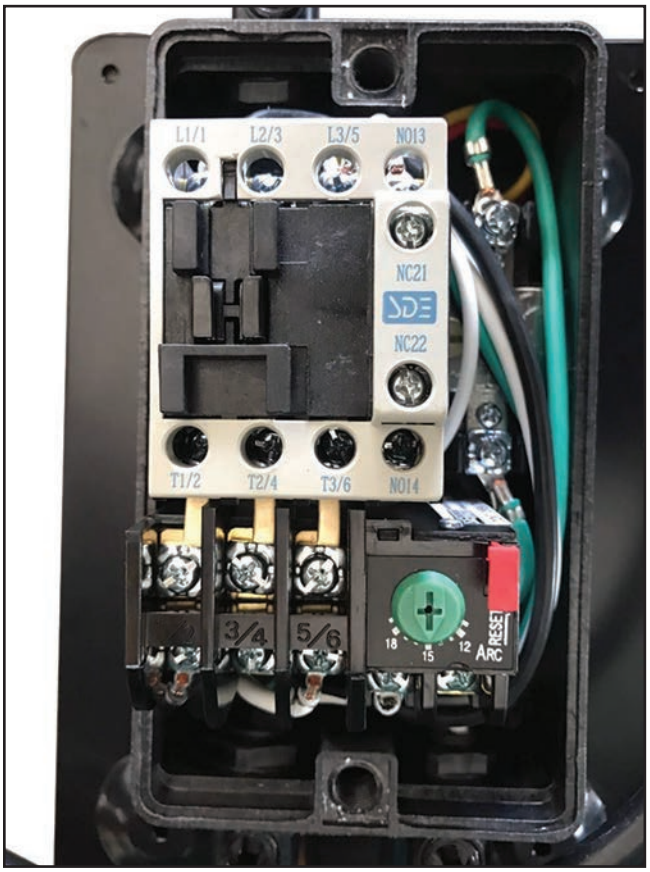
Revised Start Capacitor Wiring

Revised Run Capacitor Wiring

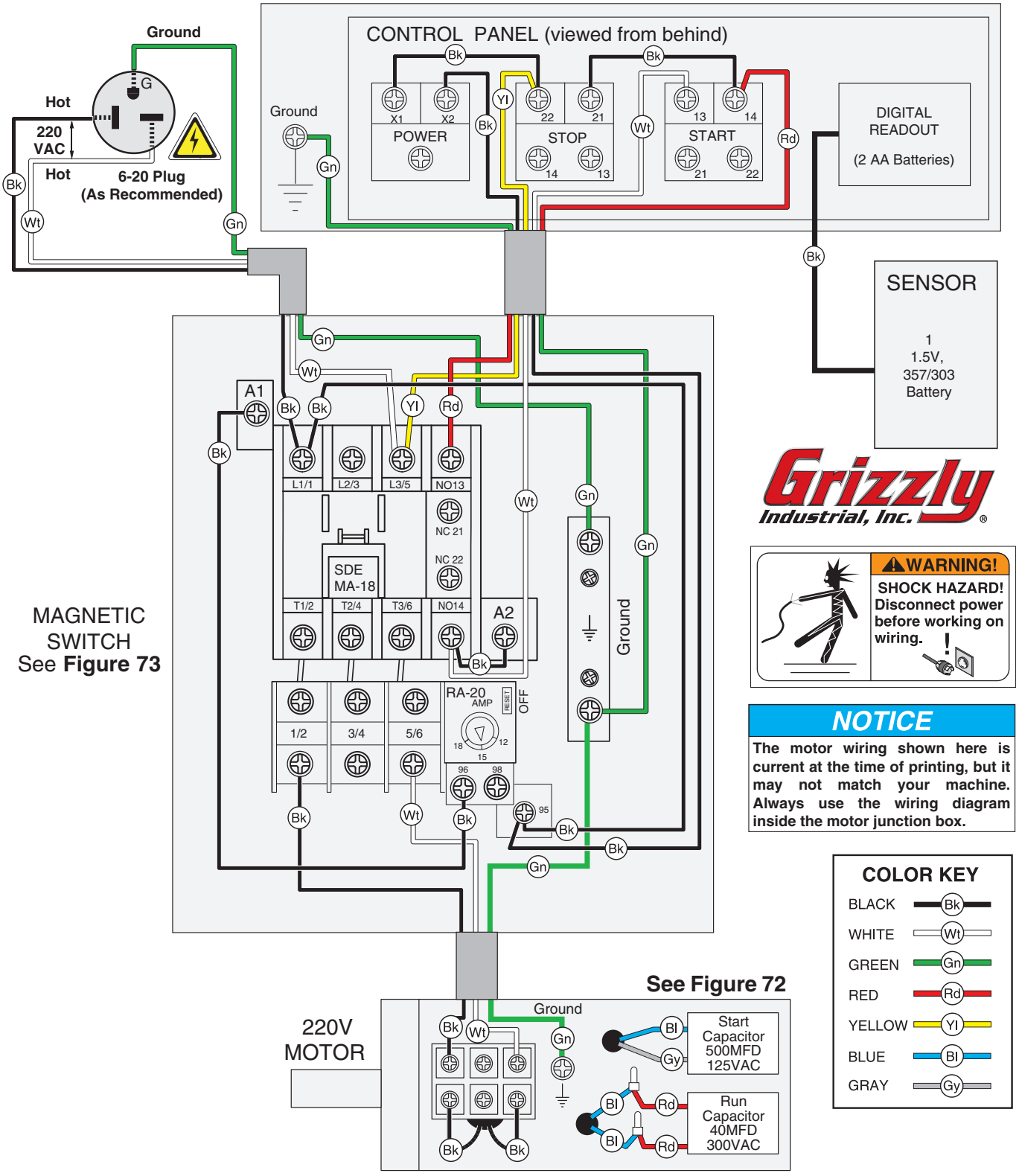


Revised Junction Box Wiring

Revised Magnetic Switch



G0495X Revised Wiring Diagram



WARNING!
SHOCK HAZARD!
Disconnect power before working on wiring.

NOTICE

The motor wiring shown here is current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.

COLOR KEY

BLACK	Bk
WHITE	Wt
GREEN	Gn
RED	Rd
YELLOW	Yl
BLUE	Bl
GRAY	Gy

Digital Readout

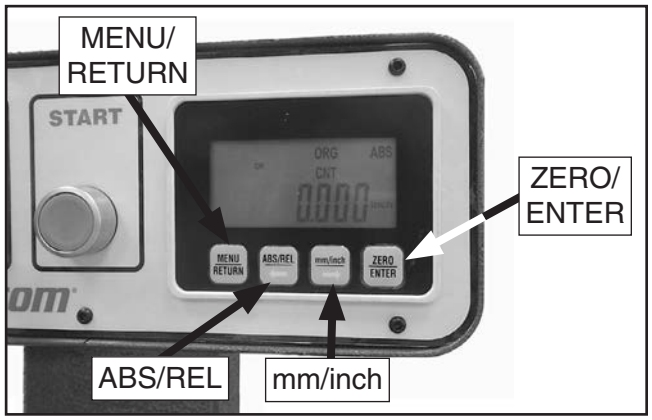


Figure 1. Digital readout.

MENU/RETURN: Toggles between ORG and MAIN menu. ORG establishes the zero point for absolute values shown on the digital readout.

ABS/REL: Toggles between absolute and relative modes. Absolute mode shows the total depth of cut in relation to an absolute zero point. Relative mode shows how much the table has moved up or down in relation to an arbitrarily chosen zero point. To select relative mode, press the ABS/REL button until REL is displayed. To return to absolute mode, press the ABS/REL button again.

For example, to use absolute and relative modes:

1. Follow **Steps 1–4** in **Calibrating Infeed Table** on **Page 41** of Owner's Manual.

2. Press MENU/RETURN button to display ORG.

3. Press ZERO/ENTER button twice. This sets an absolute zero point and returns you to main menu.

4. Move infeed table down until display reads 0.125" (the max cut allowed).

5. Press ABS/REL button to toggle to relative mode, press ZERO/ENTER button to set arbitrary zero point, then move infeed table up -0.010".

6. Press ABS/REL button to toggle back to absolute mode. The screen displays 0.115", the total depth of cut relative to absolute zero point set in **Step 2**.

MM/INCH: Toggles between inch and metric measurements.

ZERO/ENTER: Push to reset display to 0.000 in relative mode. Follow **Step 2** in the prior example to reset display to 0.000 in absolute mode.

To use zero or enter modes:

1. Make sure two included AA batteries are installed in control panel (refer to **Page 18** in Owner's Manual, for installation instructions).

2. Press ABS/REL button to enter absolute mode.

3. Raise or lower infeed table to desired cutting depth.

4. Press ABS/REL button to enter relative mode.

5. Press ZERO/ENTER button to reset digital readout to 0.000.

Calibrating Rear Sensor

The rear DRO sensor and magnetic strip can be calibrated to ensure optimum accuracy of the DRO. Complete the steps below after installing new batteries in the DRO.

To calibrate rear sensor:

1. Raise the infeed bed up all the way.

2. Press MENU/RETURN button once, then press ABS/REL or MM/INCH button until TUNE displays on DRO with icon.

3. Press ZERO/ENTER button. The icon flashes. TUNE — displays. Quickly proceed to next step.

   Note: *If no action is taken within 30 seconds, the screen returns to normal mode.*

4. Use outfeed handwheel to lower, raise, and lower bed again within 30 seconds.

   TUNE — — displays and flashes rapidly. This indicates calibration procedure is complete. The screen returns to normal mode.

MODEL G0495X
8" JOINTER
w/DIGITAL READOUT
OWNER'S MANUAL
(For models manufactured since 6/11)

#BL10436 PRINTED IN TAIWAN
V2.11.13

⚠ 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

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

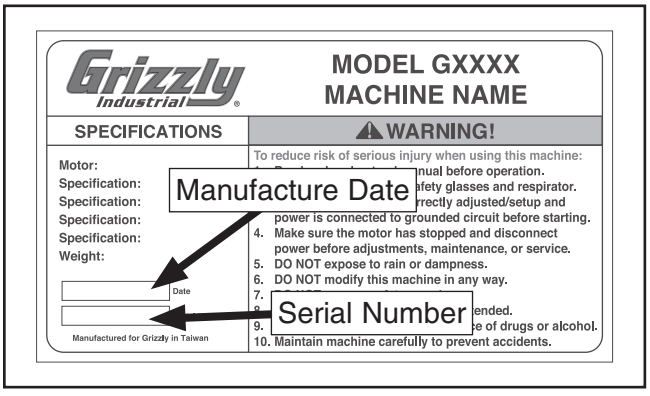
Manual Accuracy

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 contained inside. Sometimes we make mistakes, but our policy of continuous improvement also means that **sometimes the machine you receive will be slightly different than what is shown in the manual**.

If you find this to be the case, and the difference between the manual and machine leaves you confused about a procedure, 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, please write down the **Manufacture Date** and **Serial Number** stamped into the machine ID label (see below). This information helps us determine if updated documentation is available for your machine.



MACHINE DATA SHEET

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

MODEL G0495X 8" X 84" JOINTER WITH EXCLUSIVE DIGITAL HEIGHT READOUT

Product Dimensions:

Weight	596 lbs.
Width (side-to-side) x Depth (front-to-back) x Height	83 x 24-1/2 x 44 in.
Footprint (Length x Width)	45-3/4 x 15 in.

Shipping Dimensions:

Type	Wood Crate
Content	Machine
Weight	796 lbs.
Length x Width x Height	87 x 28 x 43 in.
Must Ship Upright	Yes

Electrical:

Power Requirement	220V, Single-Phase, 60 Hz
Prewired Voltage	220V
Full-Load Current Rating	15A
Minimum Circuit Size	20A
Connection Type	Cord & Plug
Power Cord Included	Yes
Power Cord Length	6 ft.
Power Cord Gauge	12 AWG
Plug Included	No
Recommended Plug Type	6-20
Switch Type	Control Panel w/Magnetic Switch Protection

Motors:

Main

Type	TEFC Capacitor-Start Induction
Horsepower	3 HP
Phase	Single-Phase
Amps	15A
Speed	3450 RPM
Power Transfer	V-Belt Drive
Bearings	Shielded & Permanently Lubricated

Main Specifications:

Cutting Capacities

Bevel Jointing	0 – 45 deg. L/R
Maximum Width of Cut	8 in.
Maximum Depth of Cut	1/8 in.
Minimum Workpiece Length	10 in.
Minimum Workpiece Thickness	1/2 in.
Maximum Rabbeting Depth	1/2 in.
Number of Cuts Per Minute	28,000

Fence Information

Fence Length	38 in.
Fence Width	1-1/2 in.
Fence Height	4-3/4 in.
Fence Stops	45, 90, 135 deg.

Cutterhead Information

Cutterhead Type	Spiral
Cutterhead Diameter	3-1/16 in.
Number of Cutter Spirals	4
Number of Indexable Cutters	36
Cutterhead Speed	7000 RPM

Cutter Insert Information

Cutter Insert Type	Indexable Carbide
Cutter Insert Length	15 mm
Cutter Insert Width	15 mm
Cutter Insert Thickness	2.5 mm

Table Information

Table Length	82-1/2 in.
Table Width	8-1/8 in.
Table Thickness	3-5/16 in.
Floor to Table Height	31 in.
Table Adjustment Type	Handwheel
Table Movement Type	Parallelogram

Construction

Base	Cast Iron
Body Assembly	Cast Iron
Cabinet	Pre-formed Steel
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	Taiwan
Warranty	1 Year
Approximate Assembly & Setup Time	45 Minutes
Serial Number Location	ID Label on Front of Cabinet
ISO 9001 Factory	Yes
CSA Certified	No

Identification

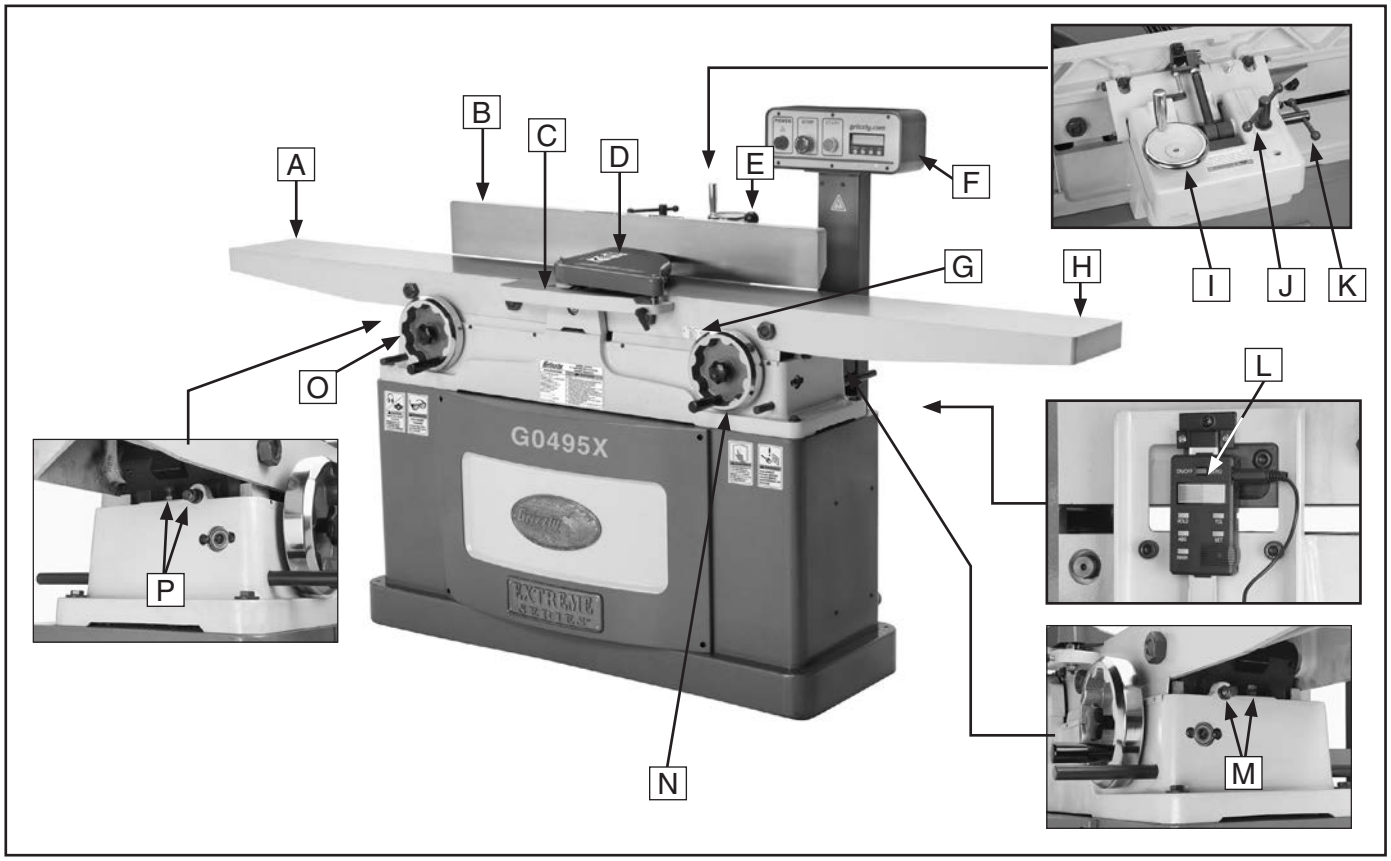


Figure 1. G0495X identification.

A. Outfeed Table
B. Fence
C. Rabbeting Extension
D. Cutterhead Guard
E. Fence Tilt Handle
F. Control Panel with Digital Readout
G. Depth Scale
H. Infeed Table
I. Fence Adjustment Wheel
J. Fence Lock
K. Tilt Lock
L. Digital Sensor
M. Infeed Depth Stops
N. Infeed Handwheel
O. Outfeed Handwheel
P. Outfeed Depth Stops

Control Panel & Digital Sensor Features

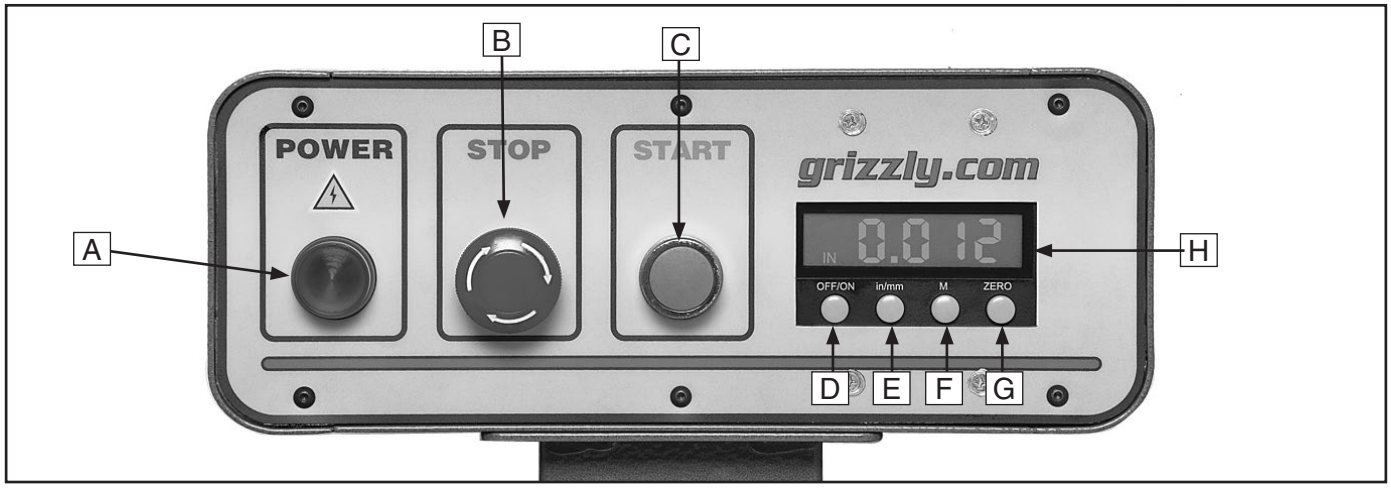


Figure 2. Control panel and digital readout features.

A. POWER Light
B. STOP Button
C. START Button
D. OFF/ON Button
E. IN/MM Button
F. M Button
G. ZERO Button
H. Digital Display

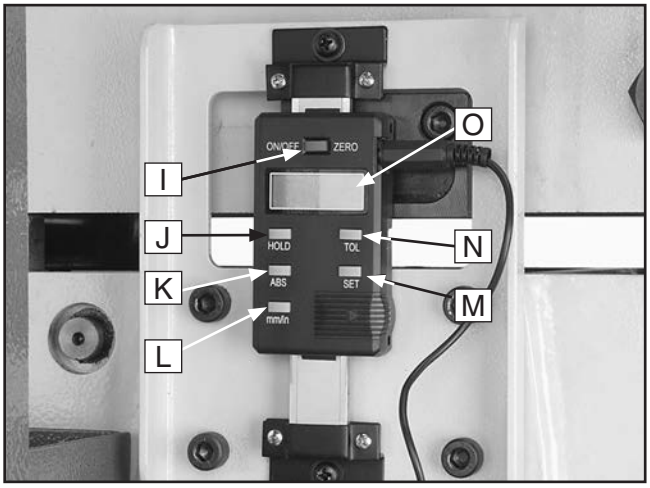


Figure 3. Infeed table digital sensor and controls.

I. ON/OFF/ZERO Button
J. HOLD Button
K. ABS Button
L. MM/IN Button
M. SET Button
N. TOL Button
O. Digital Readout

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 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 avoid accidental slips, which could cause loss of workpiece control.

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

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.

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.

CHECK DAMAGED PARTS. Regularly inspect machine for any condition that may affect safe operation. Immediately repair or replace damaged or mis-adjusted parts before operating machine.

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.

Additional Safety Instructions for Jointers

⚠WARNING

JOINTER INJURY RISKS. Familiarize yourself with the main injury risks associated with jointers—always use common sense and good judgement 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, ¾" wide, or ¼" thick.

MAXIMUM CUTTING DEPTH. To reduce the risk of kickback, never cut deeper than ⅛" 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 ⅛" (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 electrican or qualified service personnel in accordance with all applicable codes and standards.

⚠WARNING

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

Full-Load Current Rating

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

Full-Load Current Rating ..... 15 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.*

Circuit Requirements

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

Nominal Voltage 220V
Cycle .....60 Hz
Phase ..... Single-Phase
Power Supply Circuit ..... 20 Amps
Plug/Receptacle ..... NEMA 6-20

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.

This machine is equipped with a power cord that has an equipment-grounding wire and a grounding plug. 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.

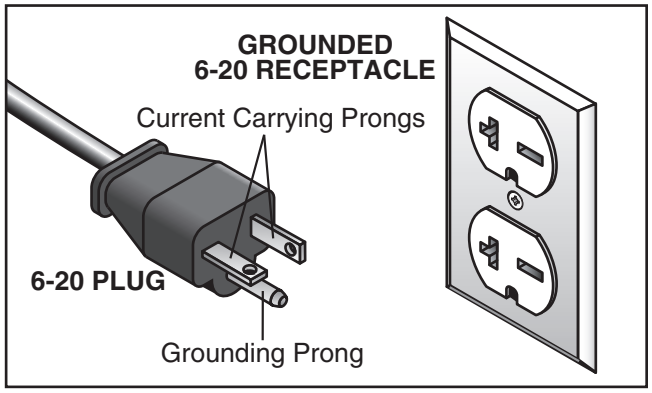
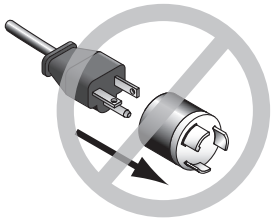


Figure 4. Typical 6-20 plug and receptacle.

⚠CAUTION



No adapter should be used with the required plug. If the plug does not fit the available receptacle, or the machine must be reconnected for use on a different type of circuit, the reconnection must be made by a qualified electrician and comply with all local codes and ordinances.

⚠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.

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.

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 Gauge Size .....12 AWG
Maximum Length (Shorter is Better).....50 ft.

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.

Items Needed for Setup

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

Description	Qty
• Safety Glasses (for each person)	1
• Straightedge 4' (or longer)	1
• Dust Collection System	1
• 4" Dust Hose (length as needed)	1
• 4" Hose Clamp	1
• Forklift, Hoist, or Boom Crane	1
• Lifting Straps (1000 lb. Capacity Min.)	2

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.

Box 1		Qty
A.	Jointer Assembly (not shown)	1
B.	Hex Wrench 3mm	1
C.	Hex Wrench 4mm	1
D.	Hex Wrench 5mm	1
E.	Hex Wrench 6mm	1
F.	Hex Wrench 8mm	**1**
G.	Open End Wrench 12/14mm	1
H.	Open End Wrench 14/17mm	1
I.	Phillips Head Screwdriver	1
J.	Push Blocks	2
K.	T-Handle T-25 Torx Driver	2
L.	Inserts 15 x 15 x 2.5	5
M.	Flat Head Torx Screws #10-32	10
N.	AAA Batteries (not shown)	2

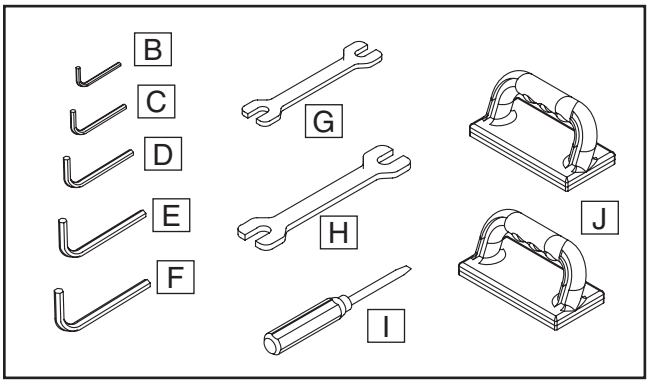


Figure 5. Tools inventory.

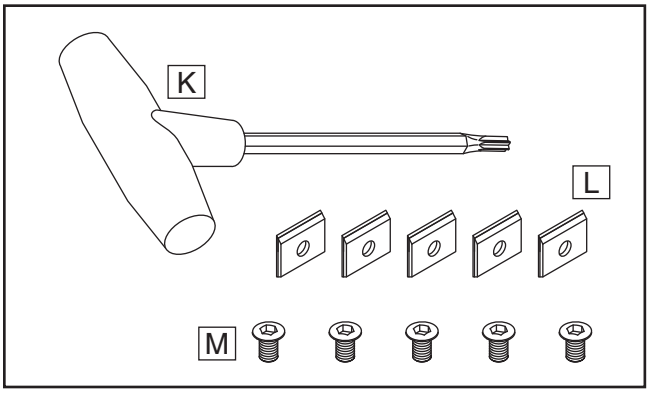


Figure 6. Spiral cutterhead hardware.

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.

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.

⚠WARNING

Gasoline and petroleum products have low flash points and can explode or cause fire if used to clean machinery. Avoid using these products to clean machinery.

⚠CAUTION

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

NOTICE

Avoid chlorine-based solvents, such as acetone or brake parts cleaner, that may damage painted surfaces.

T23692—Orange Power Degreaser
A great product for removing the waxy shipping grease from your machine during clean up.

Figure 7. T23692 Orange Power Degreaser.

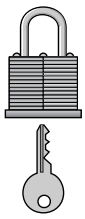
Site Considerations

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.**



⚠CAUTION

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

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.

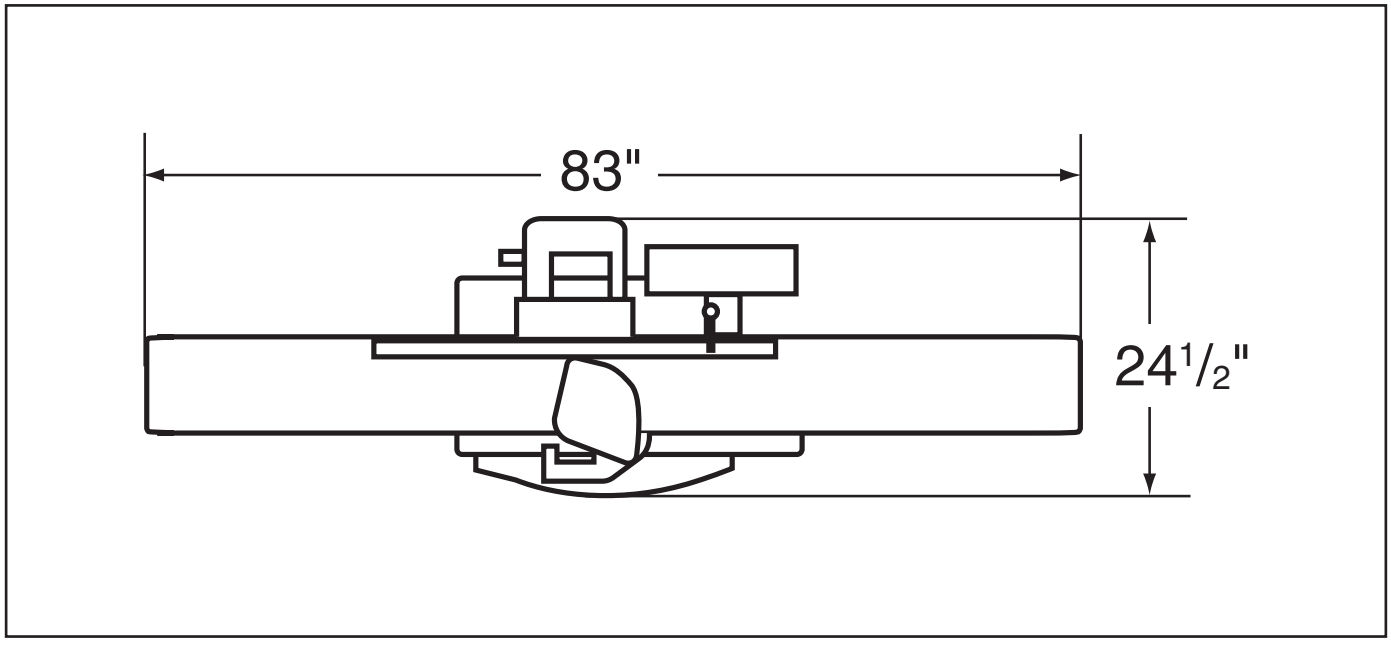
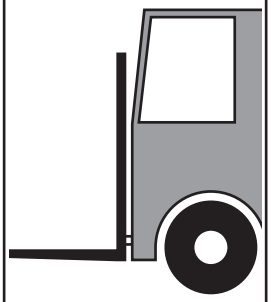


Figure 8. Minimum working clearances.

Moving & Placing Jointer



⚠WARNING

The Model G0495X is a heavy machine. Serious personal injury may occur if safe moving methods are not used. To be safe, get assistance and use power equipment to move the shipping crate and remove the machine from the crate.

The Model G0495X requires the use of lifting equipment such as a forklift, engine hoist, or boom crane. DO NOT try to lift the machine by hand.

To lift the jointer:

1. Unbolt the jointer from the pallet.

2. Wrap lifting straps around the lifting rods, as shown in **Figure 9**.

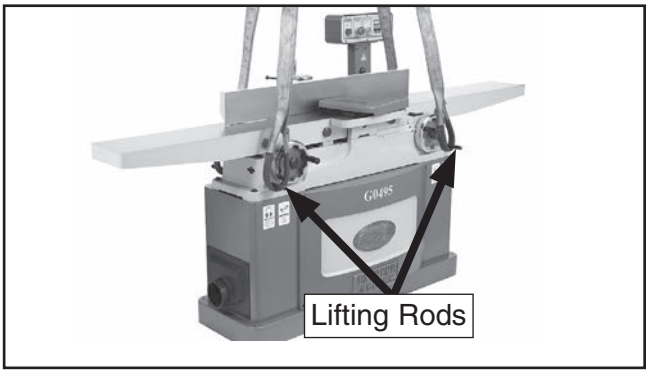


Figure 9. Model G0495X supported evenly by two lifting straps.

3. With lifting straps positioned evenly, lift the jointer off of the pallet and place it in the desired location.

Anchoring to Floor

Anchoring machinery to the floor prevents tipping or shifting and reduces vibration that may occur during operation, resulting in a machine that runs slightly quieter and feels more solid.

If the machine will be installed in a commercial or workplace setting, or if it is permanently connected (hardwired) to the power supply, local codes may require that it be anchored to the floor.

If not required by any local codes, fastening the machine to the floor is an optional step. If you choose not to do this with your machine, we recommend placing it on machine mounts, as these provide an easy method for leveling and they have vibration-absorbing pads.

Anchoring to Concrete Floors

Lag shield anchors with lag screws (see below) are a popular way to anchor machinery to a concrete floor, because the anchors sit flush with the floor surface, making it easy to unbolt and move the machine later, if needed. However, anytime local codes apply, you MUST follow the anchoring methodology specified by the code.

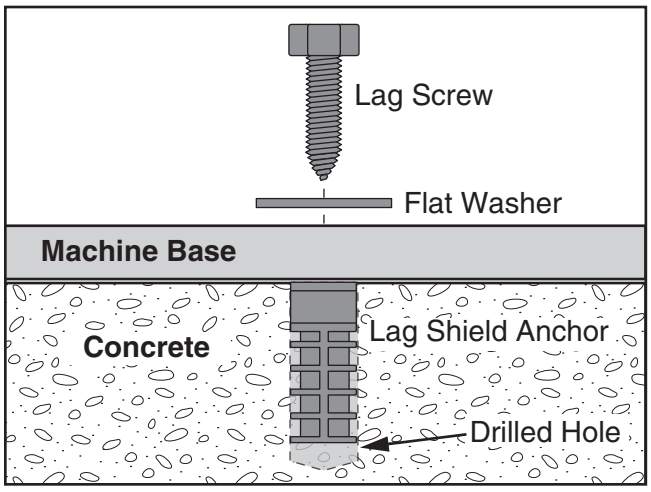


Figure 10. Popular method for anchoring machinery to a concrete floor.

Dust Collection

⚠CAUTION

DO NOT operate the Model G0495X without an adequate dust collection system. This jointer creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

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 the machine to a dust collector:

1. Fit a 4" dust hose that is connected to a dust collector over the dust port, as shown in **Figure 11**, and secure in place with a hose clamp.

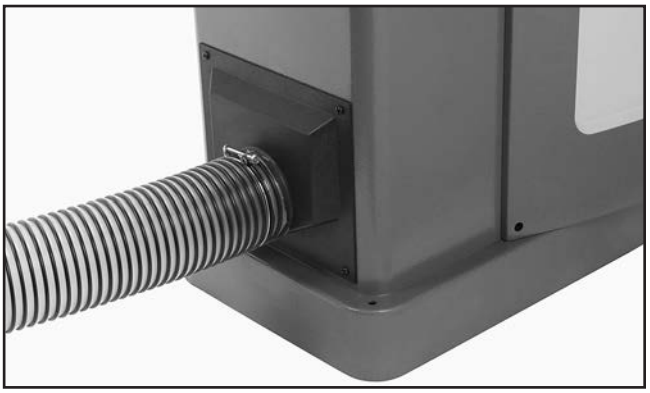


Figure 11. Dust hose attached to dust port.

2. Tug the hose to make sure it does not come off.

   Note: *A tight fit is necessary for proper performance.*

Setting Outfeed Table Height

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 remove the V-belt guard.

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 12**.

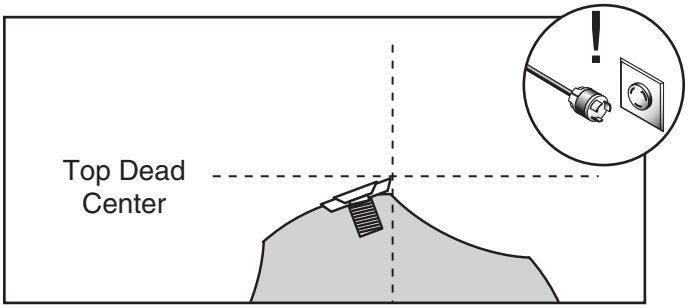


Figure 12. Cutterhead insert at top-dead-center.

4. When correctly set, the carbide insert will just touch the straightedge when the insert is at its highest point of rotation (**Figure 13**).

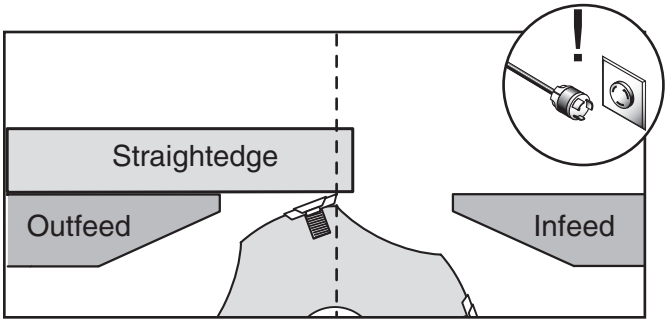


Figure 13. Using a straightedge to align outfeed table height with insert at TDC.

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

—If the insert lifts the straightedge off the table or the table is below the straightedge, loosen the outfeed table lock and outfeed table positive stop bolts and jam nuts (**Figure 1**, **Page 5**) and adjust the outfeed table height with the handwheel until the straightedge just touches a 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. Then lower the outfeed table slightly so the insert lifts the straightedge off the table. Place a ruler next to the straightedge and rotate the cutterhead, watching how far the carbide insert pulls the straightedge. Adjust the outfeed table and recheck until the straightedge only moves 5/32".

5. Lock the outfeed table, lock the outfeed table positive stop bolts, and reinstall the cutterhead guard (**Page 42**) and V-belt guards.

Digital Readout Batteries

You must install two AAA batteries into the control panel for the digital readout to function.

To install the AAA batteries in the control panel:

1. Unscrew the thumb knob on the rear door on the back of the control panel, loosen the Phillips head screw, then swing the door open.

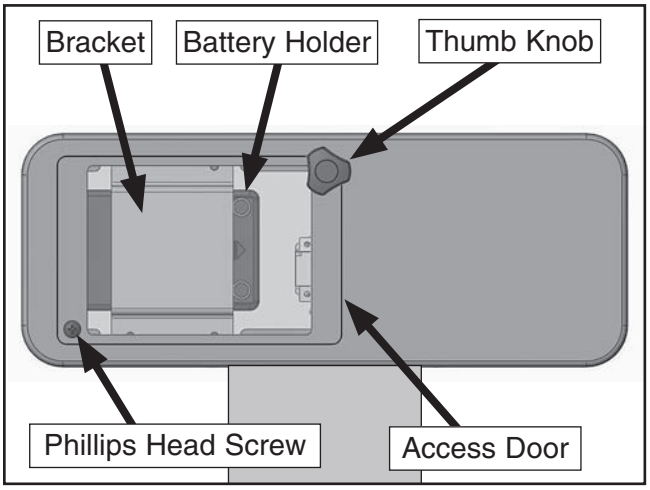


Figure 14. Rear access door on control panel (cutaway view for clarity).

2. Open the battery holder cover, install the included batteries, then close the cover.

Note: *It may help to loosen the screws on the front of the panel securing the digital readout bracket to open the battery cover.*

3. Close the rear access door, tighten the Phillips head screw, then install the thumb knob.

Test Run

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

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 setup machine may result in malfunction or unexpected results that can lead to serious injury, death, or machine/property damage.

To test run the machine:

1. Make sure you understand the safety instructions at the beginning of the manual and that the machine is setup properly.

2. Make sure all tools and objects used during setup are cleared away from the machine.

3. Connect the machine to the power source. The power light will illuminate.

   —If the light does not illuminate, check the power connection.

4. Push the STOP button in, then twist it clockwise so it pops out. When the STOP button pops out, the switch is reset and ready for operation (see **Figure 15**).

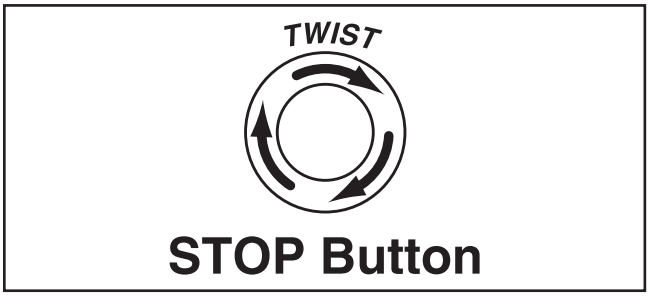


Figure 15. Resetting the STOP button.

5. Verify that the machine is operating correctly by pushing the START button.

   —When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.

   —Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.

6. Press the STOP button to stop the machine.

7. WITHOUT resetting the switch, press the START button. The machine should not start.

   —If the machine does not start, the STOP button safety feature is working correctly. The test run is complete.

   —If the machine does start (with the STOP button pushed in), immediately disconnect power to the machine. The STOP button safety feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

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**.

Factory adjustments that should be verified:

1. Table Parallelism (**Page 37**).

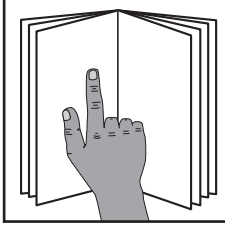
2. Infeed Table Calibration (**Page 41**).

3. Digital Sensor and Readout Calibration (**Page 42**).

4. Fence Stop Settings (**Page 43**).

5. Verify V-Belt Tension Adjustment (**Page 45**).

SECTION 4: OPERATIONS

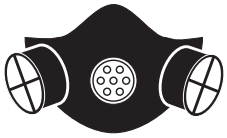


⚠WARNING

To reduce your risk of serious injury, read this entire manual BEFORE using machine.

⚠WARNING

To reduce risk of eye injury from flying chips or lung damage from breathing dust, always wear safety glasses and a respirator when operating this machine.



NOTICE

If you are not experienced with this type of machine, WE STRONGLY RECOMMEND that you seek additional training outside of this manual. Read books/magazines or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

Basic Jointer Controls

This section covers the basic controls used during routine operations.

START Button: Starts motor only if the STOP button is popped out.

STOP Button: Disables the START button. Enable the START button by twisting the STOP button until it pops out.

POWER Light: Indicates machine is correctly plugged into the power source.

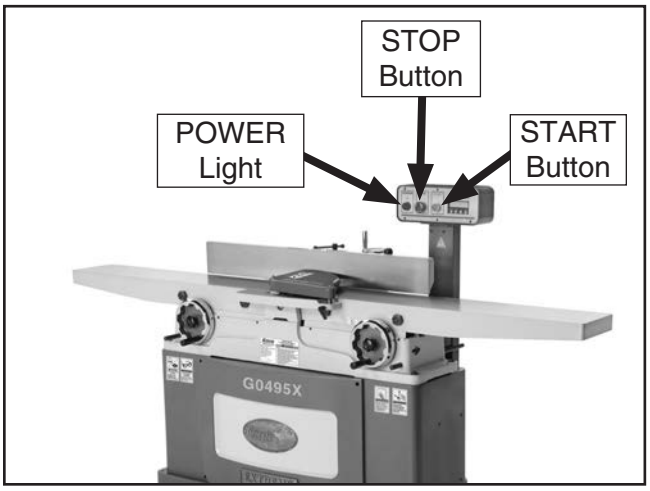


Figure 16. START/STOP button locations.

Table Movement: To move the infeed or outfeed tables, loosen the table locks (**Figure 17**), move the tables with the infeed or outfeed handwheels (**Figure 16**), then tighten the table locks.

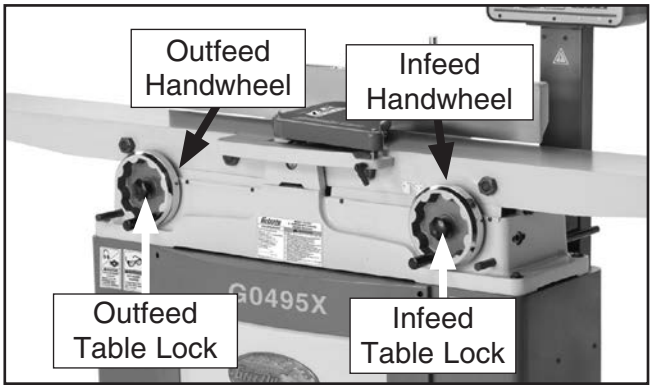


Figure 17. Table control locations.

Fence Movement: The fence has a lock that keeps it in position (**Figure 18**). To move the fence, loosen the lock and turn the fence adjustment wheel to slide the fence where needed, then retighten the lock.

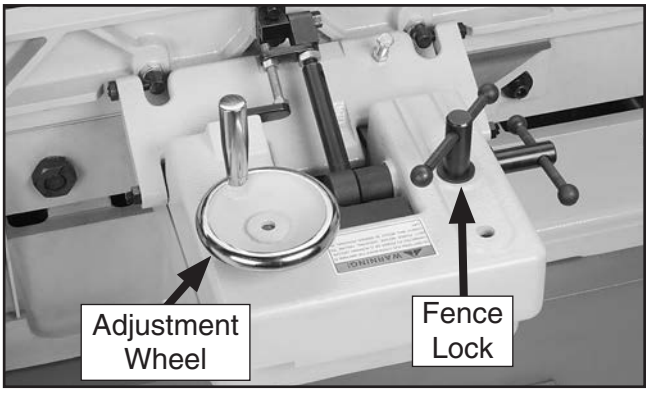


Figure 18. Fence lock location.

Fence Tilting: The tilt lock (**Figure 19**) secures the fence at any position in the available range. The stop block locks the fence for 90° cuts. Two positive stops stop the fence at 45° inward and 45° outward for common bevel cuts. Even when the fence is resting against the positive stops, the tilt lock must be tightened before cutting. Also, the stop block must be disengaged for 45° outward bevel cuts.

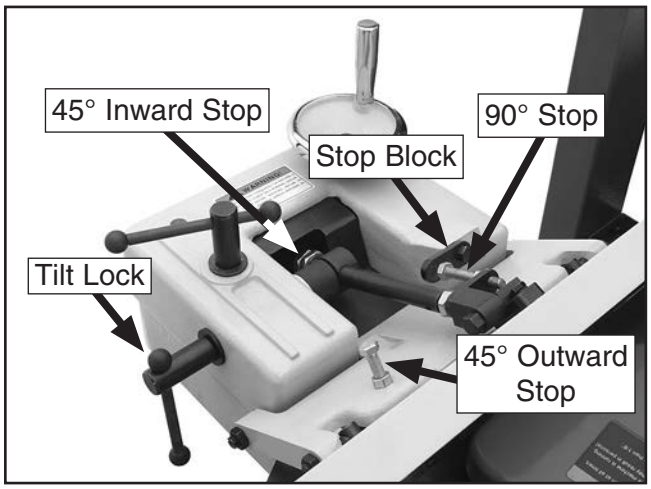


Figure 19. Tilt lock and stop block locations.

Digital Sensor & Readout

The digital readout is used in conjunction with the digital sensor to display the selected cutting depth. Before using the digital sensor and readout, verify calibration on the infeed table (**Page 41**), digital sensor, and digital readout (**Page 42**). Make sure the digital sensor is turned ***ON*** before using the digital readout, otherwise the readout will not work.

Below is a summary of the features on the rear digital sensor (**Figure 20**) and digital readout on the control panel (**Figure 25, Page 25**).

Digital Sensor

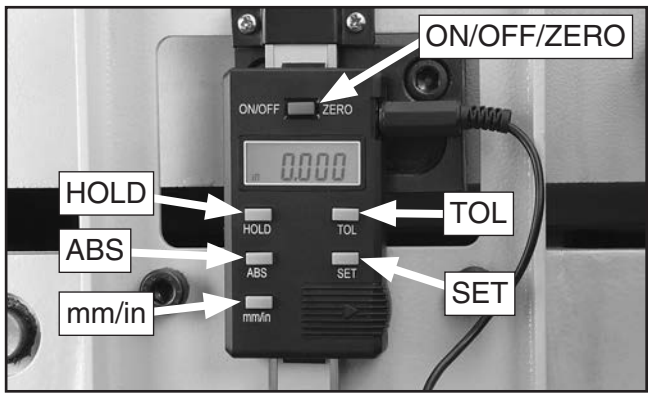


Figure 20. Digital sensor.

ON/OFF/ZERO: Turns digital sensor ***ON*** or ***OFF*** when pressed for five seconds. Push for two seconds to reset the sensor to 0.000.

HOLD: Freezes the digital display at the current value.

ABS: Toggles between absolute and incremental values. Absolute mode shows the total depth of cut in relation to an absolute zero point. Incremental mode shows how much the table has moved up or down relative to an arbitrarily chosen zero point. To select incremental mode, press the ABS button, INC is displayed. To return to absolute mode, press the ABS button, INC disappears.

For example, to use ABS and incremental modes:

1. Press the ZERO button in ABS mode, then move the infeed table down until the display reads 0.125" (the max cut allowed).

2. Press the ABS button to toggle to INC mode, press the ZERO button to set the arbitrary zero point, then move the infeed table up -0.010".

3. Press the ABS button to toggle back to ABS mode. The screen displays 0.115", the total depth of cut relative to the absolute zero point set in **Step 1**.

MM/IN: Toggles between inch and metric display units.

SET: Recalls a stored numerical value.

For example, to set the preset to 00.063":

1. Move the infeed table to the desired depth of cut. In ABS mode press ZERO, then press SET. On the screen SET will blink and "+" will appear (**Figure 21**).

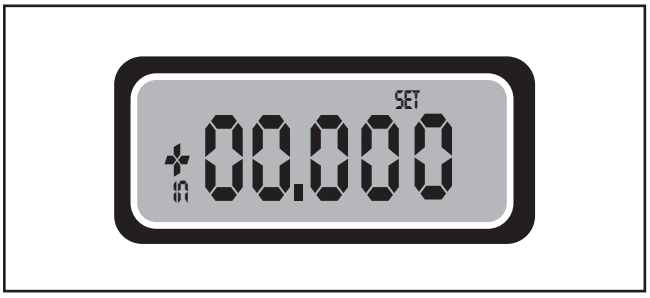


Figure 21. Initial SET mode screen.

2. While holding SET, move the cursor to the fourth digit, then release the SET button when the desired digit blinks.

3. Press SET six times to increase the value to 6.

4. Hold SET to move the cursor to the fifth digit, release the SET button, then press it three times to change the value to 3, as shown in **Figure 22**.

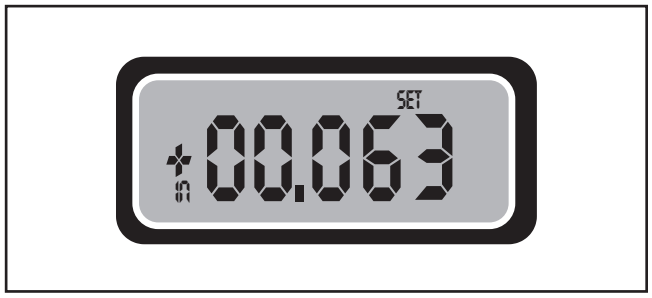


Figure 22. Set value entered.

5. Hold SET down until "SET" blinks on the display, then press SET again to set the value.

The preset value can be set positive (+) or negative (–). When the "+" flashes, press SET to toggle between "–" and "+".

TOL: Use to set the tolerance limits.

In ABS mode, first set the reference dimension, then set the upper and lower tolerance values. While setting the tolerance limits, you will not be able to use the sensor to measure depth of cut.

The upper tolerance limit value must be greater than the lower limit value, otherwise an error code (E-01) will appear. If this happens, press ZERO to return to ABS mode.

For example, to set the reference dimension at 00.063", upper tolerance at 00.125", and lower tolerance at 00.000":

1. Follow the instructions for setting the reference dimension to 00.063" on **Page 23**, then enter ABS mode.

2. Press the TOL button. SET flashes and ▲ is displayed, indicating the upper limit mode setting, as shown in **Figure 23**.

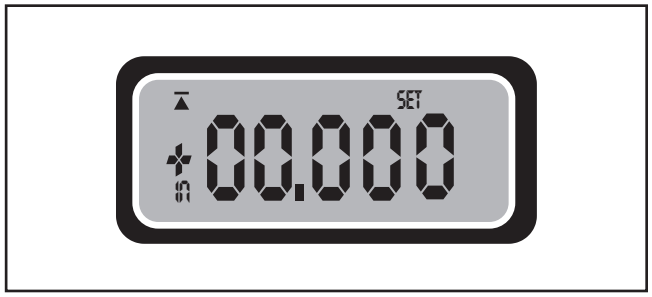


Figure 23. Setting upper limit.

3. Hold the TOL button down and move the cursor right three digits until the digit flashes, then press TOL once to increase the value to 00.100".

4. Hold TOL down to move the cursor right one digit until it flashes, then press TOL twice to change that digit to 2 so the value reads +00.120".

5. Repeat **Step 4** in a similar manner to change the next digit to 5 so the display value is now +00.125".

6. Hold the TOL button down and move the cursor until SET flashes, then press TOL again. SET flashes and ▼ is displayed, indicating the lower limit mode, as shown in **Figure 24**.

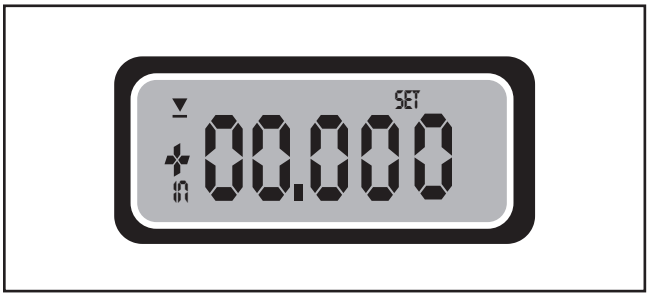


Figure 24. Setting lower limit.

7. To select a lower limit value of +00.000", hold the TOL button down and move the cursor to SET, then press TOL again. The tolerances are set.

8. Raise and lower the infeed table to verify the tolerance settings.

—If the infeed table is raised or lowered between 00.125" and 00.000", OK displays on the screen.

—If the infeed table is lowered below 00.125" the ▲ appears.

—If the infeed table is raised above 00.000" the ▼ appears with a "–".

9. To change the tolerance limits, repeat **Steps 2-7**.

10. To exit TOL mode, briefly press the TOL button until all TOL mode icons disappear and only the preset value 00.063" appears.

Digital Readout

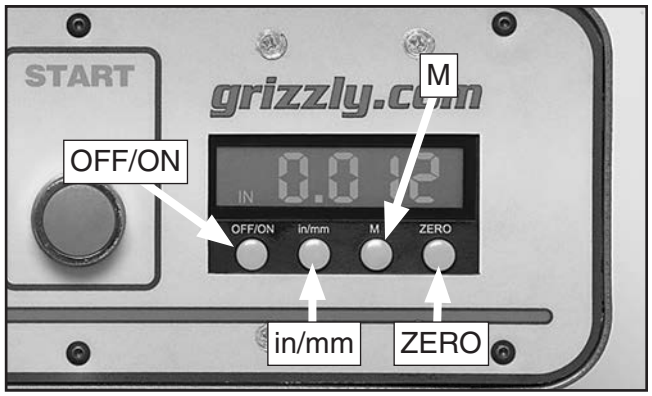


Figure 25. Digital readout.

OFF/ON: Turns digital display ***ON*** or ***OFF.***

IN/MM: Toggles between inch and metric measurements.

M: Toggles display between the relative value on the digital readout and the value displayed on the rear sensor.

ZERO: Push to reset the display to 0.000.

To use the digital readout:

1. Make sure the two included AAA batteries are installed in the control panel (refer to **Page 18**, for installation instructions).

2. Turn the digital sensor ***ON***, then turn ***ON*** the digital readout.

   Note: *If the rear sensor is not turned ON first, the front digital readout will display an error code.*

3. Raise or lower the infeed table to the desired cutting depth. The digital readout displays the table height measured by the rear sensor.

4. Press the ZERO button to reset the digital readout. This new zero point is only shown on the front display.

5. Adjust the table height to the new cutting depth.

6. Press the M button to switch the digital readout back to display the rear digital sensor cutting depth. This will delete the zero point set in **Step 3**.

Stock Inspection & Requirements

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

- **DO NOT joint or surface plane stock that contains large or loose knots.** Injury to the operator or damage to the workpiece can occur if a knot becomes 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 26**).

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

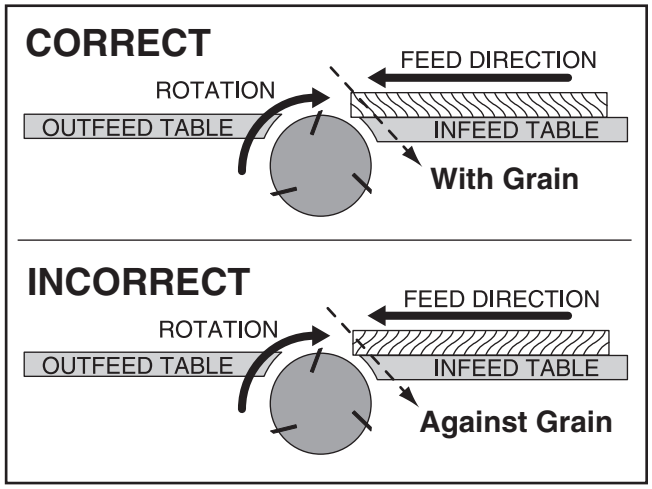


Figure 26. Correct and incorrect grain alignment with cutterhead.

- **Only process natural wood fiber through your jointer.** Never joint MDF, particle board, plywood, laminates, drywall, metal, stone, tile, glass, plastic or other synthetically made materials.

- **Scrape all glue off of boards before jointing.**

- **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, which if they hit the inserts and are drawn into the dust collector, may cause a fire hazard. The particles may also damage the inserts. Wood stacked on a concrete floor can have small pieces of stone or concrete pressed into the surface.

- **Make sure all stock is sufficiently dried before jointing.** Wood with a moisture content over 20% will cause unnecessary wear on the inserts and poor cutting results. Excess moisture can also hasten rust and corrosion.

- **Make sure your workpiece exceeds the minimum dimension requirements (Figure 27) before edge jointing or surface planing, or it may break or kick back during the operation!**

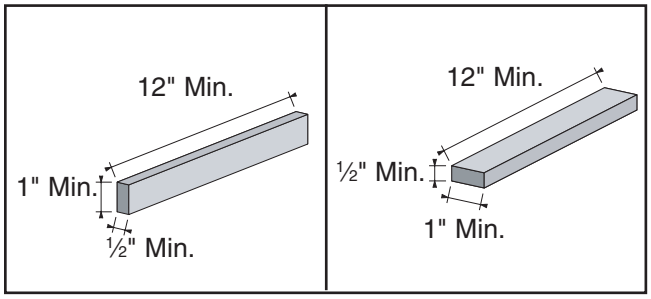
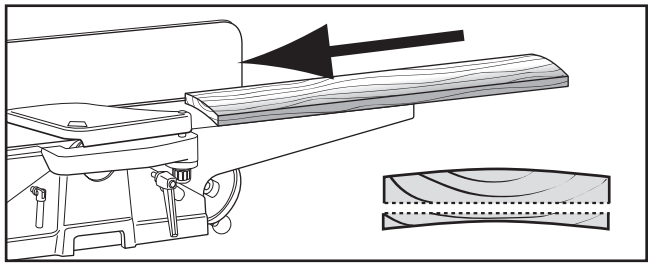


Figure 27. Minimum dimensions for edge jointing and surface planing (jointer).

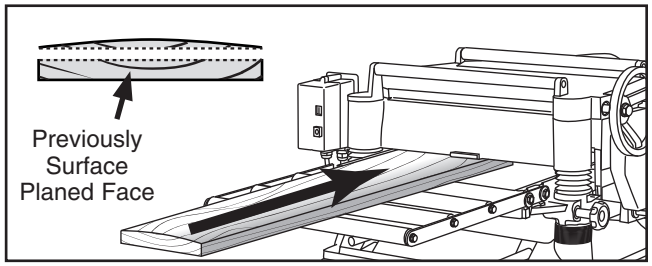
Squaring Stock

Squaring stock involves four steps performed in the order below:

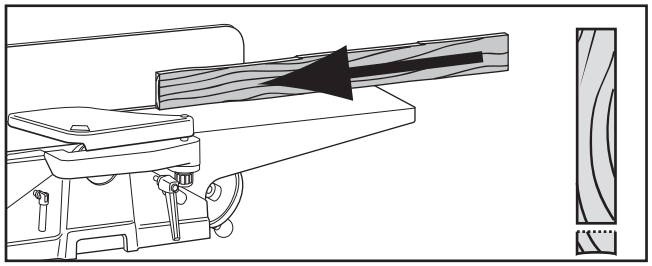
1. Surface Plane on the Jointer—The concave face of the workpiece is surface planed flat with the jointer.



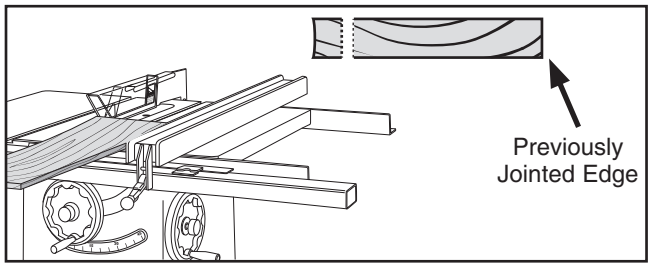
2. Surface Plane on a Thickness Planer—The opposite face of the workpiece is surface planed flat with a thickness planer.



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

The purpose of surface planing on the jointer is to make one flat face on a piece of stock (see **Figures 28 & 29**). This is a necessary step when preparing a workpiece to be run through a planer when squaring stock.

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.

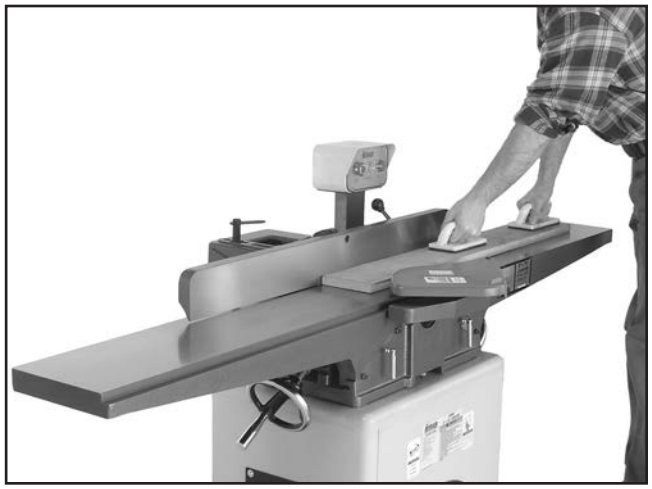


Figure 28. Typical surface planing operation.

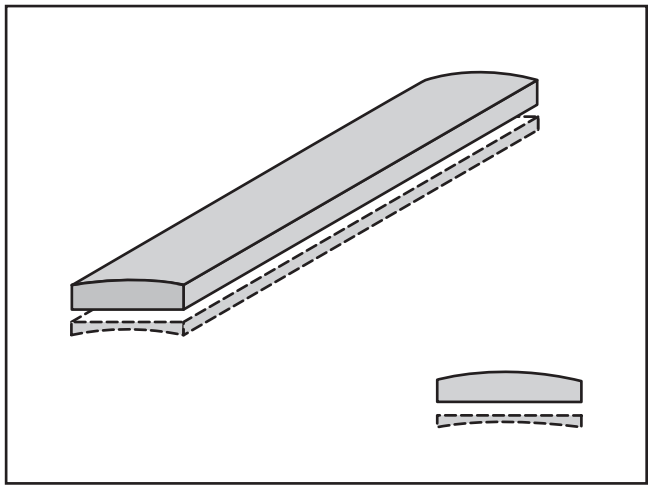


Figure 29. Illustration of surface planing results.

To surface plane on the jointer:

1. Read and understand **SECTION 1: SAFETY** at the beginning of this manual.

2. Make sure your stock has been inspected for dangerous conditions as described in the **Stock Inspection & Requirements** instructions, beginning on **Page 26**.

3. Set the cutting depth for your operation. (We suggest 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 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.

   Note: *If 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.

Edge Jointing

The purpose of edge jointing is to produce a finished, flat-edged surface (see **Figures 30 & 31**) that is suitable for joinery or finishing. It is also a necessary step when squaring rough or warped stock.

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.

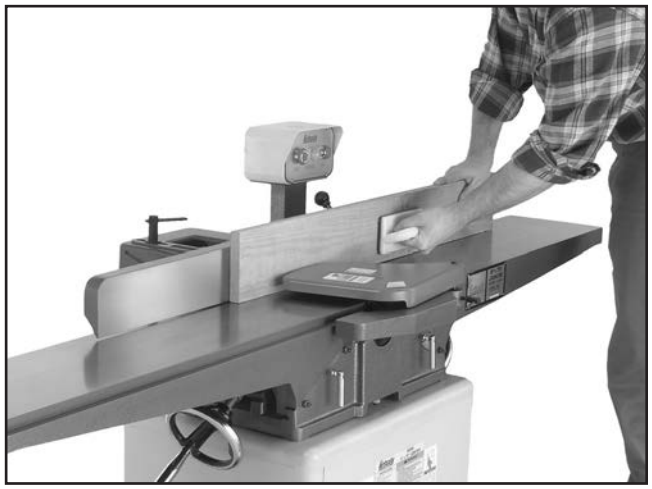


Figure 30. Typical edge jointing operation.

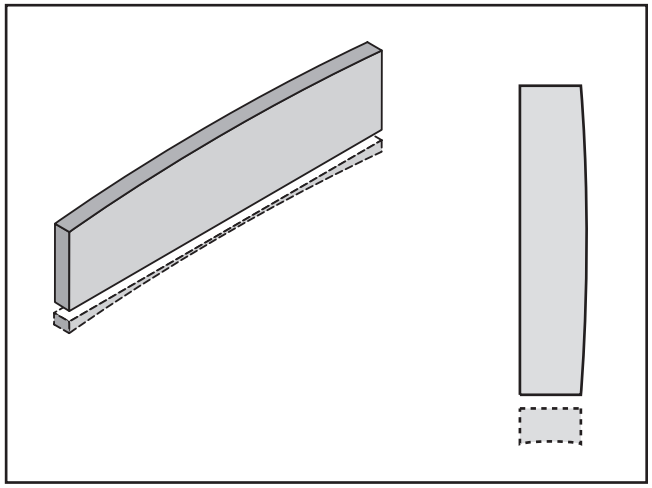


Figure 31. Illustration of edge jointing results.

To edge joint on the jointer:

1. Read and understand **SECTION 1: SAFETY** at the beginning of this manual.

2. Make sure your stock has been inspected for dangerous conditions as described in the **Stock Inspection & Requirements** instructions, beginning on **Page 26**.

3. Set the cutting depth for your operation. (We suggest between 1/16" and 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 edge 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. Use your trailing hand to guide the workpiece through the cut, and feed the workpiece over the cutterhead.

   Note: *If 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.

Bevel Cutting

The purpose of bevel cutting is to cut a specific angle into the edge of a workpiece (see **Figures 32 & 33**).

The Model G0495X has preset fence stops at 45˚ inward, 90˚, and 45˚ outward (135˚). If your situation requires a different angle, the fence can be locked anywhere between these angles.

NOTICE

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

Figure 32. Typical bevel cutting operation, fence stop at 45˚ outward.

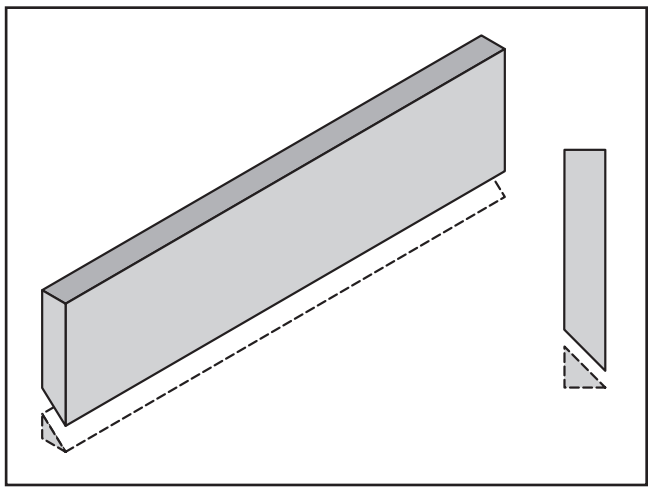


Figure 33. Illustration of bevel cutting results.

To bevel cut on the jointer:

1. Read and understand **SECTION 1: SAFETY** at the beginning of this manual.

2. Make sure your stock has been inspected for dangerous conditions as described in the **Stock Inspection & Requirements** instructions, beginning on **Page 26**.

3. Set the cutting depth for your operation. (We suggest between 1/16" and 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 edge is face down on the surface of the infeed table.

6. Start the jointer.

7. With a push block in your leading hand (**Figure 32**), press the workpiece against the table and fence with firm pressure, and feed the workpiece over the cutterhead.

   Note: *If 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

The purpose of rabbet cutting is to remove a section of the workpiece edge (see **Figures 34 & 35**). When combined with another rabbet cut edge, the rabbet joints create a simple, yet strong method of joining stock.

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.

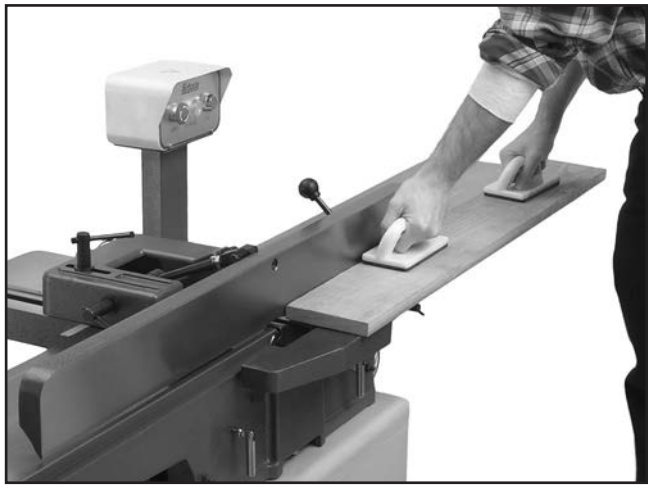


Figure 34. Typical rabbet cutting operation.

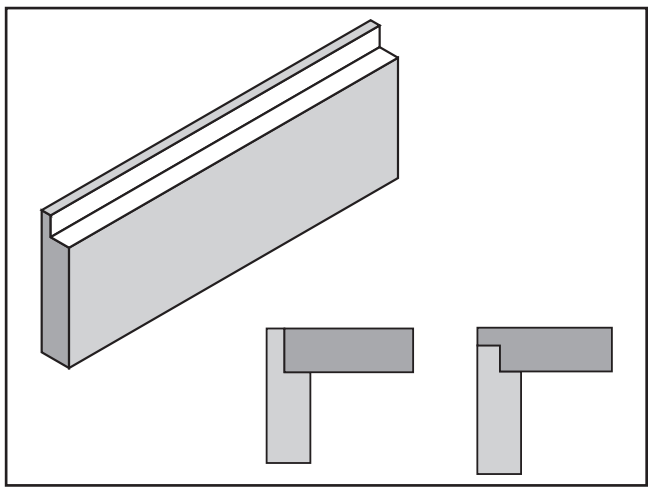


Figure 35. Illustration of rabbet cutting effects and a few sample joints.

To rabbet cut on the jointer:

1. Read and understand **SECTION 1: SAFETY** at the beginning of this manual.

2. Make sure your stock has been inspected for dangerous conditions as described in the **Stock Inspection & Requirements** instructions, beginning on **Page 26**.

3. Set the cutting depth for your operation. (We suggest between 1/16" and 1/8" for rabbet cutting.

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: *If 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.

⚠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!

SECTION 5: ACCESSORIES

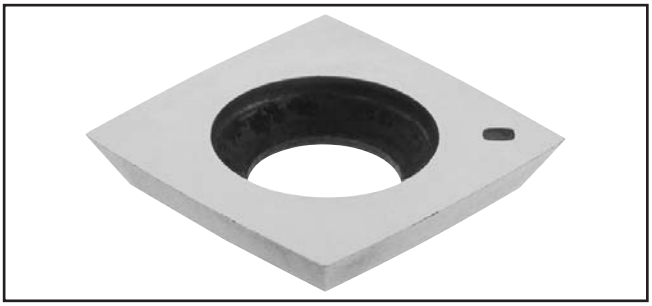
⚠WARNING

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.

H9893—10 pk. Carbide Inserts 15x15x2.5mm



G5562—SLIPIT® 1 Qt. Gel
G5563—SLIPIT® 12 oz Spray
G2871—Boeshield® T-9 12 oz Spray
G2870—Boeshield® T-9 4 oz Spray
H3788—G96® Gun Treatment 12 oz Spray
H3789—G96® Gun Treatment 4.5 oz Spray

Figure 36. Recommended products for protecting unpainted cast iron/steel parts on machinery.

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.

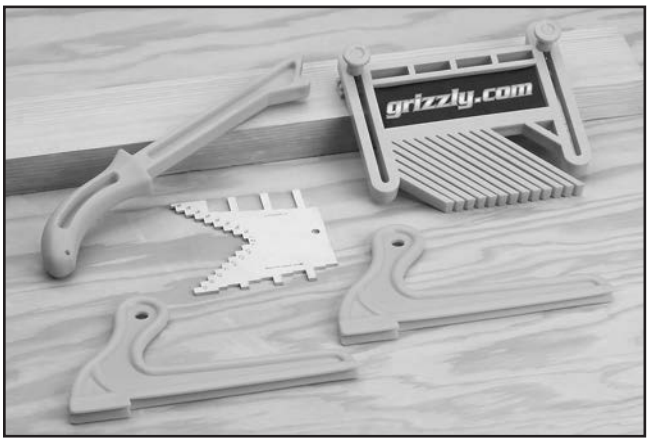


Figure 37. H8029 5 Piece Safety Kit.

G9643—8" Precision Straightedge
G9644—12" Precision Straightedge
H2675—16" Precision Straightedge
These grade 00 heavy-duty stainless steel straightedges are manufactured to DIN874 standards for professional results in set-up and inspection work.

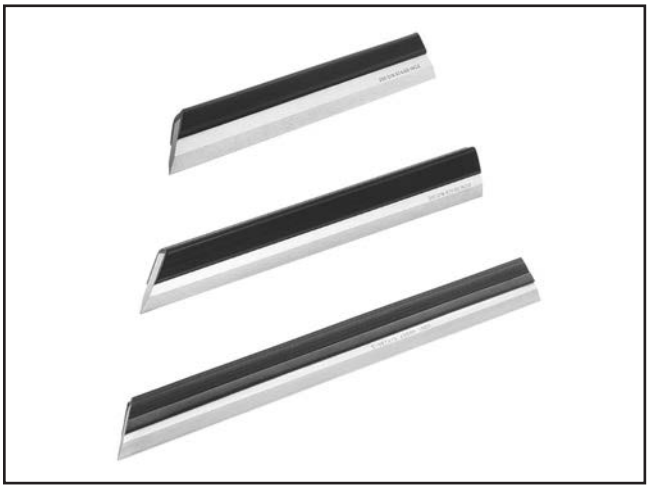


Figure 38. Straightedges.

T20514—Small Half-Mask Respirator
T20515—Medium Half-Mask Respirator
T20516—Large Half-Mask Respirator
T20511—Pre-Filter P100
T20539—Cartridge Filter 2PK P100
T20541—Cartridge Filter 2PK P100 & O Vapor
Wood and other types of dust can cause severe respiratory damage. If you work around dust everyday, a half-mask respirator can greatly reduce your risk. Compatible with safety glasses!

Figure 39. Half-mask respirator with disposable cartridge filters.

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!

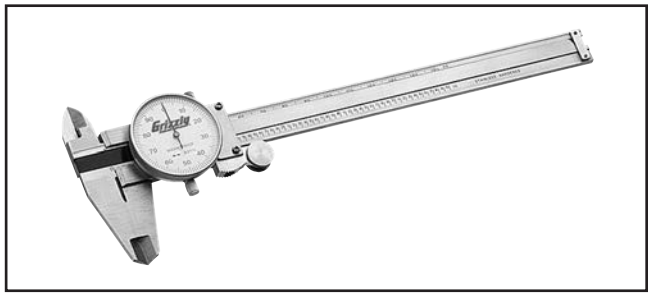


Figure 40. Grizzly® Dial Calipers.

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
H0736—Shop Fox® Safety Glasses
H7194—Bifocal Safety Glasses 1.5
H7195—Bifocal Safety Glasses 2.0
H7196—Bifocal Safety Glasses 2.5

Figure 41. Eye protection assortment.

T21992—Power Twist® V-Belt - ½" x 48"
Smooth running with less vibration and noise than solid belts. The Power Twist® V-belt can be customized in minutes to any size—just add or remove sections to fit your needs. Size: ½" x 48"; replaces all "A" sized V-belts. Requires two Power Twist® V-belts to replace the stock V-belt on the Model G0495X.

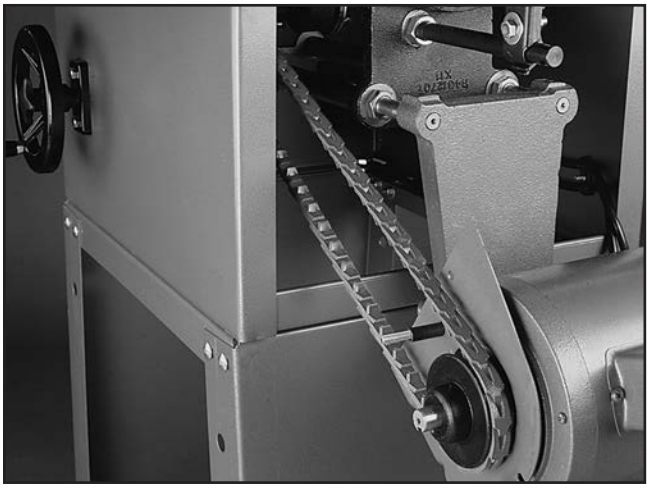
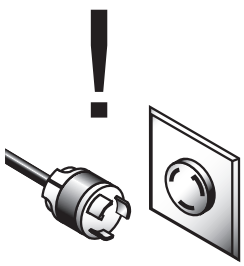


Figure 42. T21992 Power Twist® V-Belt.

SECTION 6: MAINTENANCE



⚠WARNING

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

Schedule

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

Daily Check:
- Vacuum all dust on and around the machine.
- Wipe down tables and all other unpainted cast iron with a metal protectant.
- Worn or damaged wires.
- Any other unsafe condition.

Monthly Check:
- V-belt tension, damage, or wear.
- Clean/vacuum dust build up.
- Replace batteries in control panel and digital sensor as needed.

Cleaning

Cleaning the Model G0495X 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 32** for more details).

Lubrication

Since all bearings on the G0495X are sealed and permanently lubricated, simply leave them alone until they need to be replaced. DO NOT lubricate them.

Below is a list of components that require periodic lubrication. Be careful not to over-lubricate these components. Large amounts of lubricant will attract sawdust, causing the metal components to gum up and bind.

Fence: Place one or two drops of light machine oil on the fence pivot points (**Figure 43**) as needed.

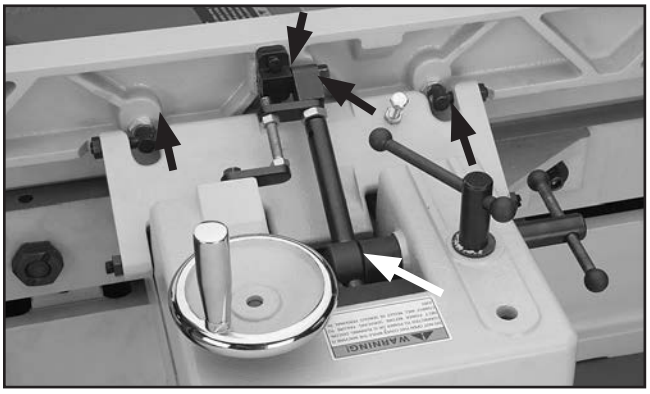


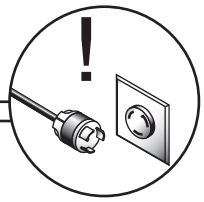
Figure 43. Fence lubrication locations.

Gears: Use a small brush to apply multi-purpose grease to the worm gear shafts and gears (Parts 96, 82 and 83) indicated on **Page 50.**

SECTION 7: SERVICE

Review the troubleshooting and procedures in this section to fix or adjust your machine if a problem develops. If you need replacement parts or you are unsure of your repair skills, then feel free to call our Technical Support at (570) 546-9663.

Troubleshooting



Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	1. Emergency stop push-button is engaged/faulty. 2. Wiring is open/has high resistance. 3. Motor START button or STOP switch is at fault. 4. Fuse has blown. 5. Power supply switched OFF or is at fault. 6. Start capacitor is at fault. 7. Thermal overload relay has tripped. 8. Wall fuse/circuit breaker is blown/tripped. 9. Contactor not getting energized/has burnt contacts. 10. Motor is at fault.	1. Rotate clockwise slightly until it pops out/replace it. 2. Check for broken wires or disconnected/corroded connections, and repair/replace as necessary. 3. Replace faulty START OR STOP switch. 4. Correct short/replace fuse on control panel. 5. Ensure power supply is switched on; ensure power supply has the correct voltage. 6. Test/replace if faulty. 7. Turn cut-out dial to increase working amps and push the reset pin. Replace if tripped multiple times. Reduce workload on machine or test and replace motor. If motor is OK, replace relay. 8. Ensure circuit size is suitable for this machine; correct for short. Reset/replace fuse or breaker. 9. Test for power on all legs and contactor operation. Replace unit if faulty. 10. Test/repair/replace.
Machine stalls or is underpowered.	1. Feed rate/cutting speed too fast for task. 2. Workpiece material is not suitable for this machine. 3. Belt slipping. 4. Motor connection is wired incorrectly. 5. Motor bearings are at fault. 6. Contactor not getting energized or has poor contacts. 7. Motor has overheated. 8. Motor is at fault.	1. Decrease feed rate/cutting speed. 2. Only cut wood products; make sure moisture content is below 20% and there are no foreign materials in the workpiece. 3. Replace bad belt, align pulleys, and re-tension. 4. Correct motor wiring connections. 5. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. 6. Test for power on all legs and contactor operation. Replace if faulty. 7. Clean off motor, let cool, and reduce workload. 8. Test/repair/replace.
Machine has vibration or noisy operation.	1. Motor or component is loose. 2. Inserts are at fault. 3. V-belt worn or loose. 4. Pulley is loose. 5. Motor mount loose/broken.	1. Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid. 2. Rotate or replace inserts causing problem. 3. Inspect/replace belt with a new one (refer to **Page 45**). 4. Realign/replace shaft, pulley, setscrew, and key as required. 5. Tighten/replace.

Symptom	Possible Cause	Possible Solution
Machine has vibration or noisy operation.	6. Machine is incorrectly mounted or sits unevenly. 7. Motor fan is rubbing on fan cover. 8. Motor bearings are at fault. 9. Cutterhead bearings at fault.	6. Tighten/replace anchor studs in floor; relocate/shim machine. 7. Replace dented fan cover; replace loose/damaged fan. 8. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. 9. Replace bearing(s)/realign cutterhead.

Table

Symptom	Possible Cause	Possible Solution
Tables are hard to adjust.	1. Table lock is engaged or partially engaged. 2. Table stops blocking movement.	1. Completely loosen the table lock. 2. Loosen/reset table positive stops.

Cutting

Symptom	Possible Cause	Possible Solution
Excessive snipe (gouge in the end of the board that is uneven with the rest of the cut).	1. Outfeed table is set too low. 2. Operator pushing down on end of workpiece.	1. Align outfeed table with cutterhead insert at top dead center (**Page 17**). 2. Reduce/eliminate downward pressure on that end of workpiece.
Workpiece stops in the middle of the cut.	1. Outfeed table is set too high.	1. Align outfeed table with cutterhead insert at top dead center (**Page 17**).
Chipping.	1. Knots or conflicting grain direction in wood. 2. Nicked or chipped insert. 3. Feeding workpiece too fast. 4. Taking too deep of a cut.	1. Inspect workpiece for knots and grain (**Page 26**); only use clean stock. 2. Rotate insert to expose sharp edge; replace insert (**Page 40**). 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.)
Fuzzy Grain.	1. Wood may have high moisture content or surface wetness. 2. Dull inserts.	1. Check moisture content and allow to dry if moisture is too high. 2. Replace inserts (**Page 40**).
Long lines or ridges that run along the length of the board	1. Nicked or chipped insert.	1. Rotate insert to expose sharp edge; replace insert (**Page 40**).
Uneven insert marks, wavy surface, chatter marks across board face.	1. Feeding workpiece too fast.	1. Slow down the feed rate.
Board edge is concave or convex after jointing.	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.	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.

Checking/Adjusting Table Parallelism

If the tables are not parallel with the cutterhead or each other, then poor cutting results and kickback can occur.

Tools Needed	Qty
Straightedge	1
Wrench or Socket 12mm	1
Wrench or Socket 32mm	1
Adjustable Wrench 10"	1
Hex Wrench 4mm	1
Duct Tape	1
Electrical Parts Cleaner	1

Checking Outfeed Table

1. DISCONNECT JOINTER FROM POWER!

2. Put on leather gloves.

3. Remove the cutterhead guard and the fence.

4. Loosen the outfeed table lock located at the front of the machine, then loosen the jam nuts and positive stop bolts located under the outfeed table (see **Figure 44**).

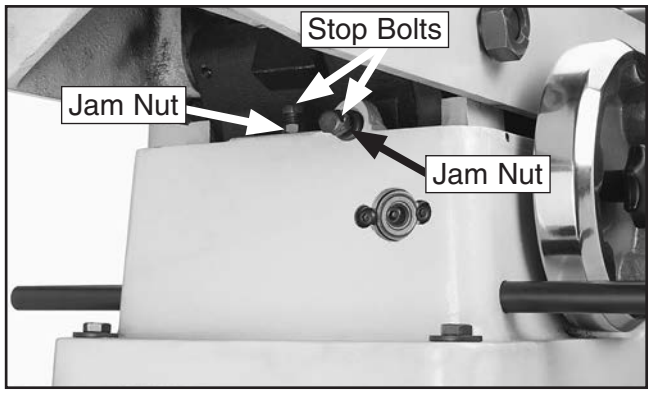


Figure 44. Outfeed table positive stop bolts.

5. Place the straightedge on the outfeed table so it hangs over the cutterhead, then lower the outfeed table until the straightedge just touches the cutterhead body, as shown in **Figure 45** (rotate the cutterhead if necessary).

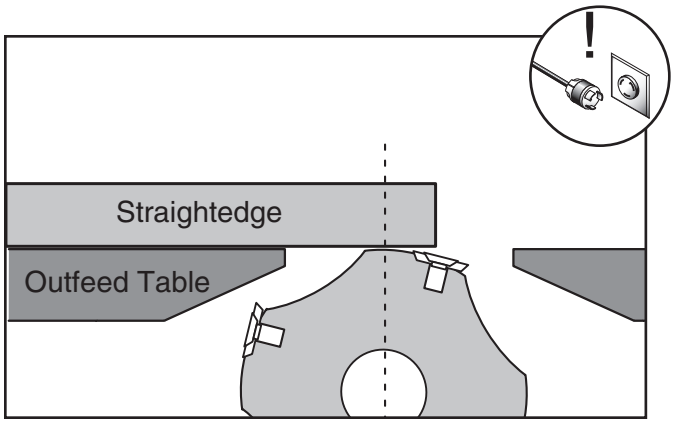


Figure 45. Adjusting outfeed table even with cutterhead body.

6. Place the straightedge in the positions shown in **Figure 46**. In each position, the straightedge should touch the cutterhead body and sit flat on the outfeed table.

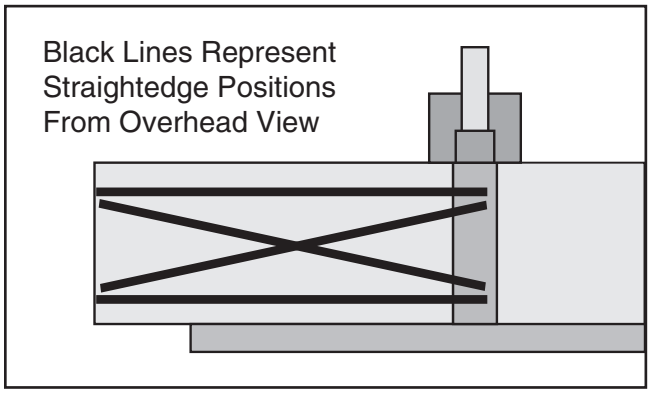


Figure 46. Straightedge positions for verifying if outfeed table is parallel with cutterhead.

—If the straightedge touches the cutterhead and sits flat across the outfeed table in each position, then the outfeed table is already parallel with the cutterhead. Check the infeed table to make sure that it is parallel with the outfeed table.

—If the straightedge does not touch the cutterhead and sit flat on the outfeed table in any of the positions, then the outfeed table is not parallel with the cutterhead. Correct the outfeed table parallelism, then correct the infeed table parallelism.

Checking Infeed Table

1. Follow all the steps for checking the outfeed table parallelism to first make sure that the outfeed table is parallel with the cutterhead.

2. Raise the outfeed table higher than the cutterhead.

3. Loosen the infeed table jam nuts and positive stop bolts shown in **Figure 47**.

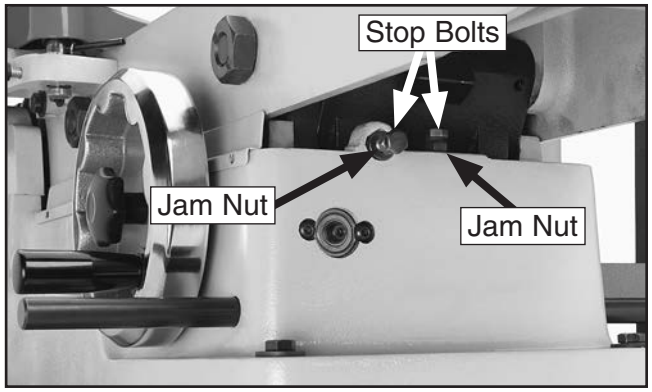


Figure 47. Infeed table positive stop bolts.

4. Place the straightedge halfway across the infeed table and halfway over the outfeed table, and adjust the infeed table even with the outfeed table, as shown in **Figure 48**.

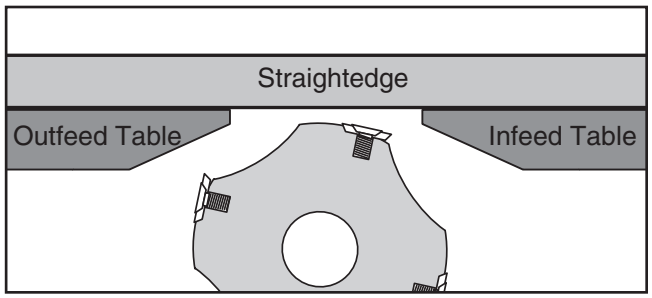


Figure 48. Infeed and outfeed tables set evenly.

5. Place the straightedge in the positions shown in **Figure 49**. In each position, the straightedge should sit flat against both the outfeed table and the infeed table.

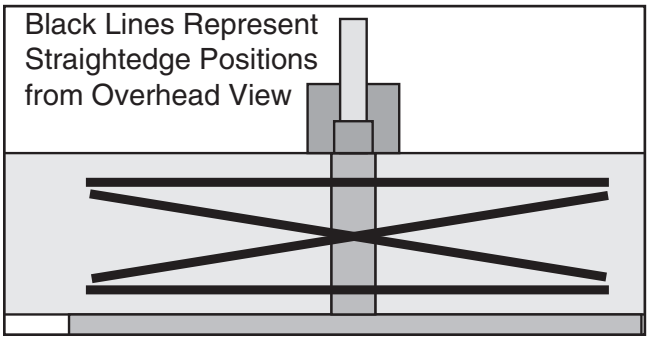


Figure 49. Straightedge positions for checking infeed/outfeed table parallelism.

—If the straightedge sits flat against both the infeed and outfeed table in each of the positions, then the tables are parallel. Set both table heights (**Pages 17 & 41**) and replace the cutterhead guard.

—If the straightedge does not sit flat against both the infeed and outfeed table in any of the positions, then follow the **Adjusting Table Parallelism** instructions.

Adjusting Table Parallelism

For safe and proper cutting results, the tables must be parallel to the cutterhead. Adjusting them to be parallel is a task of precision and patience, and may take up to one hour to complete. Luckily, this is considered a permanent adjustment and should not need to be repeated for the life of the machine.

Due to the complex nature of this task, we recommend that you double check the current table positions to make sure that they really need to be adjusted before starting.

The tables have four eccentric bushings under each corner that allow the tables to be adjusted parallel. These eccentric bushings are locked in place by set screws and adjust when rotated.

The correct order for adjusting the table parallelism is to first adjust the outfeed table parallel with the cutterhead to within 0.010"-0.012", then adjust the infeed table parallel with the outfeed table.

When setting the outfeed table, all measurements must be made from the cutterhead body—not the inserts.

IMPORTANT: The steps below are intended to be performed in succession with the steps involved in checking the outfeed table. Do not continue until you have followed those steps.

To adjust the table parallelism:

1. Place the straightedge on the outfeed table so it hangs over the cutterhead, then lower the outfeed table until the straightedge just touches the cutterhead body, as shown in **Figure 45** (rotate the cutterhead if necessary).

2. Remove the screw cover (**Figure 50**) covering each set screw on the outfeed table.

   Note: *It may help to clean the screw covers with electrical parts cleaner. Push duct tape firmly against the cover, then pull straight up.*

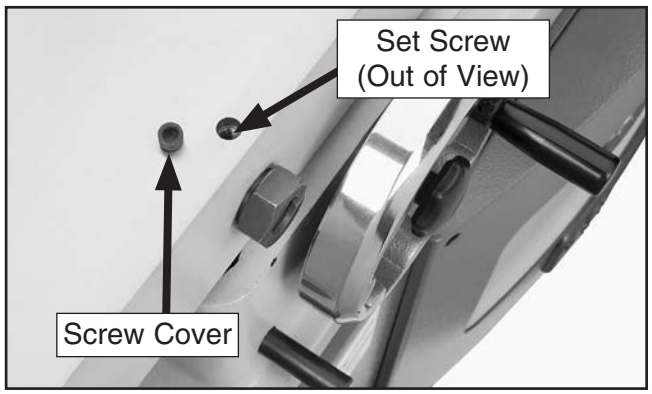


Figure 50. Screw cover and set screw location.

3. Loosen each set screw (**Figure 50**) two turns.

4. Place the straightedge in one of the positions shown in **Figure 46**, and adjust the table by turning the eccentric bushings (**Figures 51** & **52**) as needed with an adjustable wrench so that the straightedge touches the cutterhead while lying flat across the outfeed table. Repeat this step with each of the remaining straightedge positions as many times as necessary until the outfeed table is parallel with the cutterhead to within 0.010"-0.012".

   Note: *Setting the outfeed table parallel to the cutterhead within 0.010"-0.012" will produce high quality results. Going lower than this number will produce minimal gain.*

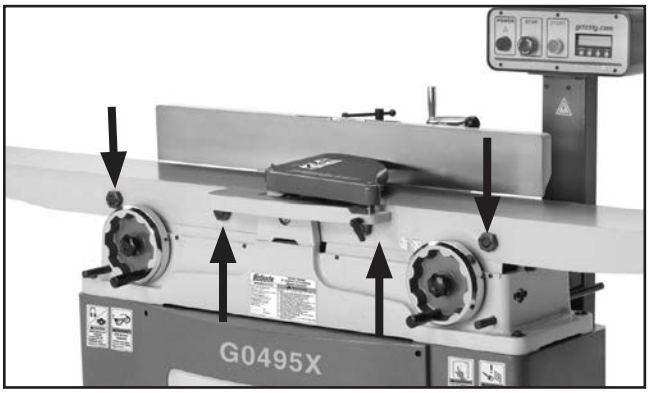


Figure 51. Front eccentric bushings.

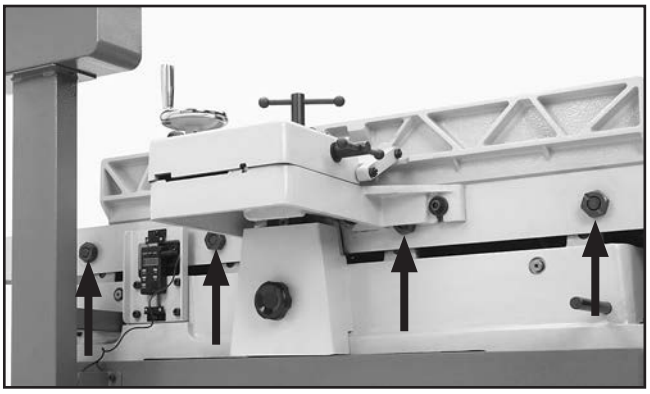


Figure 52. Rear eccentric bushings.

5. Tighten the set screws and replace the screw covers on the outfeed table.

6. Remove each of the four screw covers on the infeed table, and loosen the set screws underneath.

7. Place the straightedge halfway across the infeed table and halfway over the outfeed table, then adjust the infeed table even with the outfeed table, as shown in **Figure 48**.

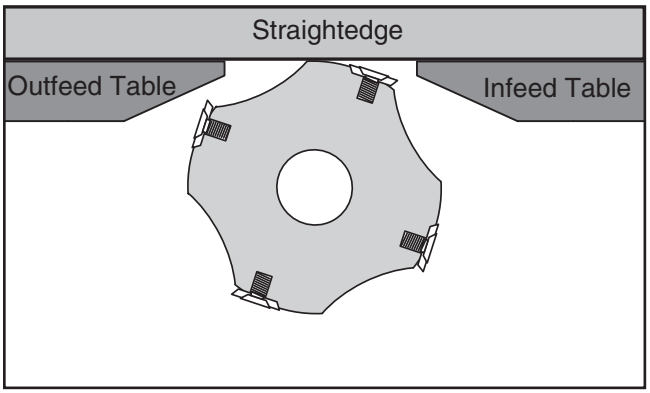


Figure 53. Infeed and outfeed tables adjusted even.

8. Place the straightedge in one of the positions shown in **Figure 49**, and adjust the eccentric bushings under the infeed table so the straightedge lies flat against both tables. Repeat this step with each of the remaining straightedge positions as many times as necessary until the infeed table is parallel with the outfeed table.

9. Tighten the set screws and replace the covers on the infeed table.

10. Set the outfeed table height (refer to **Setting Outfeed Table** on **Page 17**).

11. Reinstall the cutterhead guard and fence.

Replacing Carbide Inserts

Tools Needed: **Qty**
T-Handle Wrench w/T-25 Torx Bit 1

The cutterhead is equipped with 36 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 54**).

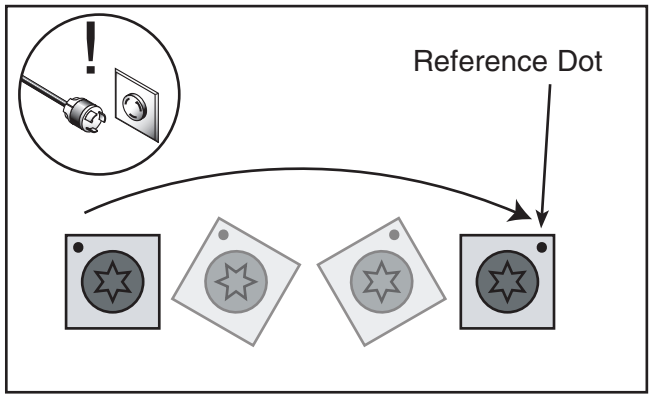


Figure 54. Insert rotating sequence.

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.

To rotate or change a carbide insert:

1. DISCONNECT JOINTER FROM POWER!

2. Remove any sawdust from the head of the carbide insert Torx screw.

3. Remove the Torx screw and carbide insert.

4. Clean all dust and dirt off the insert and the cutterhead pocket from which the insert was removed, and replace the insert so a fresh, sharp edge is facing outward.

   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.*

5. 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 in the screw hole, thereby lifting the insert or screw slightly and affecting workpiece finishes.*

Setting Infeed Table

The infeed table on the Model G0495X has positive stop bolts that, when properly set up, allow the operator to quickly adjust the infeed table between finish/final cuts and shaping/heavy cuts.

We recommend setting the minimum depth of cut to 1/32" and the maximum depth of cut to 1/8" for most operations. **DO NOT exceed 1/8" cut per pass on this machine or the risk of kickback and serious injury will be greatly increased!**

Each positive stop bolt (**Figure 55**) controls the top or bottom range of the table movement. The jam nuts lock the positive stop bolts in position so they won't move during operation.

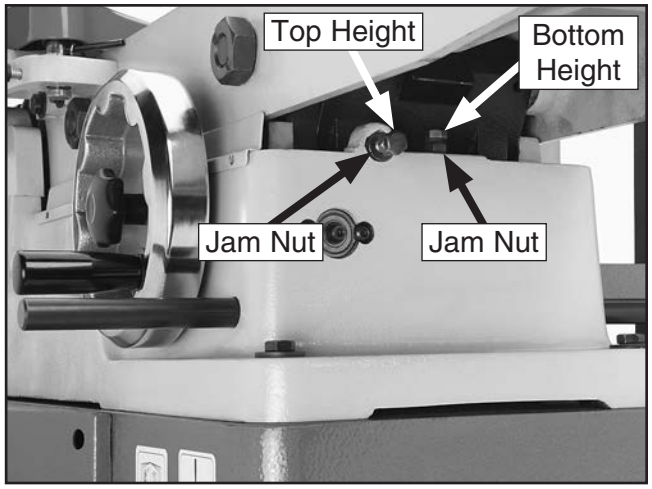


Figure 55. Infeed table positive stop bolts.

Calibrating Infeed Table

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

Tools Needed	Qty
Straightedge	1
Wrench 12mm	1

To calibrate the depth scale:

1. Set the outfeed table height as described in **Setting Outfeed Table Height** on **Page 17**.
2. Move the cutterhead guard out of the way.
3. Place a straightedge across the infeed and outfeed tables.
4. Adjust the infeed table until it is level with the outfeed table, as illustrated in **Figure 56**.

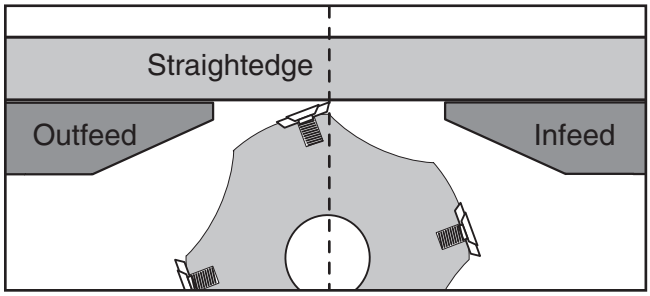


Figure 56. Infeed table adjusted even with outfeed table.

5. Follow instructions on **Page 42** to calibrate the digital sensor and readout so both display 0.000.

Calibrating Digital Sensor & Readout

The digital readout on the control panel displays the depth of cut using the sensor located on the back of the jointer. The sensor requires a 1.5V type 357/303 silver oxide button cell battery and the display requires two AAA batteries. The 1.5 V battery is preinstalled at the factory but the AAA battery must be installed (refer to **Page 18**, for installation instructions). To conserve the batteries, turn the displays ***OFF*** when not in use.

To calibrate the sensor and display:

1. Follow **Steps 1-5** on **Page 41** for calibrating the infeed table.

2. Turn ***ON*** the rear sensor, then turn ***ON*** the front digital readout.

3. Press the ZERO buttons on the sensor and front display, as shown in **Figures 57** & **58**.

Figure 57. Sensor zero button.

Figure 58. Digital readout zero button.

Cutterhead Guard

The cutterhead guard comes pre-installed for shipping, but it may need to be adjusted if the guard does not quickly snap back against the fence when pulled out and let go.

To adjust the cutterhead guard:

1. Loosen the shaft lock (**Figure 59**) and remove the cutterhead guard.

2. Wind the tang on the torsion spring clockwise a quarter turn, and slide the guard shaft into the casting so the spring tang points toward the main table but does not overlap it, as shown in **Figure 59**.

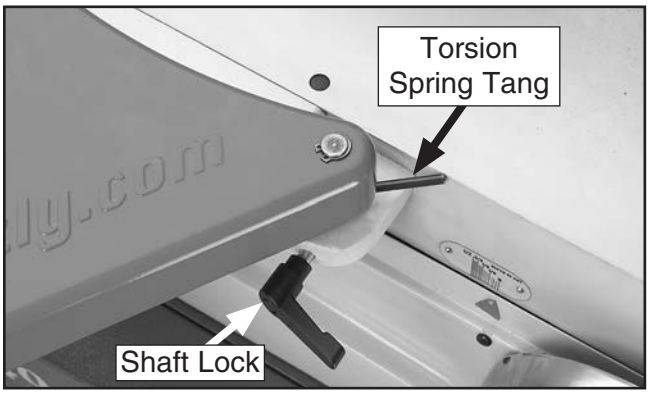


Figure 59. Guard mounted with spring tang in the correct position for proper return tension.

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

   —The guard should quickly snap back over the cutterhead without dragging across the table. If it does, tighten the shaft lock.

   —If the guard drags across the table, raise it until it won't drag, then tighten the shaft lock.

   —If the guard does not snap back, remove it and repeat **Steps 1 & 2**, increasing the spring tension as needed.

Setting Fence Stops

The fence stops simplify the task of adjusting the fence to 45˚ inward, 90˚, and 45˚ outward (135˚).

Tools Needed	Qty
45° Square	1
90° Square	1
Sliding Bevel	1
Wrench 12mm	1
Wrench 24mm	1
Phillips Screwdriver	1

To set the 45˚ inward fence stop:

1. Remove the fence assembly from the jointer, remove the Phillips head screws from the plate shown in **Figure 60** under the fence carriage. The plate must be removed to access the adjustment nuts.

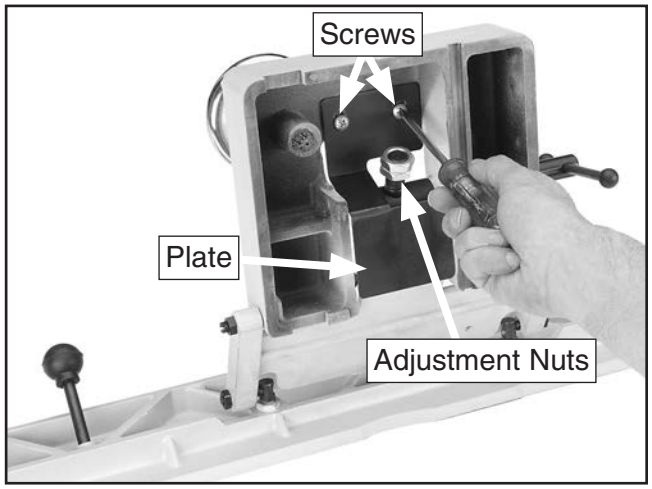


Figure 60. Removing plate to access inward fence stop.

2. Reinstall the fence assembly on the jointer.

3. Using a 45˚ square, adjust the fence to the 45˚ inward position, as shown in **Figure 61**.

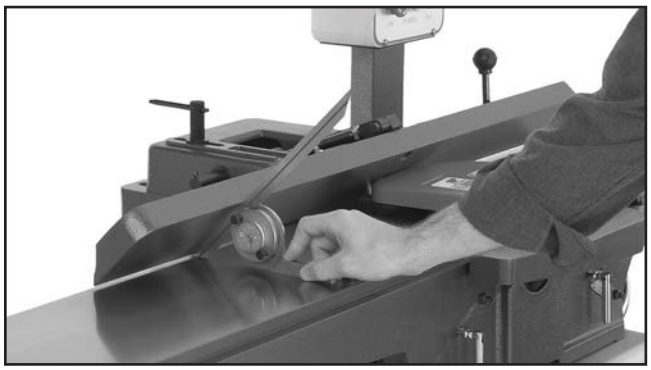


Figure 61. Example of adjusting fence 45˚ inward.

4. Loosen the jam nut shown in **Figure 62**.

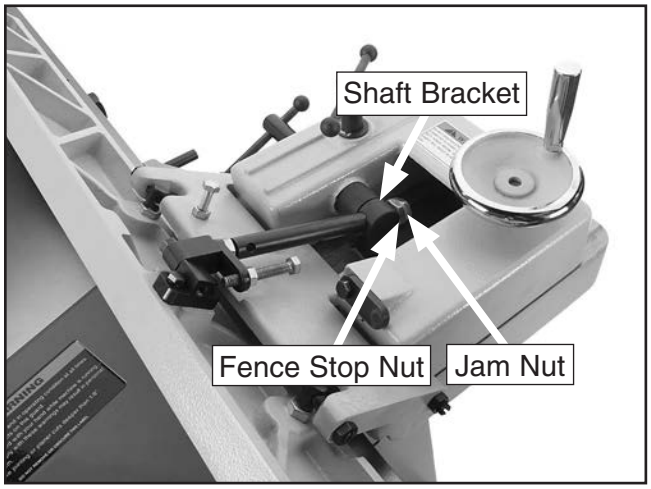


Figure 62. 45˚ inward fence stop jam nut.

5. Adjust the 45˚ inward fence stop nut until it makes contact with the back of the shaft bracket.

6. Retighten the jam nut loosened in **Step 4**.

7. Remove the fence assembly, reinstall the plate with the screws removed in **Step 1**, then reinstall the fence assembly.

To set the 90˚ fence stop:

1. Using a 90˚ square, adjust the fence to the 90˚ position, as shown in **Figure 63**.

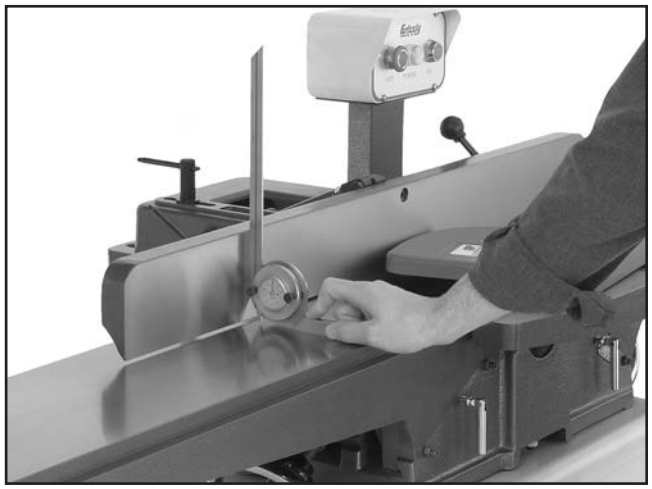


Figure 63. Adjusting fence to 90˚.

2. Flip the 90˚ stop block into the position shown in **Figure 64**.

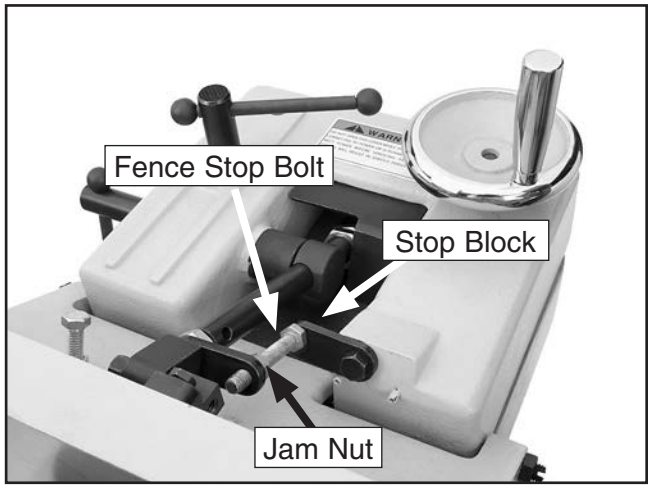


Figure 64. 90˚ stop block engaged.

3. Loosen the jam nut on the 90˚ fence stop bolt (**Figure 64**).

4. Adjust the 90˚ fence stop bolt until it makes contact with the 90˚ stop block.

5. Retighten the jam nut loosened in **Step 3**.

To set the 45˚ outward fence stop:

1. Using a sliding bevel adjusted to 135˚, adjust the fence to the 135˚ (45˚ outward) position, as shown in **Figure 65**.

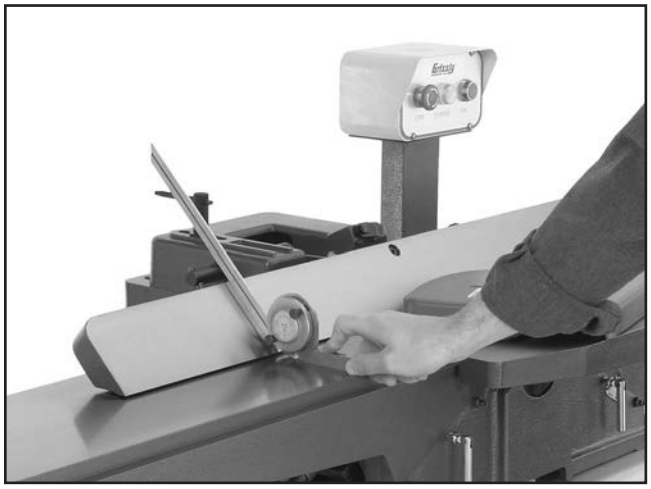


Figure 65. Adjusting fence 45˚ outward.

2. Loosen the jam nut on the 45˚ outward fence stop bolt (**Figure 66**).

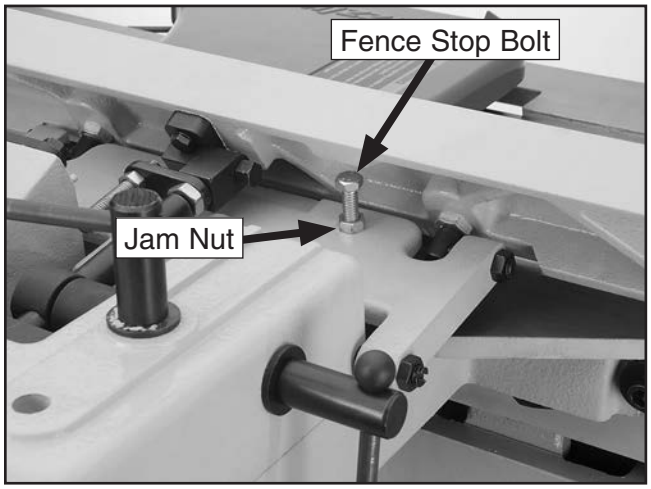


Figure 66. 45˚ outward fence stop jam nut.

3. Adjust the 45˚ outward fence stop bolt until it makes contact with the back of the fence.

4. Retighten the jam nut loosened in **Step 2**.

V-Belt

V-belt removal and replacement involves removing the V-belt, rolling it off of the pulleys, replacing it with a new belt, then retensioning it.

Consider replacing the stock belt with a Power Twist V-belt (see **Page 32, Figure 42**) to reduce vibration and noise, and increase belt lifespan.

To adjust/replace the V-belt:

1. DISCONNECT JOINTER FROM POWER!

2. Remove the rear access panel and V-belt guard.

3. Using a 17mm wrench, loosen the fasteners on the tension rod shown in **Figure 67**.

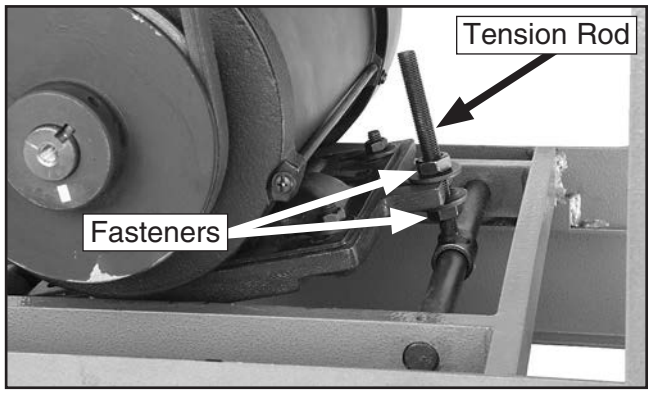


Figure 67. Fasteners needed to be loosened for V-belt replacement.

4. Lift the motor up, slide the V-belt off of the motor and cutterhead pulleys, and replace it with a new one.

5. Lower the motor and adjust the V-belt tension with the tension rod fasteners so there is approximately ½" deflection when the belt is pushed with moderate pressure, as shown in **Figure 68**.

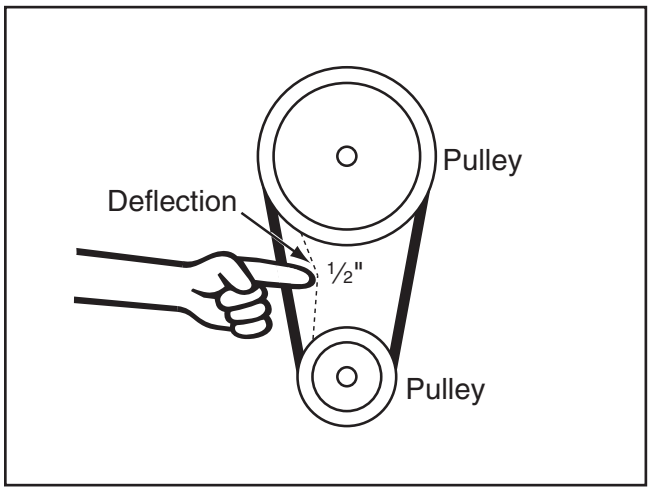


Figure 68. Checking V-belt tension.

6. Replace the rear access panel and the V-belt guard.

Pulley Alignment

Pulley alignment is another important factor in power transmission and belt life. The pulleys should be parallel to each other and in the same plane (coplaner) for optimum performance.

Each pulley can be adjusted by loosening the motor mount fasteners, sliding the motor in or out, and retightening the fasteners to lock the motor pulley in place.

Tools Needed: **Qty**
Wrench or Socket 17mm 1

To align the pulleys:

1. DISCONNECT JOINTER FROM POWER!

2. Remove the rear access cover, V-belt guard and the fence assembly.

3. Place a straightedge against both pulleys (**Figure 69**) and check to make sure that they are aligned and that the V-belt is straight up and down (see **Figure 70**).

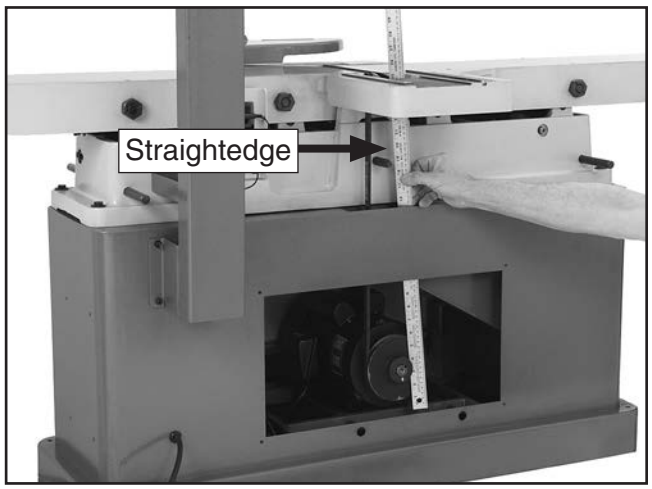


Figure 69. Checking belt alignment.

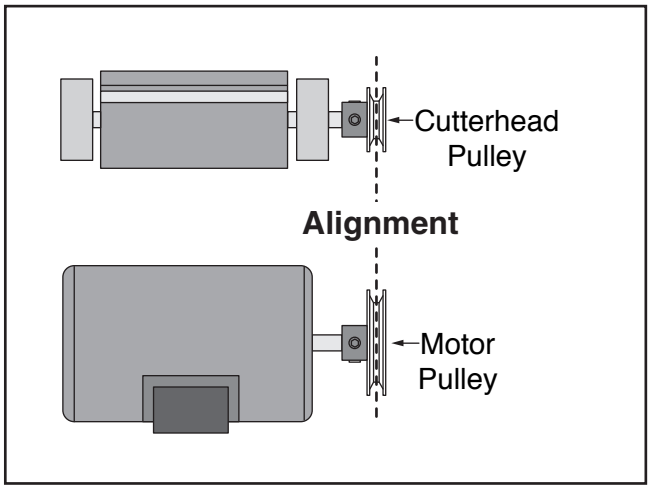


Figure 70. Pulleys aligned.

— If the pulleys are aligned, go to **Step 8**.

— If the pulleys are NOT aligned, perform **Steps 4–8**.

4. Loosen the motor mount fasteners shown in **Figure 71**.

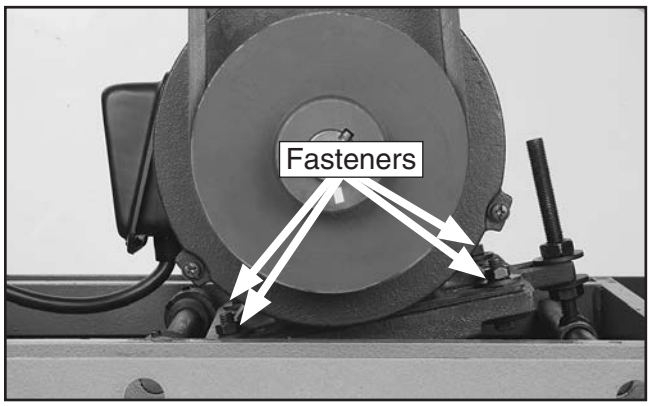


Figure 71. Motor mount fasteners.

5. Shift the motor horizontally as needed to align the motor pulley with the cutterhead pulley.

6. Tighten the motor mount fasteners. The V-belt should be parallel and aligned as shown in **Figure 70**.

7. Reinstall the fence assembly, rear access panel, and V-belt guard.

Electrical Components

Figure 72. Capacitor wiring.

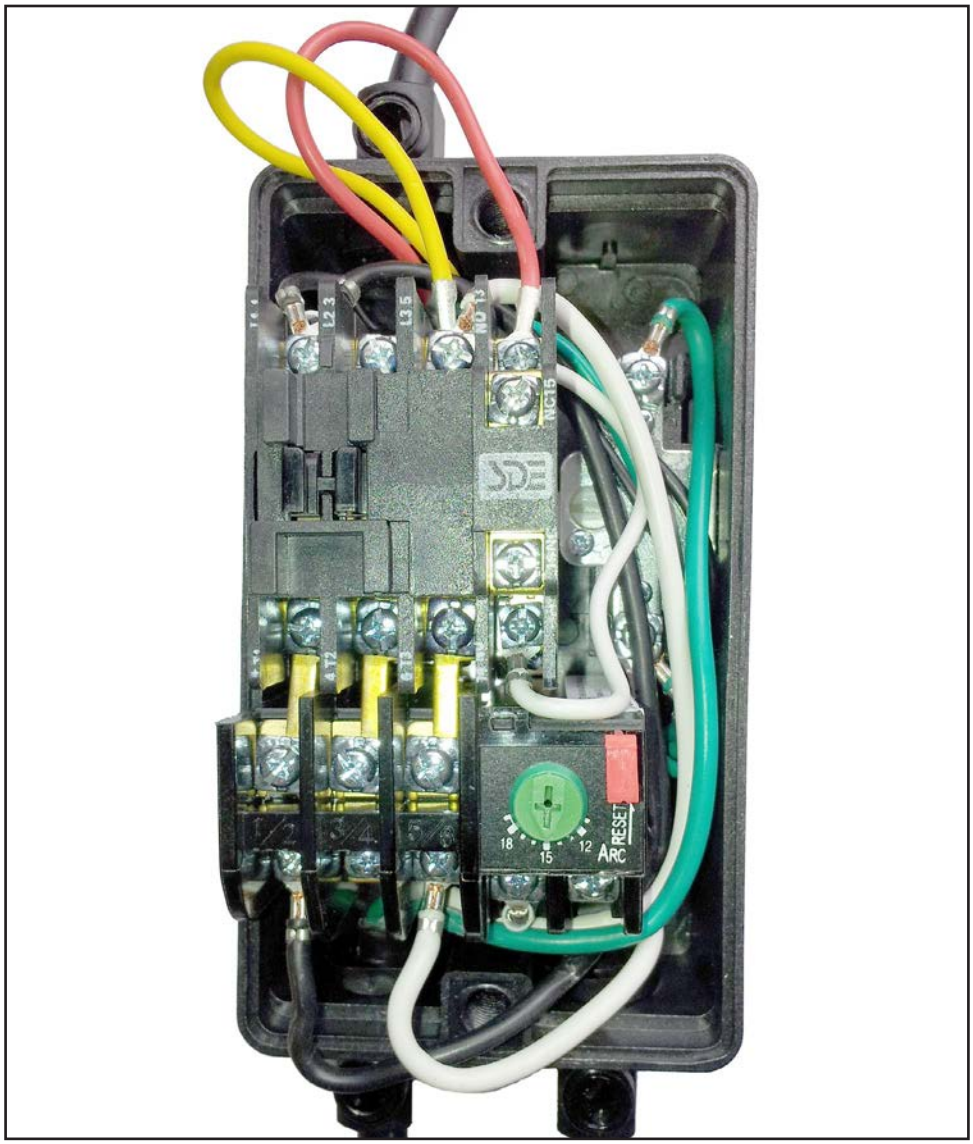


Figure 73. Magnetic switch wiring.

Wiring Diagram

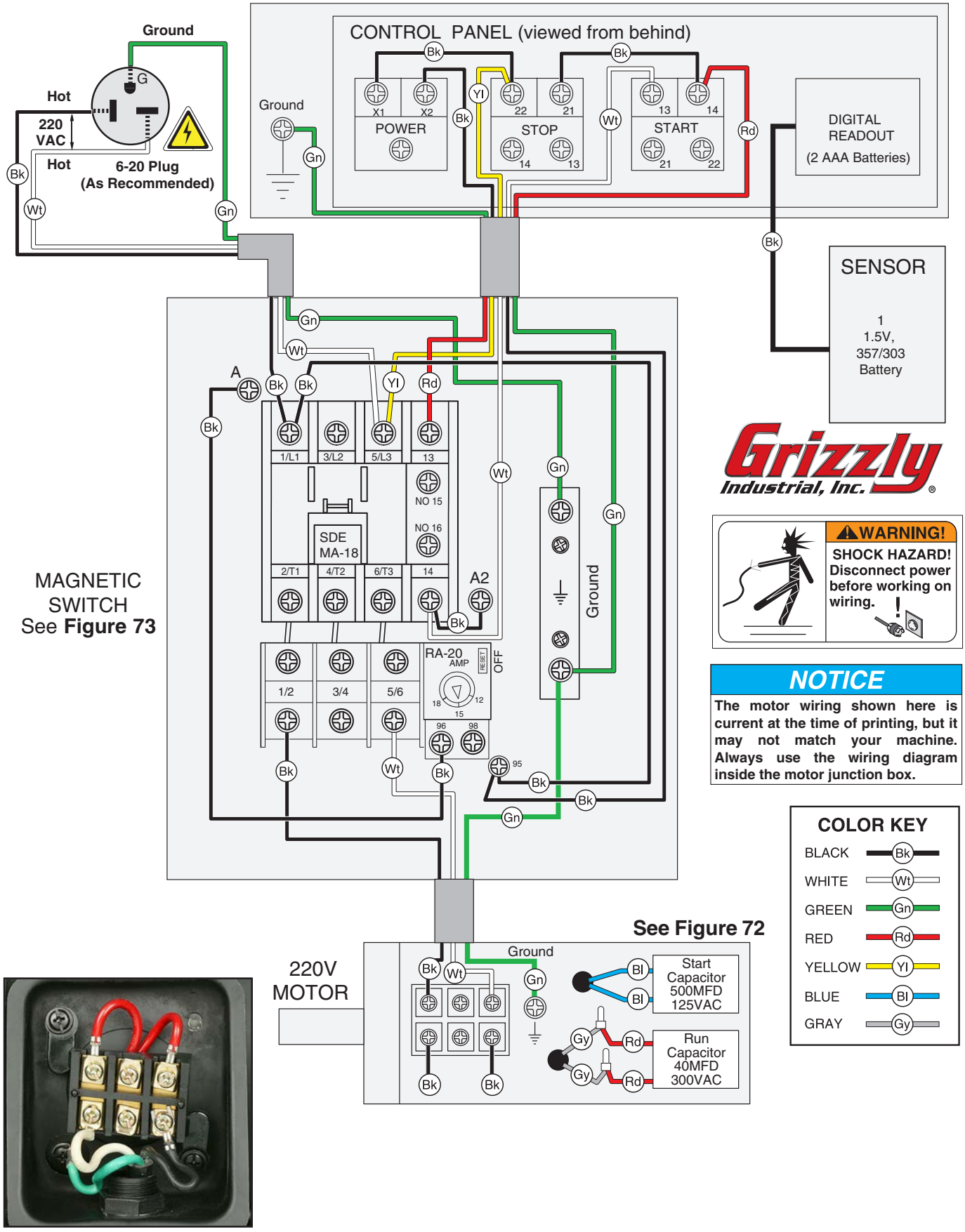
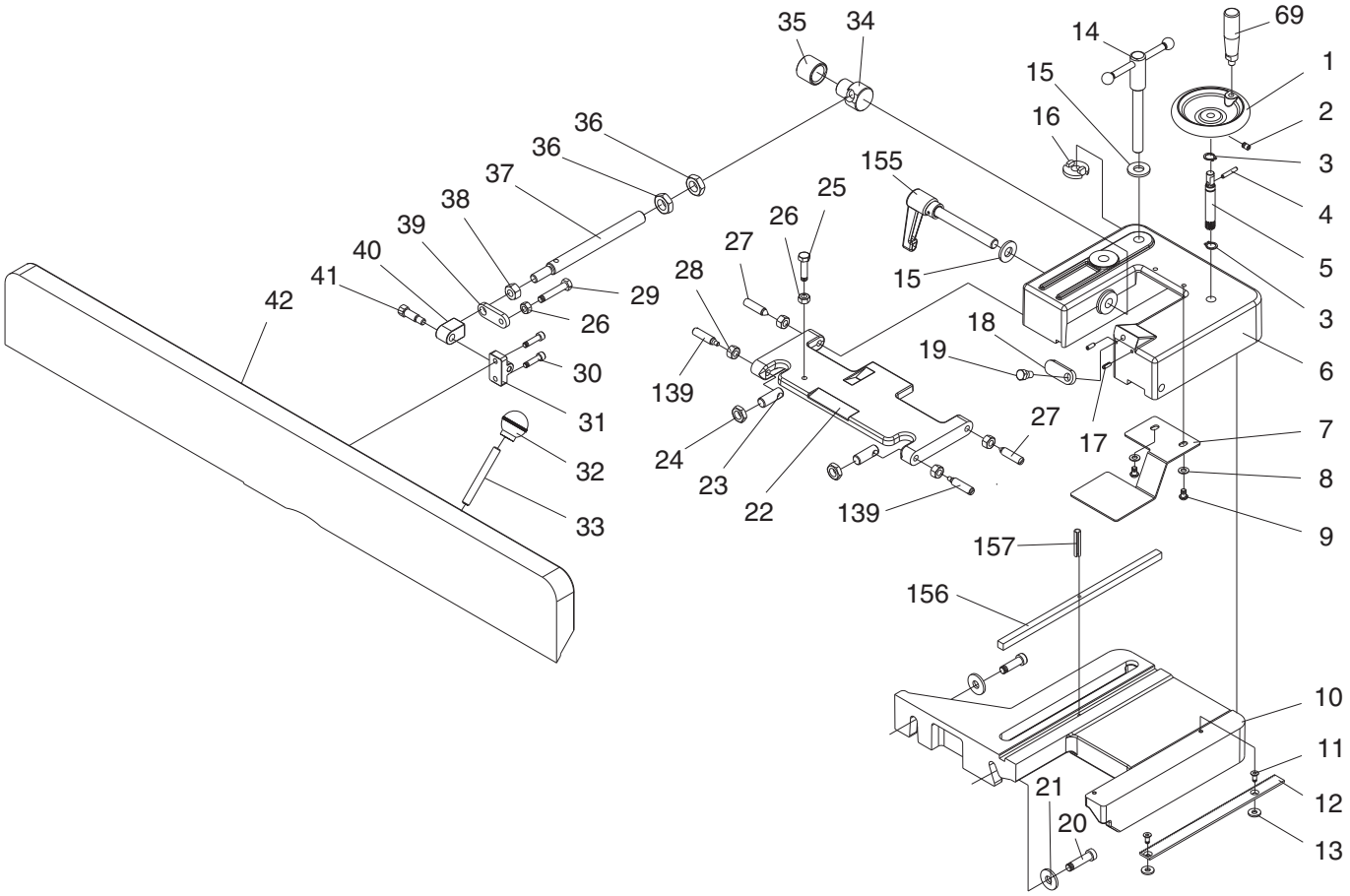


Figure 74. Junction box wiring.

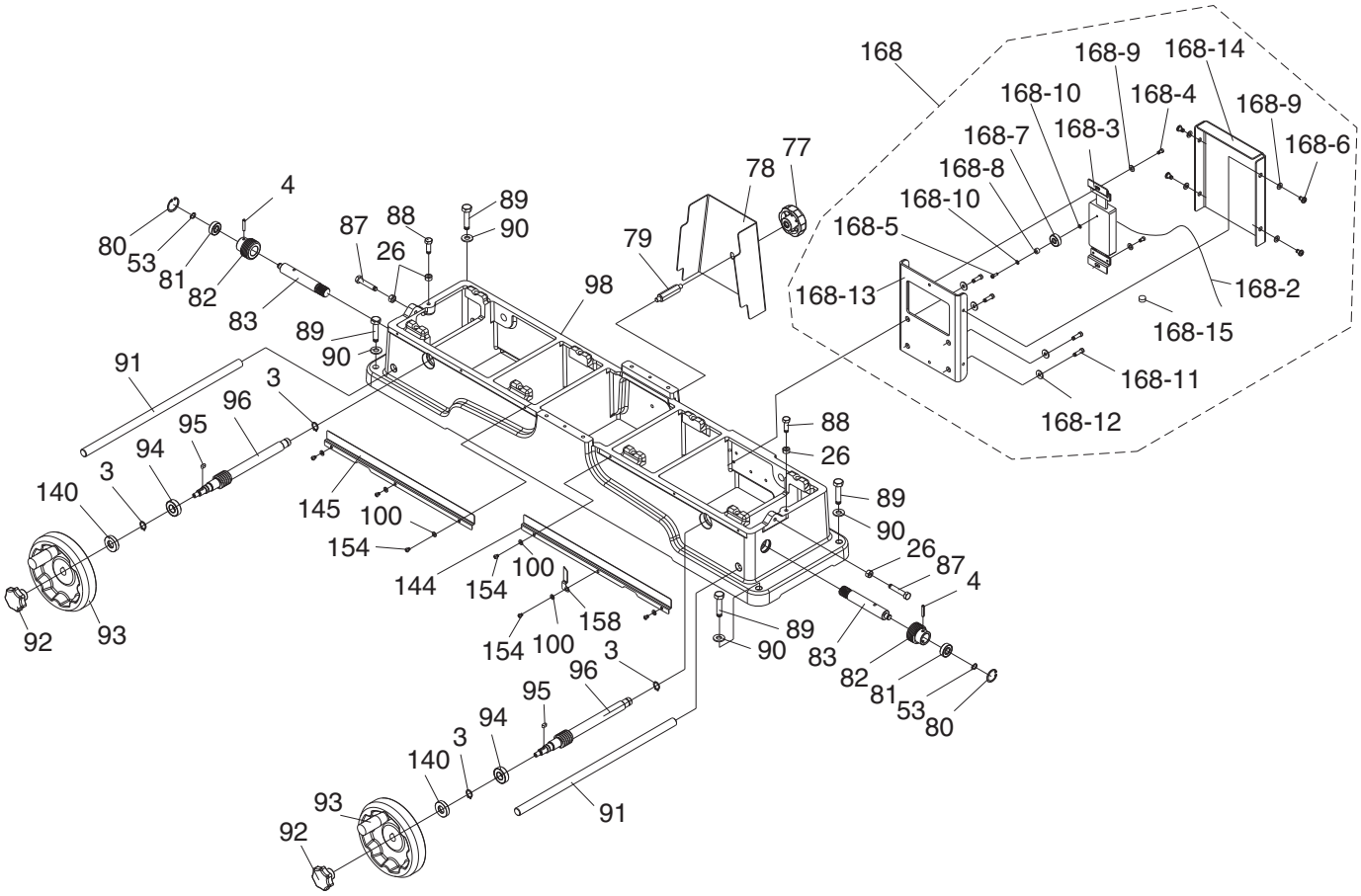
Fence Parts Breakdown & List



REF	PART #	DESCRIPTION
1	P0495X001	HANDWHEEL
2	P0495X002	SET SCREW 1/4-20 X 3/8
3	P0495X003	EXT RETAINING RING 15MM
4	P0495X004	ROLL PIN 4 X 25
5	P0495X005	GEAR SHAFT
6	P0495X006	FENCE BRACKET
7	P0495X007	PLATE
8	P0495X008	FLAT WASHER 6MM
9	P0495X009	CAP SCREW 1/4-20 X 3/8
10	P0495X010	TABLE BRACKET
11	P0495X011	FLAT HD SCR M5-.8 X 12
12	P0495X012	BAR
13	P0495X013	FLAT WASHER 6MM
14	P0495X014	LOCKING HANDLE ASSEMBLY
15	P0495X015	SPECIAL WASHER
16	P0495X016	FENCE LOCK NUT
17	P0495X017	ROLL PIN 4 X 12
18	P0495X018	STOP BLOCK
19	P0495X019	SPECIAL BOLT 5/16-18 X 3/8
20	P0495X020	CAP SCREW 3/8-16 X 1-1/4
21	P0495X021	FLAT WASHER 10MM
22	P0495X022	FENCE HINGE
23	P0495X023	SPECIAL BOLT
24	P0495X024	HEX NUT 1/2-20

REF	PART #	DESCRIPTION
25	P0495X025	HEX BOLT 5/16-18 X 1-1/4
26	P0495X026	HEX NUT 5/16-18
27	P0495X027	SPECIAL BOLT
28	P0495X028	HEX NUT 3/8-16
29	P0495X029	HEX BOLT 5/16-18 X 1-3/4
30	P0495X030	CAP SCREW 1/4-20 X 1
31	P0495X031	BRACKET
32	P0495X032	HANDLE
33	P0495X033	SHAFT
34	P0495X034	PIVOT NUT
35	P0495X035	COLLAR
36	P0495X036	HEX NUT 5/16-18
37	P0495X037	ROD
38	P0495X038	HEX NUT 7/16-14
39	P0495X039	STOP TAB
40	P0495X040	ADAPTER
41	P0495X041	ADAPTER SCREW
42	P0495X042	FENCE
69	P0495X069	FENCE ADJUSTMENT WHEEL HANDLE
139	P0495X139	BOLT
155	P0495X155	TILT LOCK
156	P0495X156	KEY 9.5 x 9.5 x 268
157	P0495X157	ROLL PIN 4 x 14

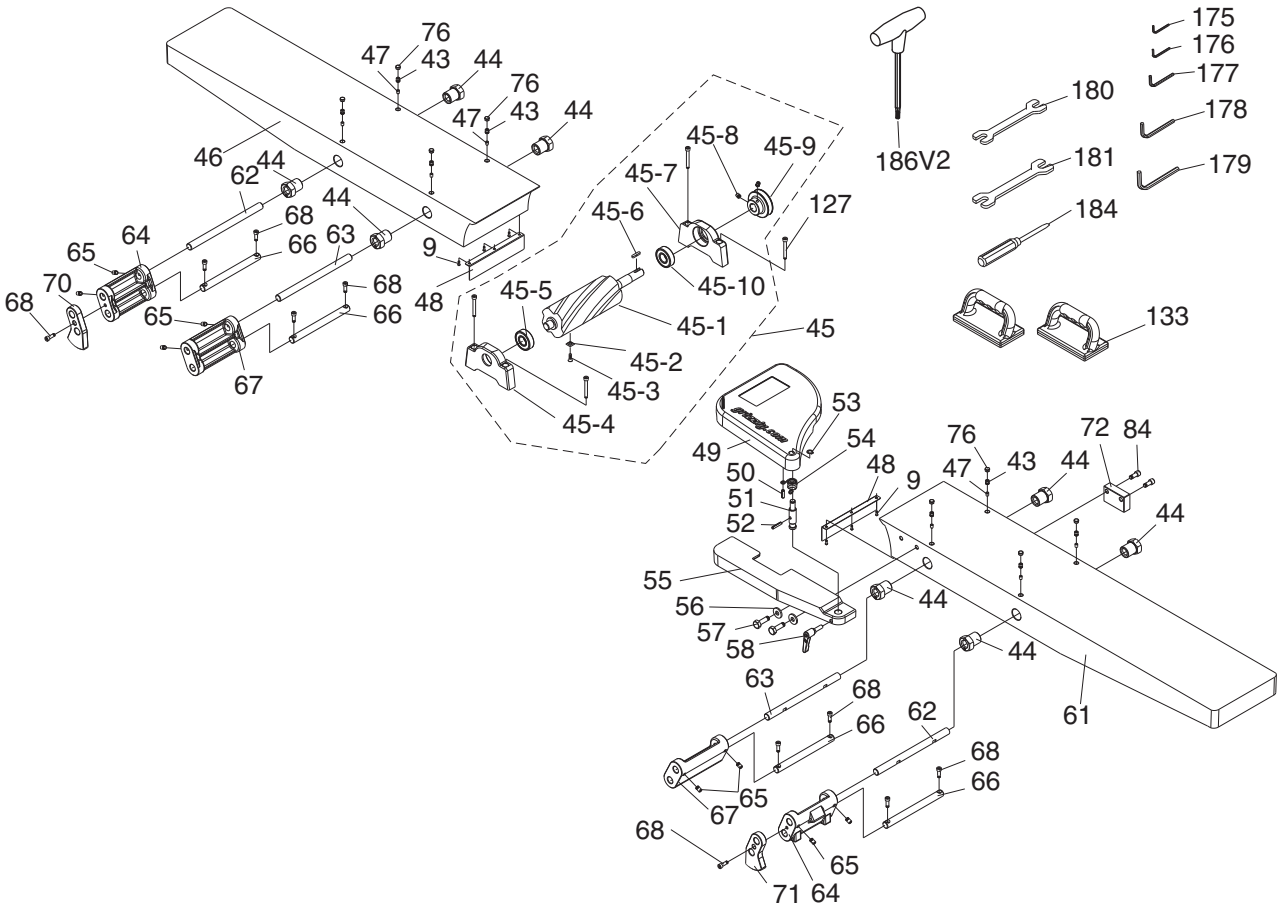
Base Parts Breakdown & List



REF	PART #	DESCRIPTION
3	P0495X003	EXT RETAINING RING 15MM
4	P0495X004	ROLL PIN 4 X 25
26	P0495X026	HEX NUT 5/16-18
53	P0495X053	EXT RETAINING RING 9MM
77	P0495X077	KNOB
78	P0495X078	GUARD COVER
79	P0495X079	DOUBLE-END STUD
80	P0495X080	INT RETAINING RING 25MM
81	P0495X081	BALL BEARING 6000ZZ
82	P0495X082	PINION GEAR
83	P0495X083	SHAFT
87	P0495X087	HEX BOLT 5/16-18 X 1-3/4
88	P0495X088	HEX BOLT 5/16-18 X 1
89	P0495X089	HEX BOLT 3/8-16 X 2
90	P0495X090	FLAT WASHER 10MM
91	P0495X091	LIFTING ROD
92	P0495X092	LOCKING NUT
93	P0495X093	HANDWHEEL ASSEMBLY
94	P0495X094	BALL BEARING 6002ZZ
95	P0495X095	KEY 5 X 5 X 10
96	P0495X096	SPIRAL GEAR SHAFT
98	P0495X098	BASE

REF	PART #	DESCRIPTION
100	P0495X100	FLAT WASHER 5MM
140	P0495X140	BUSHING
144	P0495X144	RIGHT DUST PLATE
145	P0495X145	LEFT DUST PLATE
154	P0495X154	PHLP HD SCR 10-24 X 1/4
158	P0495X158	POINTER
168	P0495X168	SENSOR ASSEMBLY
168-2	P0495X168-2	CORD
168-3	P0495X168-3	DIGITAL SENSOR W/SLIDING SHAFT
168-4	P0495X168-4	CAP SCREW M5-.8 X 8
168-5	P0495X168-5	PHLP HD SCR M3-.5 X 12
168-6	P0495X168-6	PHLP HD SCR M5-.8 X 8
168-7	P0495X168-7	BALL BEARING 606
168-8	P0495X168-8	BUSHING
168-9	P0495X168-9	FLAT WASHER 5MM
168-10	P0495X168-10	FLAT WASHER 3MM
168-11	P0495X168-11	CAP SCREW 5/16-18 X 3/4
168-12	P0495X168-12	FLAT WASHER 8MM
168-13	P0495X168-13	PLATE
168-14	P0495X168-14	COVER
168-15	P0495X168-15	BATTERY 1.5V SILVER OXIDE 357/303

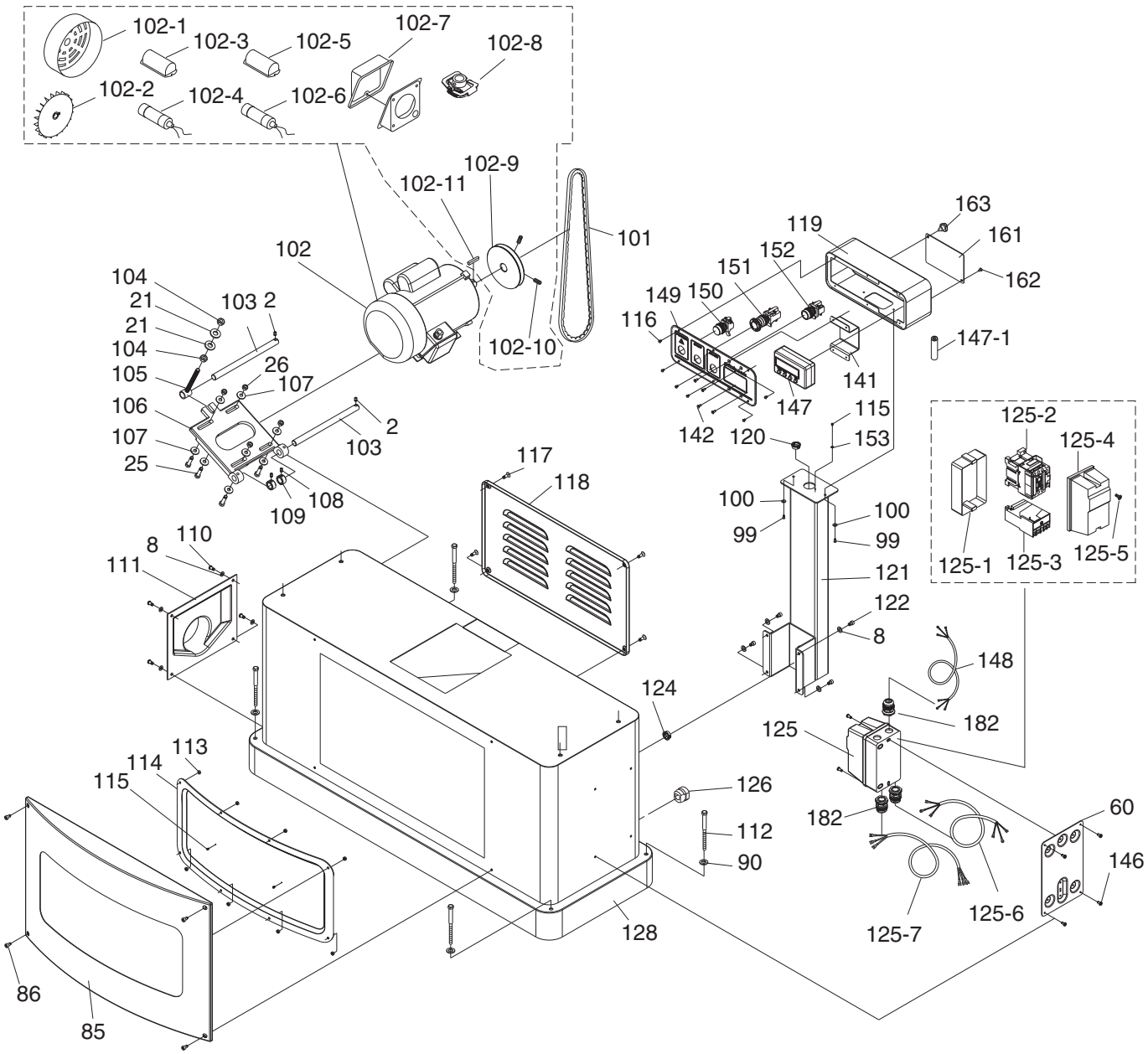
Table Parts Breakdown & List



REF	PART #	DESCRIPTION
9	P0495X009	CAP SCREW 1/4-20 X 3/8
43	P0495X043	SET SCREW 5/16-18 X 3/8
44	P0495X044	ECCENTRIC BUSHING
45	P0495X045	SP CUTTERHEAD ASSEMBLY
45-1	P0495X045-1	SPIRAL CUTTERHEAD
45-2	P0495X045-2	CARBIDE INSERTS 15 X 15 X 2.5
45-3	P0495X045-3	FLAT HD TORX SCR #10-32 X 1/2
45-4	P0495X045-4	LEFT BEARING SUPPORT BLOCK
45-5	P0495X045-5	BALL BEARING 6203ZZ
45-6	P0495X045-6	KEY 5 X 5 X 30
45-7	P0495X045-7	RIGHT BEARING SUPPORT BLOCK
45-8	P0495X045-8	SET SCREW M4-.7 X 10
45-9	P0495X045-9	CUTTERHEAD PULLEY
45-10	P0495X045-10	BALL BEARING 6203ZZ
46	P0495X046	REAR TABLE
47	P0495X047	BUSHING
48	P0495X048	CHIPBREAKER
49	P0495X049	BLADE GUARD
50	P0495X050	ROLL PIN 6 X 28
51	P0495X051	SHAFT
52	P0495X052	ROLL PIN 5 X 40
53	P0495X053	EXT RETAINING RING 9MM
54	P0495X054	TORSION SPRING
55	P0495X055	FENCE LINK
56	P0495X056	FLAT WASHER 10MM
57	P0495X057	HEX BOLT 3/8-16 X 1-1/4

REF	PART #	DESCRIPTION
58	P0495X058	CUTTERHEAD GUARD LOCK HANDLE
61	P0495X061	FRONT TABLE
62	P0495X062	SHAFT
63	P0495X063	SHAFT
64	P0495X064	BRACKET
65	P0495X065	SET SCREW 5/16-18 X 1/2
66	P0495X066	ROD SHAFT
67	P0495X067	ROD BRACKET
68	P0495X068	CAP SCREW 1/4-20 X 3/4
70	P0495X070	LEFT ELEVATE BRACKET
71	P0495X071	RIGHT ELEVATE BRACKET
72	P0495X072	SENSOR MOUNT BLOCK
76	P0495X076	SCREW COVER
84	P0495X084	CAP SCREW 5/16-18 X 3/4
127	P0495X127	CAP SCREW 5/16-18 X 1-3/4
133	P0495X133	PUSH BLOCK
175	P0495X175	HEX WRENCH 3MM
176	P0495X176	HEX WRENCH 4MM
177	P0495X177	HEX WRENCH 5MM
178	P0495X178	HEX WRENCH 6MM
179	P0495X179	HEX WRENCH 8MM
180	P0495X180	WRENCH 12 X 14
181	P0495X181	WRENCH 14 X 17
184	P0495X184	PHILLIPS SCREWDRIVER #1
186V2	P0495X186V2	T-HANDLE T-25 TORX DRIVER V2.06.11

Stand Parts Breakdown & List

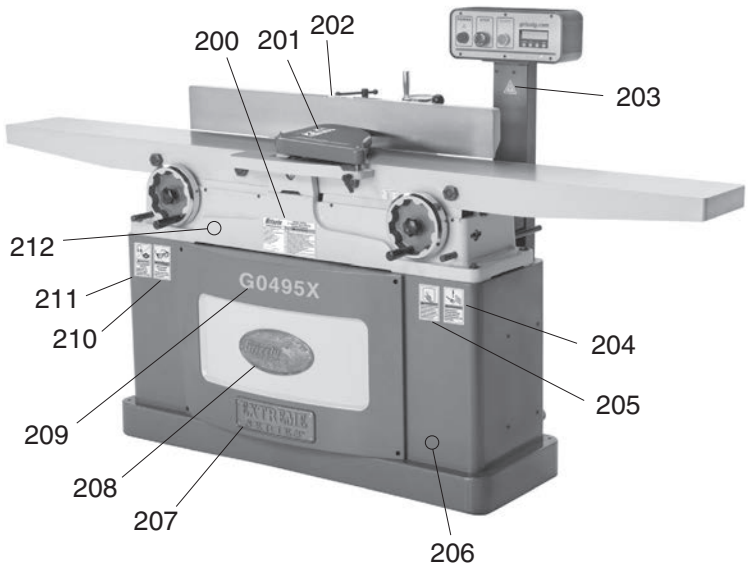


Stand Parts List

REF	PART #	DESCRIPTION
2	P0495X002	SET SCREW 1/4-20 X 3/8
8	P0495X008	FLAT WASHER 6MM
60	P0495X060	SWITCH PLATE
85	P0495X085	CAP
86	P0495X086	CAP SCREW M6-1 X 10
99	P0495X099	CAP SCREW M5-.8 X 8
101	P0495X101	V-BELT A-51
102	P0495X102	MOTOR 3HP 220V 1-PH
102-1	P0495X102-1	FAN COVER
102-2	P0495X102-2	FAN
102-3	P0495X102-3	S CAPACITOR COVER
102-4	P0495X102-4	S CAP 500M 125V 1-1/2 X 3-1/2
102-5	P0495X102-5	R CAPACITOR COVER
102-6	P0495X102-6	R CAP 40M 300V 1-1/2 X 2-3/8
102-7	P0495X102-7	JUNCTION BOX
102-8	P0495X102-8	CENTRIFUGAL SWITCH
102-9	P0495X102-9	MOTOR PULLEY
102-10	P0495X102-10	SET SCREW 1/4-20 X 3/8
102-11	P0495X102-11	KEY 5 X 5 X 45
103	P0495X103	SHAFT
104	P0495X104	HEX NUT M10-1.5
105	P0495X105	ADJUSTING SHAFT
106	P0495X106	MOTOR PLATE
107	P0495X107	FLAT WASHER 8MM
108	P0495X108	SET SCREW M6-1 X 8
109	P0495X109	COLLAR
110	P0495X110	PHLP HD SCREW 1/4-20 X 1/2
111	P0495X111	DUST CHUTE
112	P0495X112	HEX BOLT 3/8-16 X 6
113	P0495X113	HEX NUT M5-.8
114	P0495X114	FRONT COVER
115	P0495X115	PHLP HD SCR M4-.7 X 8
116	P0495X116	BUTTON HD CAP SCR M4-.7 X 12

REF	PART #	DESCRIPTION
117	P0495X117	FLAT HD SCR 1/4-20 X 3/4
118	P0495X118	REAR ACCESS PLATE
119	P0495X119	CONTROL PANEL COVER
120	P0495X120	STRAIN RELIEF NB-2430
121	P0495X121	SWITCH BRACKET ASSEMBLY
122	P0495X122	CAP SCREW 1/4-20 X 1/2
124	P0495X124	STRAIN RELIEF NB-1722
125	P0495X125	MAGNETIC SWITCH
125-1	P0495X125-1	MAG SWITCH BACK COVER
125-2	P0495X125-2	CONTACTOR SDE MA-18 220V
125-3	P0495X125-3	OL RELAY SDE RA-20 12-18A
125-4	P0495X125-4	MAG SWITCH FRONT COVER
125-5	P0495X125-5	NYLON SCREW M10-1.5 X 22
125-6	P0495X125-6	POWER CORD 12G 3C
125-7	P0495X125-7	CONTROL PANEL CORD 16AWG X 5C
126	P0495X126	STRAIN RELIEF SB8R-1
128	P0495X128	STAND
141	P0495X141	DIGITAL READOUT BRACKET
142	P0495X142	FLAT HD SCR M3-.5 X 8
146	P0495X146	PHLP HD SCR M5-.8 X 8
147	P0495X147	DIGITAL READOUT ASSEMBLY
147-1	P0495X147-1	BATTERY AAA
148	P0495X148	MOTOR CORD 12AWG X 3C
149	P0495X149	SWITCH PLATE
150	P0495X150	LIGHT 250V 1.2W JG18
151	P0495X151	STOP SWITCH
152	P0495X152	START SWITCH
153	P0495X153	EXT TOOTH WASHER 4MM
161	P0495X161	ACCESS DOOR
162	P0495X162	SPECIAL SCREW
163	P0495X163	KNOB M6-1
182	P0495X182	STRAIN RELIEF

Label Placement



REF	PART #	DESCRIPTION
200	P0495X200	MACHINE ID LABEL
201	PLABEL-29	CUTTERHEAD GUARD LABEL
202	P0495X202	FENCE/CUTTERHEAD LABEL
203	PLABEL-14	ELECTRICITY LABEL
204	PLABEL-36	DISCONNECT 220V POWER LABEL
205	PLABEL-12A	READ MANUAL-VERTICAL NS 7/05 LABEL
206	PPAINT-1	"GRIZZLY GREEN" TOUCH-UP PAINT
207	P0495X207	EXTREME SERIES PLATE
208	G8589	GRIZZLY NAMEPLATE-LARGE
209	P0495X209	MODEL # LABEL
210	PLABEL-11	SAFETY GLASSES 2" X 3-5/16" LABEL
211	P0495X211	EAR PROTECTION/RESPIRATOR LABEL
212	PPAINT-11	"PUTTY" TOUCH-UP PAINT

⚠WARNING

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

Grizzly Industrial, Inc. WARRANTY CARD

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Street _____

City _____ State _____ Zip _____

Phone # _____ Email _____

Model # _____ Order # _____ Serial # _____

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1. How did you learn about us?

____ Advertisement ____ Friend ____ Catalog
____ Card Deck ____ Website ____ Other:

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

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

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: _____

_____

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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.