

Grizzly *Industrial, Inc.*®

MODEL G0611X DOVETAIL MACHINE

OWNER'S MANUAL

(For models manufactured since 07/15)



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

#TR8667 PRINTED IN TAIWAN



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.

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INTRODUCTION

Contact Info

We stand behind our machines! If you have questions or need help, contact us with the information below. Before contacting, make sure you get the **serial number** and **manufacture date** from the machine ID label. This will help us help you faster.

Grizzly Technical Support
1815 W. Battlefield
Springfield, MO 65807
Phone: (570) 546-9663
Email: techsupport@grizzly.com

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

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

Manual Accuracy

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

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

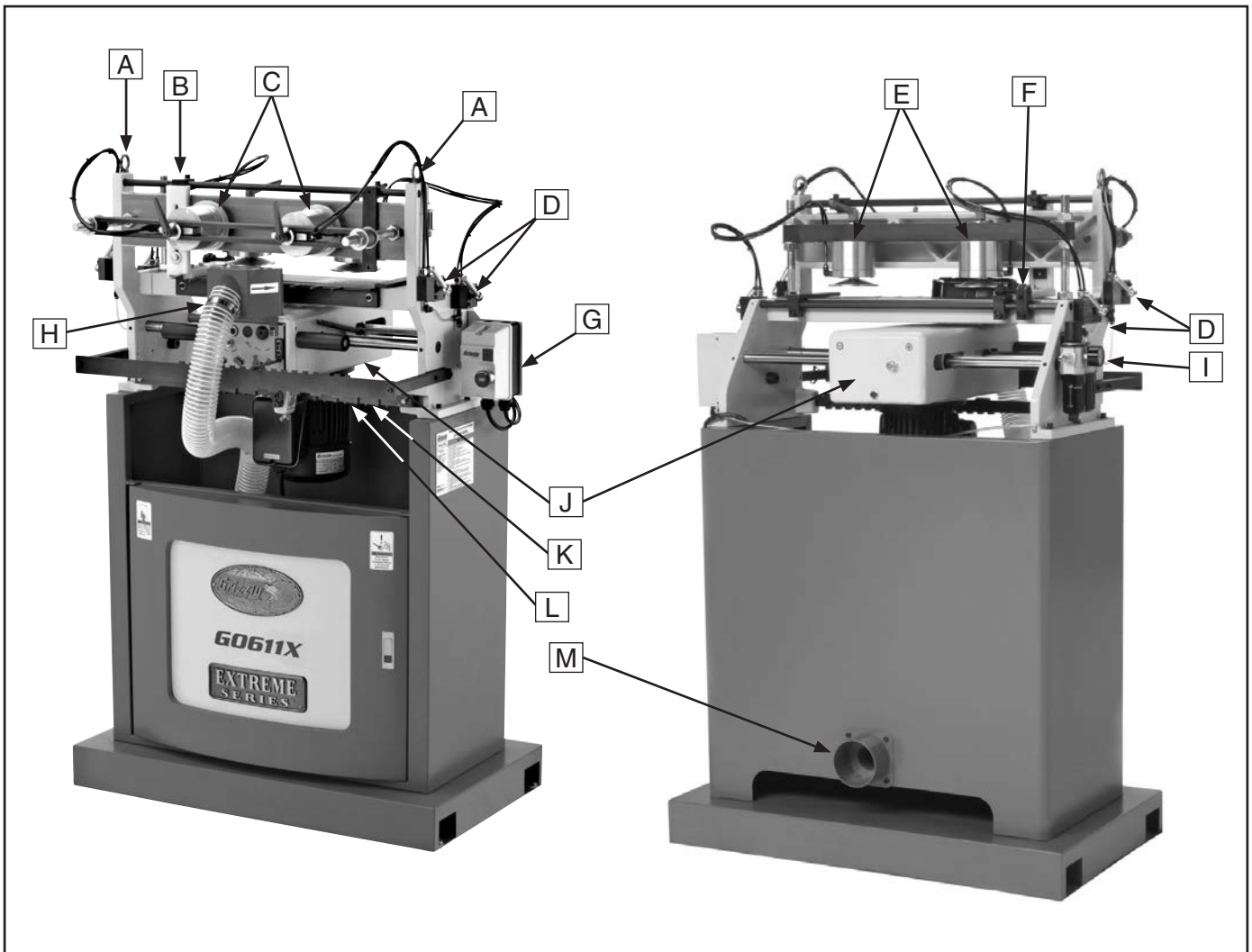
If you find this to be the case, and the difference between the manual and machine leaves you confused or unsure about something, check our website for an updated version. We post current manuals and manual updates for free on our website at www.grizzly.com.

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

Grizzly Industrial		MODEL GXXXX	
		MACHINE NAME	
SPECIFICATIONS		WARNING!	
Motor:		To reduce risk of serious injury when using this machine:	
Specification:		1. Read manual before operation.	
Specification:		2. Wear safety glasses and respirator.	
Specification:		3. Make sure safety is correctly adjusted/setup and	
Weight:		power is connected to grounded circuit before starting.	
		4. Make sure the motor has stopped and disconnect	
		power before adjustments, maintenance, or service.	
		5. DO NOT expose to rain or dampness.	
		6. DO NOT modify this machine in any way.	
		7.	
		8.	
		9. Do not use while tired, drowsy, or under the influence of drugs or alcohol.	
		10. Maintain machine carefully to prevent accidents.	
Manufactured for Grizzly in Taiwan			



Identification



- A. Eye Bolts for Lifting
- B. Vertical Workpiece Fence
- C. Vertical Workpiece Clamps
- D. Clamp Activation Handles
- E. Horizontal Workpiece Clamps
- F. Horizontal Workpiece Fence
- G. Magnetic Switch
- H. Guard
- I. Air Supply Unit
- J. Headstock
- K. Indicator Plate
- L. Template Bar
- M. Dust Port 4"





MACHINE DATA SHEET

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

MODEL G0611X EXTREME SERIES DOVETAIL MACHINE

Product Dimensions:

Weight 440 lbs.
 Width (side-to-side) x Depth (front-to-back) x Height 38-5/8 x 26-1/2 x 56-7/8 in.
 Table Height 46-7/16 in.
 Table Size 24 W x 7-3/4 L in.
 Footprint (Length/Width) 37 x 21-1/4 in.

Shipping Dimensions:

Content..... Machine
 Weight..... 539 lbs.
 Length x Width x Height..... 29-5/8 x 42 x 63-5/8 in.

Electrical:

Power Requirement 110V/220V, Single-Phase, 60 Hz
 Prewired Voltage..... 220V
 Full-Load Current Rating..... 10A at 110V, 5A at 220V
 Included Plug Type 5-15 for 110V
 Recommended Plug Type 6-15 for 220V

Motor:

Type TEFC Capacitor-Start Induction
 Horsepower..... 1 HP
 Voltage 110V/220V
 Prewired Voltage..... 220V
 Phase Single
 Amps 10A/5A
 Speed..... 3450 RPM
 Cycle 60 Hz
 Bearings Shielded & Permanently Lubricated

Capacities:

Number of Spindles 1
 Spindle Speed..... 18,500 RPM
 Dovetail Shank Diameter 1/2 in. (12mm)
 Dovetail Bit Angle 10° x 5/8 in. L Single Cutter
 Dovetail Templates 1, 1-1/2, 2, 2-1/2 in.
 Maximum Dovetail Height 3/4 in.
 Minimum Dovetail Height 3/16 in.
 Maximum Workpiece Thickness 2-3/8 in.
 Minimum Workpiece Thickness 13/32 in.
 Maximum Workpiece Size 16-1/2 W x 59 L in.
 Minimum Workpiece Size 2-3/8 W x 7-7/8 L in.

Construction:

Table Frame..... Precision-Ground Cast Iron
 Carriage Aluminum
 Stand..... Pre-Formed Steel
 Spindle Bearings..... Permanently Lubricated Ball Bearings



Slide Way..... Hardened Ground Chromed Round Steel
Sliding Guide..... Ball Bearing Linear Guides

Other Specifications:

Country of Origin..... Taiwan
Warranty..... 1 Year
Serial Number Location ID Label on Side of Machine
ISO 9001 Factory..... No
Certified by a Nationally Recognized Testing Laboratory (NRTL)..... No

Features:

Micro-Adjustable Spindle Head for Precision Control of Dovetail "Fit"
Material Stops for Quick Workpiece Positioning
Dual Pneumatic Clamping System for Quickly Loading/Unloading Workpieces
4" Dust Port
Spring Loaded Carriage for Smooth Cutting
Soft Grip Control Handles




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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



Additional Safety for Dovetail Machines

WARNING

GUARD. The guard helps protect the operator from the spinning cutter and flying debris during operation. Never operate the dovetail machine or allow it to be connected to power when the guard is removed or serious personal injury may occur.

SAFETY GLASSES. Even with the guard in place, chips may eject from the machine. Operator and bystanders **MUST** wear safety glasses to prevent eye injuries/

CLAMP PRESSURE. Improperly clamped stock may be ejected from the rear of the machine during operation. Check clamping pressure by trying to move the clamped workpiece by hand—a properly clamped workpiece will not move when tugged. Improper clamping pressure with pneumatic clamps is most often caused by the clamp bracket not being adjusted parallel to the table or the air pressure being regulated too low at the air supply unit.

CUTTER STARTING POSITION. Starting the machine with the cutter against a workpiece or fence may eject debris from the machine and most likely will ruin the workpiece or cutter. Move the cutter clear of any contact before starting the machine!

DISCONNECT POWER BEFORE ANY ADJUSTMENTS. Setting up this machine requires the operator to work near the exposed cutter. Always disconnect power **BEFORE** making adjustments or serious personal injury may occur.

LOOSE CUTTER. Starting the machine with a loose cutter may eject the cutter from the machine at a high rate of speed, causing serious personal injury to the operator or bystanders. Always double-check that the cutter is tight after adjusting.

REMOVE ADJUSTMENT TOOLS. Starting the machine with a wrench left in the spindle adjustment screw can result in serious personal injury. Always remove any wrenches or other adjustment tools from the machine after adjustments have been made and before starting the machine.

DUST COLLECTION. Using dust collection when operating this machine greatly reduces flying debris and fine airborne dust, which reduces the risk of personal injury from these hazards. Always use a dust collection system when operating this machine.

WARNING

Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

CAUTION

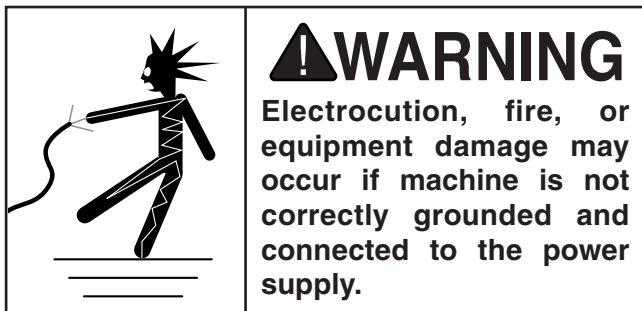
No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or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



SECTION 2: POWER SUPPLY

Availability

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



Full-Load Current Rating

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

Full-Load Current Rating at 110V..... 10 Amps

Full-Load Current Rating at 220V 5 Amps

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

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

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.)



Note: *Circuit requirements in this manual apply to a dedicated circuit—where only one machine will be running on the circuit at a time. If machine will be connected to a shared circuit where multiple machines may be running at the same time, consult an electrician or qualified service personnel to ensure circuit is properly sized for safe operation.*

Circuit Requirements for 220V

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

Nominal Voltage 208V, 220V, 230V, 240V
Cycle 60 Hz
Phase Single-Phase
Power Supply Circuit 15 Amps
Plug/Receptacle NEMA 6-15

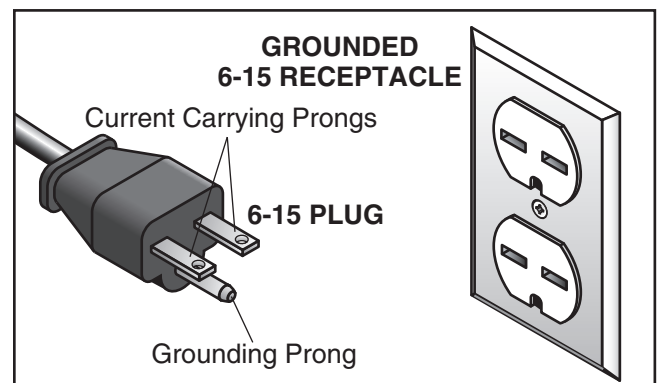


Figure 1. NEMA 6-15 plug and receptacle.



Circuit Requirements for 110V

This machine can be converted to operate on a power supply circuit that has a verified ground and meets the requirements listed below. (Refer to **Voltage Conversion** instructions for details.)

Nominal Voltage 110V, 115V, 120V
Cycle 60 Hz
Phase Single-Phase
Power Supply Circuit 15 Amps
Plug/Receptacle NEMA 5-15

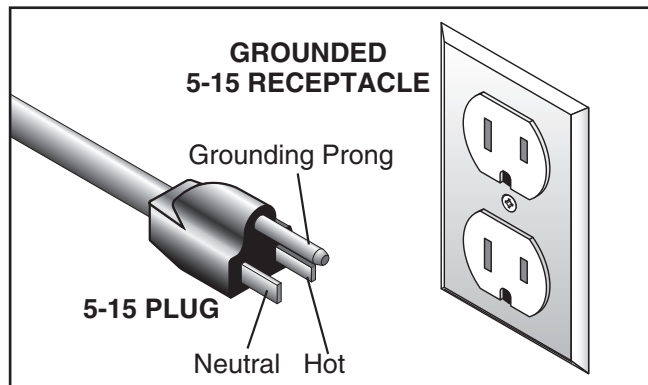


Figure 2. Typical 5-15 plug and receptacle.

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. Only insert plug into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances. **DO NOT** modify the provided plug!

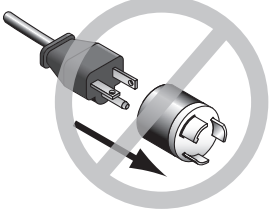
Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to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

⚠ WARNING

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

⚠ CAUTION



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

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 can 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 be in good condition and contain a ground wire and matching plug/receptacle. Additionally, it must meet the following size requirements:


Minimum Gauge Size 14 AWG
Maximum Length (Shorter is Better) 50 ft.

Voltage Conversion

The voltage conversion **MUST** be performed by a qualified electrician. To perform the voltage conversion, install the correct plug and rewire the motor to the new voltage, according to the provided wiring diagram. *If the diagram included on the motor conflicts with the one in this manual, the motor may have changed since the manual was printed. Use the diagram provided on the motor.*



SECTION 3: SETUP



! WARNING
HEAVY LIFT!
 Straining or crushing injury may occur from improperly lifting machine or some of its parts. To reduce this risk, get help from other people and use a forklift (or other lifting equipment) rated for weight of this machine.

Unpacking

This machine was carefully packaged for safe transport. When unpacking, separate all enclosed items from packaging materials and inspect them for shipping damage. ***If items are damaged, please call us immediately at (570) 546-9663.***

IMPORTANT: Save all packaging materials until you are completely satisfied with the machine and have resolved any issues between Grizzly or the shipping agent. ***You MUST have the original packaging to file a freight claim. It is also extremely helpful if you need to return your machine later.***

Needed for Setup

The following items are needed, but not included, for the setup/assembly of this machine.

Description	Qty
• Phillips Screwdriver	1
• Safety Glasses (for each person)	1
• Air Compressor	1
• Adjustable Wrench with 1¼" Capacity	1
• Pneumatic Tool Oil	4 Ounces
• Dust Collection System	1

Inventory

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

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

Box Inventory (Figure 3):	Qty
A. Dovetail Machine (not shown)	1
B. Hex Bolts M8-1.25 x 20	4
C. Flat Washers 8mm	4
D. Fixed Chaser 2½"	1
E. Fixed Chaser 3"	1
F. Indicator Bar 1½" and 2½"	1
G. Hex Wrench Set (1.5-6mm)	1 Ea.
H. Combo Wrench Set (8-10, 11-13, 12-14, and 17-19mm)	1 Ea.
I. Extra Vertical HDPE Fence	1
J. Extra Horizontal HDPE Fence	1
K. Open-End Offset Wrench 30mm	1

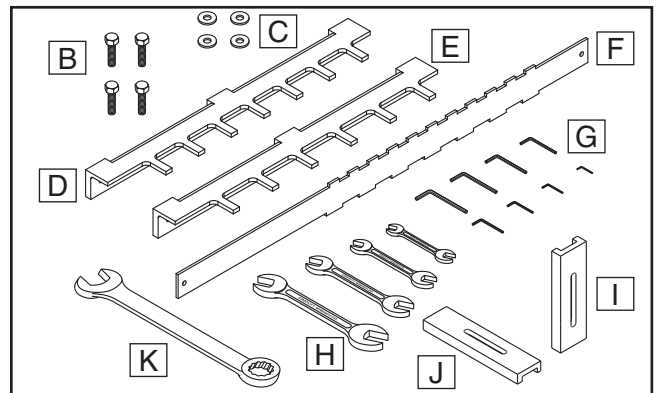


Figure 3. Model G0611X inventory.

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.

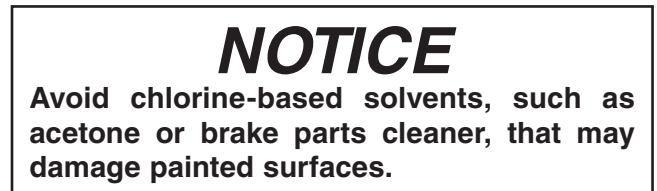
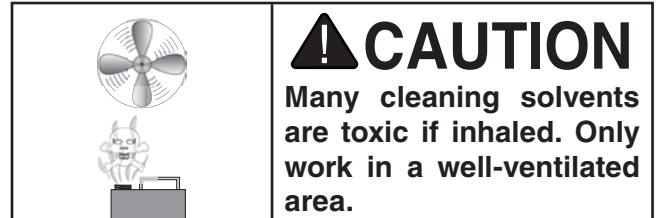
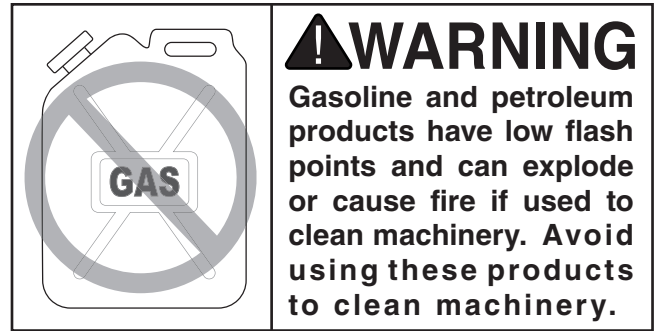
There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

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.



T23692—Orange Power Degreaser

A great product for removing the waxy shipping grease from the **non-painted** parts of the machine during clean up.



Figure 4. T23692 Orange Power Degreaser.



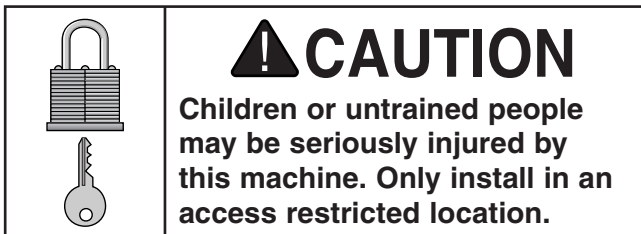
Site Considerations

Weight Load

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

Space Allocation

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



Physical Environment

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

Electrical Installation

Place this machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure to leave enough space around machine to disconnect power supply or apply 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.

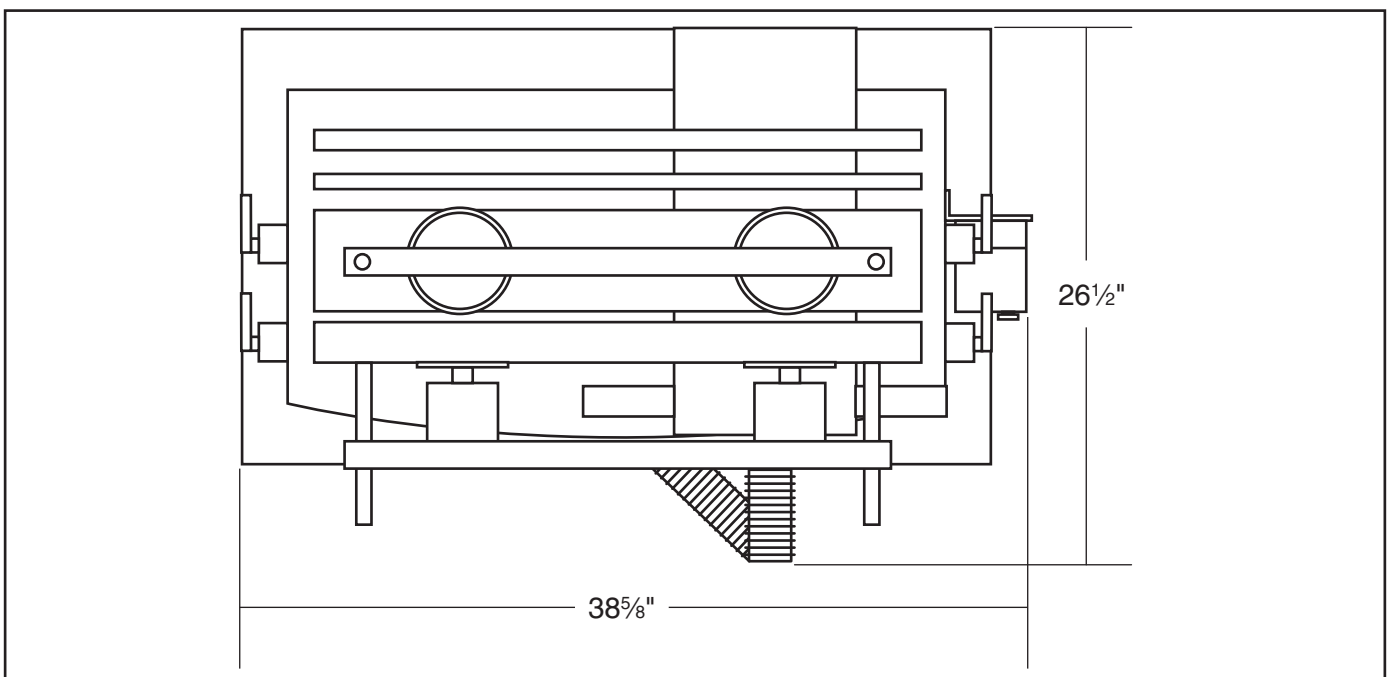
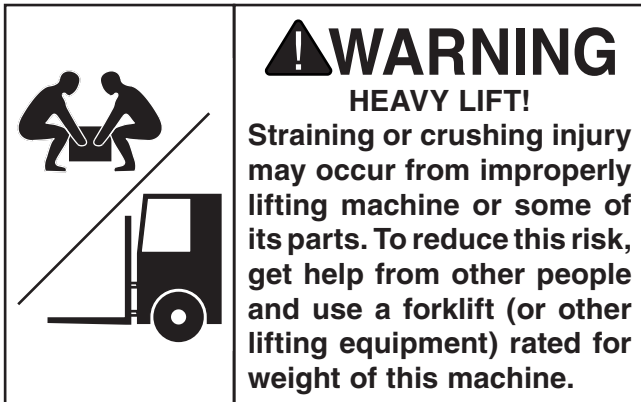


Figure 5. Minimum working clearances.



Lifting & Placing



The Model G0611X is designed to be lifted from two eye bolts mounted near the top of the machine, on both sides, using a forklift with lifting straps. The lifting straps can be connected to the eye bolts with metal shackles.

To lift the Model G0611X with a forklift:

1. Unbolt the base of the dovetail machine from the shipping pallet (see **Figure 6**), so it can be removed for placement.

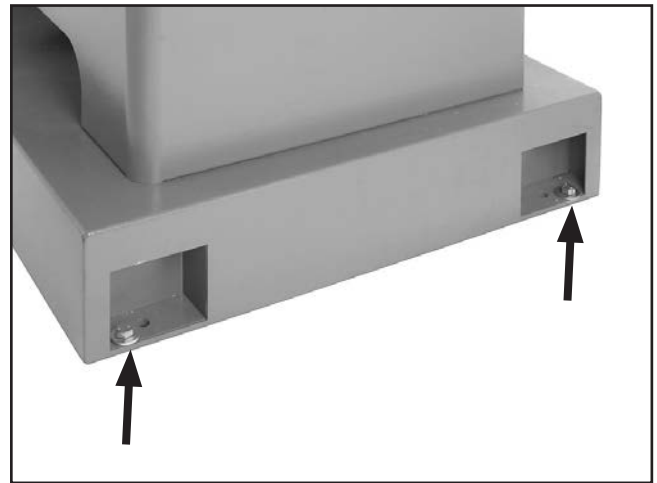


Figure 6. Example of where machine is bolted to the pallet (only one side shown).

2. Connect the lifting straps to the eye bolts using shackles, as shown in **Figure 7**.

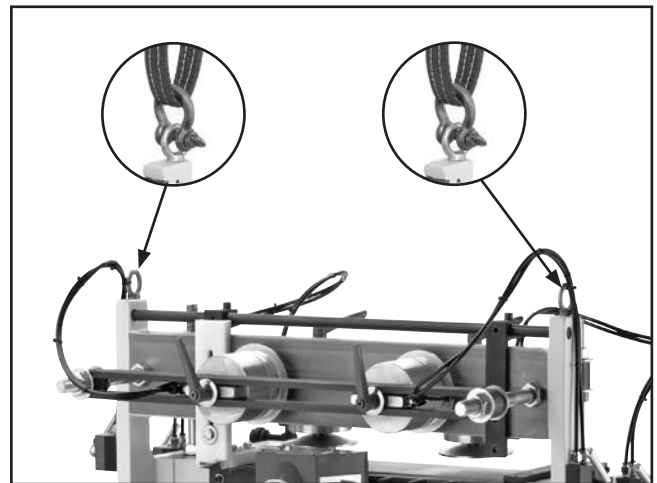


Figure 7. Lifting machine from eyes.

3. Lift the machine and place it in your desired location.
4. Remove the forklift straps.



Anchoring to Floor

Number of Mounting Holes 4
Diameter of Mounting Hardware 1/2"

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.

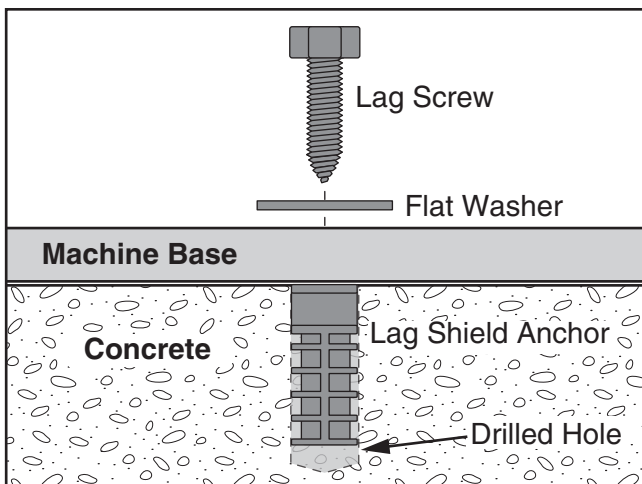


Figure 8. Popular method for anchoring machinery to a concrete floor.

Assembly

To assemble the dovetail machine:

1. Attach the dust hose to the guard as shown in **Figure 9**.

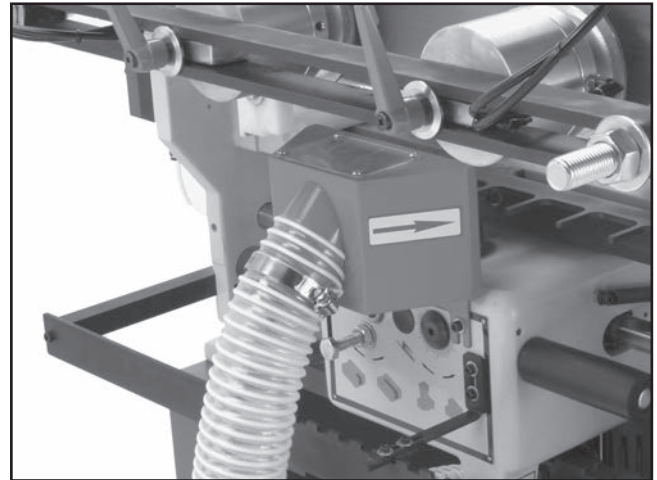


Figure 9. Dust hose attached to guard.



Dust Collection

Attach the dust collection hose to the dust port, as shown in **Figure 10**.

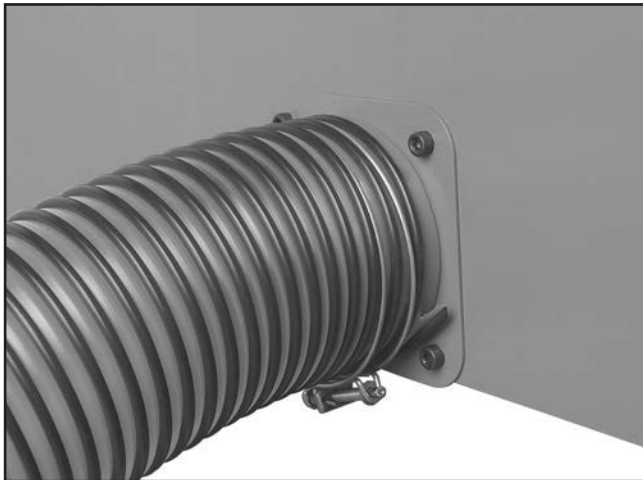


Figure 10. Dust collection hose attached to dust port.

Minimum 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.

! CAUTION

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

Air Connection

The air supply unit features a regulator, a filter, and a lubricator (see **Figure 11**). Each of these components must be setup properly before operating the machine.

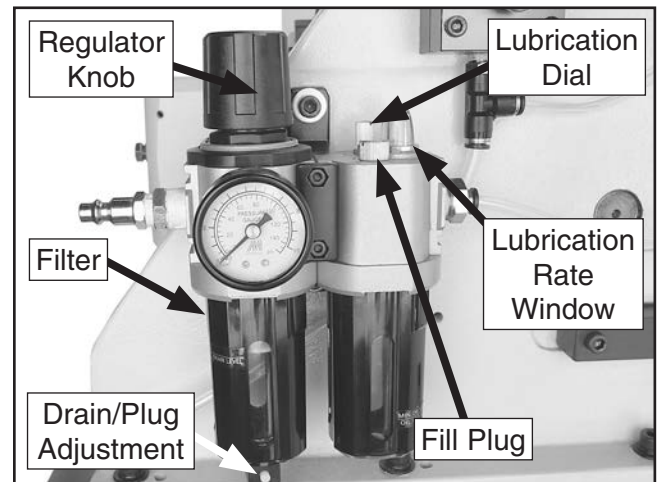


Figure 11. Air supply unit features.

To prepare the air supply unit for operation:

1. Connect your air hose to the air supply unit with a standard 1/4" NPT female quick-release coupler.
 - If air leaks from the bottom of the filter, the filter may be in "drain" mode. Move the adjustment at the bottom of the filter to the other side to put it in "plug" mode.
2. Check the air pressure reading on the gauge. The correct setting is 40 psi.
 - If the setting is correct, skip to **Step 4**.
 - If the setting is not correct, proceed to the next step.
3. Pull up on the regulator knob, rotate it in the direction necessary until the gauge reads 40 psi, then push the knob down to lock it.
4. Adjust the lubricator by turning the lubrication dial clockwise until it stops, then turning it counterclockwise one full turn. (Further adjustments can be made later as necessary.)



Test Run

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

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

The test run consists of verifying the following: 1) The motor powers up and runs correctly, 2) the stop button safety feature works correctly, and 3) the motor turns the correct direction (machine is not wired out of phase).

WARNING

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

WARNING

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

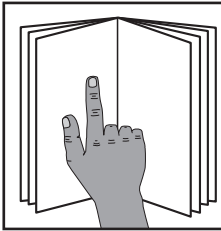
To test run the machine:

1. Clear all setup tools away from machine.
2. Press Emergency Stop button in.
3. Connect machine to power by inserting power cord plug into a matching receptacle.
4. Twist Emergency Stop button clockwise until it springs out. This resets the switch so the machine can start.

5. Verify that the machine is operating correctly by turning it **ON**.
 - 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. Turn the machine **OFF**.
7. Push the STOP button in to make sure it is NOT popped out.
8. Press the green ON button.
 - If the machine starts, immediately stop the machine. The switch disabling feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.
 - If the machine does not start, the switch disabling feature is working as designed.
9. Verify that the cutter is turning the correct direction by starting the motor, then stopping the motor while watching the cutter through the guard window.
 - If the cutter turns counterclockwise, it is turning in the correct direction. Proceed to **Step 10**.
 - If the cutter turns clockwise, it is turning in the wrong direction. Contact our Technical Support department for help.
10. Test the clamps. The clamps should clamp down when the switch is turned ON and they should raise up when the switch is turned OFF.
 - If the clamps work as stated, no additional adjustments are necessary.
 - If the clamps do not work as stated, troubleshoot and correct the clamping system. Contact our Technical Support department for help.



SECTION 4: OPERATIONS

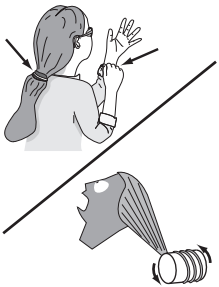


!WARNING

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

!WARNING

Eye injuries, respiratory problems, or hearing loss can occur while operating this tool. Wear personal protective equipment to reduce your risk from these hazards.



!WARNING

Keep hair, clothing, and jewelry away from moving parts at all times. Entanglement can result in death, amputation, or severe crushing injuries!

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.

Dovetail Terminology

Take a moment to review the dovetail terminology shown in **Figure 12**. These terms will be used throughout this section and knowing their meaning is important to fully understand the controls of the machine.

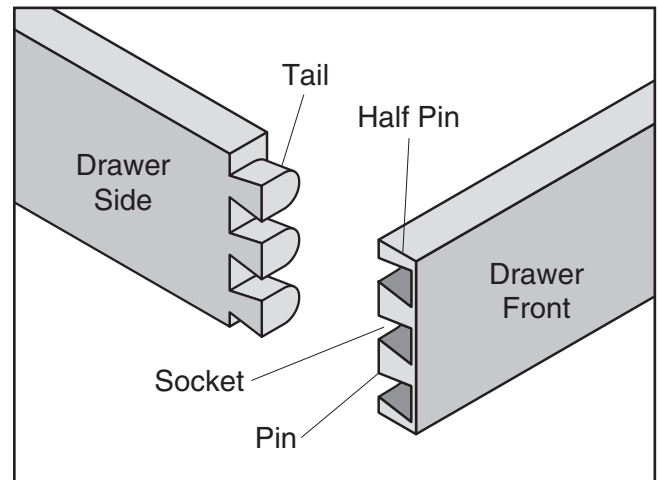


Figure 12. Dovetail terminology.



Stock Preparation

Stock preparation is one of the most important steps for cutting dovetails. Stock must be properly squared up or the dovetails will not fit in the sockets tightly or evenly. With proper planning and preparation, you can achieve perfect results.

Stock Size

When selecting your stock, make sure that the stock size is within the minimum and maximum dimensions that this machine is capable of processing (see **Figure 13**).

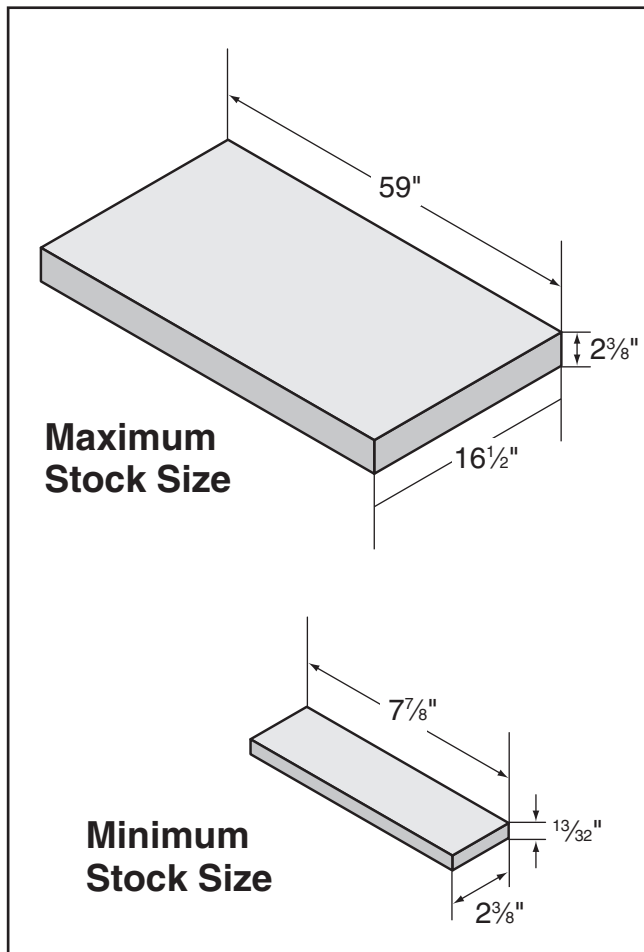


Figure 13. Model G0611X stock size limits.

The first consideration when preparing your stock is to determine the width (height of drawer). The dovetail machine includes a 4-sided template with the following sizes: 1", 1½", 2", and 2½".

To achieve perfect dovetail spacing from edge-to-edge, the stock width should be a multiple of the template size. For example, when using a 1½" template, the stock width should be divisible by 1½". Refer to **Figure 14** for more examples.

Template Size	Common Stock Width used with Template Sizes			
1"	3"	4"	5"	6"
1½"	4½"	6"	7½"	9"
2"	4"	6"	8"	10"
2½"	5"	7½"	10"	

Figure 14. Common width sizes used with the available template sizes.

Note: If you do not have control over the stock width, you can still use the machine, but the half-pins on each edge will not be the same size.

Dado Placement

The dado placement for a drawer bottom is dictated by the size of template you use. In order for the dado to be hidden when the dovetail joint is assembled, it must run through a socket.

Figure 15 illustrates this concept.

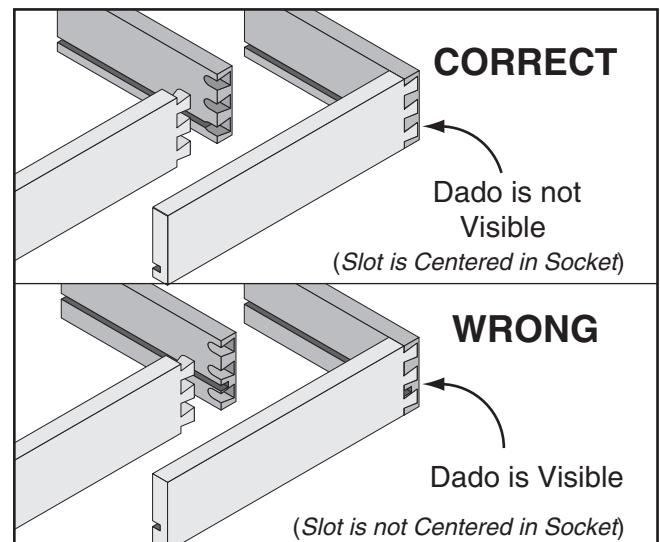


Figure 15. Correct dado placement so dado is not visible after assembly.



Dovetail Setup

A general rule of thumb: Cut the center of the dado half the distance of the template size from the bottom edge of the stock.

For example, when using a 1" template, center the dado $\frac{1}{2}$ " from the bottom of all four pieces. This placement ensures that the dado will end up in the first socket and will not be visible when the drawer is assembled. **Figure 16** shows the ideal dado placement for each template size.

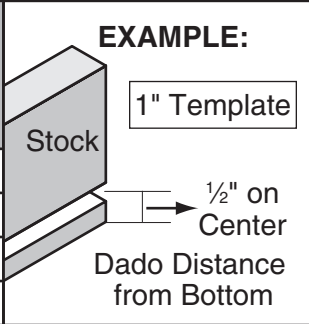
Template Size	Center of Dado from Bottom	EXAMPLE: 
1"	$\frac{1}{2}$ "	
1 $\frac{1}{2}$ "	$\frac{3}{4}$ "	
2"	1"	
2 $\frac{1}{2}$ "	1 $\frac{1}{4}$ "	

Figure 16. Dado placement for template sizes.

Note: *If your stock width is not a multiple of the template size, this rule of thumb does not apply. Instead, just cut the dado where you need it and center the socket placement by eye when setting up the machine.*

Layout

After you have dadoed and dimensioned your stock, layout and mark the drawer pieces, as shown in **Figure 17**. This will help you keep track of the pieces as you cut the dovetails.

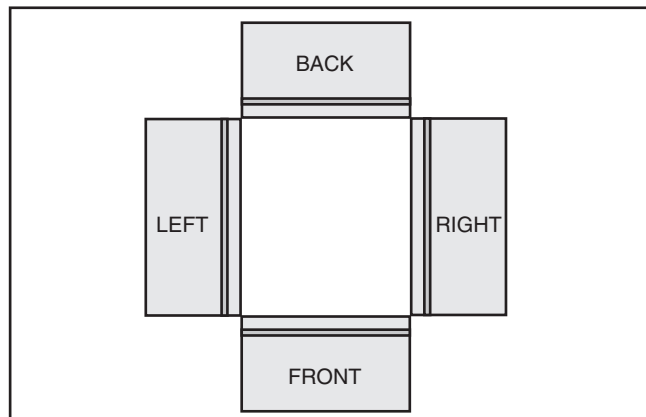


Figure 17. Drawer pieces laid out and marked; the inside of the drawer pieces are face up.

Setting up the dovetail machine is a complex procedure that involves trial-and-error and may take a fair amount of time to complete.

Once you have the machine setup for a particular stock size, then you can repeat dovetails for that size indefinitely without additional adjustments. However, if you change stock size, then you must repeat this entire setup section.

Before starting any setup, you must prepare workpieces for one drawer. These must be exactly the same size as the drawers you will make during your production run. Since trial-and-error is involved, this first drawer may end up as scrap; therefore, do not prepare ALL the drawer pieces for your production run until you have properly setup the machine and have achieved satisfactory dovetail joints on your test workpieces.

The setup procedures that follow refer to the drawer pieces by their position during cutting. To avoid confusion during the instructions, remember this:

Drawer Sides (L,R) = Vertical Workpiece
Drawer Front/Back (B, F) = Horizontal Workpiece

Follow the procedures in this section in order to properly setup your machine for operation.

Setting Clamping Thickness

1. Check the current distance between the clamps and the tables in relation to your workpiece thickness.
 - If your workpiece fits between the clamps, then further adjustments are not necessary.
 - If your workpiece does not fit between the clamps, then proceed to **Step 2**.



- Use an adjustable wrench to loosen the hex nuts shown in **Figure 18** away from the clamp mounting bracket.

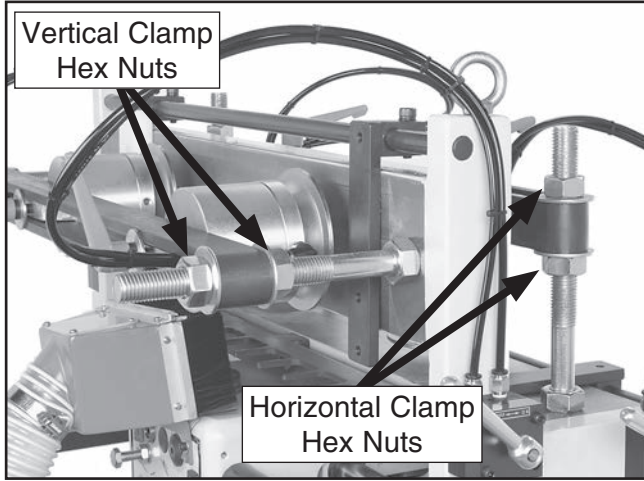


Figure 18. Hex nuts for adjusting clamping thicknesses (only one side shown).

- Slide the clamp mounting bracket so the clamps provide enough room to move your workpieces in and out.

Note: Use a ruler to make sure that both sides are adjusted equally; otherwise, contact area of the clamp faces will not be uniform, which could result in the workpieces slipping during operation.

- Tighten the hex nuts against the clamp brackets to hold them in place.

Changing Template Sizes

The template bar (**Figure 19**) has a different size dovetail template on each of the four sides. The size of each template is stamped into that side. The active template size is always the side that is facing down. A tracer pin connected to the headstock guides the cutter along the template profile when cutting.

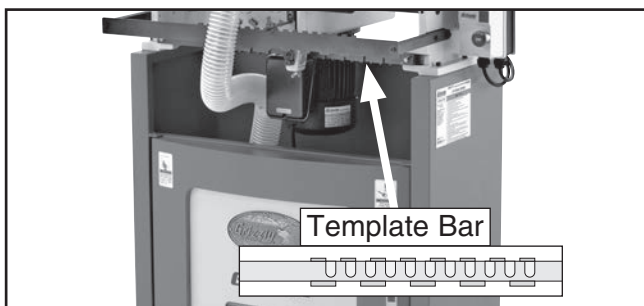


Figure 19. Template bar.

The template works in tandem with the *indicator plate* and the *fixed chaser*.

Indicator Plate: Since the template bar is underneath the cutting area and away from immediate operator view, the top edge of the indicator plate mirrors the position of the tracer pin along the template bar to help the operator when cutting.

Each indicator plate has two patterns. When mounted, the top edge of the indicator plate must match the current side of the template bar that is being used. Whenever changing the template bar size, the indicator plate must also be changed. Use the two mounting cap screws to remove and change the indicator plate (see **Figure 20**).

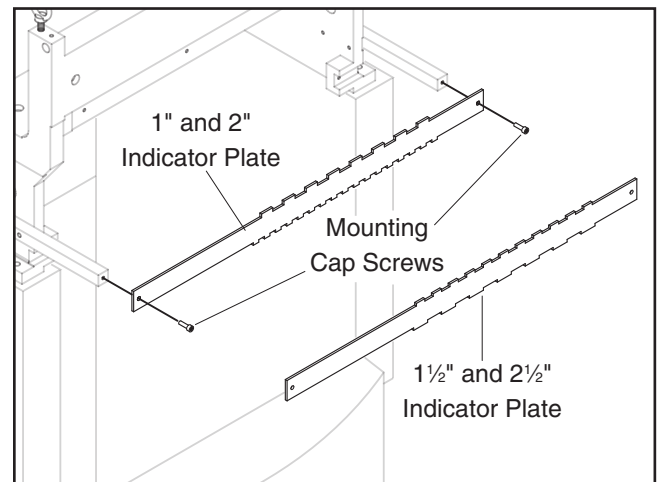


Figure 20. Indicator plate installation.

Fixed Chaser: The fixed chaser supports the vertical workpiece, yet allows the cutter to cut the bottom of the vertical workpiece without hitting the metal fixed chaser. To prevent the cutter from contacting the fixed chaser, use the fixed chaser that corresponds to the template size shown in **Figure 21**.

Template Bar Size	Use Fixed Chaser Size
1"	2"
1½"	3"
2"	2"
2½"	2½"

Figure 21. Determining correct fixed chaser.



To change the template bar size:

1. Remove the extension spring shown in **Figure 22**, and pull the headstock backward (toward you) to clear the tracer pin of the template.

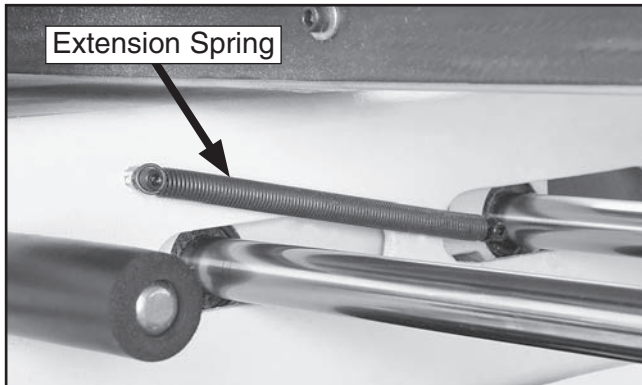


Figure 22. Extension spring (located on the right side of the headstock).

2. Remove the wing screw on each side of the template bar.
3. Slide the template bar out of the casting and reinstall it, as shown in **Figure 23**, so the desired template size is facing down.

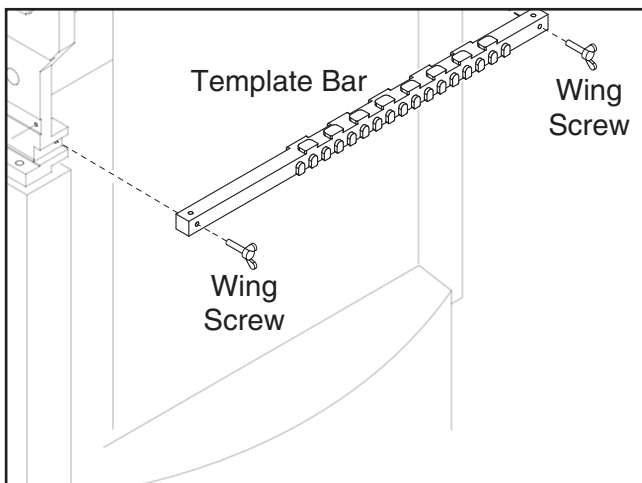


Figure 23. Template bar installation.

4. Lock the template in place with the wing screws, then replace the extension spring.

Setting Fences

The dovetail machine features HDPE (high density polyethylene) plastic fences for both the horizontal and vertical workpieces (see **Figure 24**). These fences are cut into during operation to reduce tear-out.

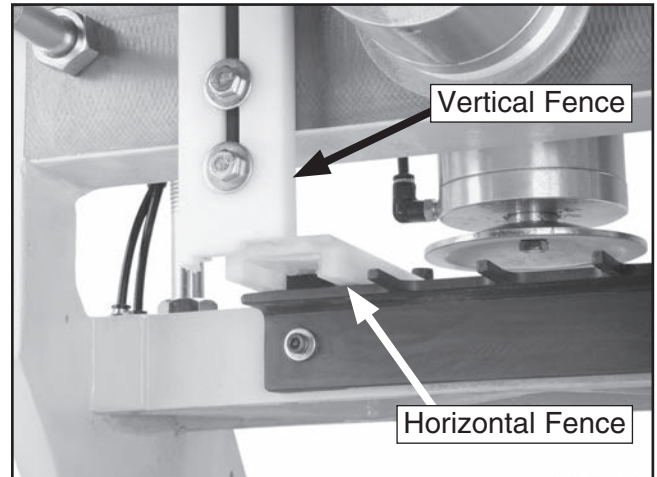


Figure 24. HDPE fences.

The fences should be set so that the dovetails are evenly distributed across the width of the workpiece. Setting the fences requires attention to the "in" and "out" positions of the tracer pin (see **Figure 25**). When the tracer pin is in the "in" position, the cutter is cutting the workpiece. When the tracer is in the "out" position, the cutter is outside of the workpiece.

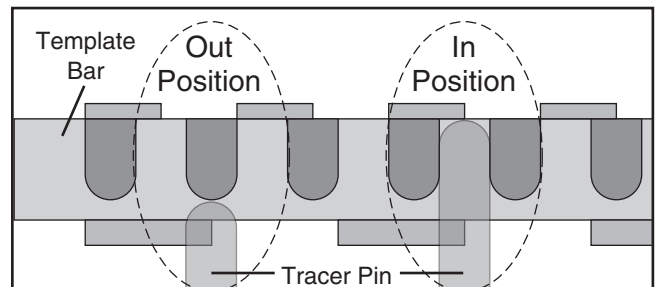


Figure 25. Tracer pin positions (as viewed from underneath template bar).

To set the fences:

1. DISCONNECT MACHINE FROM POWER!
2. Remove the guard.
3. Place the vertical workpiece on the support bar.



- Loosen the cap screw on the vertical fence bracket shown in **Figure 26**.

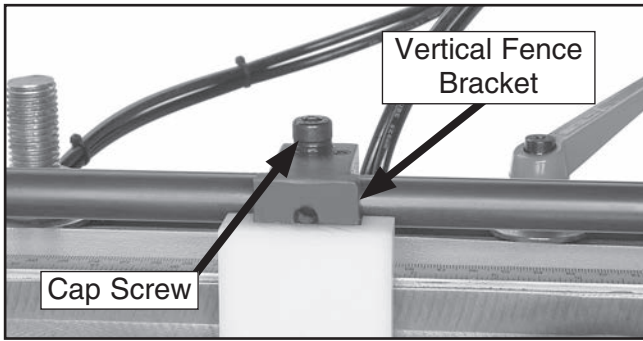


Figure 26. Vertical fence adjustment cap screw.

- Align the left-hand edge of the vertical workpiece with the centerline of the cutter when the tracer pin is in the "in" or cutting position. This position will make the first cut in the vertical workpiece half the width of the cutter. **Figure 27** illustrates this concept.

Note: If your workpiece width is not evenly divisible by the template size, then setting the fences for even cut distribution is a matter of judging the best possible position by eye.

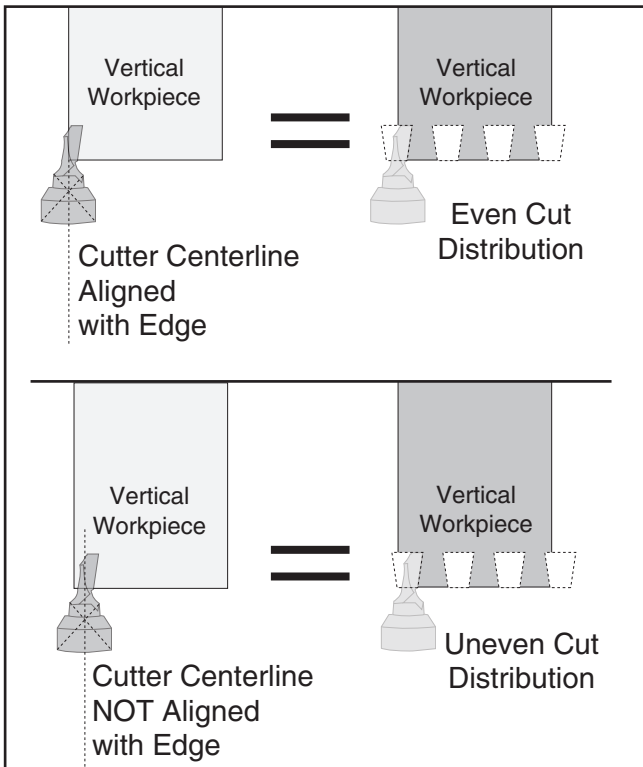


Figure 27. Aligning cutter start location with the vertical workpiece.

- Remember the position of the left-hand edge of the vertical workpiece on the vertical fence scale, and move the vertical workpiece out of the way.
- Align the right-hand edge of the vertical fence with the same position on the scale from the previous step, then lock the vertical fence in place with the cap screw.
- Familiarize yourself with the horizontal fence adjustment components in **Figure 28**.

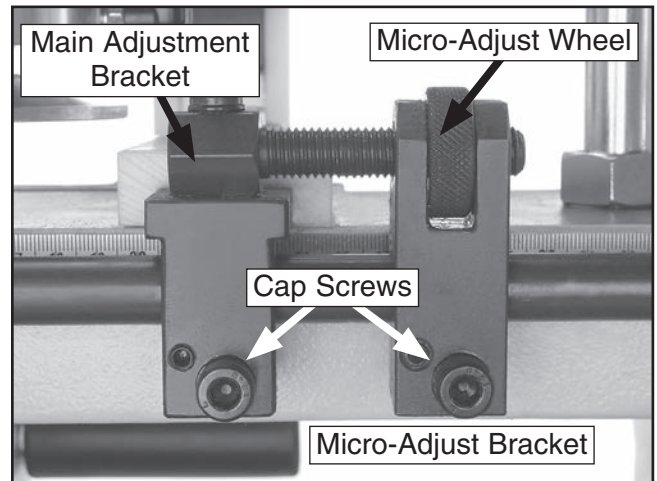


Figure 28. Horizontal fence adjustment components.

- Loosen both cap screws shown in **Figure 28**.

Continued on next page →



- Using the scale on each table as a guide, adjust the right-hand edge of the horizontal fence so it is offset half the amount of the template size being used.

For example, if the template size is 1", offset the right-hand edge of the horizontal fence $\frac{1}{2}$ " from the right-hand edge of the vertical fence, as shown in **Figure 29**.

Template Size	Horizontal Fence Offset Distance	Offset Example for 1" Template	
1"	$\frac{1}{2}$ "		
1½"	$\frac{3}{4}$ "		
2"	1"		
2½"	1¼"		

Figure 29. Fence offset sizes for each template size and example offset diagram for 1" template.

- Tighten the cap screw on the micro-adjust bracket, and use the micro-adjust wheel to set the horizontal fence in the exact position.
- Tighten the cap screw on the main adjustment bracket to lock the horizontal fence.

Cutter Height

The cutter height dictates the tail height on the vertical workpiece and the socket height on the horizontal workpiece (see **Figure 30**).

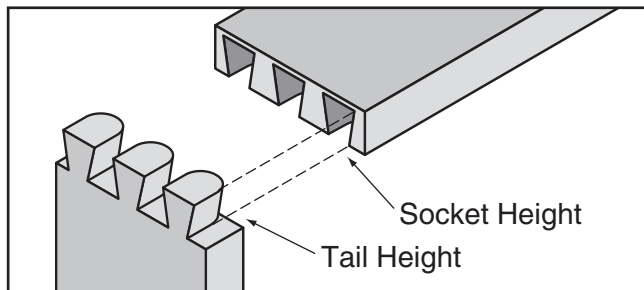


Figure 30. Example of cutter and socket height.

The cutter height range is restricted by the size of the cutter (see **Figure 31**). The lowest point of the cutting edge on the cutter should never be set above the bottom of the workpiece.

A taller cutter height is better due to larger tails and pins, so maximizing the cutter height is preferred in most situations.

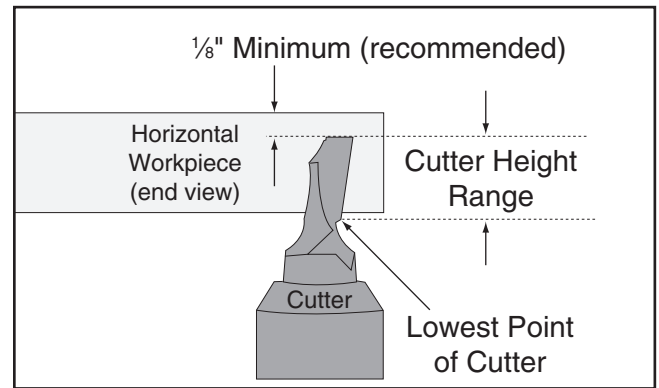


Figure 31. Understanding the cutter height range compared to the workpiece.

To set the cutter height:

- DISCONNECT MACHINE FROM POWER!
- Place the horizontal workpiece on the horizontal table against the fence, and clamp the workpiece down.
- Remove one end of the headstock spring, and move the cutter in front of the horizontal workpiece.
- Use a 6mm hex wrench to loosen the cutterhead lock shown in **Figure 32**.

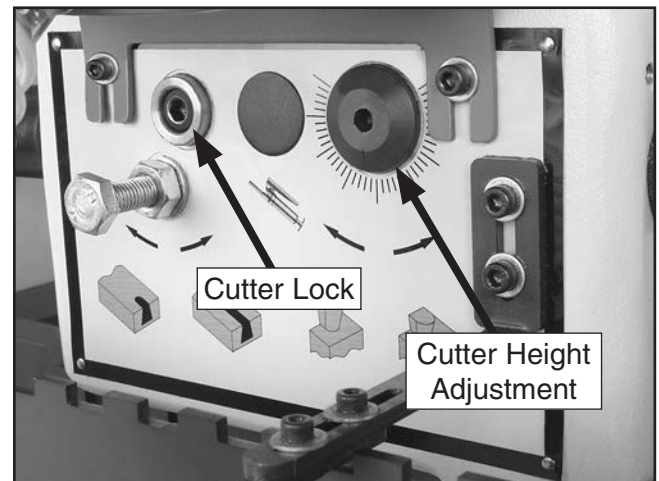


Figure 32. Cutter lock and adjustment height.

- Use a 6mm hex wrench to adjust the cutter up or down. Leave at least $\frac{1}{8}$ " of material between the top of the board and the top of the cutter (see **Figure 31**).
- Tighten the cutterhead lock.



Tail Thickness

Figure 33 shows the tail thickness.

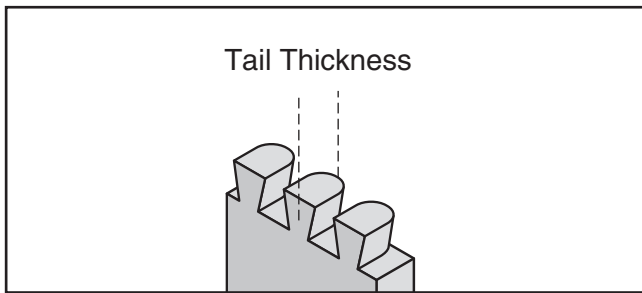


Figure 33. Example of tail thickness.

The tail thickness is controlled by adjusting the tracer pin when it is in the "out" position on the template bar, as shown in Figure 34.

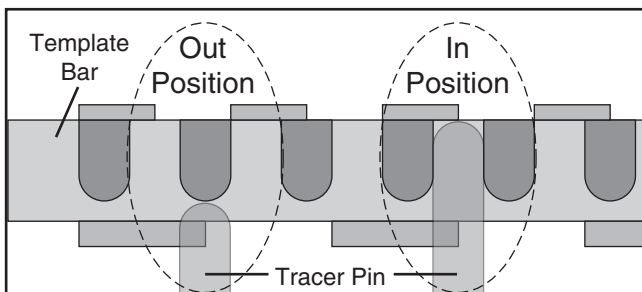


Figure 34. Tracer pin positions on template.

To set the tail thickness:

1. DISCONNECT MACHINE FROM POWER!
2. Draw a small pencil line on the edge of the vertical workpiece approximately $\frac{1}{16}$ " from the side of the workpiece (see Figure 35).

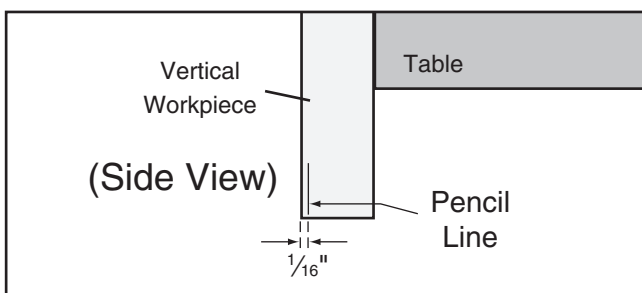


Figure 35. Pencil line location on vertical workpiece.

3. Install the vertical workpiece so the side of the board closest to the pencil line is facing out, as shown in Figure 35, and clamp the workpiece into position against the vertical fence.

4. Connect the spring to the headstock.
5. Move the headstock just to the right of the workpiece, and put the tracer pin in the "out" position on the template.
6. Stand to the right-hand side of the machine, and look across the table at the cutter relationship to the vertical workpiece. This viewing position will help you align the cutter with the workpiece during the next step.

Note: Familiarize yourself with the tracer pin controls shown in Figure 36 if this is the first time you have adjusted it.

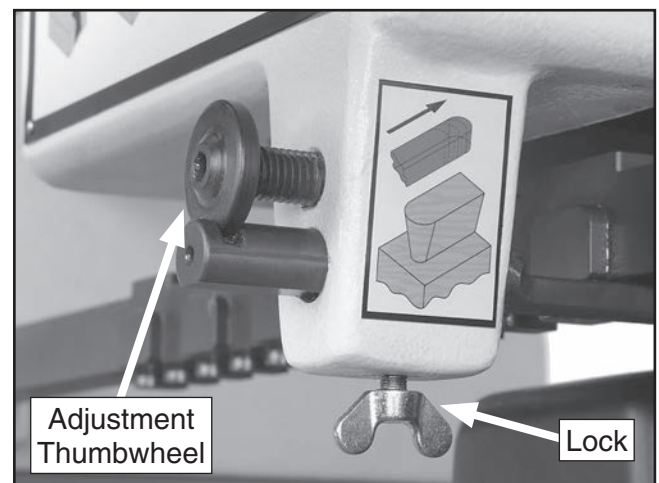


Figure 36. Tracer pin controls.

7. Unlock the tracer pin, and adjust the thumbwheel as necessary until the bottom of the cutter is positioned as shown in Figure 37.

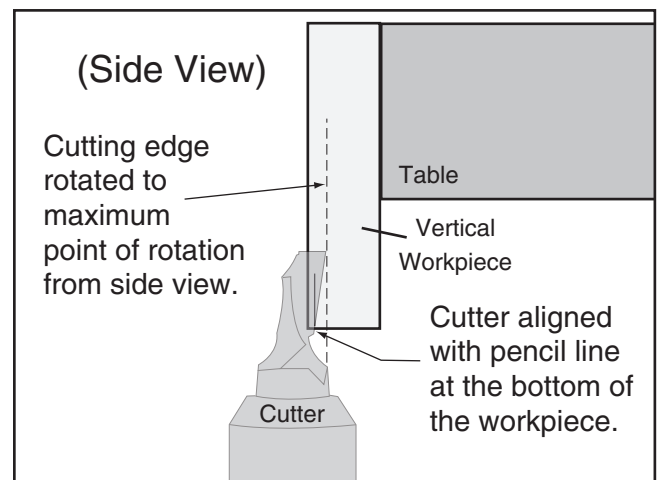


Figure 37. Cutter position for setting tail thickness (as viewed from the side).

8. Lock the tracer pin.



Cutter Depth Stop

The cutter depth stop adjustment bolt (**Figure 38**) dictates the depth of the sockets (**Figure 39**) by controlling how far the cutter will cut into the horizontal workpiece.

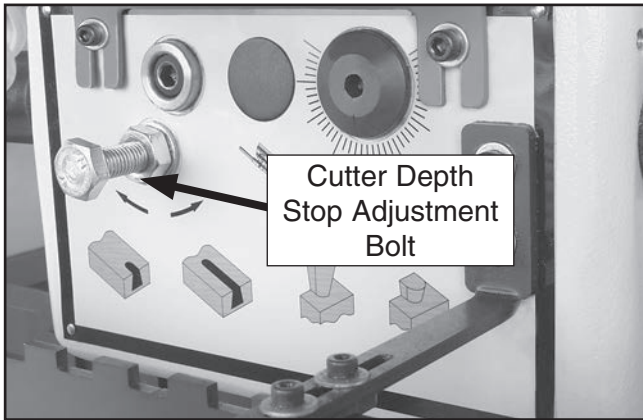


Figure 38. Cutter depth stop adjustment bolt.

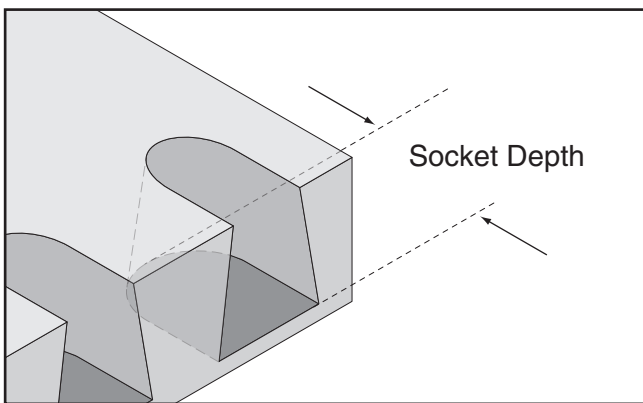


Figure 39. Socket depth.

The cutter depth should be the same as the tail thickness, so that when the joint is assembled the tails are flush with the pins (**Figure 40**).

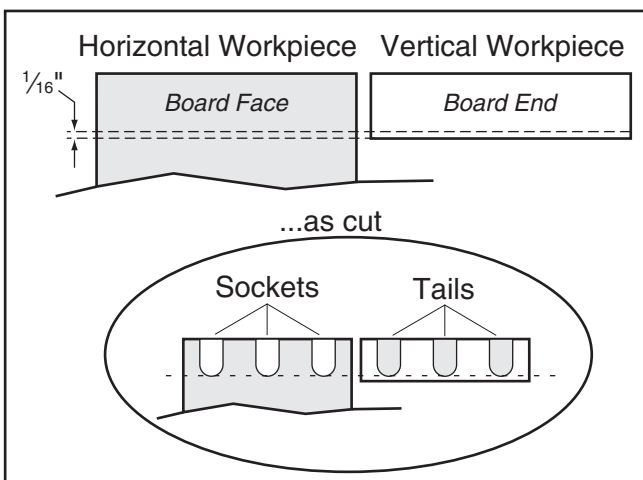


Figure 40. Understanding correct cutter depth.

To set the cutter depth stop:

1. DISCONNECT MACHINE FROM POWER!
2. On a workbench, copy the "Tail Thickness" dimension from the vertical workpiece to the horizontal workpiece (**Figure 41**).

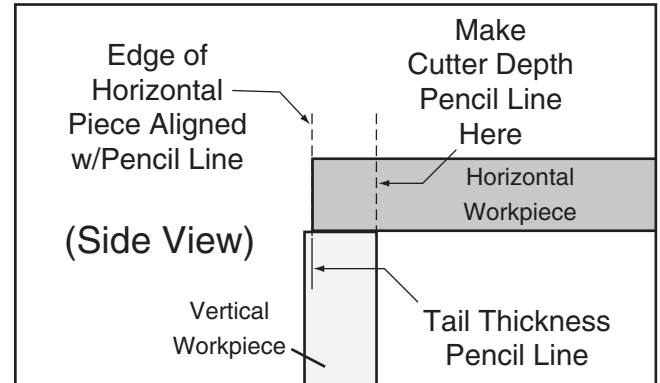


Figure 41. Marking horizontal workpiece to set the cutter depth.

3. Clamp vertical workpiece in position on the machine, then clamp the horizontal workpiece in place against the vertical workpiece.
4. Move the cutter to the right of the horizontal workpiece and make sure the tracer pin is in the "in" position.
5. Rotate the cutter until the leading edge is at the farthest point in rotation toward the rear of the machine.
6. From the right-hand side of the machine, look across the table at the cutter position in relation to the pencil line.
7. Adjust the cutter depth bolt until the tip of the cutter aligns with the pencil line (**Figure 42**), then tighten the hex nut.

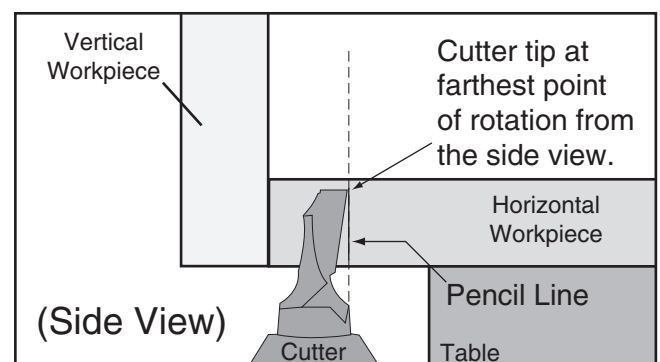


Figure 42. Cutter position to set cutter depth stop (viewed from the side).



Testing Machine Setup

Testing the setup requires you to make cuts and adjust the cutter until the dovetail fit is perfect. Be aware that the drawer you make during this procedure may end up as scrap. To achieve good dovetails, you must have prepared your stock as described in **Stock Preparation** on **Page 19**.

The standard cutting order is shown in **Figure 43**. **Figure 44** shows the workpieces positioned with the dadoses close to or away from the fences.

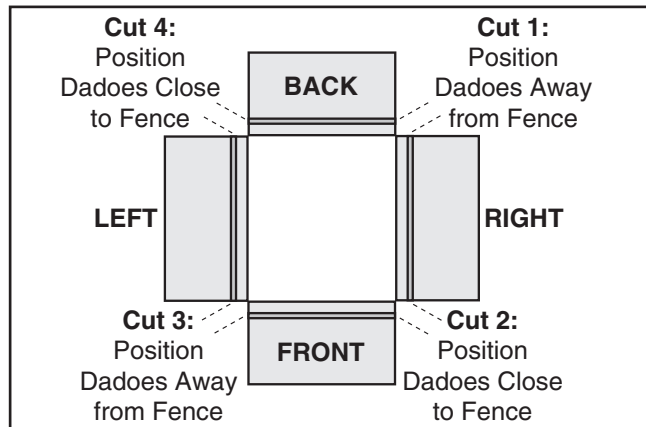


Figure 43. Drawer pieces laid out and marked inside face up; cutting order and workpiece position against fences also shown.

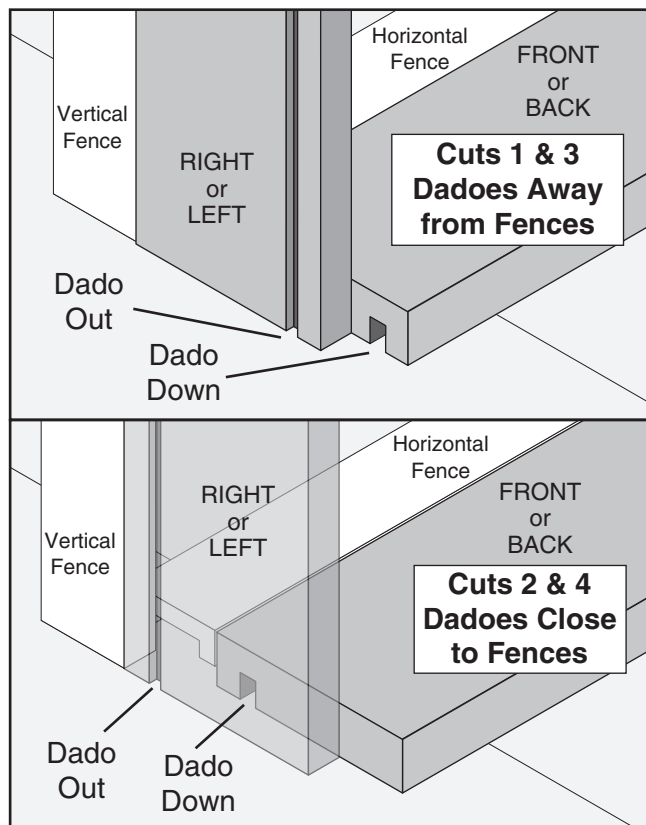


Figure 44. Workpiece positions for cuts.

To make a test cut:

1. Position the RIGHT workpiece on the vertical support bar, as shown in the top illustration in **Figure 44** (with the dado positioned out and opposite the fence), then clamp down the RIGHT workpiece.
2. Place the BACK workpiece on the horizontal table, as shown in the top illustration in **Figure 44** (with the dado positioned down and opposite the fence), then clamp down the BACK workpiece. The bottom of both workpieces should be flush with each other and both workpieces should be firmly against their respective fences.
3. Position the cutter so it is not touching the fences or workpieces.
4. **INSTALL AND SECURE THE GUARD!**
5. Connect the machine to the power source.
6. Make the test cut as described below, but read all of the steps before starting, so you do not have to stop after you begin cutting:
 - a. Start the cut on the left-hand side of the vertical piece (half of the cutter will cut into the plastic fences), then carefully follow the template from left-to-right, making sure the tracer pin maintains contact with the template (otherwise unnecessary tear-out will occur).
 - b. After clearing the workpieces, do a clean-up pass by bringing the headstock back the opposite direction and following the template from right-to-left.
 - c. Turn the machine **OFF**, and position the cutter clear of the workpieces and fences.



7. Remove the workpieces from the machine and test fit the dovetail joint.
8. Carefully examine how the tails fit into the sockets. The tails should fit into the sockets tightly and both workpieces should be flush with each other. Typically, fine-tuning the dovetail joint fit requires balancing socket depth and the cutter adjustment, as follows:

—If the workpieces do not fit together or if the fit is too tight, then adjust the cutter to take a larger cut and repeat "Cut 1."

—If the workpieces fit together too loosely, then adjust the cutter to take a smaller cut and do "Cut 2."

—If the tails fit easily side-to-side into the sockets, but do not go down far enough, adjust the socket depth deeper.

—If the tails fit easily side-to-side into the sockets, but go too far down, adjust the socket depth shallower.

Adjusting Cutter

The cutter rotates eccentrically in the spindle, which allows it to be adjusted to control the dovetail joint "fit."

Two set screws hold the cutter in position and a spindle scale is provided for monitoring the cutter position during adjustments. **Figure 45** shows the set screws and spindle scale.

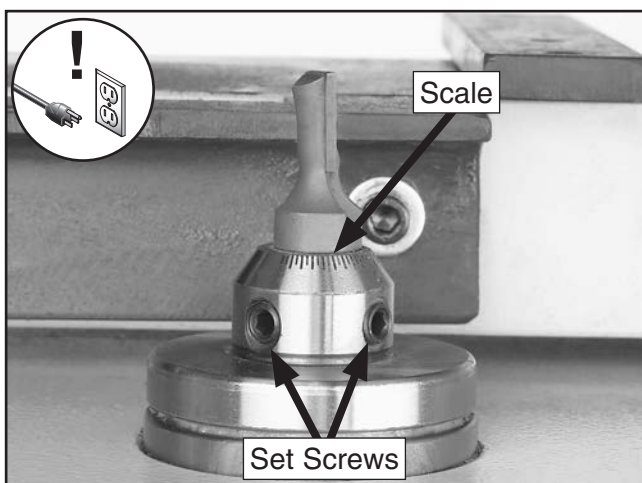


Figure 45. Cutter adjustment controls.

To adjust the cutter:

1. DISCONNECT MACHINE FROM POWER!
2. Remove the guard.
3. Use a 4mm hex wrench to loosen the two set screws on the spindle just enough to allow the cutter to rotate. (Loosening the two set screws too much may cause the cutter to drop down in the spindle and throw off other adjustments.)
4. Rotate the cutter inside the spindle as necessary to take a smaller or larger cut (see **Figure 46**). Use the lowest point in the cutter groove to keep track of the cutter position during adjustments.

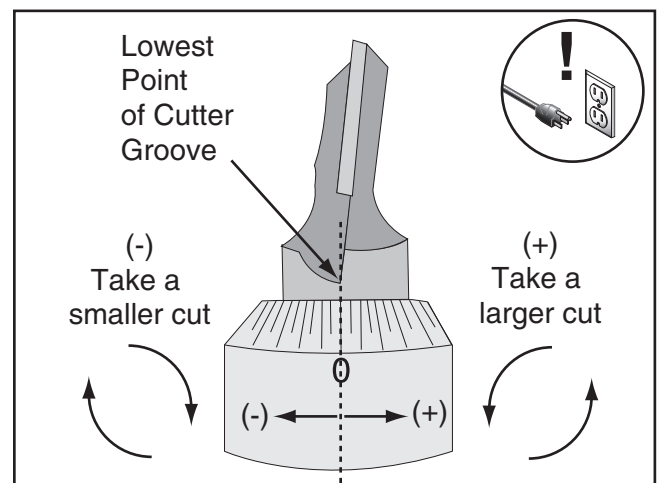


Figure 46. Understanding cutter adjustments.

5. Tighten the two set screws to secure the cutter in place.
6. Make sure the spring is connected to the headstock.
7. Install the guard.
8. Test the cutter adjustment by making a cut.
9. Repeat cutter adjustments as necessary until the fit is satisfactory. **ALWAYS DISCONNECT POWER BEFORE ADJUSTING CUTTER!**



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.

G0777—1.5 HP Ultra-Quiet Cyclone Dust Collector

Where most dust collectors this size operate at a minimum of 80-82 dB, the G0777 can collect even the biggest shavings without exceeding 70-72 dB due to its slow-speed motor and large impeller. Features a compact profile on a sturdy mobile frame, a pleated filter system, an internal filter-cleaning brush system, 880 CFM airflow, a built-in remote control switch, and a mobile 35-gallon collection drum.



Figure 47. G0777 Ultra-Quiet Cyclone Dust Collector.

G7314Z—Heavy-Duty Mobile Base

Make your machine mobile with this popular patented mobile base. The unique outrigger type increases stability and lowers machine height. This heavy duty mobile base is rated for up to a 700 lb. capacity.



Figure 48. G7314Z Mobile Base.

H9388—Replacement Dovetail Bit

This replacement Dovetail Bit is for the G0610 and G0611X Dovetail Machines.



Figure 49. H9388 Replacement Dovetail Bit.

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



T10456—Heavy-Duty Anti-Fatigue Mat 3' x 5'
 This Heavy-Duty Anti-Fatigue Mat features beveled edges and no-slip tread for safety and comfort. Open-hole design allows liquid to drain through, so it's perfect for wet or oily conditions. Measures 3' wide x 5' long x 3/8" thick.

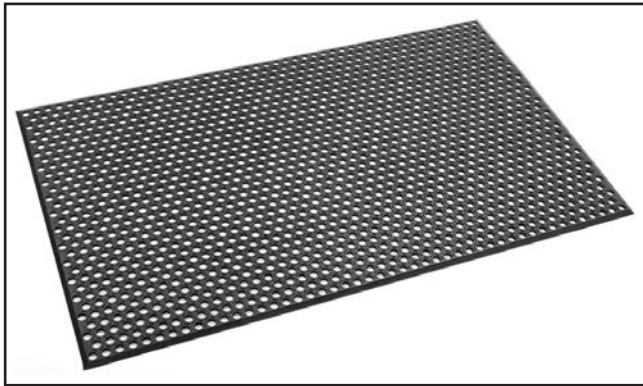


Figure 50. T10456 Anti-Fatigue Mat.

H4978—Deluxe Earmuffs - 27dB
H4979—Twin Cup Hearing Protector - 29dB
T20446—Classic Earplugs, 200-pair - 31dB
 Protect yourself comfortably with a pair of cushioned earmuffs. Especially important if you or employees operate for hours at a time.



Figure 51. Hearing protection.

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 52. Recommended products for protecting unpainted cast-iron/steel part on machinery.

G4682—Dry Coating Lube
 Spray on saw blades, router bits, shaper cutters - even table tops - to form a low-friction coating that works great, even under high temperature and pressure. Contains no silicone or oil, so it won't stain or damage paint or wood finishes. 9.5 oz.



Figure 53. G4682 Dry Coating Lube.

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



H6840—Titebond III - Wood Glue, 1 Gal.

An advanced, proprietary technology that offers the best possible performance in woodworking glues, Titebond III uses a waterproof formula that passes the ANSI/HPVA Type-1 water-resistance specification and offers superior bond strength, longer open assembly time, and lower application temperature. It provides strong initial tack, sands easily without softening, and is FDA approved for indirect food contact (cutting boards). The ultimate in wood glues - ideal for both interior and exterior applications.



Figure 54. H6840 Titebond III Wood Glue.

Basic Eye Protection

- T20501—Face Shield Crown Protector 4"
- T20502—Face Shield Crown Protector 7"
- T20503—Face Shield Window
- T20451—"Kirova" Clear Safety Glasses
- T20452—"Kirova" Anti-Reflective S. Glasses
- H7194—Bifocal Safety Glasses 1.5
- H7195—Bifocal Safety Glasses 2.0
- H7196—Bifocal Safety Glasses 2.5

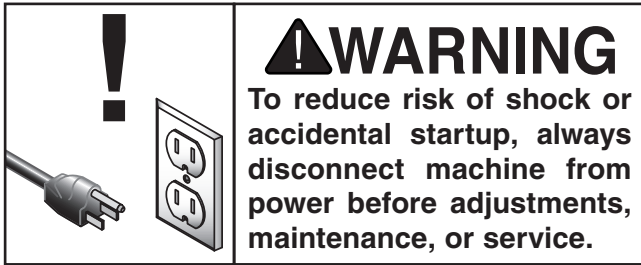


Figure 55. Assortment of basic eye protection.

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SECTION 6: MAINTENANCE



Schedule

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

Daily Check (8 Hours)

- Check/tighten cutter set screws.
- Clean debris/sawdust from clamps to ensure that they do not interfere with the clamping ability.
- Clean/vacuum dust buildup from inside cabinet and off motor.
- Unpainted cast-iron portions of the table and the headstock travel rods should be cleaned and wiped down with a metal protectant.
- Check/replace damaged power cords or wires.
- Check/add air tool oil to the air supply unit lubricator.
- Check/drain the air supply unit water filter. (Drain by sliding the white shaft to the other side.)

Weekly Maintenance (40 Hours)

- Grease the spindle.

Monthly Check (320 Hours)

- Belt tension, damage, or wear.

Cleaning

Cleaning the Model G0611X 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.

Protect the unpainted cast iron table by wiping it clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces. Keep the table rust-free with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9 (see **Page 29** for more details).

Lubrication

Most of the bearings in the machine are sealed and lubricated for life.

The spindle has one grease fitting that must be greased approximately every 40 hours or one week of regular use (refer to **Figure 56**). Use high temperature bearing grease.

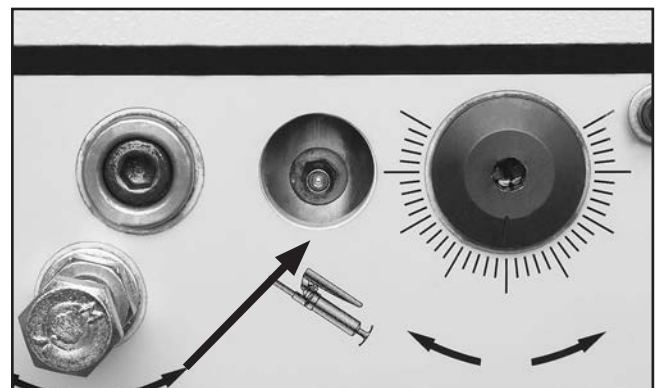


Figure 56. Spindle grease fitting located on headstock control panel.

To grease the spindle, connect the fitting to a grease gun and give the spindle one pump of grease.



SECTION 7: SERVICE

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

Troubleshooting



Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> 1. STOP button pushed in, disabling the switch. 2. Plug/receptacle is at fault or wired incorrectly. 3. Start capacitor is at fault. 4. Motor connection wired incorrectly. 5. Power supply is at fault/switched OFF. 6. Motor ON button or ON/OFF switch is at fault. 7. Motor centrifugal switch is at fault. 8. Emergency stop push-panel is stuck/switch is at fault. 9. Motor windings or motor is at fault. 	<ol style="list-style-type: none"> 1. Twist STOP button clockwise until it pops out to enable the switch. 2. Test for good contacts; correct the wiring. 3. Test/replace if faulty. 4. Correct motor wiring connections. 5. Ensure hot lines have correct voltage on all legs and main power supply is switched ON. 6. Replace faulty ON button or ON/OFF switch. 7. Adjust/replace the centrifugal switch if available. 8. Free push-panel from binding; replace faulty switch. 9. Replace motor.
Machine stalls or is underpowered.	<ol style="list-style-type: none"> 1. Wrong workpiece material (wood). 2. Feed rate too fast for task. 3. Run capacitor is at fault. 4. Belt slipping. 5. Motor connection is wired incorrectly. 6. Plug/receptacle is at fault. 7. Motor bearings are at fault. 8. Motor has overheated. 9. Motor is at fault. 10. Motor centrifugal switch is at fault. 	<ol style="list-style-type: none"> 1. Use wood with correct moisture content, without glues, and little pitch/resins. 2. Decrease feed rate. 3. Tighten/repair/replace. 4. Replace bad belt and retension (Page 36). 5. Correct motor wiring connections. 6. Test for good contacts; correct the wiring. 7. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. 8. Clean off motor, let cool, and reduce workload. 9. Test/repair/replace. 10. Adjust/replace centrifugal switch if available.
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> 1. Motor or component is loose. 2. Belt(s) worn or loose. 3. Motor fan is rubbing on fan cover. 4. Pulley is loose. 5. Machine is incorrectly mounted or sits unevenly on floor. 6. Cast iron motor mount loose/broken. 7. Motor or spindle bearings are at fault. 8. Cutter is at fault. 9. Motor centrifugal switch is at fault. 	<ol style="list-style-type: none"> 1. Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid. 2. Inspect/replace belts (Page 36). 3. Replace dented fan cover; replace damaged fan. 4. Tighten pulley set screw. 5. Tighten/replace anchor studs in floor; relocate/shim machine. 6. Tighten/replace. 7. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. 8. Replace warped, bent, or twisted cutter. 9. Adjust/replace centrifugal switch if available.



Cutting Operations and Results



Symptom	Possible Cause	Possible Solution
Workpiece slips or kicks out during operation.	<ol style="list-style-type: none"> 1. Low air pressure to clamps. 2. Clamps are adjusted too far away from the workpiece. 3. Clamp bracket is incorrectly adjusted, causing the clamps to make uneven contact with the workpiece. 	<ol style="list-style-type: none"> 1. Increase the air pressure to at least 40 PSI. 2. Adjust clamps closer to the workpiece (Page 20). 3. Adjust the both sides of the clamp bracket and even distance from the table (Page 20).
Cutter cuts slow or does not cut properly.	<ol style="list-style-type: none"> 1. Cutter is dull. 2. Belt is slipping on the pulley. 3. Cutter is rotating clockwise (motor is wired incorrectly). 	<ol style="list-style-type: none"> 1. Replace or sharpen the cutter (Page 35). 2. Tighten belt (Page 33) or replace belt (Page 36). 3. Wire motor so cutter rotates counterclockwise.
Dovetail joint fit is too tight.	<ol style="list-style-type: none"> 1. Cutter is not taking a large enough cut. 	<ol style="list-style-type: none"> 1. Adjust the cutter to take a larger cut (Page 28).
Dovetail joint fit is too loose.	<ol style="list-style-type: none"> 1. Cutter is taking too large of a cut. 	<ol style="list-style-type: none"> 1. Adjust the cutter to take a smaller cut (Page 28).
Tails fit too far into sockets.	<ol style="list-style-type: none"> 1. Sockets are cut too deep. 	<ol style="list-style-type: none"> 1. Adjust the cutter depth stop so the cutter will not cut as deeply into the horizontal workpiece (Page 26).
Tails will not fit completely into the sockets.	<ol style="list-style-type: none"> 1. Cutter is not taking a large enough cut. 2. Sockets are not cut deep enough. 	<ol style="list-style-type: none"> 1. Adjust the cutter to take a larger cut (Page 28). 2. Adjust the cutter depth stop so the cutter will cut as deeper into the horizontal workpiece (Page 26).
Tails sit flush with pins at one end but not the other.	<ol style="list-style-type: none"> 1. Horizontal workpieces were not positioned square when clamped. 2. Horizontal workpieces were not cut square or workpieces were not properly prepared. 	<ol style="list-style-type: none"> 1. Reclamp the workpiece with emphasis on keeping it square before and during clamping. 2. Cut new workpieces with emphasis on squaring up all the boards (Page 19). Check the saw or technique used to cut the boards to ensure squareness.
Gaps exist between tails and pins.	<ol style="list-style-type: none"> 1. Vertical workpieces were not positioned square when clamped. 2. The fixed chaser is not flush with the horizontal table. 3. Vertical workpieces were not cut square or workpieces were not properly prepared. 	<ol style="list-style-type: none"> 1. Reclamp the workpiece with emphasis on keeping it square before and during clamping. 2. Loosen the 3 cap screws securing the fixed chaser, adjust it flush with the horizontal table, and tighten. 3. Cut new workpieces with emphasis on squaring up all the boards (Page 19). Check the saw or technique used to cut the boards to ensure squareness.
Dado or groove for drawer bottom visible on assembled joint.	<ol style="list-style-type: none"> 1. Dado cut in the wrong location for the template being used. 2. Fences set incorrectly. 	<ol style="list-style-type: none"> 1. Cut dados in the correct location (Page 19). 2. Reset the fences (Page 22).
Dovetails fit together correctly, but tops/edges of workpieces are not flush with each other.	<ol style="list-style-type: none"> 1. Fences were not offset by exactly half of the template size being used. 	<ol style="list-style-type: none"> 1. Set the fences so they are offset exactly half of the distance as the template size being used. For example, offset the fences $\frac{1}{2}$" for 1" template, $\frac{3}{4}$" for $1\frac{1}{2}$" template, etc. Refer to Page 22 for more details.
Distribution of dovetails across assembled joint is not symmetrical.	<ol style="list-style-type: none"> 1. Fences are not set correctly to allow the cutter to start in the proper location. 2. Workpiece width is not divisible by the template size being used. 	<ol style="list-style-type: none"> 1. Reset the fences, paying close attention to where the first cut will be made into the vertical workpiece (Page 22). 2. Cut new workpieces that are divisible by the template size being used (Page 21); change template size to be divisible by workpiece (Page 21); or align the cutter starting point by eye do the best with the workpiece size you have—results may not be truly symmetrical.



Replacing Cutter

When the cutter gets dull or if it gets damaged, it must be replaced. Dull cutters can be resharpened by a professional, but cutters are inexpensive and easy to replace.

Tools Needed	Qty
Hex Wrench 4mm.....	1

To replace the cutter:

1. DISCONNECT MACHINE FROM POWER!
2. Remove the guard.
3. Loosen the two set screws that hold the cutter in the spindle. (The set screws must be backed out approximately half-way before the cutter can be removed.)
4. Slide the cutter out and insert the new one.
5. Tighten the two set screws to secure the cutter in place.
6. Replace the guard.

NOTICE

The cutter must be re-adjusted after being replaced to ensure proper cutting results.

Tensioning Belt

A flat belt transfers power from the motor to the cutter spindle. This belt stretches with use and periodically needs to be tensioned. If the cutter lacks power, stops spinning, or cuts slower than normal, then the belt may need to be tightened.

When properly tensioned, the belt should only deflect approximately a 1/4" when pushed inward from the middle.

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

To tighten the belt:

1. DISCONNECT MACHINE FROM POWER!
2. Loosen the two motor mount cap screws shown in **Figure 57**.

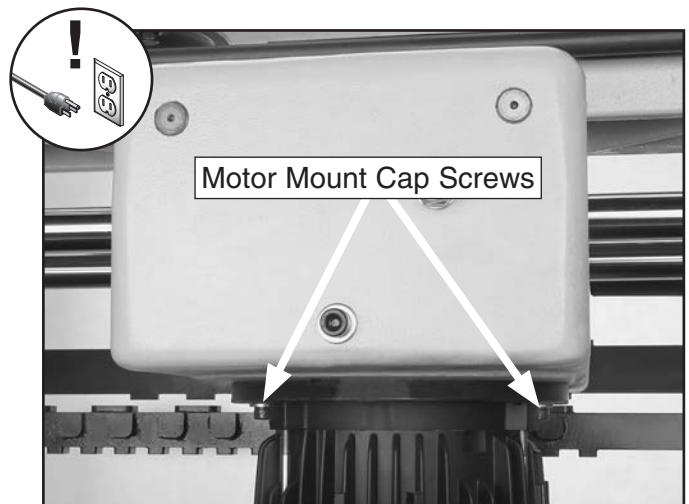


Figure 57. Motor mount cap screw locations.

Continued on next page →



- Turn the belt tension bolt, shown in **Figure 58**, clockwise to tension the belt.

Note: Each time you adjust the belt tension, *only turn the bolt one full turn. This will prevent over-tightening the belt, which can lead to premature bearing failure in the motor and spindle.*

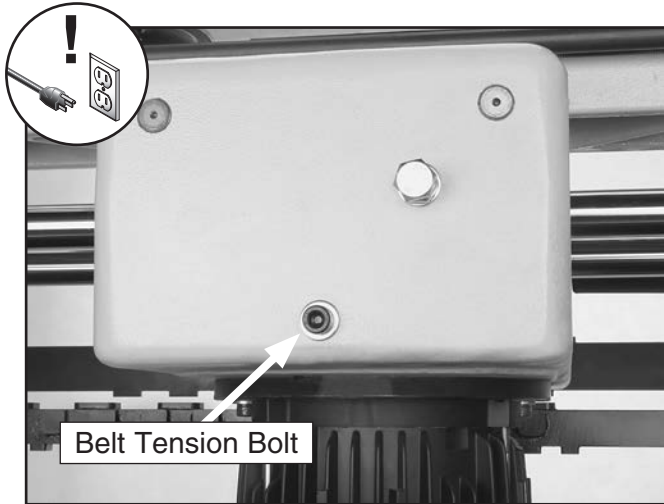


Figure 58. Belt tension bolt.

- Tighten the motor mount cap screws.

Replacing Belt

If the belt is left loose, it can stop during operation while the pulley continues to spin. This scenario will burn the belt, which will create a horrible vibration and smell of burned rubber. If this happens, then the belt must be replaced before continuing operations.

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

To replace the belt:

- DISCONNECT MACHINE FROM POWER!
- Lower the cutter as far as it will go.
- Remove the dust plug shown in **Figure 59** to access the bottom of the belt.

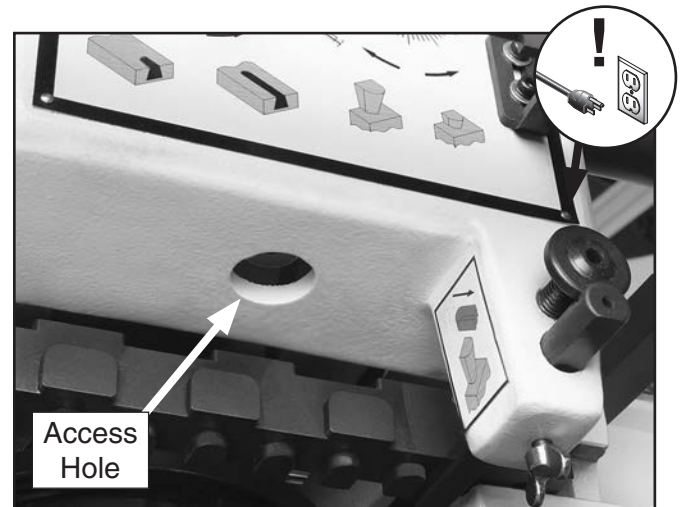


Figure 59. Dust plug removed to see bottom of cutter spindle for belt removal.

- Loosen the two motor mount cap screws shown in **Figure 57**.
- Turn the motor tension bolt, shown in **Figure 58**, counterclockwise to loosen the belt.
- Slide the belt under the top of the spindle shaft and off the motor pulley.
- Reinstall and tension the new belt.
- Replace the dust plug, and tighten the motor mount cap screws.



SECTION 8: WIRING

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

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

WARNING

Wiring Safety Instructions

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

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

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

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

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

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















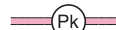
CAPACITORS/INVERTERS. Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

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

NOTICE

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

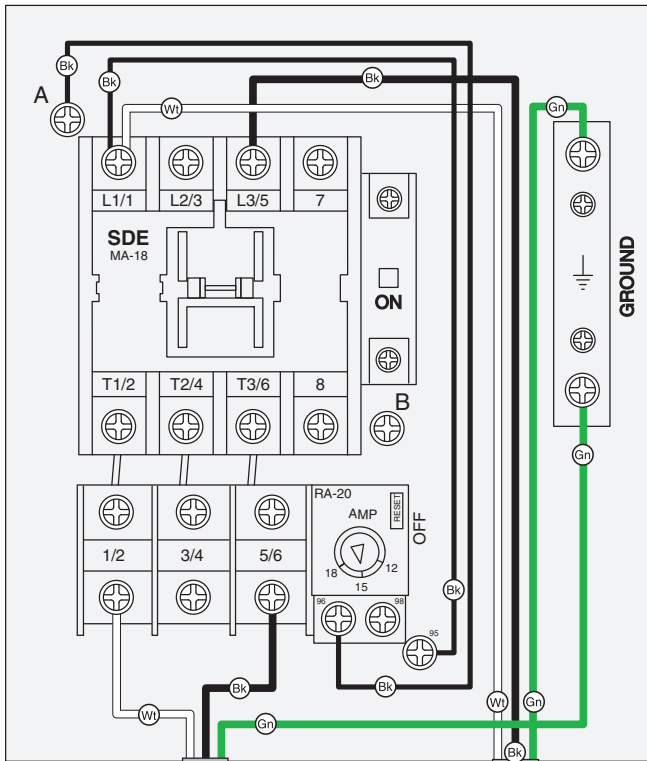
COLOR KEY

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



110V Wiring Diagram

The Model G0611X is prewired for 220V operation. If you plan to operate your machine at 110V, you must rewire the motor and replace the mag switch with part number P0611X230A (see Page 45).

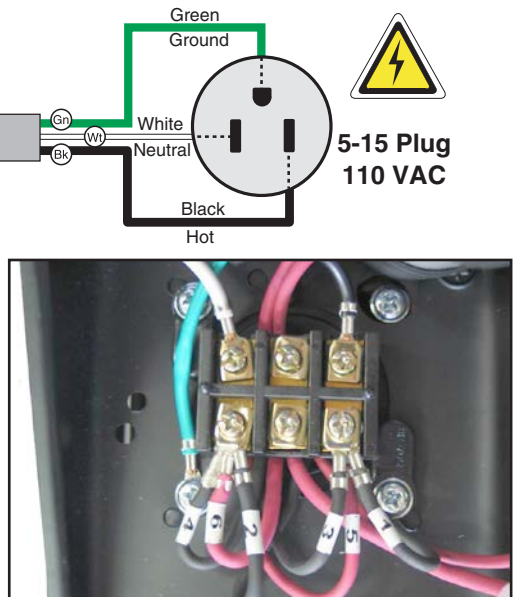
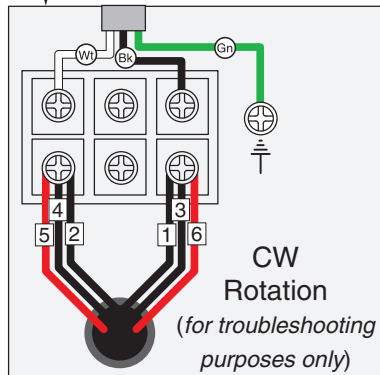
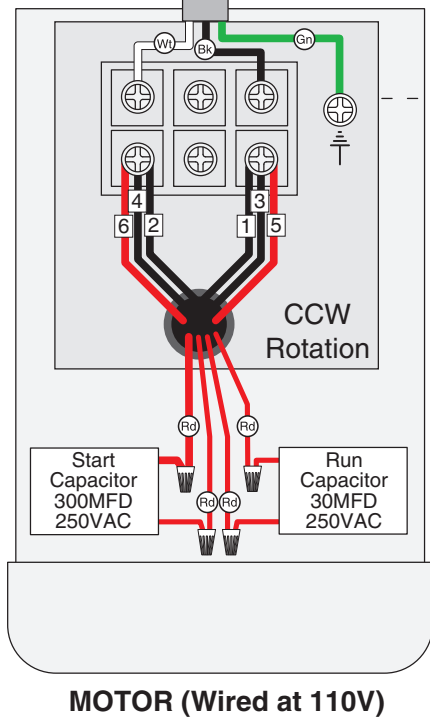


MAGNETIC SWITCH ASSEMBLY



COLOR KEY	
BLACK	
WHITE	
GREEN	
RED	

⚠ DANGER
 Disconnect power before servicing electrical components. Electrical shock causes serious personal injury or even death!

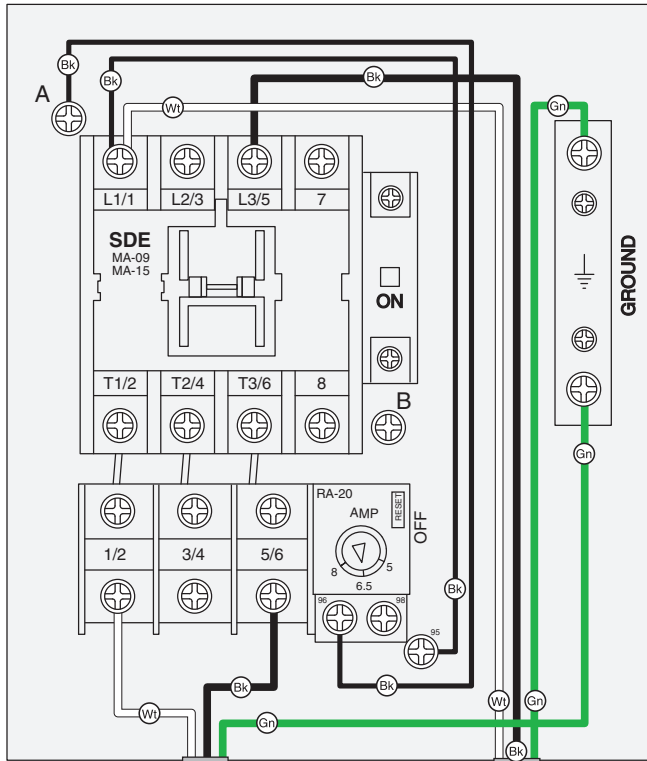


NOTICE
 If your cutter rotates in the wrong direction, wire it for counterclockwise (CCW) rotation.

NOTICE
 The motor wiring shown here is current at the time of printing; however, always use the diagram on the inside of junction box cover when rewiring your motor.



220V Wiring Diagram



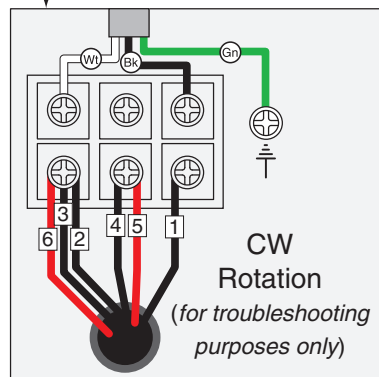
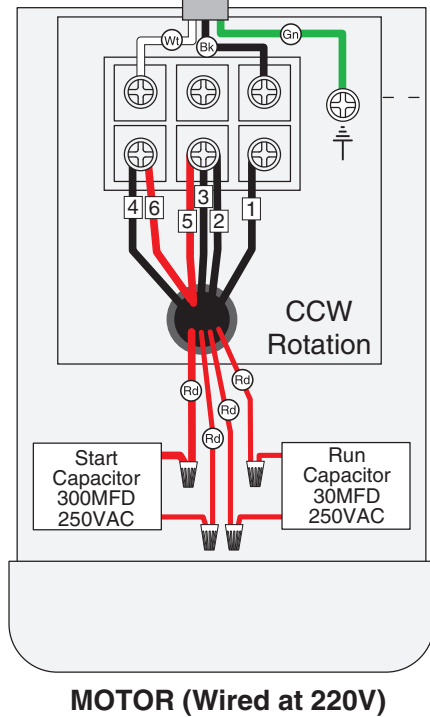
MAGNETIC SWITCH ASSEMBLY



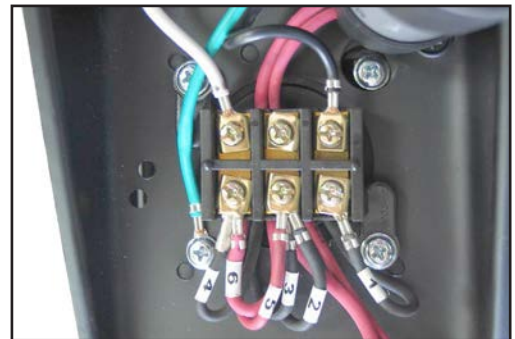
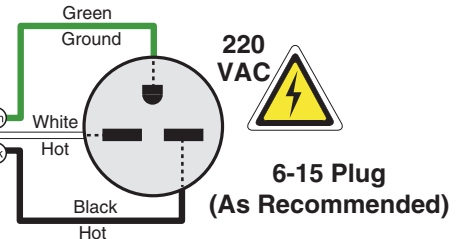
COLOR KEY

BLACK	
WHITE	
GREEN	
RED	

⚠ DANGER
 Disconnect power before servicing electrical components. Electrical shock causes serious personal injury or even death!



NOTICE
 If your cutter rotates in the wrong direction, wire it for counterclockwise (CCW) rotation.



NOTICE
 The motor wiring shown here is current at the time of printing; however, always use the diagram on the inside of junction box cover when rewiring your motor.



SECTION 9: PARTS

We do our best to stock replacement parts when possible, but we cannot guarantee that all parts shown are available for purchase. Call **(800) 523-4777** or visit **www.grizzly.com/parts** to check for availability.

Table

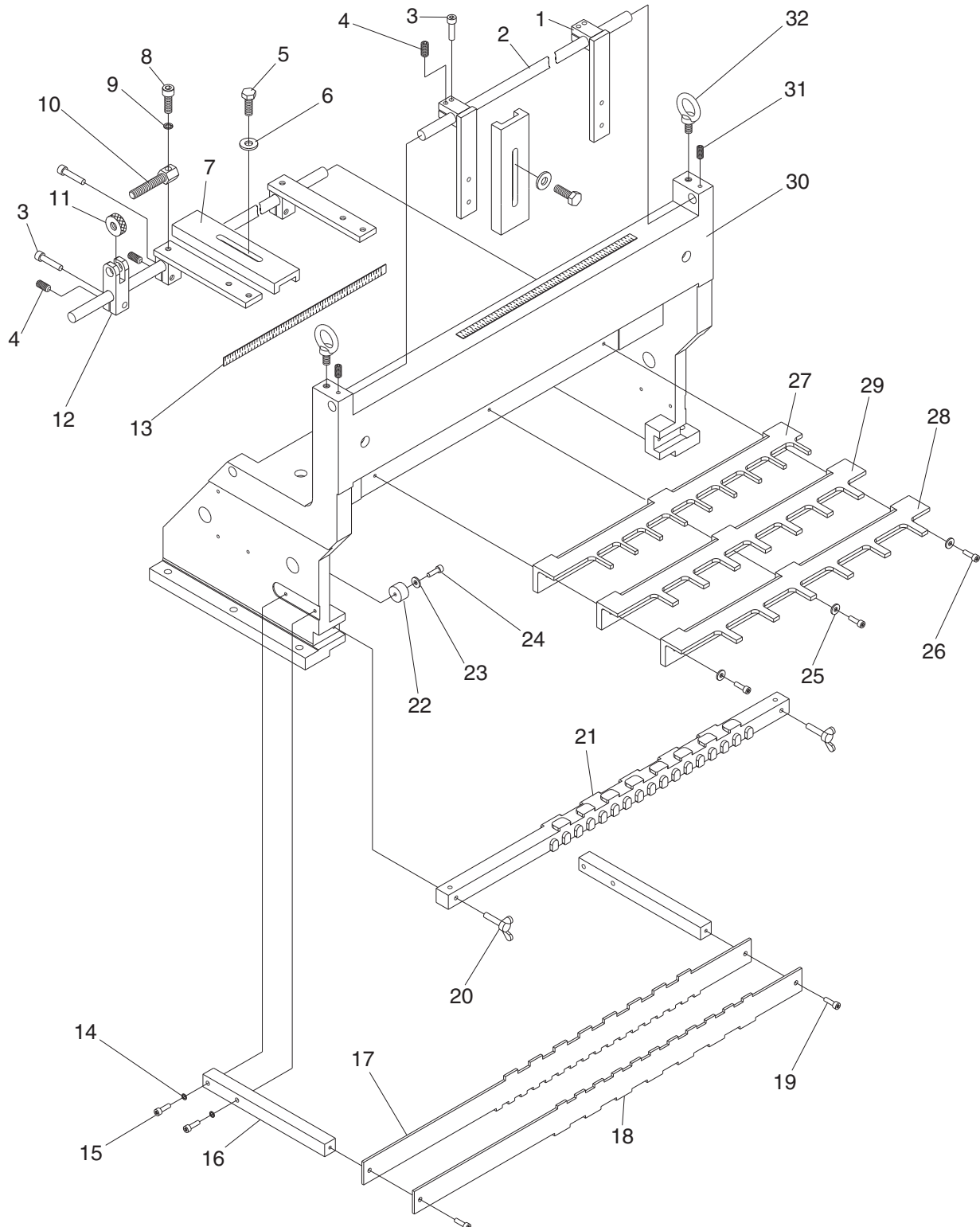


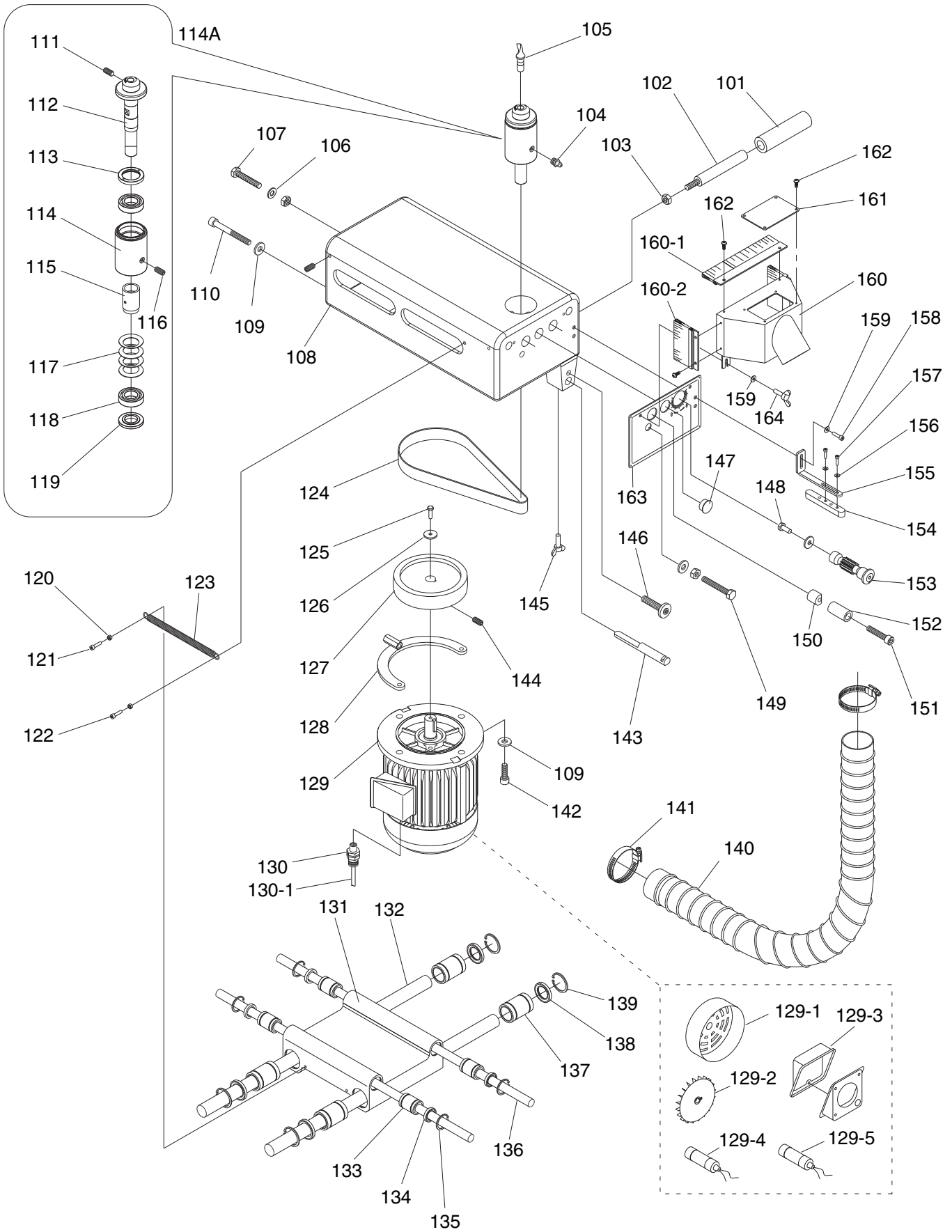
Table Parts List

REF	PART #	DESCRIPTION
1	P0611X001	FENCE
2	P0611X002	SLIDING ROD
3	PSB31M	CAP SCREW M8-1.25 X 25
4	PSS04M	SET SCREW M6-1 X 12
5	PB09M	HEX BOLT M8-1.25 X 20
6	PW01M	FLAT WASHER 8MM
7	P0611X007	BUFFER PAD
8	PSB13M	CAP SCREW M8-1.25 X 30
9	PLW04M	LOCK WASHER 8MM
10	P0611X010	ADJUSTMENT SCREW
11	P0611X011	ADJUSTMENT NUT
12	P0611X012	MICRO-ADJUSTMENT SEAT
13	P0611X013	TABLE SCALE
14	PLW03M	LOCK WASHER 6MM
15	PSB48M	CAP SCREW M6-1 X 35
16	P0611X016	INDICATOR MOUNTING BAR

REF	PART #	DESCRIPTION
17	P0611X017	INDICATOR TEMPLATE 1" & 2"
18	P0611X018	INDICATOR TEMPLATE 1-1/2" & 2-1/2"
19	PSB04M	CAP SCREW M6-1 X 10
20	P0611X020	WING SCREW M6-1 X 35
21	P0611X021	TEMPLATE BAR
22	P0611X022	BUFFER PAD
23	PW03M	FLAT WASHER 6MM
24	PSB02M	CAP SCREW M6-1 X 20
25	PW03M	FLAT WASHER 6MM
26	PSB07M	CAP SCREW M6-1 X 30
27	P0611X027	FIXED CHASER 1" & 2"
28	P0611X028	FIXED CHASER 3"
29	P0611X029	FIXED CHASER 2-1/2"
30	P0611X030	WORKTABLE
31	PSS02M	SET SCREW M6-1 X 6
32	P0611X032	EYE BOLT M10-1.5 X 15



Headstock



Headstock Parts List

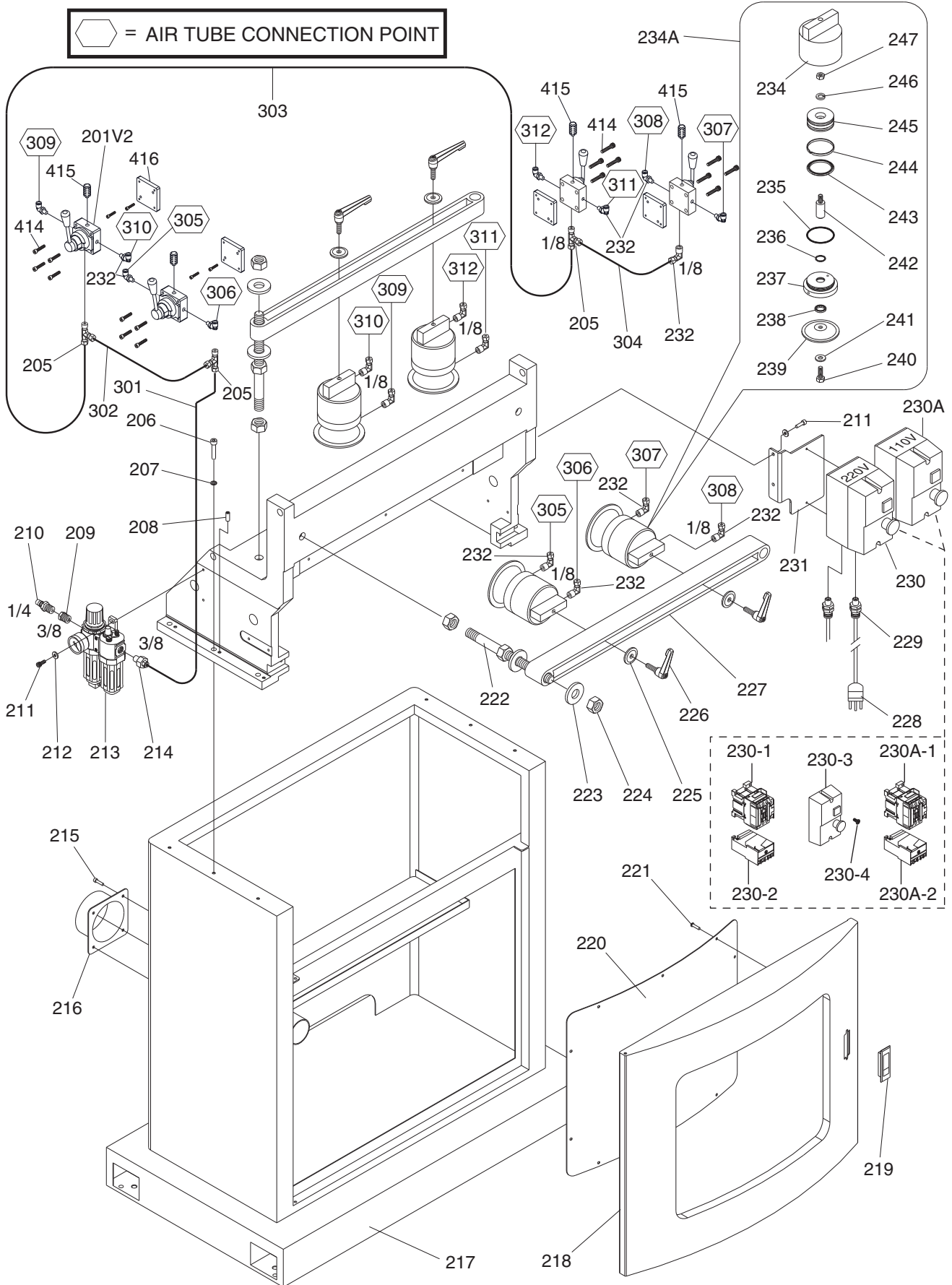
REF	PART #	DESCRIPTION
101	P0611X101	SPONGE COATING
102	P0611X102	HANDLE
103	PN02M	HEX NUT M10-1.5
104	PZERK2	GREASE FITTING M6-1 x 5
105	P0611X105	CUTTER
106	PW04M	FLAT WASHER 10MM
107	P0611X107	SPECIAL ADJUSTMENT BOLT
108	P0611X108	SPINDLE SLIDE SEAT
109	PW01M	FLAT WASHER 8MM
110	PSB157M	CAP SCREW M8-1.25 X 100
111	PSS16M	SET SCREW M8-1.25 X 10
112	P0611X112	ECCENTRIC SPINDLE
113	P0611X113	LOCK NUT
114	P0611X114	SPINDLE BEARING HOUSING
114A	P0611X114A	COMPLETE SPINDLE ASSY
115	P0611X115	SPACER
116	PSS07M	SET SCREW M5-.8 X 5
117	P0611X117	COMPRESSION SPRING AK-6005
118	P6005	BALL BEARING 6005
119	P0611X119	FIXING NUT
120	PN06M	HEX NUT M5-.8
121	PSB79M	CAP SCREW M5-.8 X 35
122	PSB15M	CAP SCREW M5-.8 X 20
123	P0611X123	EXTENSION SPRING
124	P0611X124	FLAT BELT 670 X 25
125	PB08M	HEX BOLT M6-1 X 20
126	PW03M	FLAT WASHER 6MM
127	P0611X127	MOTOR PULLEY
128	P0611X128	MOTOR BRACKET
129	P0611X129	MOTOR 1HP, 110V/220V
129-1	P0611X129-1	MOTOR FAN COVER
129-2	P0611X129-2	MOTOR FAN
129-3	P0611X129-3	MOTOR JUNCTION BOX
129-4	P0611X129-4	S CAPACITOR 300MFD 250VAC
129-5	P0611X129-5	R CAPACITOR 30MFD 250VAC
130	P0611X130	STRAIN RELIEF 11-10B
130-1	P0611X130-1	MOTOR CORD

REF	PART #	DESCRIPTION
131	P0611X131	CARRIAGE
132	P0611X132	GUIDE ROD M25 X 750L
133	P0611X133	LINEAR BUSHING 16UU
134	P0611X134	SEAL 16 X 28 X 7 X 3
135	PR20M	INT RETAINING RING 28MM
136	P0611X136	GUIDE ROD M16 X 459L
137	P0611X137	LINEAR BUSHING 25UU
138	P0611X138	SEAL 25 X 40 X 7 X 2
139	PR23M	INT RETAINING RING 40MM
140	P0611X140	FLEXIBLE HOSE 2.5" X 63"
141	P0611X141	HOSE CLAMP 2-3/4"
142	PSB40M	CAP SCREW M8-1.25 X 35
143	P0611X143	TRACER PIN
144	PSS53M	SET SCREW M5-.8 X 12
145	P0611X145	WING SCREW M6-1 X 20
146	P0611X146	ADJUSTMENT SCREW
147	P0611X147	PLASTIC PLUG 22MM
148	PB03M	HEX BOLT M8-1.25 X 16
149	P0611X149	SPECIAL ADJUSTMENT BOLT
150	P0611X150	CLAMP BUSHING
151	PSB66M	CAP SCREW M8-1.25 X 65
152	P0611X152	BUSHING
153	P0611X153	GEAR SHAFT
154	P0611X154	INDICATOR BAR
155	P0611X155	INDICATOR BRACKET
156	PW05M	FLAT WASHER 4MM
157	PSB17M	CAP SCREW M4-.7 X 10
158	PSB33M	CAP SCREW M5-.8 X 12
159	PW02M	FLAT WASHER 5MM
160	P0611X160	GUARD
160-1	P0611X160-1	TOP GUARD BRUSH
160-2	P0611X160-2	SIDE GUARD BRUSH
161	P0611X161	WINDOW
162	PS17M	PHLP HD SCR M4-.7 X 6
163	P0611X163	CONTROL PANEL LABEL
164	P0611X164	WING SCREW M5-.8 X 15



Body & Pneumatic

 = AIR TUBE CONNECTION POINT



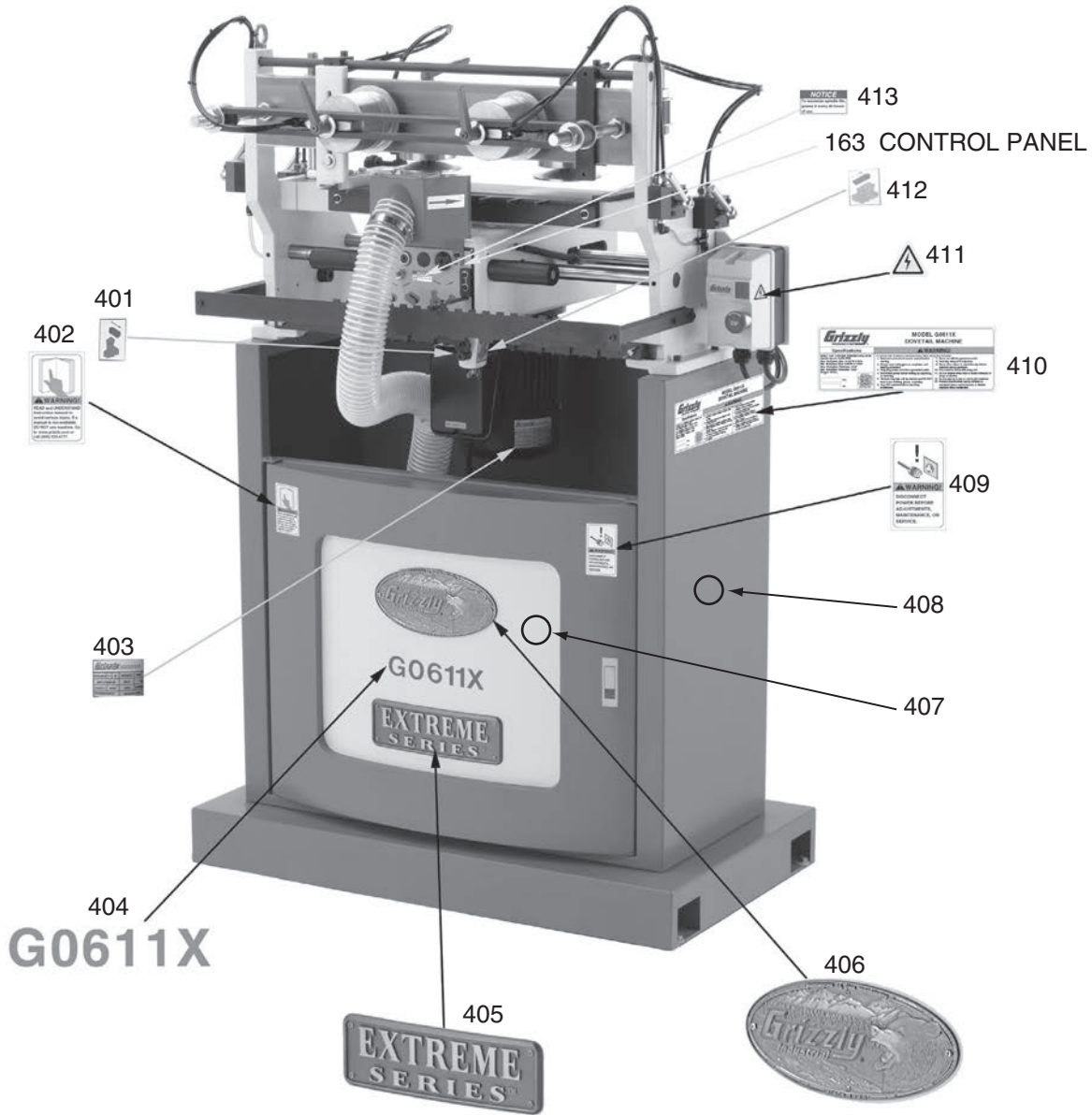
Body & Pneumatic Parts List

REF	PART #	DESCRIPTION
201V2	P0611X201V2	CONTROL VALVE V2.07.15
205	P0611X205	T-CONNECTOR PT-1/8" X 6MM X 6MM
206	P0611X206	CAP SCREW M8-1.25 X 35
207	P0611X207	LOCK WASHER 8MM
208	P0611X208	SET SCREW M8-1.25 X 10
209	P0611X209	ADAPTER 3/8" X 1/4"
210	P0611X210	MALE COUPLING PT-1/4"
211	P0611X211	CAP SCREW M6-1 X 16
212	P0611X212	FLAT WASHER 6MM
213	P0611X213	AIR SUPPLY UNIT MACP 300-10A
214	P0611X214	MALE CONNECTOR PT-3/8" X 6MM
215	P0611X215	CAP SCREW M5-.8 X 10
216	P0611X216	DUST PORT 4"
217	P0611X217	CABINET
218	P0611X218	DOOR
219	P0611X219	DOOR LATCH
220	P0611X220	DOOR INSET
221	P0611X221	PHLP HD SCR M5-.8 X 6
222	P0611X222	STUD
223	P0611X223	FLAT WASHER 20MM
224	P0611X224	HEX NUT M20-2.5
225	P0611X225	SPECIAL WASHER
226	P0611X226	LOCKING HANDLE M10-1.5 X 35
227	P0611X227	HOLDER BRACKET
228	P0611X228	POWER CORD
229	P0611X229	STRAIN RELIEF MGB20G-12B
230	P0611X230	MAGNETIC SWITCH ASSY 220V
230A	P0611X230A	MAGNETIC SWITCH ASSY 110V
230-1	P0611X230-1	CONTACTOR 220V
230-2	P0611X230-2	OVERLOAD RELAY FOR 220V
230-3	P0611X230-3	MAG SWITCH COVER
230-4	P0611X230-4	PLASTIC SCREW
230A-1	P0611X230A-1	CONTACTOR 110V
230A-2	P0611X230A-2	OVERLOAD RELAY FOR 110V

REF	PART #	DESCRIPTION
231	P0611X231	SWITCH BRACKET
232	P0611X232	MALE ELBOW PT1/8" X 6MM
233	P0611X233	CAP SCREW M5-.8 X 50
234	P0611X234	CYLINDER BODY
235	P0611X235	O-RING G80
236	P0611X236	O-RING P25
237	P0611X237	CYLINDER END COVER
238	P0611X238	LOCKING PIECE
239	P0611X239	CLAMPING DISC
240	P0611X240	HEX BOLT M8-1.25 X 16
241	P0611X241	FLAT WASHER 8MM
242	P0611X242	PISTON ROD
243	P0611X243	PISTON BACKING 80 X 65 X 5.5
244	P0611X244	WEARING 80 X 75 X 6
245	P0611X245	PISTON
246	P0611X246	LOCK WASHER 12MM
247	P0611X247	HEX NUT M12-1.75
234A	P0611X234A	CLAMPING CYLINDER ASSY
301	P0611X301	PU TUBE 4 X 6 X 240MM
302	P0611X302	PU TUBE 4 X 6 X 140MM
303	P0611X303	PU TUBE 4 X 6 X 1360MM
304	P0611X304	PU TUBE 4 X 6 X 140MM
305	P0611X305	PU TUBE 4 X 6 X 790MM
306	P0611X306	PU TUBE 4 X 6 X 730MM
307	P0611X307	PU TUBE 4 X 6 X 790MM
308	P0611X308	PU TUBE 4 X 6 X 730MM
309	P0611X309	PU TUBE 4 X 6 X 790MM
310	P0611X310	PU TUBE 4 X 6 X 730MM
311	P0611X311	PU TUBE 4 X 6 X 790MM
312	P0611X312	PU TUBE 4 X 6 X 730MM
414	P0611X414	CAP SCREW M5-.8 X 30
415	P0611X415	AIR DIFFUSER 1/8" NPT
416	P0611X416	MOUNTING PLATE



Labels



REF	PART #	DESCRIPTION
163	P0611X163	CONTROL PANEL LABEL
401	P0611X401	TAIL SHORTER LABEL
402	PLABEL-12A	READ MANUAL LABEL
403	P0611X403	MOTOR LABEL
404	P0611X404	G0611X MODEL # LABEL
405	P0611X405	EXTREME SERIES PLATE
406	G8589	GRIZZLY LOGO PLATE

REF	PART #	DESCRIPTION
407	PPAINT-14	"PUTTY" TOUCH-UP PAINT
408	PPAINT-1	"GRIZZLY GREEN" TOUCH-UP PAINT
409	PLABEL-36	DISCONNECT POWER LABEL
410	P0611X410	MACHINE ID LABEL
411	PLABEL-14	ELECTRICITY LABEL
412	P0611X412	TAIL LONGER LABEL
413	P0611X413	GREASE SPINDLE LABEL

WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine **MUST** maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, **REPLACE** that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.





WARRANTY CARD

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

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

1. How did you learn about us?

<input type="checkbox"/> Advertisement	<input type="checkbox"/> Friend	<input type="checkbox"/> Catalog
<input type="checkbox"/> Card Deck	<input type="checkbox"/> Website	<input type="checkbox"/> Other:

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

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

3. What is your annual household income?

<input type="checkbox"/> \$20,000-\$29,000	<input type="checkbox"/> \$30,000-\$39,000	<input type="checkbox"/> \$40,000-\$49,000
<input type="checkbox"/> \$50,000-\$59,000	<input type="checkbox"/> \$60,000-\$69,000	<input type="checkbox"/> \$70,000+

4. What is your age group?

<input type="checkbox"/> 20-29	<input type="checkbox"/> 30-39	<input type="checkbox"/> 40-49
<input type="checkbox"/> 50-59	<input type="checkbox"/> 60-69	<input type="checkbox"/> 70+

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

<input type="checkbox"/> 0-2 Years	<input type="checkbox"/> 2-8 Years	<input type="checkbox"/> 8-20 Years	<input type="checkbox"/> 20+ Years
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6. How many of your machines or tools are Grizzly?

<input type="checkbox"/> 0-2	<input type="checkbox"/> 3-5	<input type="checkbox"/> 6-9	<input type="checkbox"/> 10+
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7. Do you think your machine represents a good value? Yes No
8. Would you recommend Grizzly Industrial to a friend? Yes No
9. Would you allow us to use your name as a reference for Grizzly customers in your area?
Note: We never use names more than 3 times. Yes No

10. Comments: _____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE



Place
Stamp
Here



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



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Send a Grizzly Catalog to a friend:

Name _____
Street _____
City _____ State _____ Zip _____

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY AND RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

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

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

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

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

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