

Grizzly **Industrial, Inc.**®

MODEL G0812 13" X 18" METAL-CUTTING BANDSAW OWNER'S MANUAL *(For models manufactured since 2/16)*



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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.**
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V1.01.17



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.

		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 glasses and respirator are properly adjusted/setup and	
Specification:		4. power is connected to grounded circuit before starting.	
Weight:		5. Make sure the motor has stopped and disconnect power before adjustments, maintenance, or service.	
		6. DO NOT expose to rain or dampness.	
		7. DO NOT modify this machine in any way.	
		8. Make sure power is disconnected.	
		9. Do not use while under the influence of drugs or alcohol.	
		10. Maintain machine carefully to prevent accidents.	
		Manufactured for Grizzly in Taiwan	

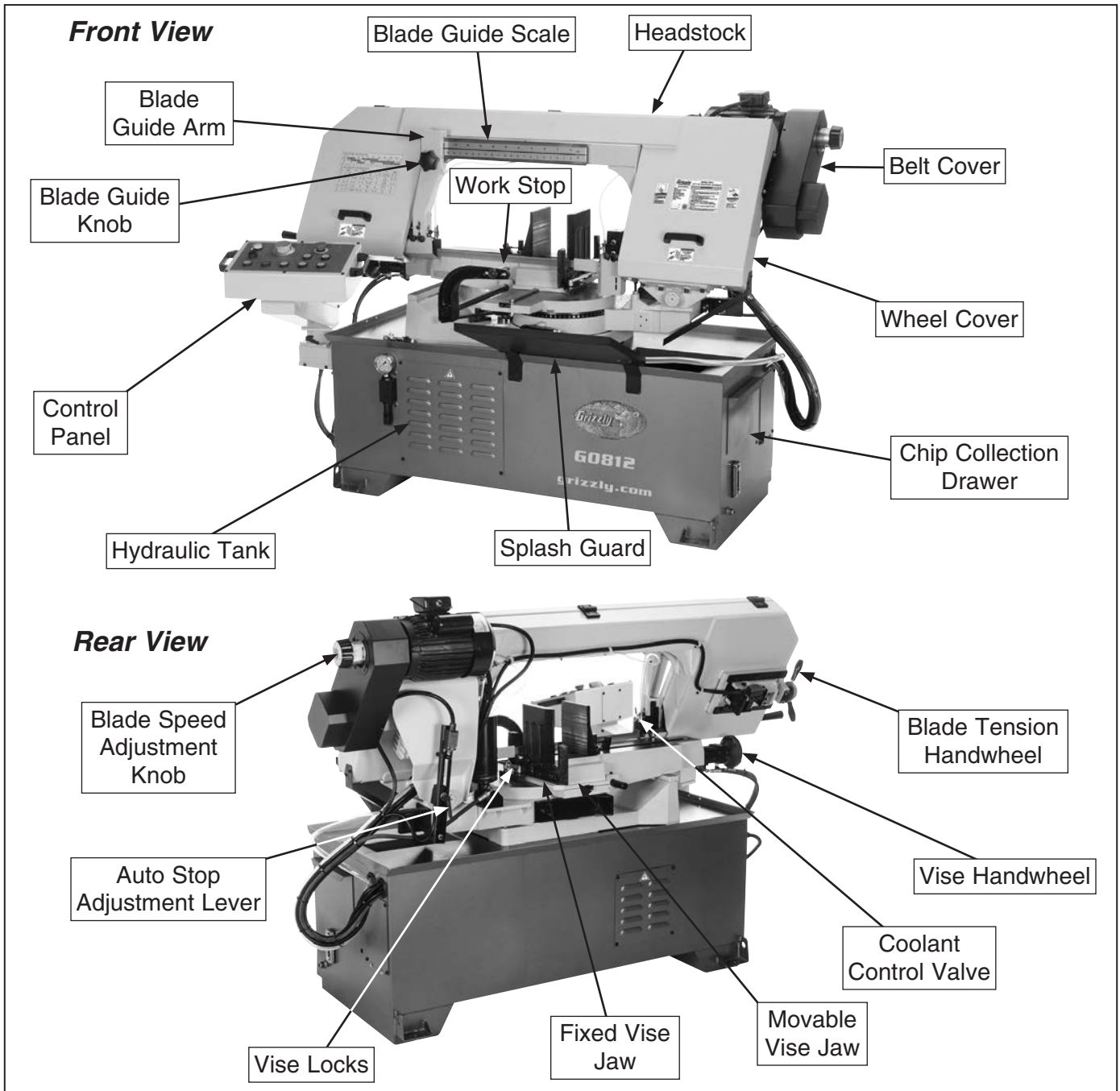
Manufacture Date

Serial Number



Identification

Become familiar with the names and locations of the controls and features shown below to better understand the instructions in this manual.



	<p>⚠ WARNING</p> <p>To reduce your risk of serious injury, read this entire manual BEFORE using machine.</p>
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Controls & Components



Refer to **Figures 1–5** and the following descriptions to become familiar with the basic controls and components of this machine. Understanding these items and how they work will help you understand the rest of the manual and stay safe when operating this machine.

Control Panel

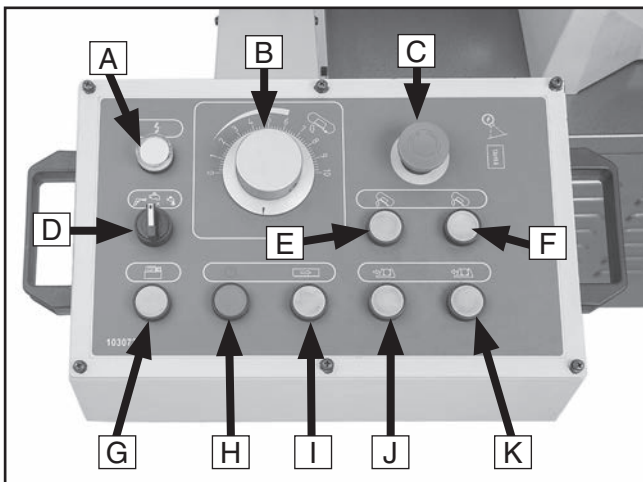


Figure 1. Model G0812 control panel.

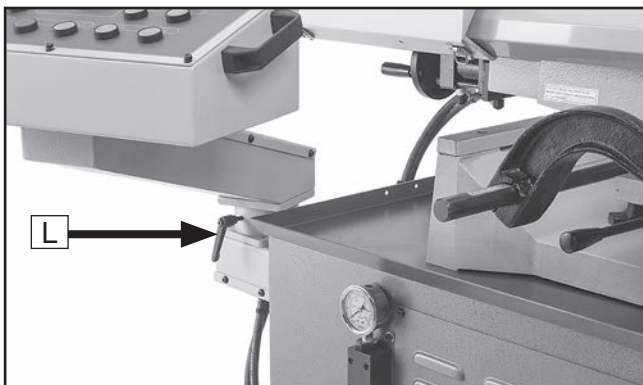


Figure 2. Control panel pedestal lock location.

- A. Power Lamp:** Indicates main power to machine is turned **ON**.
- B. Feed Rate Dial:** Controls rate at which blade feeds into workpiece.
- C. Emergency Stop Button:** Stops all machine functions. Twist clockwise to reset.
- D. Coolant Pump Switch (☞ ☜ ☛):** Low-pressure setting (☜) supplies cutting fluid to blade through fluid nozzles. High-pressure setting (☞) supplies coolant to spray gun, and (☛) turns coolant pump motor **OFF**.
- E. Raise Headstock Button (☞):** Hydraulically raises headstock. Continues raising blade until lower limit switch activates or button is released.
- F. Lower Headstock Button (☞):** Hydraulically lowers headstock. Lowers at rate determined by feed rate dial (B).
- G. Hydraulic Motor Button (☞):** Turns hydraulic motor **ON**.
- H. Stop Button:** Stops all machine functions when pressed. Press again to reset.
- I. Blade Start Button (☞):** When pressed, turns saw blade motor **ON** and starts saw blade. **IMPORTANT:** For blade start button to work, hydraulic motor button (G) and vise close button (J) must be pressed first, and headstock must be raised.
- J. Vise Close Button (☞):** Hydraulically closes vise to secure workpiece during cut. **IMPORTANT:** As a safety precaution, vise close button must be pressed in order for blade start button (I) to function.
- K. Vise Open Button (☞):** Hydraulically opens vise to release workpieces between cuts.
- L. Pedestal Lock:** Loosen to move control panel to desired location for operation and tighten to secure. **IMPORTANT:** To avoid headstock hitting control panel during operation, swivel control panel out of way to ensure it is not in path of headstock.



Headstock

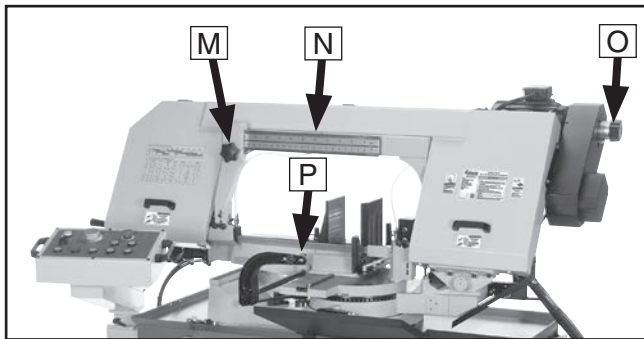


Figure 3. Headstock controls and components.

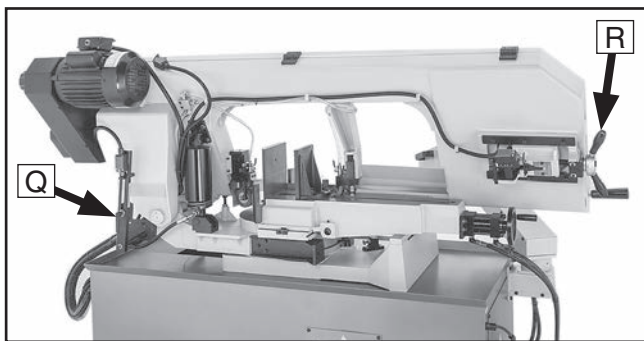


Figure 4. Additional headstock controls.

- M. Blade Guide Arm:** Holds blade guide that supports bandsaw blade. Arm is placed as close to workpiece as possible during cutting to prevent blade from twisting.
- N. Blade Guide Scale:** Displays position of blade guide arm relative to workpiece.
- O. Blade Speed Adjustment Knob:** Controls bandsaw blade speed. Rotate knob clockwise to decrease blade speed or counterclockwise to increase blade speed. **IMPORTANT:** *To avoid damaging machine, ONLY change blade speeds while the motor is running.*
- P. Work Stop:** Can be positioned on either side of vise base to support repetitive cutting operations. The stop is placed on same side of machine where cut is made.
- Q. Auto-Stop Adjustment Lever:** Sets maximum headstock height. Adjust by changing position of lower limit switch. This feature is useful for speeding up repetitive cuts by eliminating unnecessary headstock travel.
- R. Blade Tension Handwheel:** Increases or decreases blade tension.

Vise Table

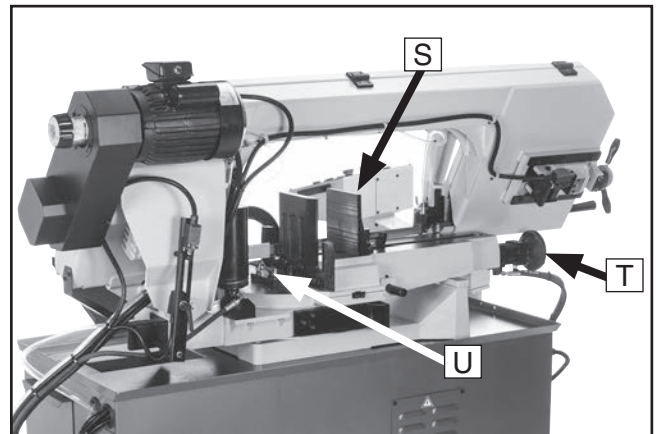


Figure 5. Vise table controls.

- S. Movable Vise Jaw:** Features quick release that allows jaw width to be adjusted when changing from one workpiece size to another.
- T. Vise Handwheel:** Rotate to manually position movable vise jaw close to workpiece.
- U. Vise Locks:** Loosen to move vise base or tighten to secure its position.





MACHINE DATA SHEET

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

MODEL G0812 13" X 18" 2 HP INDUSTRIAL METAL-CUTTING BANDSAW

Product Dimensions:

Weight..... 1345 lbs.
 Width (side-to-side) x Depth (front-to-back) x Height..... 90 x 52 x 56 in.
 Footprint (Length x Width)..... 57 x 27-1/2 in.

Shipping Dimensions:

Type..... Wood Crate
 Content..... Machine
 Weight..... 1446 lbs.
 Length x Width x Height..... 84 x 37 x 60 in.
 Must Ship Upright..... Yes

Electrical:

Power Requirement..... 220V, Single-Phase, 60 Hz
 Prewired Voltage..... 220V
 Full-Load Current Rating..... 20A
 Minimum Circuit Size..... 30A
 Connection Type..... Cord & Plug
 Power Cord Included..... Yes
 Power Cord Length..... 6 ft.
 Power Cord Gauge..... 14 AWG
 Plug Included..... No
 Recommended Plug Type..... L6-30
 Switch Type..... Magnetic Switch

Motors:

Coolant Pump

Horsepower..... 53 W
 Phase..... Single-Phase
 Amps..... 0.3A
 Speed..... 3440 RPM
 Type..... Universal
 Power Transfer Direct Drive
 Centrifugal Switch/Contacts Type..... N/A

Main

Horsepower..... 2 HP
 Phase..... Single-Phase
 Amps..... 15A
 Speed..... 1720 RPM
 Type..... TEFC Capacitor-Start Induction
 Power Transfer Belt Drive
 Bearings..... Sealed & Permanently Lubricated
 Centrifugal Switch/Contacts Type..... External



Hydraulic Pump

Horsepower.....	1/2 HP
Phase.....	Single-Phase
Amps.....	4.7A
Speed.....	1720 RPM
Type.....	TEFC Capacitor-Start
Power Transfer	Direct Drive
Bearings.....	Sealed & Permanently Lubricated
Centrifugal Switch/Contacts Type.....	External

Main Specifications:

Operation Info

Blade Speeds.....	95 – 380 FPM
Std. Blade Length.....	150 in.
Blade Length Range.....	149-3/4 – 150-1/4 in.

Cutting Capacities

Cutting Height.....	13 in.
Angle Cuts.....	60R – 45L deg.
Vise Jaw Depth.....	18 in.
Vise Jaw Height.....	6-3/4 in.
Max. Capacity Rectangular Height at 90 Deg.....	12 in.
Max. Capacity Rectangular Width at 90 Deg.....	18 in.
Max. Capacity Round at 90 Deg.....	13 in.
Max. Capacity Rectangular Height at 30 Deg.....	11 in.
Max. Capacity Rectangular Width at 30 Deg.....	19 in.
Max. Capacity Round at 30 Deg.....	19 in.
Max. Capacity Rectangular Height at 45 Deg.....	11 in.
Max. Capacity Rectangular Width at 45 Deg.....	12 in.
Max. Capacity Round at 45 Deg.....	12 in.
Max. Capacity Rectangular Height at 60 Deg.....	7 in.
Max. Capacity Rectangular Width at 60 Deg.....	8 in.
Max. Capacity Round at 60 Deg.....	8 in.
Max. Capacity Rectangular Height at -45 Deg.....	11 in.
Max. Capacity Rectangular Width at -45 Deg.....	12 in.
Max. Capacity Round at -45 Deg.....	12 in.

Construction

Table.....	Precision-Ground Cast Iron
Trunnions.....	Cast Iron
Upper Wheel.....	Cast Iron
Lower Wheel.....	Cast Iron
Body.....	Steel
Stand.....	Steel
Wheel Cover.....	Steel
Paint Type/Finish.....	Epoxy

Other

Wheel Size.....	16 in.
Blade Guides Upper.....	Carbide Steel
Blade Guides Lower.....	Carbide Steel
Coolant Capacity.....	7.5 gal.

Table Info

Table Size Length.....	26-1/8 in.
Table Size Width.....	7-3/4 in.
Table Size Thickness.....	4-7/8 in.
Floor To Cutting Area Height.....	32-1/4 in.



Other Specifications:

Country of Origin Taiwan
Warranty 1 Year
Approximate Assembly & Setup Time 1 Hour
Serial Number Location ID Label
ISO 9001 Factory Yes
Certified by a Nationally Recognized Testing Laboratory (NRTL) No

Features:

Coolant System with 7.5-Gallon Coolant Capacity
Heavy-Duty, Precision-Ground Cast-Iron Table
Variable-Speed Blade Control with Speeds from 95 – 380 FPM
Quick-Release Vise
Variable-Speed Hydraulic Feed Control
Pivoting Control Panel Arm for Convenient Access to Controls
Coolant Splash Guard
Built-in Spray Hose for Quick and Easy Cleanup
Miter Base Swivels 45-degrees left and 60-degrees right



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 Alerts the user to useful information about proper operation of the machine to avoid machine damage.

Safety Instructions for Machinery

⚠ WARNING

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

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

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

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

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

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

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



WARNING

WEARING PROPER APPAREL. Do not wear clothing, apparel or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to reduce risk of slipping and losing control or accidentally contacting cutting tool or moving parts.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



Additional Safety for Horizontal Metal Bandsaws

WARNING

Serious injury or death can occur from getting fingers, hair, or clothing entangled in rotating or moving parts or making direct contact with the moving blade. To minimize risk of injury, anyone operating this machine MUST completely heed hazards and warnings below.

BLADE CONDITION. Do not operate with dull, cracked, or badly worn blade. Inspect blades for cracks and missing teeth before each use.

HAND PLACEMENT. Never position hands or fingers in line with the cut or under bandsaw headstock while lowering or operating. Hands could be cut or crushed.

BLADE GUARD POSITION. Adjust blade guard as close to workpiece as possible before cutting to minimize operator exposure to unused portion of blade.

ENTANGLEMENT HAZARDS. Do not operate this saw without blade guard in place. Loose clothing, jewelry, long hair and work gloves can be drawn into working parts.

BLADE REPLACEMENT. When replacing blades, disconnect the machine from power, wear gloves to protect hands and safety glasses to protect eyes.

HOT SURFACES. Contact with hot surfaces from machine components, ejections of hot chips, swarf, and the workpiece itself can cause burns.

WORKPIECE HANDLING. Always properly support workpiece with table, vise, or some type of support fixture. Always secure workpiece in vise before cutting. Never hold the workpiece with your hands during a cut.

UNSTABLE WORKPIECES. Avoid cutting workpieces that cannot be properly supported or clamped in a vise or jig, because they can unexpectedly move while cutting and draw the operator's hands into the blade causing serious personal injury. Examples are chains, cables, round or oblong-shaped workpieces, and those with internal or built-in moving or rotating parts, etc.

FIRE HAZARD. Use EXTREME CAUTION if cutting magnesium. Using the wrong cutting fluid could lead to chip fire and possible explosion.

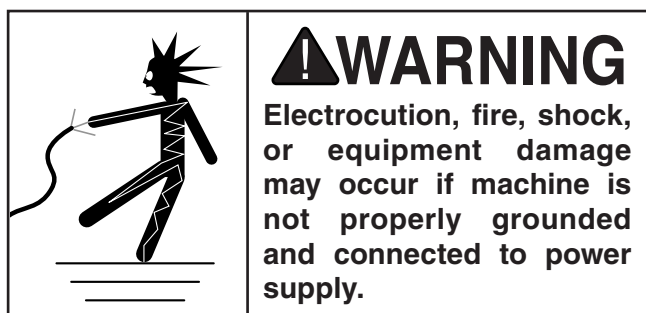
CUTTING FLUID SAFETY. Cutting fluids are poisonous. Always follow manufacturer's cutting-fluid safety instructions. Pay particular attention to contact, contamination, inhalation, storage and disposal warnings. Spilled cutting fluid invites slipping hazards.



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 220V 20 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.

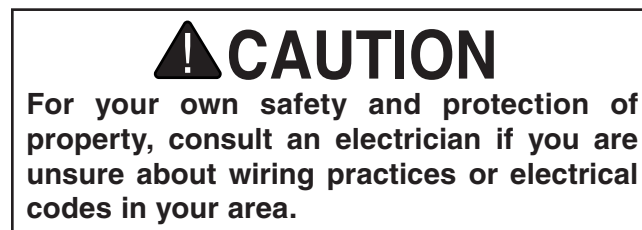
If the machine is overloaded for a sufficient length of time, damage, overheating, or fire may result—especially if connected to an undersized circuit. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets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

Circuit 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 1-Phase
Power Supply Circuit 30 Amps
Plug/Receptacle NEMA L6-30
Cord “S”-Type, 3-Wire, 14 AWG, 300 VAC

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.*



Grounding Instructions

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.

The power cord and plug specified under “Circuit Requirements for 220V” on the previous page has an equipment-grounding wire and a grounding prong. The plug must only be inserted into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances (see figure below).

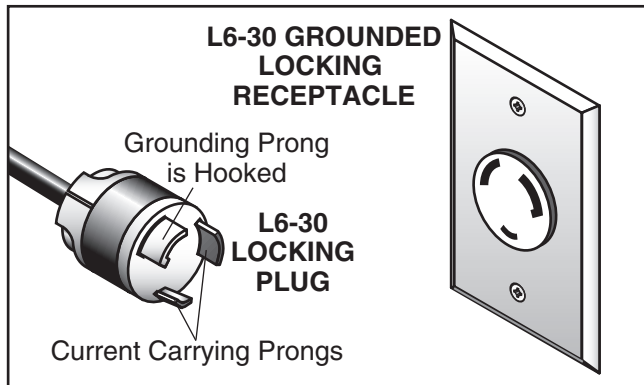
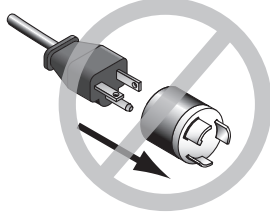


Figure 6. Typical L6-30 plug and receptacle.

⚠ 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.

⚠ 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.

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

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

Extension Cords

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

Extension cords cause voltage drop, which 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 12 AWG
Maximum Length (Shorter is Better).....50 ft.**



SECTION 3: SETUP

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
• Safety Glasses (for each person).....	1
• Cleaner/Degreaser (refer to Page 15).....	1
• Disposable Shop Rags.....	1
• Lifting Equipment (Rated for at least 1700 lbs.)	1
• Precision Level	1
• Open-End Wrench 10, 12, 24mm.....	1 Ea
• Hex Wrench 4, 5, 6mm	1 Ea
• Additional Person	1
• Hammer.....	1
• Pry Bar	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 7)	Qty
A. Work Stop Arm	1
B. Work Stop.....	1
C. Work Stop Rod	1
D. Splash Guard	1
E. Hex Bolts M16-2 x 75	4
F. Hex Nuts M16-2.....	4

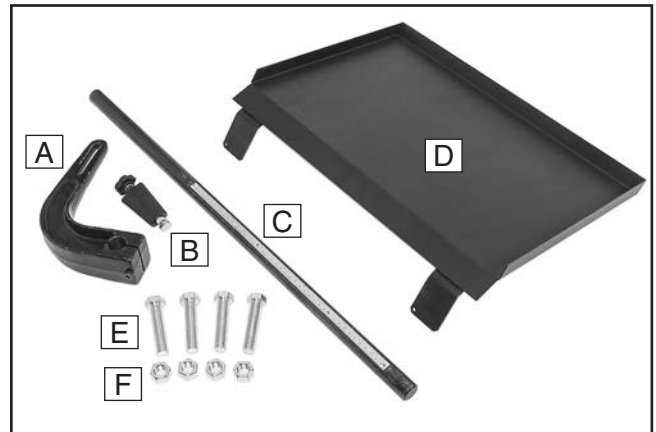


Figure 7. Box inventory.

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.

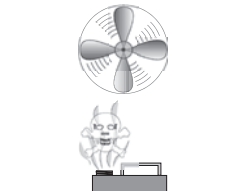
Before cleaning, gather the following:

- 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.

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

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

NOTICE Avoid harsh solvents like acetone or brake parts cleaner that may damage painted surfaces. Always test on a small, inconspicuous location first.

T23692—Orange Power Degreaser

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

<p>Call 1-800-523-4777 To Order</p>	
--	---



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.**

	<p>CAUTION</p> <p>Children or untrained people may be seriously injured by this machine. Only install in an access restricted location.</p>
---	--

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.

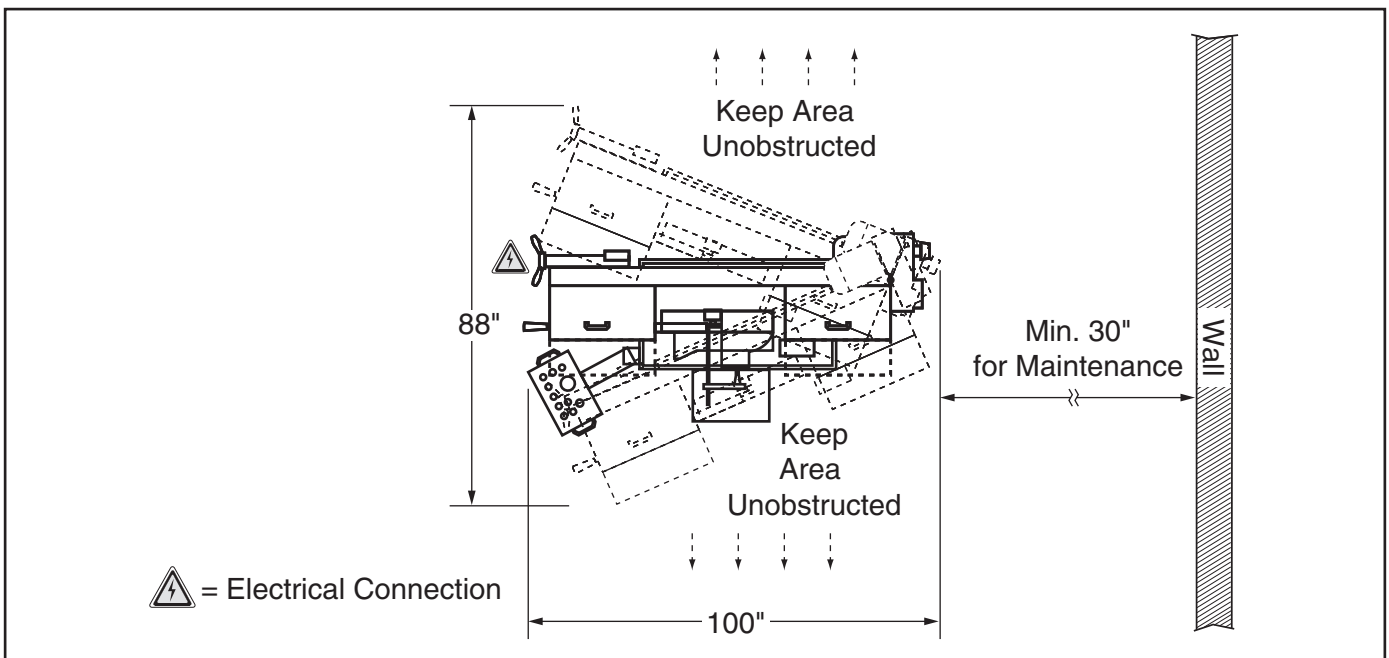
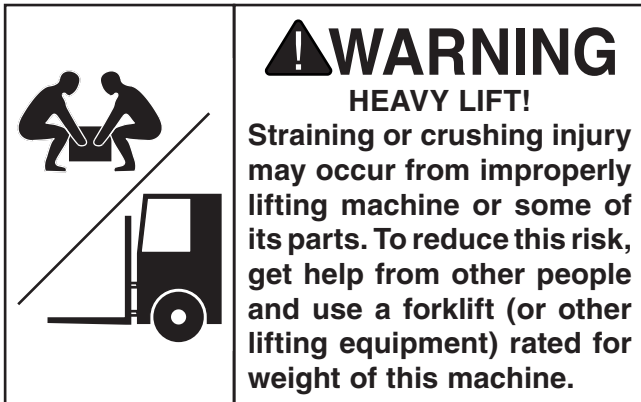


Figure 9. Minimum working clearances.



Lifting & Placing



To lift and place machine:

1. Position crate as close as possible to installation location, then remove top and sides of crate.
2. Remove small items packed around machine and unbolt machine from pallet.
3. Remove shipping material underneath center opening, then place forklift forks through opening (see **Figure 10**) so forks are as wide as possible for stability.



Figure 10. Inserting forklift forks for lifting machine.

4. With an assistant helping to stabilize the load, lift machine just high enough to clear pallet and any floor obstacles, then place machine in final position on shop floor.

5. Install each of (4) M16-2 x 75 leveling hex bolts with (1) M16-2 hex nut into each of the (4) mounting holes in frame, as shown in **Figure 11**.

— If you choose not to install included leveling bolts, refer to **Anchoring to Floor** for additional options.

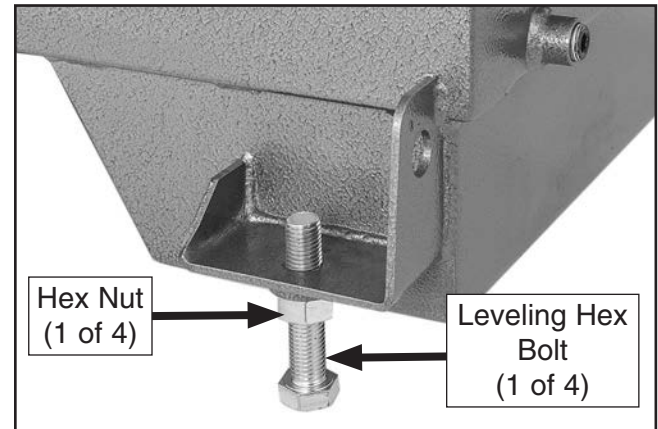


Figure 11. Leveling bolt threaded into frame.

6. Carefully lower machine onto floor, and then back forklift away.
7. Adjust each leveling hex bolt as needed to stabilize machine.
8. Tighten hex nuts against frame to secure leveling bolts.



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.

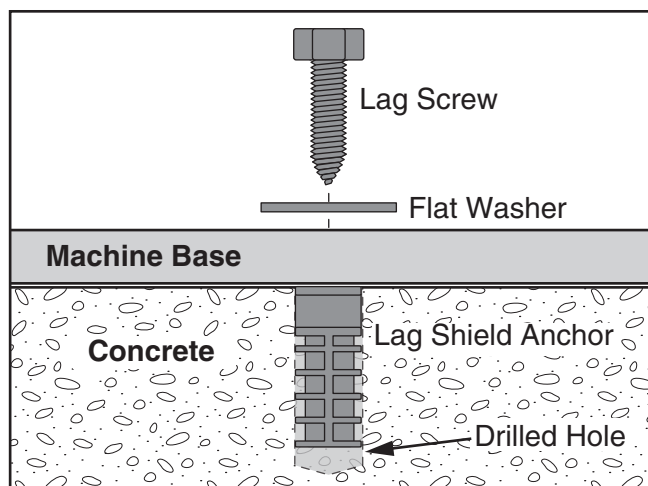


Figure 12. Popular method for anchoring machinery to a concrete floor.

Assembly

The machine must be fully assembled before it can be operated. Before beginning the assembly process, refer to **Needed for Setup** and gather all listed items. To ensure the assembly process goes smoothly, first clean any parts that are covered or coated in heavy-duty rust preventative (if applicable).

With the exception of the work stop rod, work stop, and splash guard, the Model G0812 comes fully assembled from the factory.

To assemble machine:

1. Remove upper hex bolt and two lower cap screws that secure shipping bracket shown in **Figure 13**.

Note: *The bracket was installed to keep the saw in alignment during shipping. Store bracket for safe keeping, in the event you move your saw to a different location.*

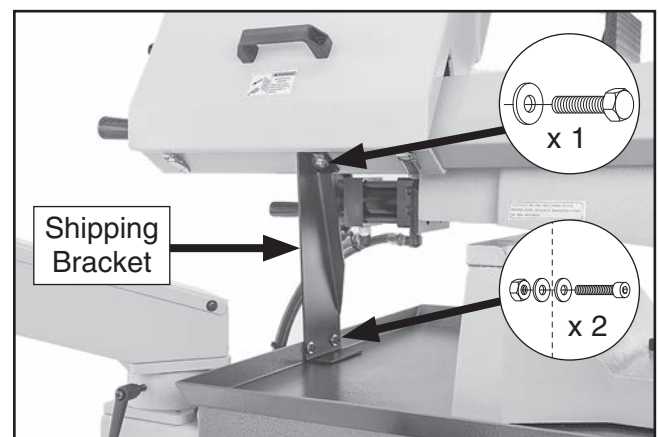


Figure 13. Shipping bracket.



- Slide work stop rod into hole in vise base so scale faces up and rod is flush with back of vise bed casting (see **Figures 14–15**), then tighten front and rear set screws.

Note: The stop rod can be installed on either side of the vise base depending upon the cutting operation. It should be placed on the same side where the workpiece is being cut. Refer to **Work Stop** on **Page 32** for additional details.

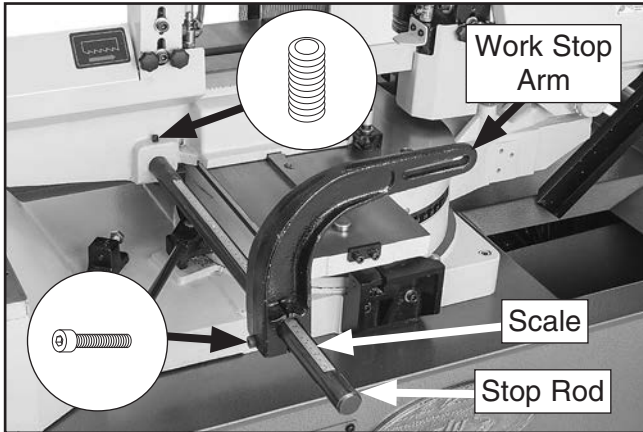


Figure 14. Work stop arm attached to stop rod.

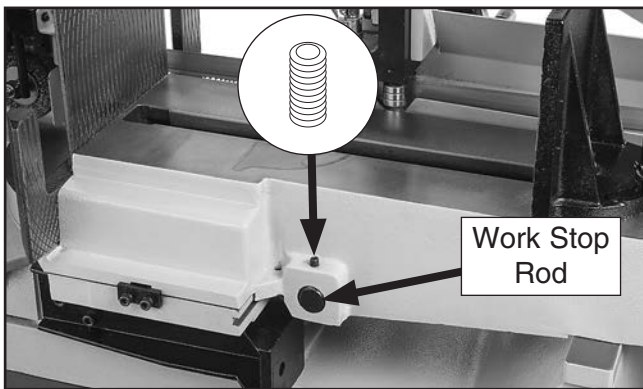


Figure 15. Stop rod flush with vise base casting.

- Slide work stop arm onto stop rod, position it as necessary, then tighten cap screw (see **Figure 16**).
- Insert work stop into arm and secure with knob (see **Figure 16**).

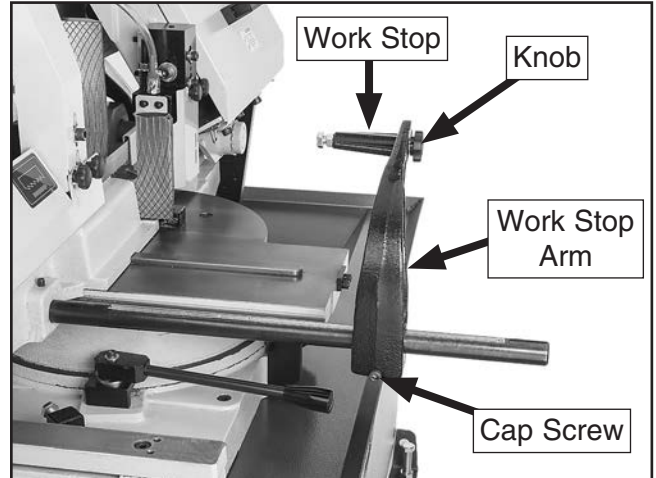


Figure 16. Work stop attached to work stop arm.

- Fit splash guard over lip of base, as shown in **Figure 17**.

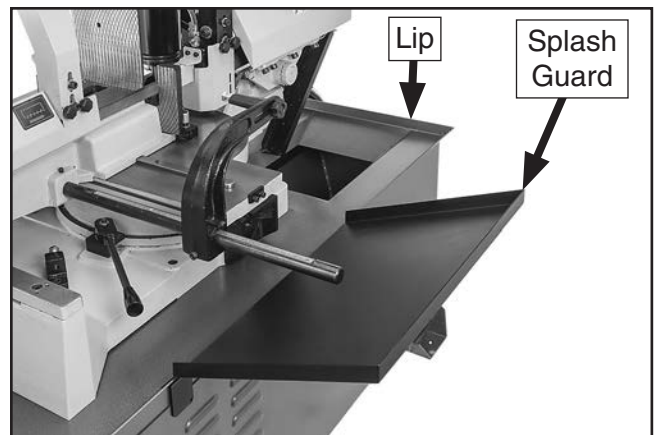


Figure 17. Splash guard installed over lip of base.



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 hydraulic controls work correctly, 2) the motor powers up and runs correctly, and 3) the Emergency Stop button and lower limit switch work correctly.

Refer to **Figure 18** during test run. Each control has an alphabetical callout for identification.

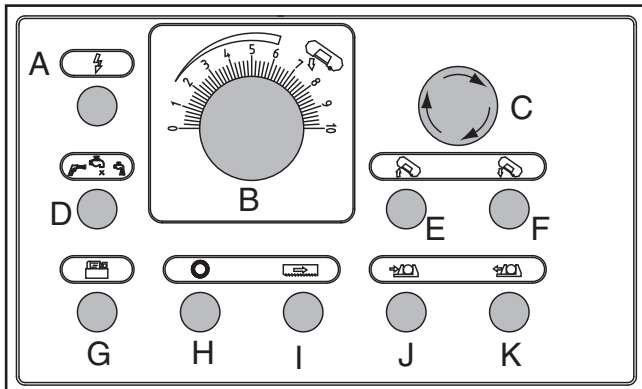


Figure 18. G0812 Control panel.

⚠ WARNING

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

⚠ WARNING

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

To test run machine:

1. Clear all setup tools away from machine.
2. Verify cutting fluid switch (☞, D) is OFF.
3. Fill coolant reservoir with coolant (refer to **Page 48**), if you have not already done so. DO NOT run pump without coolant or you will damage it.
4. Connect machine to power source. Power lamp (☑, A) will illuminate.
5. Push Emergency Stop button (●, C) in, then twist it clockwise so it pops out. When STOP button pops out, switch is reset, and machine is ready for operation (see **Figure 19**).

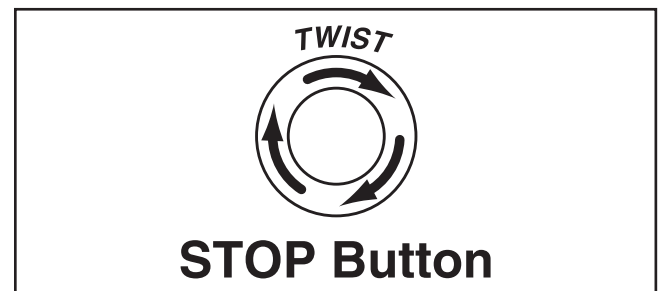


Figure 19. Resetting the switch.

6. Press hydraulic motor button (☑, G). You should hear hydraulic motor (located in machine base) turn **ON**.
7. Check function of saw headstock hydraulics by pressing raise headstock button (☞, E) setting feed dial (B) at a number over "0", then pressing lower headstock button (☞, F).
8. Check function of vise hydraulics by pressing vise open button (☞, K) and vise close button (☞, J).
9. Open coolant valves (see **Figure 20**).

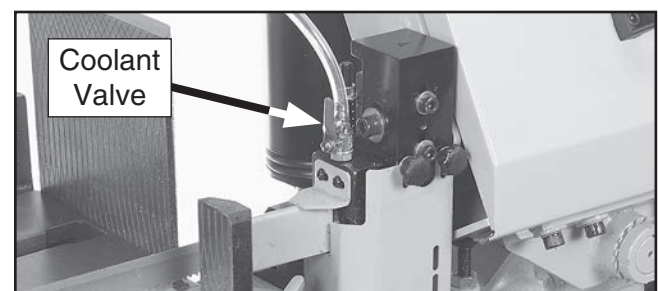















Figure 20. Coolant valve (1 of 2) opened.



10. Check function of cutting fluid pump by turning cutting fluid pump switch (, D) all the way to the right.
11. Verify that cutting fluid flows through nozzles into blade guides, then turn switch **OFF**.
12. Press raise headstock button (, E) and raise headstock several inches, then press vise close (, J) button.

Note: As a safety precaution, saw motor will not start unless vise close button is pressed first.

13. Start blade movement by pressing blade start button (, I) while keeping your finger near Emergency Stop button (, C). The machine should run smoothly and without unusual problems or noises.
14. Press Emergency Stop button (, C) in completely to stop machine.
15. WITHOUT resetting Emergency Stop button, press hydraulic motor button (, G), vise close button (, J), then blade start button (, I). The machine should *not* start.
 - If machine *does not* start, Emergency Stop button safety feature is working correctly. Congratulations! Test Run is complete.
 - If machine *does* start (with Emergency Stop button pushed in), immediately disconnect power. Emergency Stop button is NOT working properly and must be replaced before further using machine.
16. Reset Emergency Stop button, repeat **Steps 12–13**, then press Stop button (, H) to stop machine.
17. WITHOUT pressing Stop button again, press hydraulic motor button (, G), vise close button (, J), then blade start button (, I). The machine should *not* start.
18. Open blade cover and lock in position (see **Figure 21**). This activates blade cover safety switch to prevent saw starting.

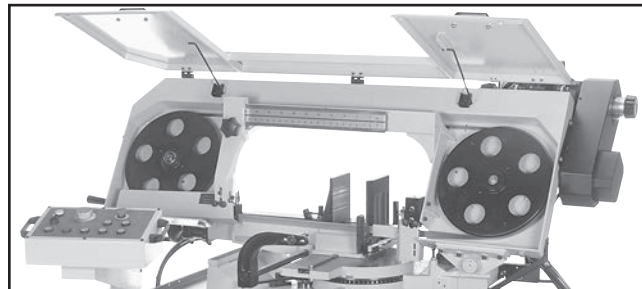



Figure 21. Wheel cover locked in "up" position.

19. While staying safely away from blade, press Stop button again, press hydraulic motor button, vise close button, then start button.
 - If blade *does not* start, blade cover safety switch feature is working correctly.
 - If blade *does* start (with blade cover open), immediately turn machine **OFF** and disconnect power. Blade cover safety switch safety feature is *not* working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.
20. Press Emergency Stop button (, C) in completely, then close wheel cover and secure.
21. Reset Emergency Stop button.
22. Raise headstock up all the way, then start blade. When headstock reaches bottom of travel, the blade should shut off and the headstock should move back to the top of its travel.
 - If blade *does* shut off and headstock moves back to top of its travel, upper limit switch is working correctly.
 - If blade *does not* stop or headstock does *not* move back to top of its travel, upper limit switch is *not* working correctly. This safety feature must work properly before proceeding with regular operations. Refer to **Page 57** to adjust this limit switch.
23. Press Emergency Stop button. **Test Run** is complete.



Recommended Adjustments

The adjustments listed below have been performed at the factory. However, because of the many variables involved with shipping, we recommend that you at least verify the following adjustments to ensure accurate cutting results.

Step-by-step instructions on verifying these adjustments can be found in **SECTION 7: SERVICE ADJUSTMENTS**.

Factory adjustments that should be verified:

1. Downfeed Stop (**Page 54**).
2. Blade Tracking (**Page 28**).
3. Blade Guide Bearings (**Page 55**).
4. Squaring Blade to Table (**Page 56**).

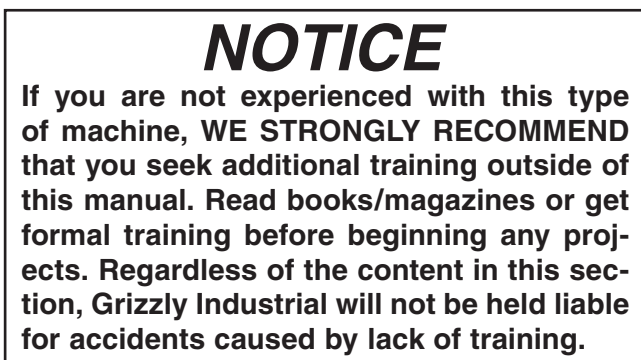
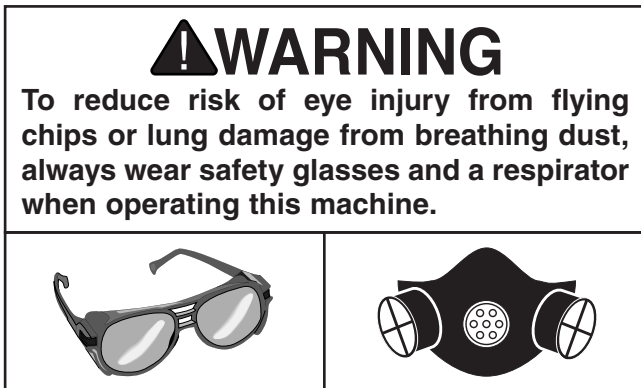


SECTION 4: OPERATIONS

Operation Overview

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

Due to the generic nature of this overview, it is **not** intended to be an instructional guide. To learn more about specific operations, read this entire manual, seek additional training from experienced machine operators, and do additional research outside of this manual by reading "how-to" books, trade magazines, or websites.



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

1. Examines workpiece to make sure it is suitable for cutting.
2. Adjusts headstock angle and vise position, then securely clamps workpiece in vise using manual and hydraulic controls.
3. Sets up splash guard and work stop if needed for operation.
4. Adjusts blade guide arm as close to workpiece as possible, and verifies blade is properly tensioned.
5. Makes sure workpiece and machine are stable and that there are no obstructions in the way of cut.
6. Sets blade speed.
7. Ensures machine has adequate amount of coolant.
8. Puts on safety glasses and respirator.
9. Raises headstock using hydraulic controls.
10. Starts machine and waits for blade to reach full speed, then turns on coolant pump.
11. Turns feed rate dial clockwise, lowers blade into workpiece, and allows machine to complete cut.
12. Once machine has stopped, removes workpiece.
13. When finished, turns machine **OFF**.



Blade Selection

Selecting the right blade for the cut requires a knowledge of various blade characteristics.

Blade Terminology

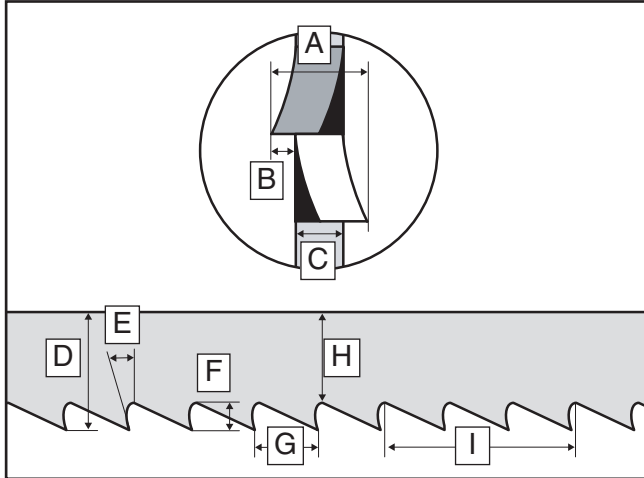


Figure 22. Bandsaw blade terminology.

- A. **Kerf:** The amount of material removed by the blade during cutting.
- B. **Tooth Set:** The amount each tooth is bent left or right from the blade.
- C. **Gauge:** The thickness of the blade.
- D. **Blade Width:** The widest point of the blade measured from the tip of the tooth to the back edge of the blade.
- E. **Tooth Rake:** The angle of the tooth face from a line perpendicular to the length of the blade.
- F. **Gullet Depth:** The distance from the tooth tip to the bottom of the curved area (gullet).
- G. **Tooth Pitch:** The distance between tooth tips.
- H. **Blade Back:** The distance between the bottom of the gullet and the back edge of the blade.
- I. **Blade Pitch or TPI:** The number of teeth per inch measured from gullet to gullet.

Blade Length

Measured by the blade circumference, blade lengths are usually unique to the brand of bandsaw and the distance between the wheels.

Model	Blade Length Range
G0812	149 ³ / ₄ "–150 ¹ / ₄ "

Blade Width

Measured from the back of the blade to the tip of the blade tooth (the widest point).

Model	Blade Width
G0812	1"

Tooth Type

The most common tooth types are described as follows, and illustrated in Figure 23.

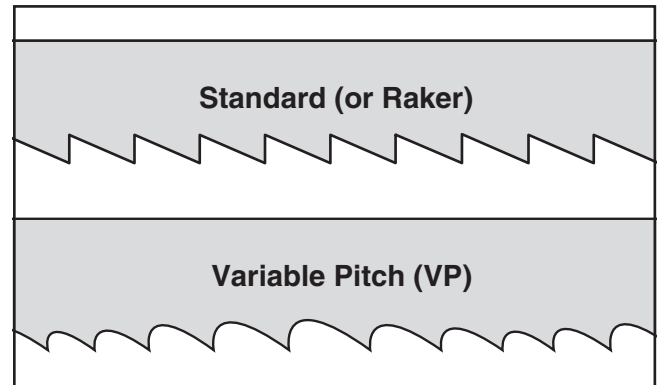


Figure 23. Bandsaw blade tooth types.

Standard or Raker: Equally spaced teeth set at a "0" rake angle. Recommended for all purpose use.

Variable Pitch (VP): Varying gullet depth and tooth spacing, a "0" rake angle, excellent chip removing capacity, and smooth cutting.



Blade Pitch (TPI)

The chart below is a basic starting point for choosing teeth per inch (TPI) for variable pitch blades and standard raker set bi-metal blades/HSS blades. However, for exact specifications of bandsaw blades that are correct for your operation, contact the blade manufacturer.

To select correct blade pitch:

1. Measure material thickness. This measurement is distance from where each tooth enters workpiece to where it exits workpiece.
2. Refer to "Material Width/Diameter" row of blade selection chart in **Figure 24**, and read across to find workpiece thickness you need to cut.

3. Refer to "Material Shapes" row and find shape of material to be cut.
4. In applicable row, read across to right and find box where row and column intersect. Listed in the box is minimum TPI recommended for variable tooth pitch blades.

The TPI range is represented by a "/" between numbers. For example, 3/4 TPI is the same as 3–4 TPI.

The "Cutting Speed Rate Recommendation" chart, which is located on the machine just below the Blade Pitch Chart, offers guidelines for various metals, given in feet per minute (FPM). Refer to **Blade Speed Chart** section on **Page 30** for further details.

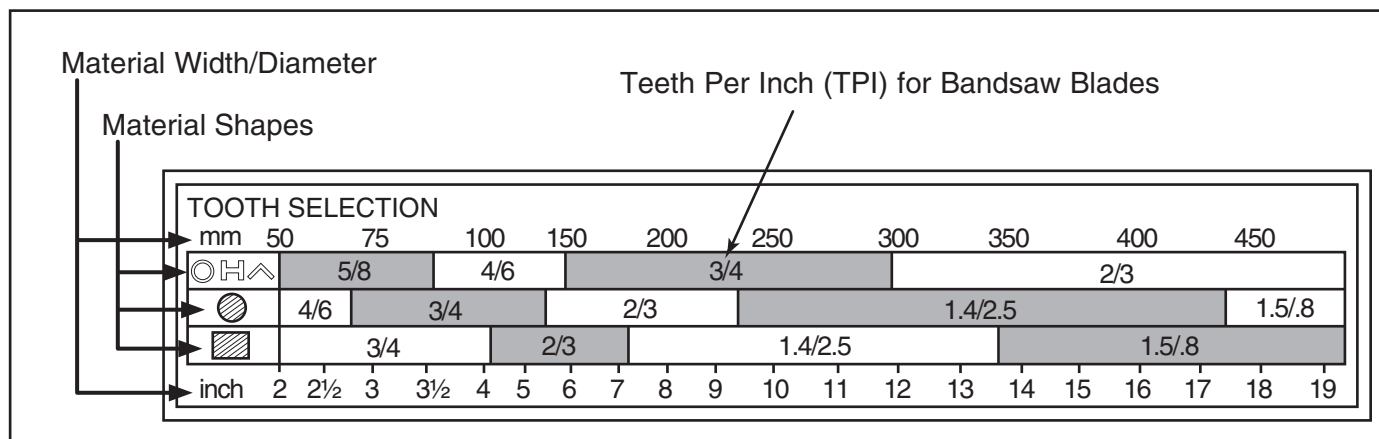



Figure 24. General guidelines for blade selection and speed chart.



Changing Blade



⚠ CAUTION
All saw blades are dangerous and may cause personal injury. To reduce the risk of being injured, wear leather gloves when handling and uncoiling saw blades.

Items Needed	Qty
Leather Gloves	1
Assistant	1
Phillips Head Screwdriver #2	1

Blades should be changed when they become dull, damaged, or when you are using materials that require a blade of a certain type or tooth count.

To change blade on bandsaw:

1. Raise headstock about six inches.
2. DISCONNECT MACHINE FROM POWER!
3. Open wheel access cover and secure in "up" position so struts lock into end of grooves on brackets shown in **Figure 25**.

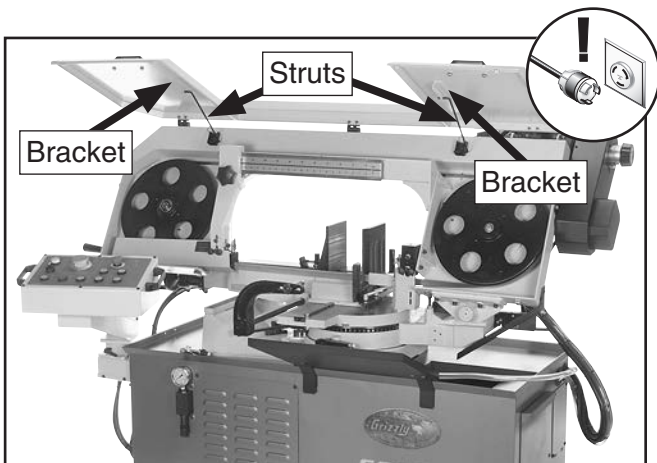


Figure 25. Wheel cover secured in "up" position.

4. Loosen knob on left blade-guide arm and move arm until it contacts stop pin on scale, as shown in **Figure 26**. Clean cover and clean out all chips and shavings.

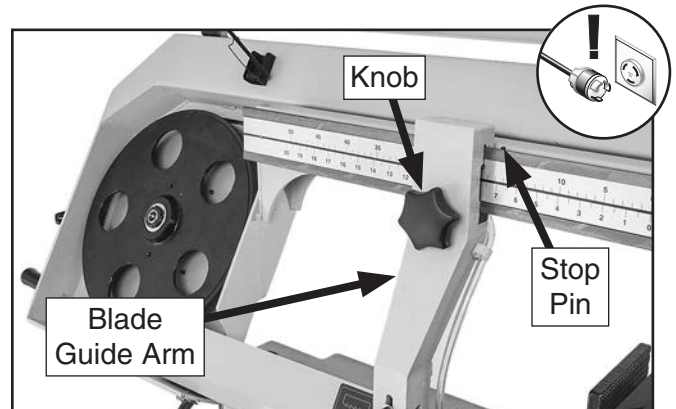


Figure 26. Left guide arm positioned as far right as possible.

5. Remove guards on both blade guides, and remove wire wheel on right guard (see **Figure 27**).
6. Loosen blade tension handwheel (see **Figure 27**), and slip blade off of wheels.
7. With help of an assistant, install new blade through both blade guide bearings shown in **Figure 27**, then around wheels.

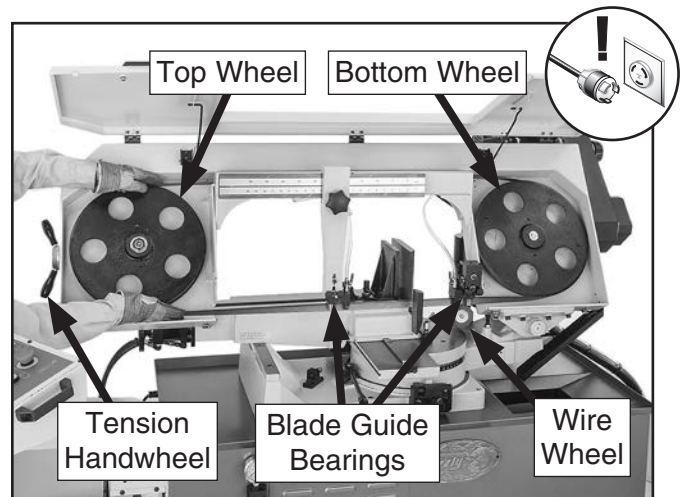


Figure 27. Installing new blade.



Note: It is sometimes possible to flip the blade inside out, in which case the blade will be installed in the wrong direction. After installing, check to make sure the blade teeth face the same direction as blade travel (see **Figure 28**). Some blades will have a directional arrow as a guide.

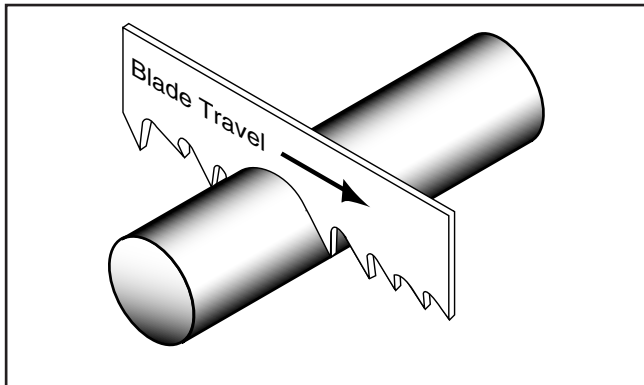


Figure 28. Example of blade cutting direction.

8. Use one hand to hold blade in place, then work your way around the blade, making adjustments so back of blade lightly touches shoulder of wheels, as shown in **Figure 29**.

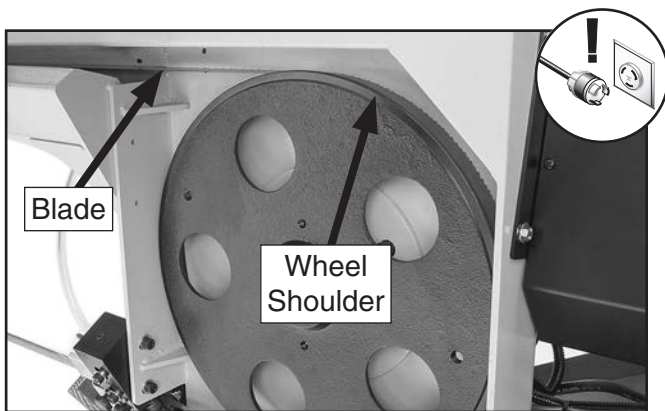


Figure 29. Blade installed on wheels.

9. Complete blade change by using **Tensioning & Tracking Blade** procedure that follows this section.
10. Re-install wheel brush and blade guards, then close and secure wheel cover. Ensure guards do not touch blade.
11. Reposition left blade guide (refer to **Blade Guides** on **Page 37** for details).
12. Adjust blade tension to 25,000 to 30,000 PSI (refer to next section for details).

Tensioning & Tracking Blade

Proper blade tension is essential to long blade life, straight cuts, and efficient cutting. The Model G0812 features a blade tension indicator to assist you with blade tensioning.

The three major signs of incorrect blade tension are: 1) The blade stalls in the cut and slips on the wheels, 2) the bandsaw does not make straight cuts, and 3) the blade frequently breaks.

NOTICE

Loosen blade tension at the end of each day to prolong blade life.

Tensioning Blade

Rotate blade tension handwheel (see **Figure 30**) clockwise to tension blade and move tip of indicator to correct PSI setting on graduated scale that corresponds with blade type being used.

For *bi-metal* blades, like the one supplied with your machine, set blade tension between 30,000 and 35,000 PSI (start low and adjust up from there only as necessary for accurate cutting results).

For *carbon* blades, set blade tension at 20,000 PSI.

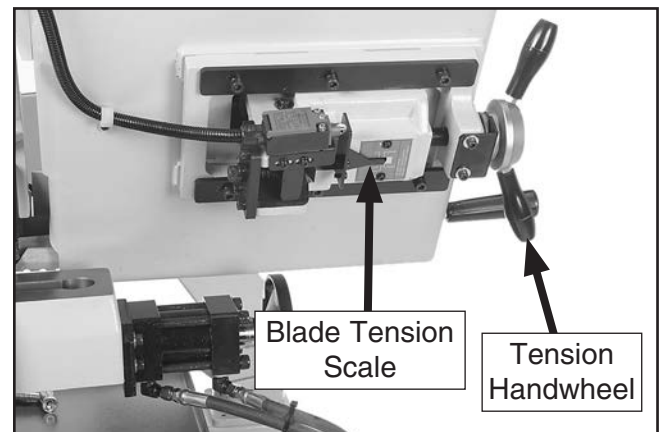


Figure 30. Location of blade tension handwheel and blade tension indicator.



Tracking Blade

The blade tracking has been properly set at the factory. The tracking will rarely need to be adjusted if the bandsaw is used and maintained properly. The blade is tracking properly when the back of the blade lightly touches the shoulder of both wheels during operation (see **Figure 31**).

Tip: One way to gauge whether the blade is tracking properly is to DISCONNECT MACHINE FROM POWER and slide the end of a fingernail between the end of the blade and the shoulder, with the machine. If there is just enough space to do that, the blade tracking is properly set.

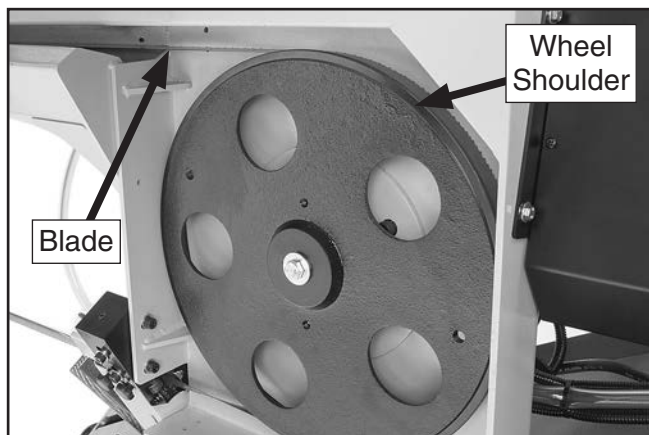


Figure 31. Location of wheel shoulder.

To adjust blade tracking, rotate tracking cap screw in **Figure 32** until the blade is tracking properly.

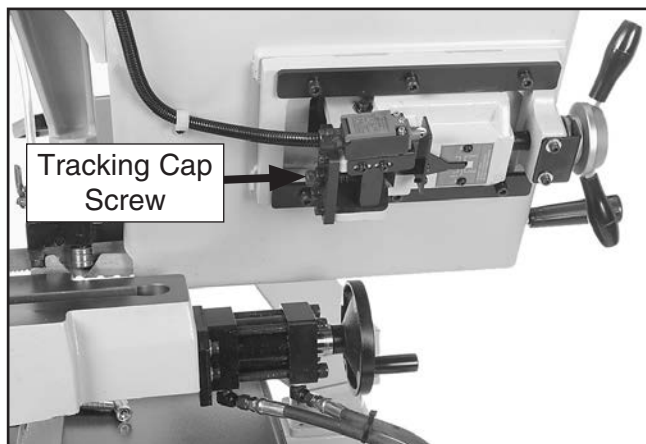


Figure 32. Location of blade tracking cap screw.

Blade Breakage

Many conditions may cause a bandsaw blade to break. Some of these conditions are unavoidable and are the natural result of the stresses placed on the bandsaw; other causes of blade breakage are avoidable.

The most common causes of avoidable blade breakage are:

- Faulty alignment or adjustment of the blade guides.
- Feeding blade through the workpiece too fast.
- Dull or damaged teeth.
- Improperly-tensioned blade.
- Left blade guide assembly set too high above the workpiece. Adjust left blade guide assembly as close to workpiece as possible.
- Using a blade with a lumpy or improperly finished braze or weld.
- Continuously running the bandsaw when not in use.
- Leaving the blade tensioned when not in use.
- Using the wrong blade pitch (TPI) for the workpiece thickness. The general rule of thumb is to have no fewer than three teeth in contact with the workpiece when starting a cut and at all times during cutting.



Blade Care & Break-In

Blade Care

To prolong blade life, always use a blade with the proper width, set, type, and pitch for each application. Maintain the appropriate feed rate, feed pressure, and blade speed, and pay attention to the chip characteristics (Refer to **Blade Speed Chart** on **Page 30** and **Chip Inspection Chart** on **Page 31**). Keep your blades clean, since dirty or gummed up blades pass through the cutting material with much more resistance than clean blades, causing unnecessary heat.

Blade Break-In

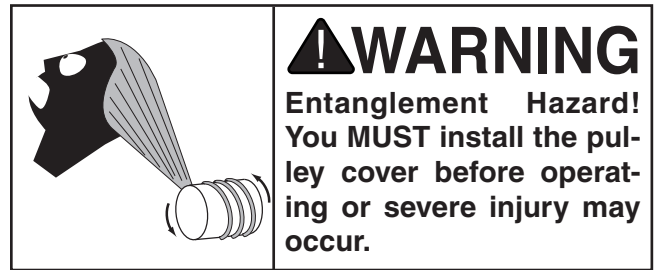
The tips and edges of a new blade are extremely sharp. Cutting at too fast of a feed rate or too slow of a blade speed can fracture these tips and edges, quickly dulling the blade. Properly breaking in a blade allows these sharp edges to wear without fracturing, thus keeping the blade sharp longer. Below is a typical break in procedure. For aftermarket blades, refer to the manufacturer's break-in procedure to keep from voiding the warranty.

Use the **Chip Inspection Chart** on **Page 31** as a guide to evaluate the chips and ensure that the optimal blade speed and feed rate are being used.

To properly break-in new blade:

1. Choose correct speed for blade and material type.
2. Reduce feed pressure by half for first 50–100 in² of material cut.
3. To avoid twisting blade when cutting, adjust feed pressure when total width of blade is in cut.

Blade Speed



Model G0812 blade speeds: 95–380 FPM.

During operation, pay attention to the chips being produced from the cut and compare them to the **Chip Inspection Chart** on **Page 31** to properly set the downfeed rate.

NOTICE

Only change speeds while the motor is running. Changing speeds when machine is OFF may result in damage to your machine. Always make sure belt guard is in use.

To change blade speeds:

1. Turn bandsaw **ON** and allow motor to reach full speed.
2. Rotate speed adjustment knob (see **Figure 33**) clockwise to decrease blade speed and counterclockwise to increase blade speed.

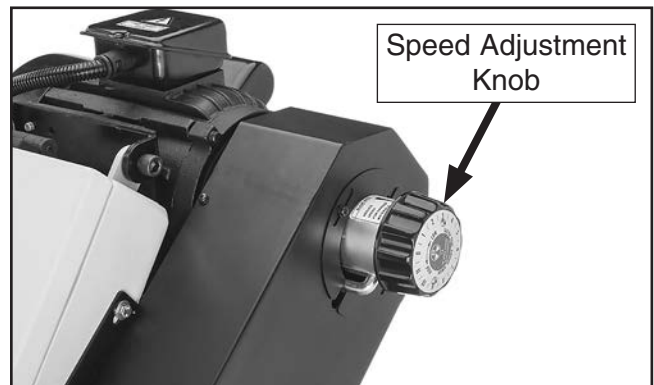


Figure 33. Speed adjustment knob location.



Blade Speed Chart

The chart in **Figure 34** offers blade speed guidelines for various metals, given in feet per minute (FPM) and meters per minute (M/Min). Choose the closest available speed on the machine, then adjust the feed rate as necessary, using the appearance of the chips produced as a guide. Refer to the **Chip Inspection Chart** that follows for recommendations on adjusting feed rate or blade speed based on the appearance of the chips produced.

Material	Speed FPM (M/Min)	Material	Speed FPM (M/Min)	Material	Speed FPM (M/Min)	Material	Speed FPM (M/Min)
Carbon Steel	196~354 (60) (108)	Tool Steel	203 (62)	Alloy Steel	111~321 (34) (98)	Free Machining Stainless Steel	150~203 (46) (62)
Angle Steel	180~220 (54) (67)	High-Speed Tool Steel	75~118 (25) (36)	Mold Steel	246 (75)	Gray Cast Iron	108~225 (33) (75)
Thin Tube	180~220 (54) (67)	Cold-Work Tool Steel	95~213 (29) (65)	Water-Hardened Tool Steel	242 (74)	Ductile Austenitic Cast Iron	65~85 (20) (26)
Aluminum Alloy	220~534 (67) (163)	Hot-Work Tool Steel	203 (62)	Stainless Steel	85 (26)	Malleable Cast Iron	321 (98)
Copper Alloy	229~482 (70) (147)	Oil-Hardened Tool Steel	203~213 (62) (65)	CR Stainless Steel	85~203 (26) (62)	Plastics & Lumber	220 (67)

Figure 34. Dry-cutting blade speed chart.



Chip Inspection Chart

The best method for choosing the cutting speed and feed rate for a cutting operation is to inspect the chips created by the cut. These chips are indicators of what is commonly referred to as the "chip load." Refer to the chip inspection chart below to evaluate chip characteristics and determine whether to adjust feed rate/pressure, blade speed, or both.









Chip Appearance	Chip Description	Chip Color	Blade Speed	Feed Rate/Pressure	Other Actions
	Thin & Curled	Silver	Good	Good	
	Hard, Thick & Short	Brown or Blue	Increase	Decrease	
	Hard, Strong & Thick	Brown or Blue	Increase	Decrease	
	Hard, Strong, Curled & Thick	Silver or Light Brown	Good	Decrease Slightly	Check Blade Pitch
	Hard, Coiled & Thin	Silver	Increase	Decrease	Check Blade Pitch
	Straight & Thin	Silver	Good	Increase	
	Powdery	Silver	Decrease	Increase	
	Coiled, Tight & Thin	Silver	Good	Decrease	Check Blade Pitch

Figure 35. Chip inspection chart.



Feed Rate

The speed at which the saw blade will cut through a workpiece is controlled by blade type, feed rate, and feed pressure. The feed rate is controlled by the feed rate dial on the control panel.

Note: If a lubricant is used on the cut, the feed rate can be increased by approximately 15%.

To set feed rate:

1. Raise headstock to highest position.
2. Adjust feed rate dial shown in **Figure 36** to desired feed rate from 0 (slowest) to 10 (fastest).



Figure 36. Feed rate dial.

3. Proceed with cutting operations.
4. Examine metal chips created from cutting operation, and adjust feed rate as necessary for optimum cutting performance (refer to **Chip Inspection Chart** on **Page 31** for more details).

Work Stop

The Model G0812 is equipped with a work stop for repetitive cutting operations up to 16" long.

Tools Needed	Qty
Hex Wrench 4mm.....	1
Hex Wrench 6mm.....	1

Setting Work Stop

1. Lower headstock completely.
2. DISCONNECT MACHINE FROM POWER!
3. Loosen set screws shown in **Figures 37–38**.

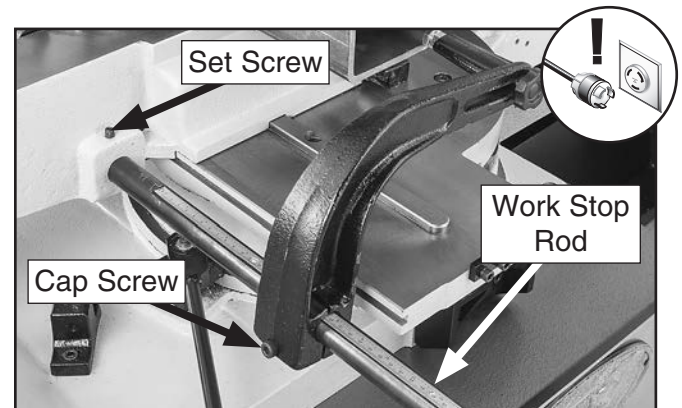


Figure 37. Location of front set screw for setting stop rod.

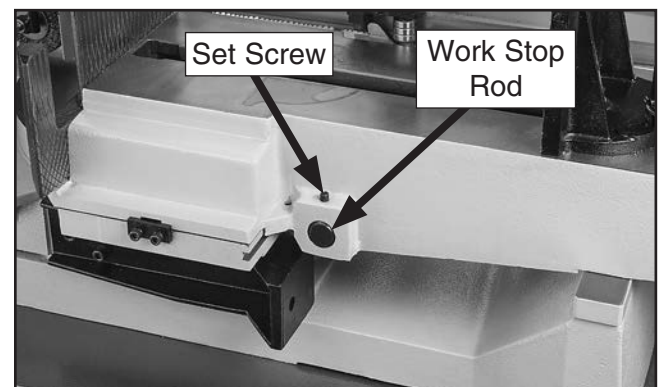


Figure 38. Location of rear set screw for setting stop rod flush with vise bed casting.

4. Slide work stop rod into hole in base on side required for cutting workpiece.
5. Adjust work stop rod so it is flush with back of vise bed casting, as shown in **Figure 38**.



- Loosen cap screw shown in **Figure 37** on **Page 32**, and align front of work stop arm with "0" mark on stop rod scale, as shown in **Figure 39**.
- Adjust hex bolt on work stop to just touch blade, then tighten jam nut against work stop (see **Figure 39**).

Note: The work stop rod will need to be re-calibrated any time it is removed or repositioned on the opposite side of the machine.

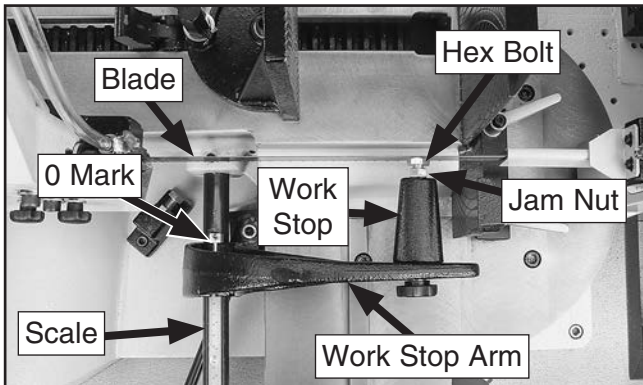


Figure 39. Top view of work stop rod aligned with "0" on scale and hex bolt touching blade.

Using Work Stop

- Loosen cap screw shown in **Figure 40**, and adjust work stop arm relative to depth of cut indicated on stop rod scale.
- Loosen work stop knob (see **Figure 40**), and adjust horizontal position of hex bolt relative to end of workpiece, then tighten cap screw and knob.

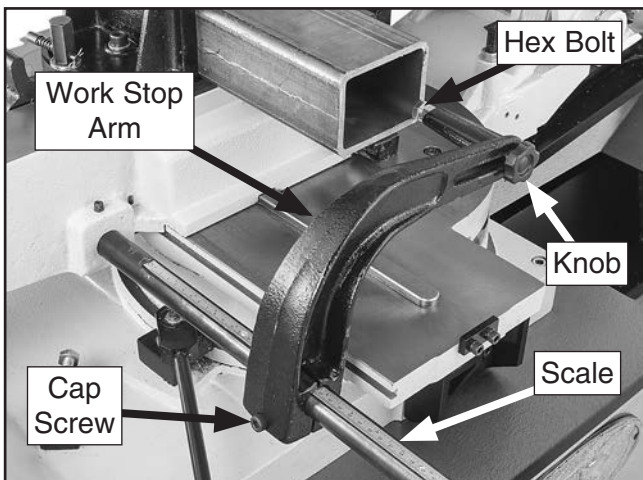


Figure 40. Work stop set for repetitive cutting operation.

Repositioning Work Stop

- To use work stop on opposite side of machine for straight or angle cuts (see **Figure 41**), remove work stop arm from stop rod, then remove stop rod.

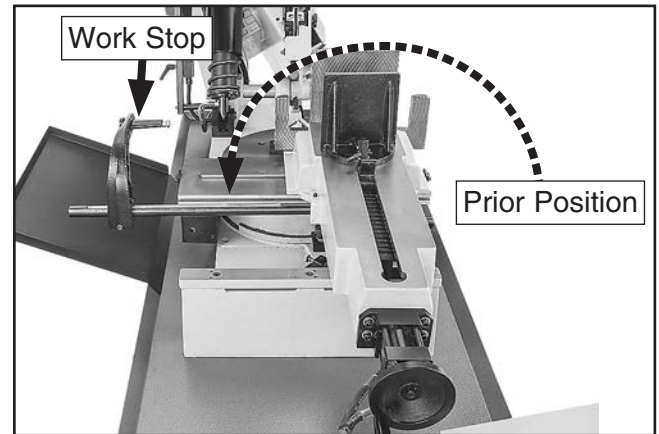


Figure 41. Work stop repositioned.

- Reposition vise as necessary for operation (refer to **Vise** on **Page 36**).
- Follow **Steps 1–4** in **Setting Work Stop** on **Page 32** to properly re-install stop rod.
- Re-install work stop onto work stop arm so hex bolt and jam nut face blade, re-install work stop arm onto stop rod, then follow **Steps 5–6** in **Setting Work Stop**.



Vise

⚠ CAUTION

Always turn saw **OFF** and allow blade to come to complete stop before using vise! Failure to follow this caution may lead to injury.

The Model G0812 vise can be positioned on either side of the machine to perform a variety of straight or angle cuts. After the movable vise jaw is manually positioned near the workpiece, the vise open/close buttons can be used to quickly release and re-clamp the workpiece hydraulically during repetitive operations. The vise must be positioned to the left side for right angle cuts or the right side for left angle cuts.

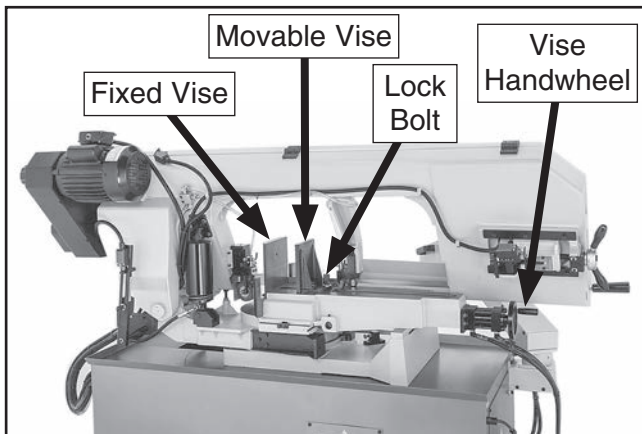


Figure 42. Location of vise components.

Tool Needed	Qty
Open-End Wrench 19mm.....	1

Changing Vise Position

1. Remove work stop, work stop rod, and splash guard.
2. Press hydraulic motor button (☒), then press raise headstock button (☑) to raise headstock to maximum height.
3. DISCONNECT MACHINE FROM POWER!
4. Loosen two vise locks at base of vise (see Figure 43).

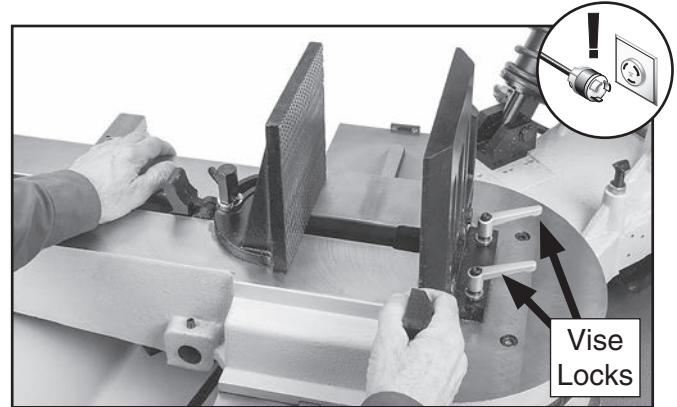


Figure 43. Location of vise base locks.

5. Pull vise all the way to opposite side of base and tighten vise locks (see Figure 44).
6. Re-install splash guard and work stop on side of vise base opposite of vise, as shown in Figure 44.

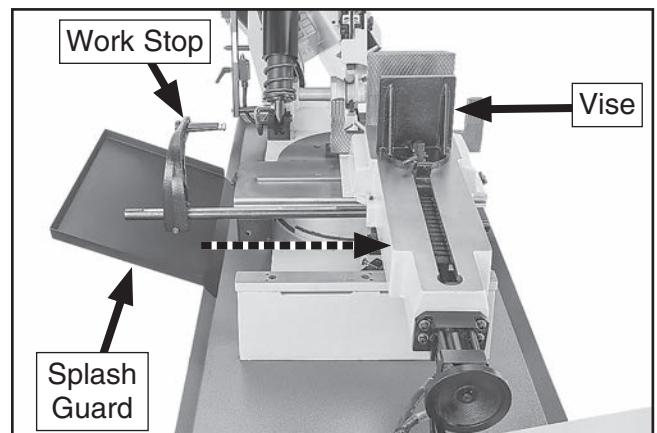


Figure 44. Vise positioned to right.



Using Vise

1. DISCONNECT MACHINE FROM POWER!
2. Rotate vise handwheel (see **Figure 45**) counterclockwise 1/2-turn to relieve any pressure on vise jaw.
3. Flip quick-release latch (see **Figure 45**) up to disengage it from vise leadscrew.

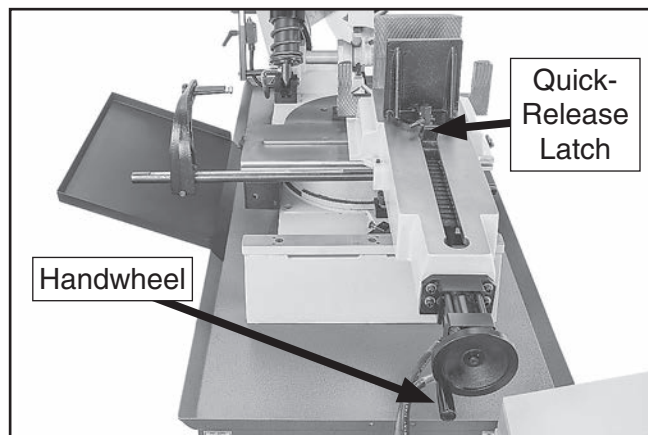






Figure 45. Quick-release latch location.

4. Pull or push jaw in desired direction, as required to accommodate workpiece.
5. Insert workpiece between jaws and engage latch with leadscrew when vise is close to workpiece. Use handwheel to move vise jaw until it just contacts workpiece. If necessary, use a stand to support long workpieces to prevent tipping.
6. Reconnect machine to power.
7. Press hydraulic motor button ().
8. Use vise close button () to clamp workpiece. Between cuts, use vise open button () to release and reposition/reload a new workpiece.

Note: As a safety precaution, the vise close button () must be pressed and saw headstock must be raised before saw motor and blade will start.

Note: **Figure 46** shows correct methods of holding different workpiece shapes.

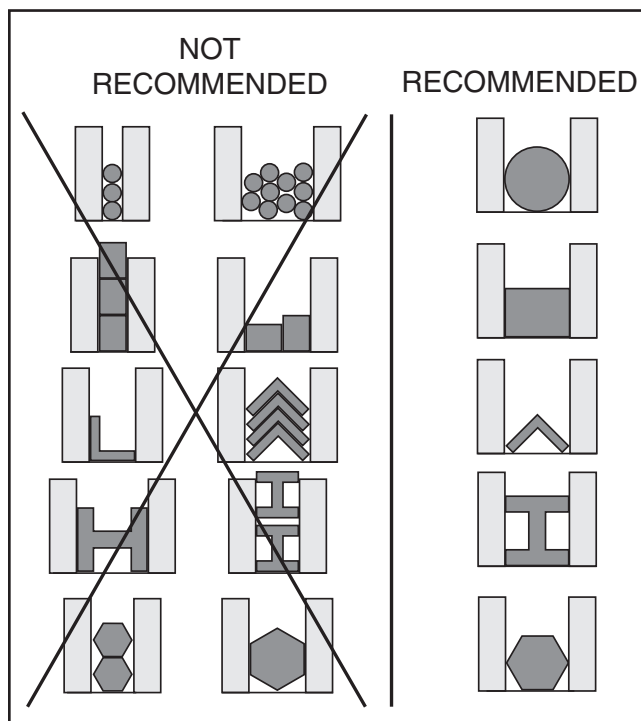


Figure 46. Example of workholding options by material shape.

Using Movable Vise

1. Loosen lock bolt shown in **Figure 47** on movable vise so jaw can match angle of workpiece and fixed jaw.

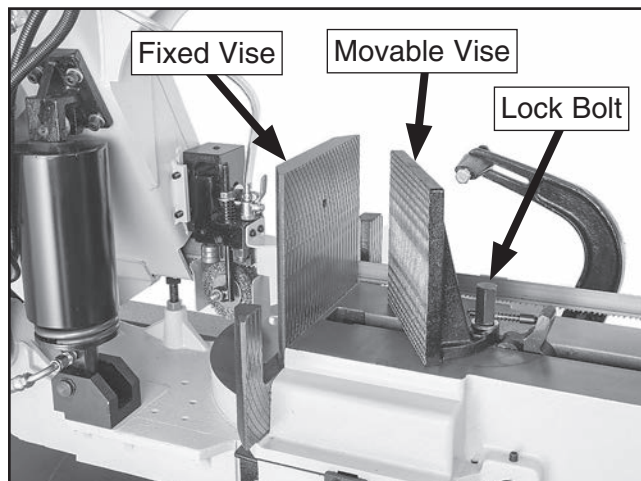


Figure 47. Movable vise positioned for angled workpiece.

2. Tighten movable vise against workpiece, then tighten lock bolt.



Angle Cuts

The headstock can be swiveled to cut angles from 0°–60° to the left and 0°–45° to the right for a total swing of 105°. When making cuts to the right, the vise should remain in the left position. When making cuts to the left, the vise should be in the right position.

0°–45° Cuts to Right

1. Raise headstock to highest position.
2. DISCONNECT MACHINE FROM POWER!
3. Rotate flip-stop out completely, as shown in **Figure 48**.
4. Rotate swivel lock handle (see **Figure 48**) toward base, then rotate headstock *counter-clockwise* to desired angle using angle scale.

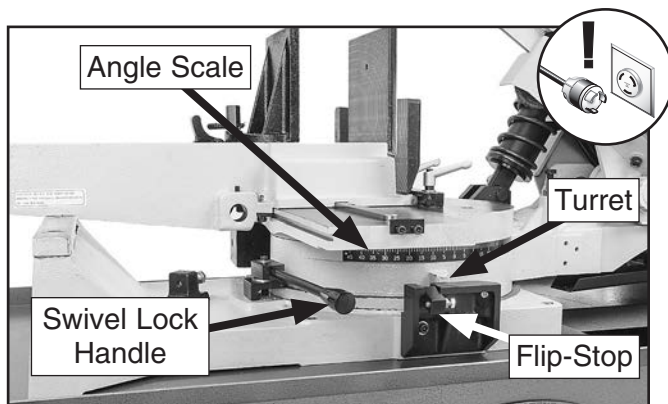


Figure 48. Swivel base controls for cuts to right.

5. Slide vise to left position and secure (refer to **Changing Vise Position** on **Page 34**). Headstock should now look similar to **Figure 49**.

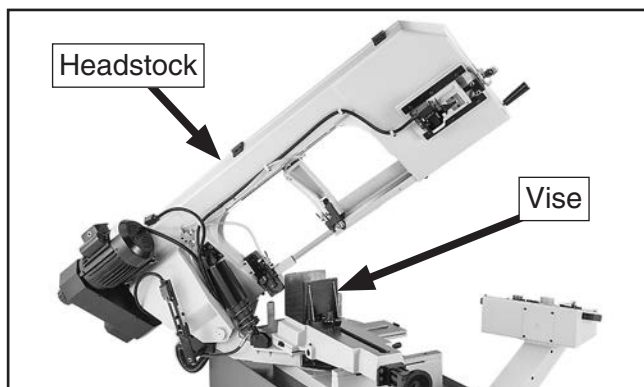


Figure 49. Headstock positioned for cuts to right.

6. Move saw through its full range of motion to make sure blade will not contact vise or control panel during operation, then tighten swivel lock handle and secure vise.
7. Install splash guard (and work stop if desired) on right side.

0°–60° Cuts to Left

1. Raise headstock to highest position.
2. DISCONNECT MACHINE FROM POWER!
3. Rotate flip-stop out completely, as shown in **Figure 51** on **Page 37**.
4. Rotate swivel lock handle (see **Figure 48**), toward base, then rotate headstock *clockwise* to desired angle, using angle scale as a guide.
5. Slide vise to right position and secure (refer to **Changing Vise Position** on **Page 34**). Headstock should look similar to **Figure 50**.

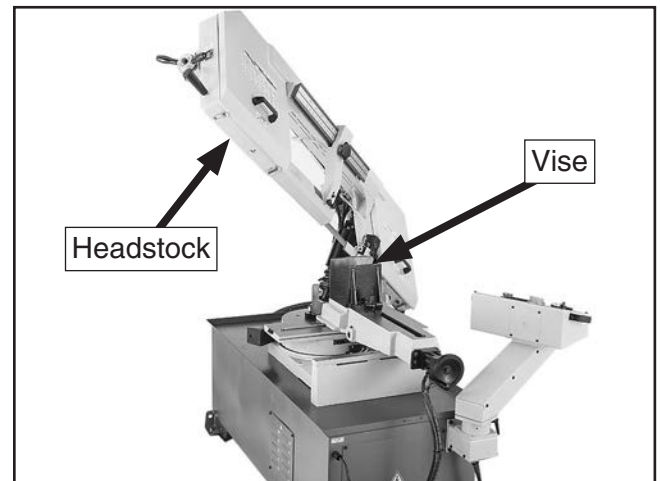


Figure 50. Headstock positioned for cuts to left.

6. Move saw through its full range of motion to make sure the blade will not contact vise during operation, then tighten swivel lock handle and secure vise.
7. Install splash guard (and work stop if desired) on left side.



Returning to 0° (90°) Cuts

1. DISCONNECT MACHINE FROM POWER!
2. Loosen swivel lock handle (see **Figure 51**) and rotate headstock slightly past "0" on angle scale.
3. Rotate flip-stop back in and move headstock until turret (see **Figure 51**) contacts flip-stop bolt, then tighten swivel lock handle.

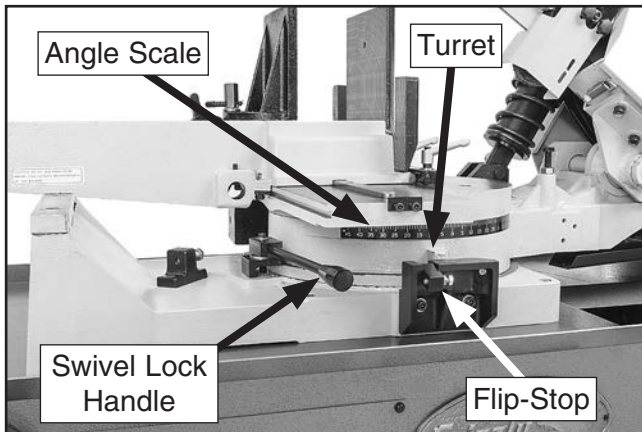


Figure 51. Controls for returning headstock to 90° position.

Blade Guides

The left blade guide should be as close to the workpiece as possible. This will help ensure straight cuts by keeping the blade from twisting and drifting off the cut line.

To adjust the left blade guide, loosen the knob shown in **Figure 52** and slide left blade guide as close to the workpiece as possible, then tighten the knob.

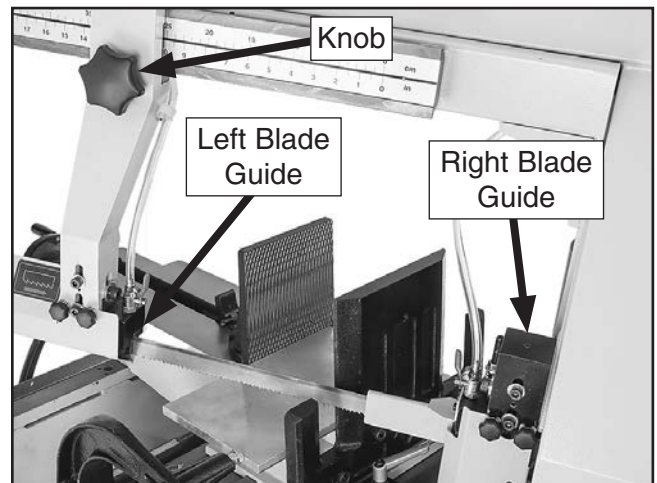


Figure 52. Blade guides.

The right blade guide has a wire brush that makes contact with the blade to help clear away chips and extend blade life (see **Figure 53**).

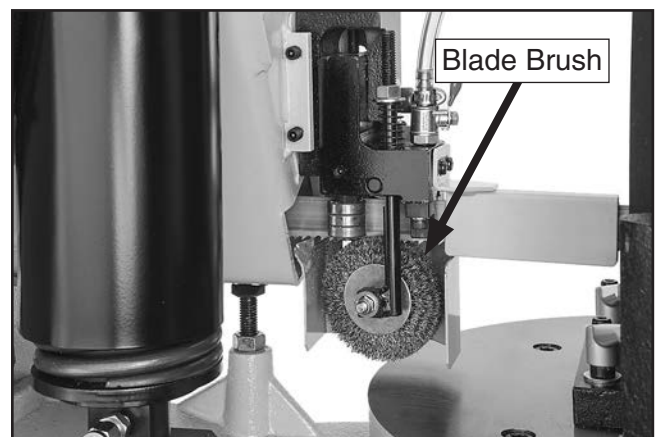


Figure 53. Blade brush.



Coolant

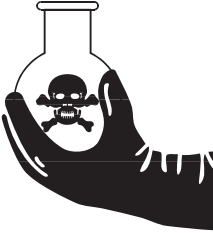
While simple in concept and function, many issues must be taken into account to find and use the correct coolant. Always follow all product warnings and contact the fluid manufacturer for unanswered questions.

Use the information below as a guideline to choose the appropriate coolant. Always refer to the coolant manufacturer for specific application and safety information:


- For cutting low alloy, low carbon, and general-purpose category metals with a bi-metal blade—use a water soluble coolant.
- For cutting stainless steels, high carbon, and high alloy metals, brass, copper and mild steels—use "Neat Cutting Oil" (commonly undiluted mineral oils) that have extreme pressure additives (EP additives).
- For cutting cast iron, coolant is not recommended.

Remember: Too much flow at the coolant nozzles will make a mess and can make the work area unsafe by creating a slipping hazard; and not enough fluid at the cut will heat the blade, causing the blade teeth to load up and break.



Tip: Using a refractometer or hydrometer to replenish water in water-based coolant can extend the life of blades and coolant, and ensure consistent cutting results.

	<p>!WARNING BIOLOGICAL AND POISON HAZARD! Use proper personal protection equipment when handling coolant and follow federal, state, and fluid manufacturer requirements to properly dispose of coolant.</p>
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Coolant System



	<p>!WARNING FIRE HAZARD! DO NOT cut magnesium when using oil-water solutions as coolant! Always use coolant intended for magnesium. Water in the solution could cause a magnesium-chip fire.</p>
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This bandsaw has a built-in coolant system that can extend the life of your bandsaw blades by lowering the temperature of the blade and workpiece if used properly when cutting.

The cutting fluid pump has two modes controlled by the switch on the control panel. The low-pressure setting () is used to supply cutting fluid directly to the blade through the fluid nozzles. The high-pressure setting () is used to supply high pressure to the auxiliary sprayer for rinsing metal chips into the reservoir. See **Coolant** section for additional information.

Using Coolant System

Add coolant (refer to **Adding Coolant** on **Page 48**) before using coolant system.

Turn cutting fluid pump switch () to low pressure position (), and open coolant valves to control flow of cutting fluid (see **Figure 54**).

Note: *Too much flow at the fluid nozzle will make a mess and can make the work area unsafe; and not enough fluid at the cut will overheat the blade, causing the blade teeth to load up and break.*

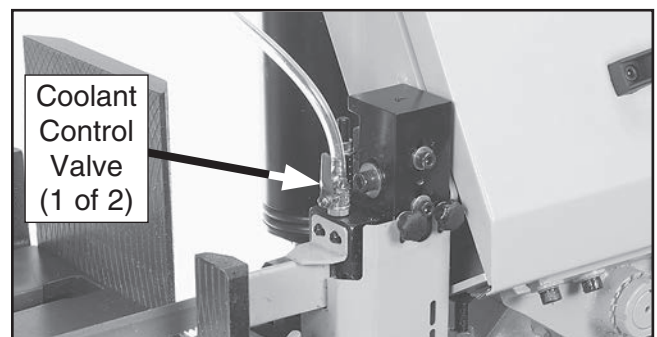


Figure 54. Coolant valve (1 of 2) open.



Important: Monitor coolant level frequently to keep system working properly. DO NOT let coolant level fall below halfway level on filter screen (see **Figure 55**).

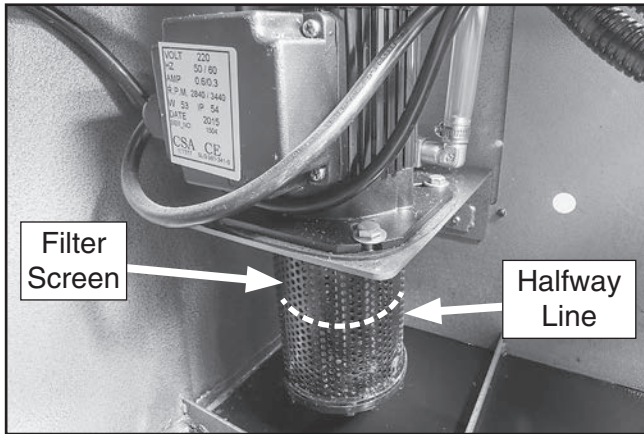


Figure 55. Halfway level on filter screen.

Using Spray Gun

1. Position splash guard on side of base near location of spraying operation.
2. Close coolant control valves.
3. Turn coolant pump switch to high-pressure setting (H) **ON**. Coolant will now spray when the trigger is pressed (see **Figure 56**).





Figure 56. Example of spray gun in use.

Operation Tips

The following tips will help you safely and effectively operate your bandsaw, and help you get the maximum life out of your saw blades.

Tips for horizontal cutting:

- Use the work stop to quickly and accurately cut multiple pieces of stock to the same length.
- Clamp the material firmly in the vise jaws to ensure a straight cut through the material.
- Use vise close () and vise open () buttons to speed production.
- Let the blade reach full speed before engaging the workpiece. Never start a cut with the blade in contact with the workpiece, and do not start a cut on a sharp edge.
- Chips should be curled and silvery. If the chips are thin and powder like, increase your feed rate.
- Burned chips indicate a need to reduce your blade speed.
- Wait until the blade has completely stopped before removing the workpiece from the vise, and avoid touching the cut end—it could be very hot!
- Support long pieces so they won't fall when cut, and flag the ends to alert passers-by of potential danger.
- Adjust left blade guide as close as possible to the workpiece to minimize side-to-side blade movement.
- Use coolant when possible to increase blade life.

NOTICE

Loosen blade tension at the end of each day to prolong blade life.



Workpiece Inspection

Some metal workpieces are not safe to cut with a metal cutting bandsaw; instead, a different tool or machine should be used.

Before cutting, inspect the material for any of the following conditions and take the necessary precautions:

- **Small or Thin Workpieces:** Small or thin workpieces may be damaged during cutting—avoid cutting these workpieces if possible. If you must cut a small or thin workpiece, attach it to or clamp it between larger scrap pieces that will both support the workpiece through the cut. Some thin sheet metals will not withstand the forces from this bandsaw during cutting; instead, use a shear, nibblers, or sheet metal nippers to cut these pieces.
- **Unstable Workpieces:** Workpieces that cannot be properly supported or stabilized with the vise should not be cut on this bandsaw. Examples are chains, cables, workpieces with internal or built-in moving or rotating parts, etc.
- **Material Hardness:** Always factor in the hardness of the metal before cutting it. Hardened metals will take longer to cut, may require lubrication, and may require a different type of blade in order to efficiently cut them.
- **Tanks, Cylinders, Containers, Valves, Etc:** Cutting into containers that are pressurized or contain gasses or liquids can cause explosions, fires, caustic burns, or machine damage. Avoid cutting any of these types of containers unless you have verified that the container is empty and it can be properly supported during a cut.
- **Magnesium:** Pure magnesium burns easily. Cutting magnesium with a dull blade can create enough friction to ignite the small magnesium chips. Avoid cutting magnesium if possible.



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.

Variable Pitch Bi-Metal Blades

T27644—150" x 1 x .035 3–4 Variable Pitch

T27645—150" x 1 x .035 4–6 Variable Pitch

T27646—150" x 1 x .035 5–8 Variable Pitch

T27647—150" x 1 x .035 6–10 Variable Pitch

T27648—150" x 1 x .035 8–12 Variable Pitch

T27649—150" x 1 x .035 10–14 Variable Pitch



Figure 57. Typical variable pitch bi-metal cutting blade.

D2271—Shop Fox® Roller Table

Use this versatile roller table wherever you need extra workpiece support.



Figure 58. D2271 Shop Fox® Roller Table.

H9240—Water Soluble Machining Oil

Rustlick water soluble machining oil contains effective chlorinated E.P. additive to provide excellent tool life. Guaranteed to protect neoprene seals. Great for general purpose or heavy duty applications. Can be used on all metals except titanium.



Figure 59. H9240 Rustlick Machining Oil.

H6572—Grease-Resistant Mat 3' x 3' x 3/4"

These Black Grease Resistant Mats are engineered for proper back and leg support, using super-tough virgin rubber material. The non-slip surface features a modular interlock design, which enables the user to create a custom floor. Mats measure 36" x 36" x 3/4".

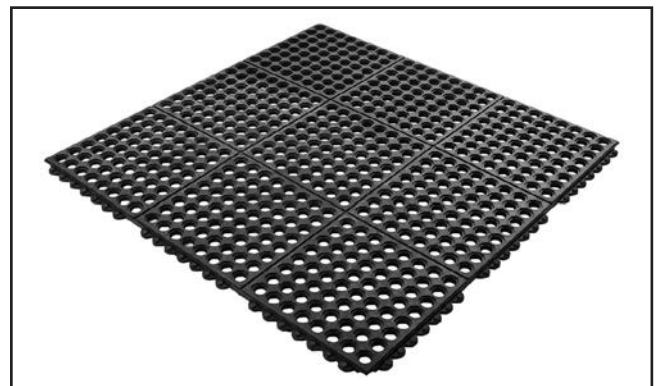
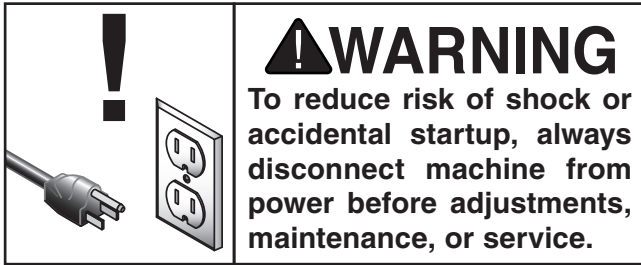


Figure 60. Model H6572 Grease-Resistant Mat 3' x 3' x 3/4".

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



SECTION 6: MAINTENANCE



Schedule

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

Daily:

- Check/correct loose mounting bolts.
- Check/correct damaged or dull saw blade.
- Check/correct worn or damaged wires.
- Clean/protect table.
- Clean metal chips from upper and lower wheel areas.
- Correct any other unsafe condition.

Monthly:

- Lubricate vise leadscrew (**Page 43**).
- Remove the blade and clean the wheels.
- Monitor gearbox oil level (**Page 44**); check that oil level is even with halfway mark on sight glass with headstock in down position.

Yearly:

- Change gearbox oil (**Page 44**).

SB1365—South Bend Way Oil-ISO 68
T26419—Syn-O-Gen Synthetic Grease



Figure 61. Recommended products for machine lubrication.

Cleaning & Protecting

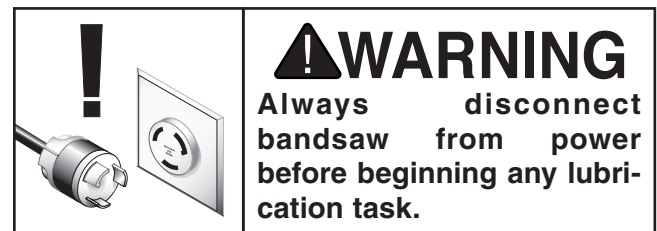
Use a brush and shop vacuum to remove chips and other debris from the working surfaces.

Remove any rust build-up from unpainted cast iron surfaces of your machine and treat with a non-staining lubricant after cleaning.

Keep unpainted cast iron surfaces rust-free with regular applications of ISO 68 way oil.

Lubrication

The bearings on your bandsaw are factory lubricated and sealed. Leave them alone unless they need to be replaced.



Use the schedule below and the following instructions to properly lubricate the other components that require lubrication.

Lubrication Task	Frequency (Hours of Operation)	Page Ref.
Blade Tension Leadscrew	8 Hrs.	43
Blade & Guides	8 Hrs.	43
Table & Vise	8 Hrs.	43
Vise Leadscrew	40 Hrs.	43
Gearbox	50 Hrs.	44
Headstock Pivot Point	8 Hrs.	44

Figure 62. Recommended lubrication tasks.



Items Needed	Qty
NLGI#2 Grease or Equivalent	As Needed
ISO 68 Oil (SB1365 or Equivalent)	As Needed
Clean Shop Rags	As Needed
1-Gallon Catch Pan	1
Grease Gun.....	1

Blade Tension Leadscrew

Lube Type.. Model SB1365 or ISO 68 Equivalent
Oil Amount.....1–2 Drops
Lubrication Frequency.....8 Hrs. of Operation

Lubricate the tension leadscrew with 1–2 drops of light machine oil daily (see **Figure 63**). Wipe off excess oil with a clean rag.

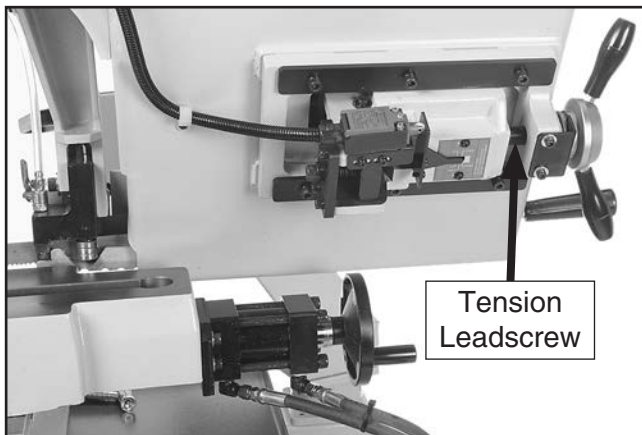


Figure 63. Location to apply lubrication on blade tension leadscrew.

Blade & Guides

Lube Type.. Model SB1365 or ISO 68 Equivalent
Oil Amount.....1–2 Drops
Lubrication Frequency.....8 Hrs. of Operation

Place one or two drops of light machine oil on blade and guides daily, especially when cutting cast iron, as no coolant is recommended.

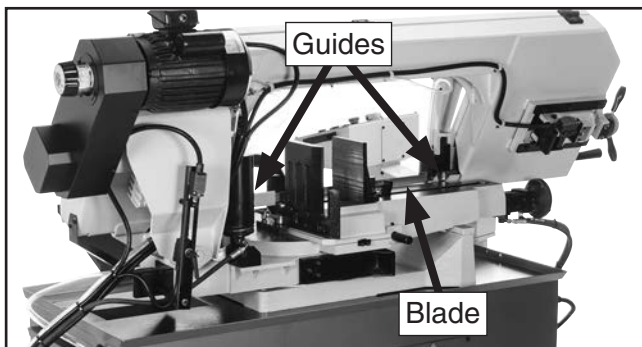


Figure 64. Blade and guide lubrication points.

Table & Vise

Lube Type.. Model SB1365 or ISO 68 Equivalent
Oil Amount.....Thin Coat
Lubrication Frequency.....8 Hrs. of Operation

Keep the table, vise (see **Figure 65**), and other machined surfaces rust-free with regular applications of a quality way oil.

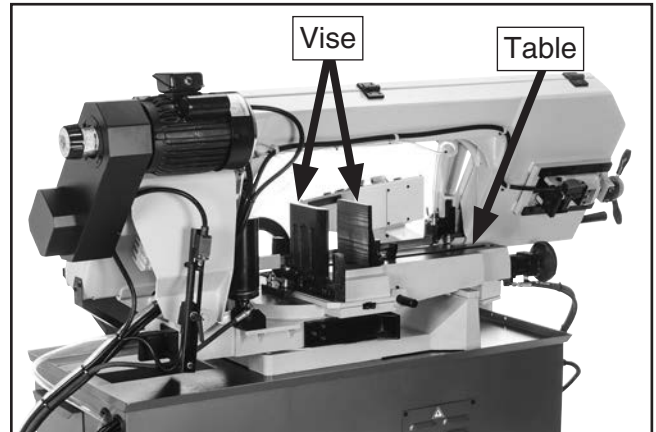


Figure 65. Table and vise.

Vise Leadscrew

Lube Type..... SB1365 or ISO 68 Equivalent
Oil Amount.....Thin Coat
Lubrication Frequency.....40 Hrs. of Operation

Use mineral spirits, shop rags, and a brush to clean the vise leadscrew from underneath the table. When dry, use a clean brush to apply a thin coat of oil or grease to the leadscrew threads (see **Figure 66**).



Figure 66. Vise leadscrew lubrication area.



Gearbox

Lube Type..... ISO 320 Equivalent
Amount 0.84 Qt.
Lubrication Frequency50 Hrs. of Operation

The gearbox should be drained and refilled after the first 50 hours of use, and then once every five months.

To change gearbox oil:

1. Run machine for 10 minutes to warm up oil in gearbox.
2. Raise headstock to highest position.
3. DISCONNECT MACHINE FROM POWER!
4. Remove fill plug shown in **Figure 67**.

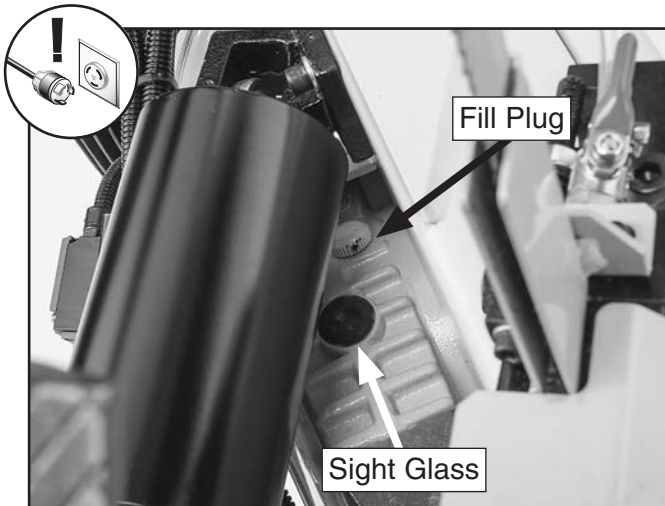


Figure 67. Gearbox fill plug and sight glass.

5. Place drain pan under drain plug, then remove drain plug (see **Figure 68**) and drain oil.

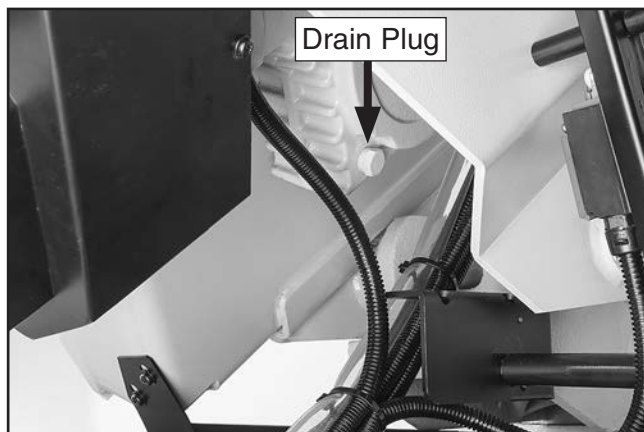


Figure 68. Location of drain plug.

6. Replace drain plug, remove drain pan, then lower headstock to its lowest position.
7. Fill gearbox with oil until oil level is at halfway point in sight glass, then replace fill plug.

Headstock Pivot-Point

Lube Type..... T26419 or NLGI#2 Equivalent
Amount 1–2 Pumps.
Lubrication Frequency8 Hrs. of Operation
Grease Gun..... 1

Add grease to headstock pivot-point grease fittings shown in **Figure 69**.



Figure 69. Pivot-point grease fitting locations.



Hydraulic System

The hydraulic system must be maintained on a regular basis and kept in good operating condition to avoid premature wear of moving parts, hoses, and valves.

If you have never maintained a hydraulic system before, WE STRONGLY RECOMMEND that you read books, get formal training, or seek the help of a qualified hydraulic service technician.

Checking Hydraulic Fluid

1. DISCONNECT MACHINE FROM POWER!
2. Remove front access panel (see **Figure 70**).



Figure 70. Front access panel location.

3. Check fluid level and temperature on fluid gauge mounted on front of hydraulic tank (see **Figure 71**). Fluid level indicator should be halfway between "L" (low) and "H" (high).

— If fluid level is low, proceed to **Changing Hydraulic Fluid**.

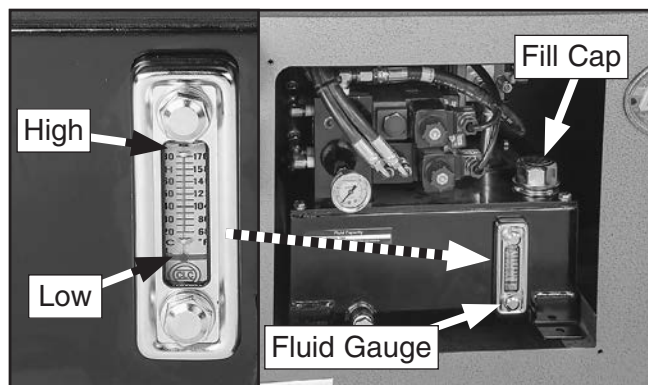


Figure 71. Hydraulic tank fluid gauge and fill cap location.

IMPORTANT: The operating temperature of the hydraulic fluid should not exceed 140°F (60°C) with an optimum operating temperature window of 50–95°F (10–35°C). If the fluid temperature rises above 140°F, stop the machine immediately and allow the fluid to cool down.

If this condition continues during operation, stop using the machine immediately, then review **Troubleshooting on Page 51**. If you still cannot remedy the problem, contact a qualified hydraulic service technician or our Tech Support.

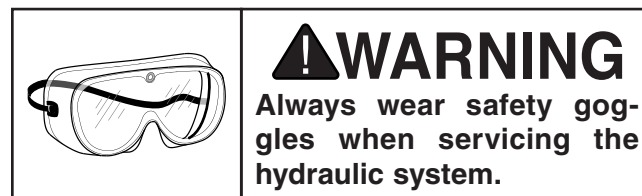
4. Remove tank fill cap and inspect for burnt-smelling or tan-colored, water-contaminated hydraulic fluid.

— If fluid is contaminated, proceed to **Changing Hydraulic Fluid**.

5. Re-install tank cap and front access panel.

Changing Hydraulic Fluid

The hydraulic fluid should be changed after the first 50 hours of use, then every 5,000 hours of use after the initial changing.



Items Needed	Qty
3.17 Quarts (3 Liters) ISO 32 or Equivalent.....	1
1-Gallon Drain Pan.....	1
Open-End Wrench 13mm.....	1
Mineral Spirits.....	As Needed
Air Compressor	1
Safety Goggles.....	1

To change hydraulic fluid:

1. Run machine for 10 minutes to warm up hydraulic oil in tank.
2. DISCONNECT MACHINE FROM POWER!
3. Remove front access panel (see **Figure 70**).
4. Slide tank out, then place it on blocks high enough to get drain plug over drain pan.



5. Remove fill cap (see **Figure 72**), then remove drain plug and allow tank to empty into drain pan.

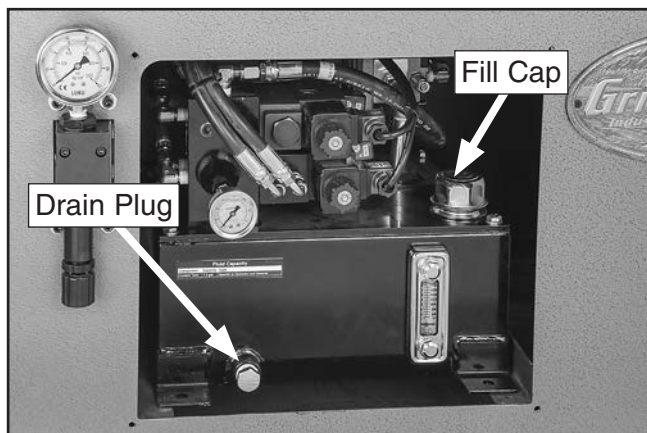


Figure 72. Drain plug and fill cap location.

6. Clean fill cap with mineral spirits and allow to air dry.
7. Clean tank screen (see **Figure 73**) with mineral spirits and blow dry with compressed air.
8. Inspect screen (see **Figure 73**) and tank fill cap for any holes, and replace if any damage exists.
9. Open tank by removing hex bolts that secure lid (see **Figure 73**).

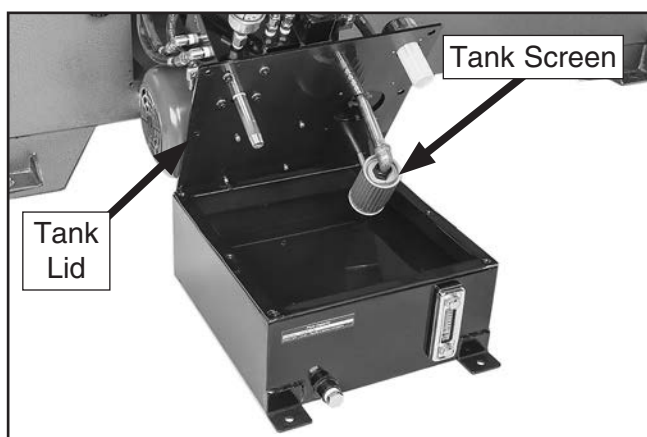


Figure 73. Hydraulic fluid tank lid removed to access for cleaning.

10. Wipe out as much residual fluid and contaminants from tank as possible. We highly recommend that tank be cleaned out with pressure washer or steam cleaner and fully dried with compressed air for best results.
11. Re-install tank lid and screen.
12. Replace drain plug, then fill tank approximately 80 percent full with 3.17 quarts of ISO 32 or equivalent hydraulic fluid.
13. Re-install tank fill cap and front access panel.



Tensioning/ Replacing Belt

To ensure optimum power transmission from the motor to the bandsaw blade, the belt must be in good condition (free from cracks, fraying and wear) and properly tensioned. After the first 16 hours of belt life, re-tension the belt, as it will stretch and seat during this time.

Tools Needed	Qty
Phillips Head Screwdriver #2	1
Open-End Wrench 19mm.....	1
Hex Wrench 10mm.....	1

Tensioning Belt

1. DISCONNECT MACHINE FROM POWER!
2. Remove variable-speed covers and belt cover shown in **Figure 74**.

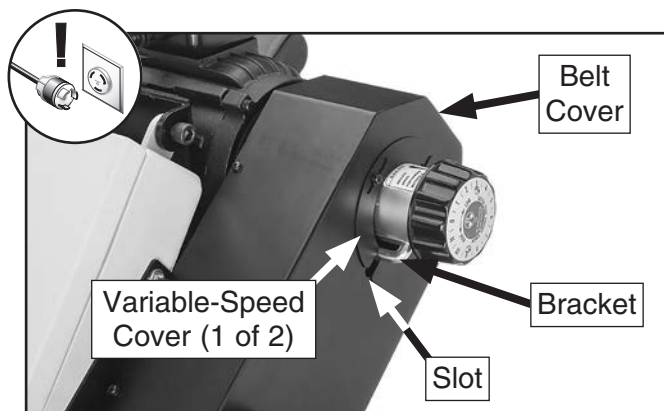


Figure 74. Location of belt cover and variable-speed covers.

3. Loosen cap screws and hex nuts on lower motor pivot brackets (see **Figure 75**).

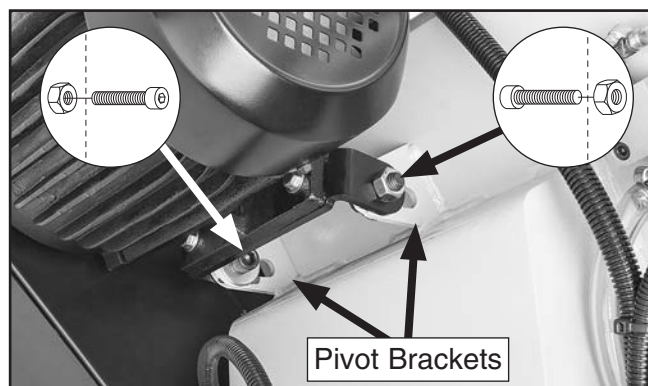


Figure 75. Motor pivot bracket location.

4. While an assistant lifts motor to tension it, tighten cap screws and hex nuts.
5. Press belt in center to check belt tension. The belt is correctly tensioned when there is approximately 1/2" deflection when it is pushed with moderate pressure, as shown in **Figure 76**.

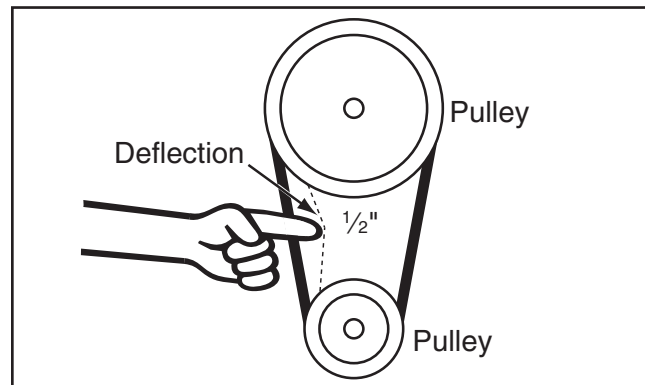


Figure 76. Checking belt tension.

— If there is more than 1/2" deflection when belt is pushed with moderate pressure, loosen cap screws, adjust motor upward, then tighten cap screws.

6. Re-install belt cover so bracket aligns with slot (see **Figure 74**), then re-install variable-speed covers.

Replacing Belt

1. DISCONNECT MACHINE FROM POWER!
2. Remove variable-speed covers and belt cover shown in **Figure 74**.
3. Loosen cap screws and hex nuts on lower motor pivot bracket shown in **Figure 74**, to remove belt tension.
4. Remove belt and install new one, making sure ribs of belt are seated in pulley grooves.
5. Follow **Steps 4–5 in Tensioning Belt** procedure to set correct belt tension.
6. Re-install belt cover so bracket aligns with slot (see **Figure 74**), then re-install variable-speed covers.



Coolant System Service

The coolant system consists of a fluid tank, pump, and hose with valves. The pump pulls fluid from the tank and sends it to the valves, which control the flow of coolant. As the fluid leaves the work area, it drains through the cabinet, where the swarf and metal chips are screened out, and back into the tank.

Although most swarf from machining operations is screened out of the coolant before it returns to the tank, small particles will accumulate in the bottom of the tank in the form of sludge. To prevent this sludge from being pulled into the pump and damaging it, the pump's intake is positioned above the bottom of the tank. This works well when the tank is regularly cleaned; however, if excess sludge is allowed to accumulate, the pump will inevitably begin sucking it up.

Hazards

As coolant ages and gets used, dangerous microbes can proliferate and create a biological hazard. The risk of exposure to this hazard can be greatly reduced by replacing the old fluid on a monthly basis, or as indicated by the fluid manufacturer.

When working with the coolant, minimize exposure to your skin, eyes, and lungs by wearing the proper PPE (Personal Protective Equipment), such as long-sleeve waterproof gloves, protective clothing, splash-resistant safety goggles, and a NIOSH-approved respirator.

	<p>⚠️ WARNING BIOLOGICAL & POISON HAZARD! Use correct personal protection equipment when handling coolant. Follow federal, state, and fluid manufacturer requirements for proper disposal.</p>
---	--

Adding Coolant

Items Needed	Qty
Safety Wear.....	See Hazards
New Coolant.....	7.5 Gallons
Disposable Shop Rags.....	As Needed

To add coolant:

1. DISCONNECT MACHINE FROM POWER!
2. Remove chip collection drawer shown in **Figure 77**.

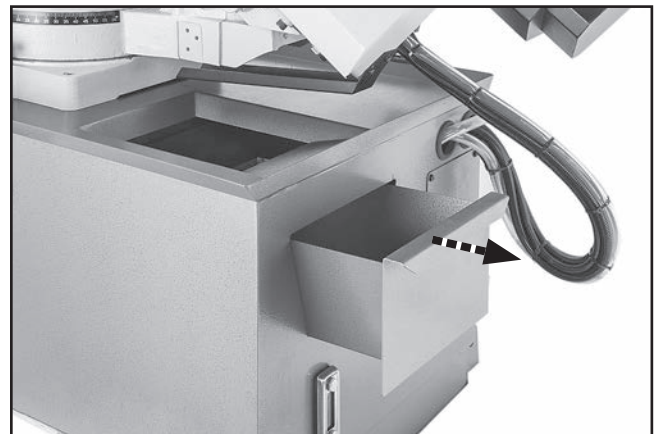


Figure 77. Removing chip collection drawer.

3. Fill reservoir with coolant until it is at maximum fill line shown in **Figure 78**.

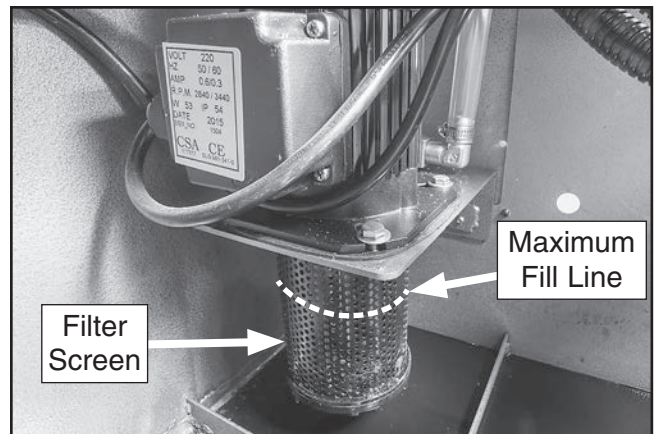


Figure 78. Approximate maximum fill line on filter screen.

4. Replace chip collection drawer.



Changing Coolant

Items Needed	Qty
10-Gallon Drain Pan.....	1
Hex Wrench 8mm.....	1
Disposable Rags	As Needed

To change coolant:

1. DISCONNECT MACHINE FROM POWER!
2. Remove chip collection drawer (see **Figure 79**) from coolant tank.
3. Remove drain plug (see **Figure 79**), empty tank contents into drain pan, and dispose of fluid following federal, state, and fluid manufacturer requirements.

4. Thoroughly clean tank, pump with hot, soapy water and dry.
5. Re-install drain plug, then refill tank with coolant (refer to **Adding Coolant** on **Page 48**).
6. Replace chip collection drawer.

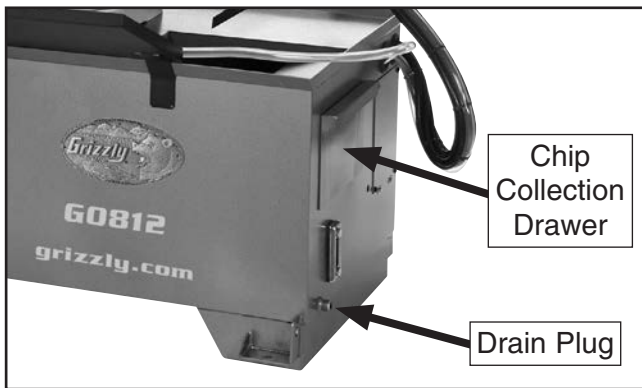


Figure 79. Coolant drain plug location.



Machine Storage

All machinery will develop serious rust problems and corrosion damage if not properly prepared for storage. If decommissioning this machine, use the steps in this section to ensure that it remains in good condition.

Items Needed	Qty
NLGI#2 Grease	As Needed
Rust Preventative	As Needed
Control Tags	As Needed
Tarp/Plastic Sheet	1
Desiccant Packs	As Needed

Preparing Machine for Storage

1. DISCONNECT MACHINE FROM POWER!
2. Thoroughly clean all unpainted, bare metal surfaces, then coat them with light weight grease or rust preventative. Take care to ensure these surfaces are completely covered but that grease or rust preventative is kept off of painted surfaces.
 - If machine will be out of service for only a short period of time, use quality medium-weight machine oil (not auto engine oil) in place of grease or rust preventative.
3. Remove old coolant, then add a few drops of way oil and blow out lines with compressed air.

4. Loosen or remove blade so it does not stretch or rust while machine is stored.
 - If machine will be out of service for only a short period of time, start machine once a week and run all gear-driven components for a few minutes. This will put fresh coat of gear oil on gearing components inside gearbox.
 - If it will be out of service for a long period of time, drain, then completely fill gearbox with recommended gear oil so components above normal oil level do not develop rust. (Make sure to put a tag on controls as a reminder for re-commissioning process to adjust gear oil level before starting machine.)
5. Place a few moisture-absorbing desiccant packs inside of electrical box.
6. Completely cover machine with tarp or plastic sheet that will keep out dust and resist liquid or moisture. If machine will be stored in/near direct sunlight, use a cover that will block the sun's rays.

Bringing Machine Out of Storage

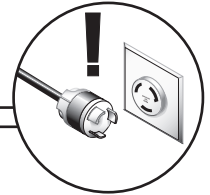
1. DISCONNECT MACHINE FROM POWER!
2. Remove moisture-absorbing desiccant packs from electrical box.
3. Re-tension blade as described on **Page 27**.
4. Repeat **Test Run** on **Page 20**.
5. Add coolant, as described in **Coolant System Service** on **Page 48**.



SECTION 7: SERVICE

Review the troubleshooting 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 power supply breaker immediately trips after startup.	<ol style="list-style-type: none"> Emergency stop button depressed/at fault. Stop button depressed. Wheel cover limit switch engaged/at fault. Blade tension limit switch engaged/at fault. Hydraulic motor, vise close, and blade start buttons not pressed/buttons at fault. Headstock not raised. Incorrect power supply voltage or circuit size. Power supply circuit breaker tripped or fuse blown. Motor wires connected incorrectly. Wiring open/has high resistance. Motor centrifugal switch out of adjustment or at fault. Start capacitor at fault. Thermal overload relay has tripped. Contactors not energized/has poor contacts. Motor at fault. 	<ol style="list-style-type: none"> Rotate button to reset. Replace if at fault. Press stop button to reset. Close wheel cover/replace limit switch. Properly tension blade (Page 27)/replace limit switch. Press hydraulic motor, vise close, and blade start buttons/replace buttons if at fault. Raise headstock. Ensure correct power supply voltage and circuit size. Ensure circuit is sized correctly and free of shorts. Reset circuit breaker or replace fuse. Correct motor wiring connections. Check/fix broken, disconnected, or corroded wires. Adjust/replace. Test/replace. Reset; adjust trip load dial if necessary; replace. Test all legs for power/replace if at fault. Test/repair/replace.
Machine stalls or underpowered.	<ol style="list-style-type: none"> Feed rate too fast; blade speed too low. Machine undersized for task. Blade not correct for material being cut. Improper workpiece material for saw/blade. Blade slipping on wheels. Belt slipping; oil/grease on V-belt. Blade dull. Motor overheated. Motor wired incorrectly. Pulley/sprocket slipping on shaft. Contactors has poor contacts. Motor at fault. 	<ol style="list-style-type: none"> Reduce feed rate/pressure; increase blade speed. Use correct, sharp blade; reduce feed rate/pressure; use coolant if possible. Use correct blade for operation (Page 24). Only cut correct material for saw blade/type. Adjust blade tracking (Page 28), tension (Page 27). Tension/replace belt (Page 47); clean belt. Replace blade (Page 26). Clean motor, let cool, reduce workload. Wire motor correctly (Page 64). Replace loose pulley/shaft. Test all legs for power/replace if at fault. Test/repair/replace.
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> Motor or component loose. Blade damaged or dull. V-Belt worn or loose. Motor fan rubbing on fan cover. Pulley loose. 	<ol style="list-style-type: none"> Retighten/replace damaged bolts/nuts. Replace blade (Page 26). Inspect/replace belt (Page 47). Fix/replace fan cover; replace loose/damaged fan. Re-align/replace shaft, pulley, set screw, and key.

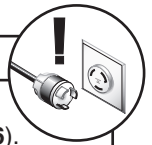


Operation

Symptom	Possible Cause	Possible Solution
Vibration when operating or cutting.	<ol style="list-style-type: none"> 1. Loose or damaged blade. 2. Worn wheel bearing. 3. Bent or dull blade. 4. Machine component loose. 5. Wheels worn or incorrectly installed. 6. Wheel appears bent. 7. Gearbox at fault. 	<ol style="list-style-type: none"> 1. Tighten or replace blade (Pages 26–27). 2. Check/replace wheel bearing. 3. Replace blade (Page 26). 4. Fix/replace fan cover; replace loose/damaged fan. 5. Replace wheels; adjust blade tracking (Page 28). 6. Check/replace wheel/wheelbearing. 7. Rebuild gearbox for bad gear(s)/bearing(s).
Ticking sound when saw is running.	<ol style="list-style-type: none"> 1. Blade weld contacting blade guides. 2. Blade weld may be failing. 3. Blade teeth missing or broken. 	<ol style="list-style-type: none"> 1. Grind blade weld down flush. 2. Cut and reweld blade, or replace blade (Page 26). 3. Replace blade (Page 26).
Machine or blade bogs down in cut.	<ol style="list-style-type: none"> 1. Feed rate too fast; blade speed too low. 2. V-belt slipping; oil/grease on belt; improper tension. 3. Blade loading up. 4. Blade dull. 5. Blade not supported/tracking properly. 6. Blade TPI incorrect. 7. Blade tension too low. 8. Material requires cutting fluid/lubrication. 	<ol style="list-style-type: none"> 1. Reduce feed rate (Page 32) or increase blade speed (Page 29). 2. Tighten/clean/replace V-belt (Page 47). 3. Install blade with fewer TPI/ different style of teeth (Page 24). 4. Replace blade (Page 26). 5. Adjust guides (Page 37), tracking (Page 28). 6. Use blade with at least 3 teeth contacting material at all times (Page 24). 7. Clean wheels, increase blade tension (Page 27). 8. Use applicable coolant/lubricant.
Cuts not square, angle incorrect.	<ol style="list-style-type: none"> 1. Angle stops on swivel base set incorrectly. 2. Blade not square to table. 	<ol style="list-style-type: none"> 1. Adjust angle stops (Page 58). 2. Adjust blade square to table (Page 56).
Blade dulls prematurely, or metal sticking to the blade.	<ol style="list-style-type: none"> 1. Blade improperly broken in. 2. Blade gullets loading up with chips. 3. Blade TPI too fine; teeth load-up and overheat. 4. Incorrect coolant mixture for workpiece/cut. 	<ol style="list-style-type: none"> 1. Replace blade (Page 26); complete blade break-in procedure (Page 29). 2. Use blade with larger gullets. 3. Use coarser-tooth blade; adjust feed rate (Page 32), adjust blade speed (Page 29); make sure blade brush works (Page 54). 4. Use correct coolant mixture.
Blade wears on one side or shows overheating.	<ol style="list-style-type: none"> 1. Blade guides worn or mis-adjusted. 2. Blade support inadequate. 3. Dull/incorrect blade. 4. Incorrect coolant mixture for workpiece/cut. 5. Blade bell-mouthed. 	<ol style="list-style-type: none"> 1. Re-adjust/replace. 2. Tighten blade guide close to workpiece as possible. 3. Replace blade (Page 26). 4. Use correct coolant mixture. 5. Replace blade Page 26).
Blade tracks incorrectly, or comes off wheels.	<ol style="list-style-type: none"> 1. Feed rate too fast/wrong TPI. 2. Blade tracking requires adjustment. 3. Blade guides need adjustment. 4. Blade bell-mouthed. 	<ol style="list-style-type: none"> 1. Reduce feed rate/decrease blade TPI (Page 32). 2. Adjust blade tracking (Page 28). 3. Adjust blade guides (Page 55). 4. Install new blade (Page 26); regularly de-tension from blade when not in use (Page 27).
Cuts crooked.	<ol style="list-style-type: none"> 1. Feed rate too fast; blade speed too low. 2. Guide bearings out of adjustment; guide arm too far from workpiece. 	<ol style="list-style-type: none"> 1. Reduce feed rate/increase blade speed (Page 32). 2. Re-adjust/replace (Page 55).
Blade keeps moving or headstock not raising after cut.	<ol style="list-style-type: none"> 1. Upper limit switch not engaged/at fault. 	<ol style="list-style-type: none"> 1. Adjust/replace upper limit switch (Page 57).
Headstock not raising to desired height.	<ol style="list-style-type: none"> 1. Lower limit switch position incorrect. 	<ol style="list-style-type: none"> 1. Adjust lower limit switch position (Page 57).



Hydraulic System



Symptom	Possible Cause	Possible Solution
Hydraulics aren't functioning.	<ol style="list-style-type: none"> 1. Hydraulic fluid level is low. 2. Hydraulic pump motor wiring connection is incorrect. 3. Hydraulic system is leaking. 4. Flow blocked or impeded. 5. Hydraulic pump is faulty. 6. Control panel wiring is faulty. 	<ol style="list-style-type: none"> 1. Check/fill hydraulic fluid level (Page 45). 2. Check/correct pump motor wiring (Page 66). 3. Test for leaks/repair. 4. Hydraulic line pinched or damaged. 5. Test/repair/replace. 6. Check that hydraulic pump motor is running and that solenoids are activating (indicated by red LED in solenoid plug).
Vise doesn't open/close.	<ol style="list-style-type: none"> 1. Vise valve solenoids are faulty. 2. Vise valve solenoids connections are bad. 3. Vise hydraulic system is leaking. 4. Control panel wiring is faulty. 	<ol style="list-style-type: none"> 1. Test/repair/replace. 2. Check solenoid plugs. 3. Test for leaks/repair. 4. Check that hydraulic pump motor is running and that solenoids are activating (indicated by red LED in solenoid plug).
Headstock doesn't raise/lower.	<ol style="list-style-type: none"> 1. Headstock valve solenoids are faulty. 2. Headstock valve solenoids connections are bad. 3. Headstock hydraulic system is leaking. 4. Control panel wiring is faulty. 	<ol style="list-style-type: none"> 1. Test/repair/replace. 2. Check solenoid plugs. 3. Test for leaks/repair. 4. Check that hydraulic pump motor is running and that solenoids are activating (indicated by red LED in solenoid plug).
Hydraulic tank fluid burnt or has tan discoloration.	<ol style="list-style-type: none"> 1. Hydraulic fluid is old or contaminated with water. 	<ol style="list-style-type: none"> 1. Replace hydraulic fluid (Page 45).



Blade Brush

The Model G0812 has a blade brush to help keep metal chips off the blade wheels. It will wear over time and require re-adjustment when it no longer makes proper contact with the blade. Eventually the brush will require replacement. This is considered a normal wear item and is not covered by warranty.

Tool Needed	Qty
Open-End Wrench 14mm.....	1

To adjust blade brush:

1. DISCONNECT MACHINE FROM POWER!
2. Using hex nut shown in **Figure 80**, adjust blade brush so blade extends $\frac{1}{8}$ " into bristles of brush.

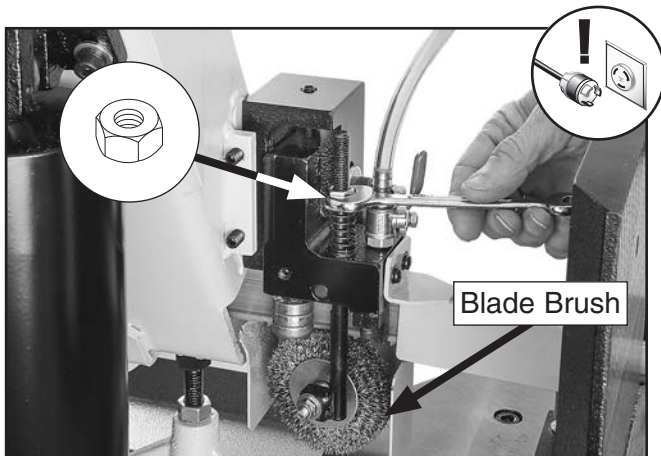


Figure 80. Adjusting brush adjustment hex nut.

Downfeed Stop Bolt

The Model G0812 has an adjustable stop bolt to help support the headstock at the bottom of its travel. If the blade does not travel far enough to complete the cut or hits the table, this bolt will have to be adjusted.

Tool Needed	Qty
Open-End Wrench 19mm.....	1

To adjust downfeed stop bolt:

1. Without starting blade, lower headstock all the way. When headstock stops, blade should be just below table, but not contacting it.
 - If blade contacts table, raise headstock enough so blade is just below surface.
2. DISCONNECT MACHINE FROM POWER!
3. Adjust downfeed stop bolt and jam nut shown in **Figure 81**, so they contact bottom of headstock.

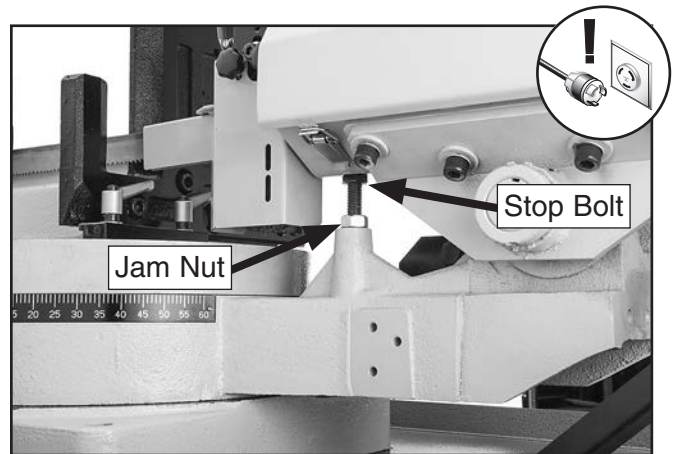


Figure 81. Downfeed stop bolt and jam nut location.

4. Tighten jam nut against base to prevent stop bolt from loosening during use.



Blade Guide Bearings

The support bearings and blade guide bearings come adjusted from the factory, but due to shipping and storage, they may need adjustment. Uneven blade wear and crooked cuts may be the result of improper adjustment.

Tools Needed	Qty
Hex Wrench 3, 4, 5, 6, 8mm	1 Ea.
Flat Head Screwdriver	1

Adjusting Support Bearings

1. Make sure blade is tensioned and tracking correctly (refer to **Page 27**).
2. Raise headstock high enough to give you room to work around bearings.
3. DISCONNECT MACHINE FROM POWER!
4. Remove blade guard from blade arm.
5. Verify that back of blade lightly contacts support bearing.

— If it does not, loosen cap screws on blade guide arm, (see **Figure 82**), adjust upper set screw (see **Figure 83**), and move assembly up or down until support bearing lightly touches back of blade, then tighten cap screws.

Note: If it is difficult to slide blade guide assembly onto blade, adjust roller bearings and carbide guides away from blade (refer to next sub-section). Also, clean blade guide assembly of any shipping protectant (refer to **Cleanup** section on **Page 15**).

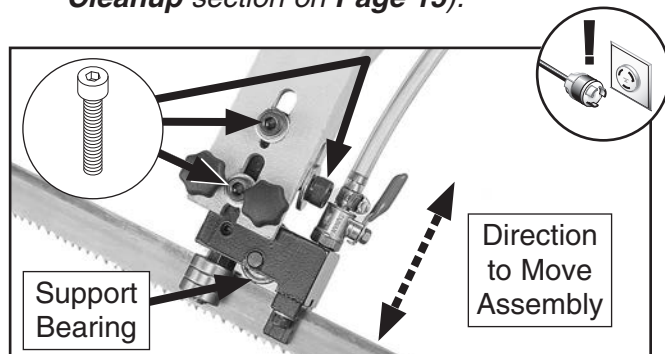


Figure 82. Support bearing touching blade.

6. Repeat **Steps 1–5** in similar manner for right blade guide assembly.

Adjusting Blade Guide Bearings

1. Remove coolant valve assembly from blade guide.
2. Loosen set screws shown in **Figure 83** to allow guide bearings on front blade guide arm to turn.

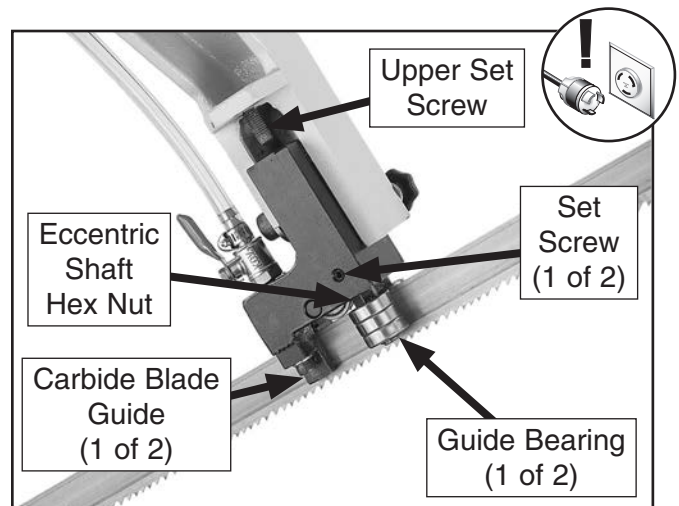


Figure 83. Adjustment controls on right front blade guide.

3. Turn hex nut on each eccentric shaft. Adjust guide bearings (see **Figure 83**) so they lightly contact blade or have maximum clearance of 0.002".

Note: Since bearings twist blade into position, it is acceptable if there is 0.001"-0.002" gap between blade and front or back of bearing. Just make sure not to squeeze blade too tightly with bearings. After guide bearings are set, you should be able to rotate guide bearings (although they will be stiff) with your fingers.

4. Tighten set screws.
5. Adjust carbide blade guides (see **Figure 83**) so they make same contact with blade as guide bearings.
6. Adjust blade guide bearings on right blade guide assembly in same manner, then re-install blade guards.



Squaring Blade with Table

This adjustment has been made at the factory and should not need to be adjusted under normal circumstances. However, if you find the saw is not cutting square, you may need to adjust the blade. Only make this adjustment after factors such as excessive feed rate or the blade guide being set too far away from the workpiece have been ruled out.

Tools Needed	Qty
Hex Wrench 3mm.....	1
Hex Wrench 6mm.....	1
Machinist Square.....	1

To square blade with table:

1. Lower headstock until it contacts downfeed stop bolt (refer to **Page 54**).
2. **DISCONNECT MACHINE FROM POWER!**
3. Place square on table bed and against edge of blade (see **Figure 84**), and check different points along length of table between blade guide assemblies.

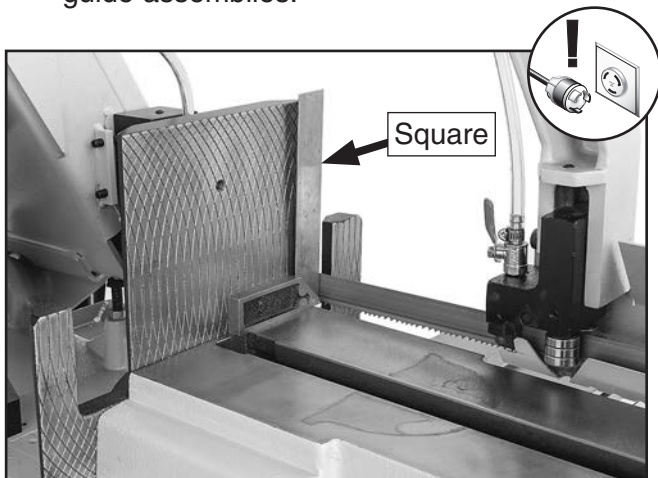


Figure 84. Checking blade-to-table squareness.

- If blade *is* square with table, no further adjustments need to be made.
- If blade *is not* square with table, loosen two cap screws shown in **Figure 85** one to two turns and repeat on second blade guide assembly, then turn set screws on blade guides as necessary until blade is perpendicular to bed.

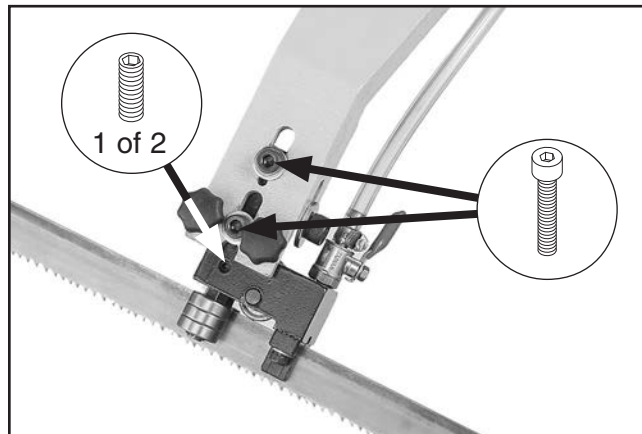


Figure 85. Screws for adjusting blade-to-table squareness.

4. Re-tighten cap screws loosened earlier.
5. Repeat **Step 3** and adjustments above as necessary until blade is perfectly square to table.

Tip: Cut small section from scrap piece of material with known square end and measure for uniform thickness. If thickness is not uniform, repeat adjustments above until your personal requirements are met.



Limit Switches

Limit switches shut off the motor at the end of a cut, limit the maximum headstock travel, and prevent the machine from operating if the blade is not properly tensioned. If these functions do not operate correctly, you will need to adjust the appropriate limit switch.

Tools Needed	Qty
Phillips Head Screwdriver #2	1
Open-End Wrench 8mm.....	1
Open-End Wrench 19mm.....	1

Adjusting Blade Tension Switch

1. DISCONNECT MACHINE FROM POWER!
2. Tension bandsaw blade for blade type (refer to **Tensioning & Tracking Blade on Page 27**).
3. Loosen screws that secure blade tension limit switch (see **Figure 86**) and slide switch bottom so it *just* touches switch plate.

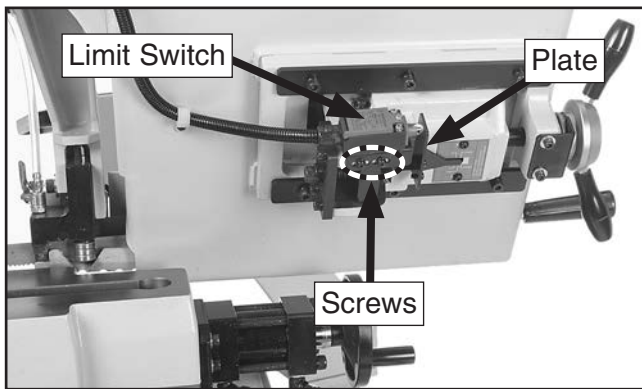


Figure 86. Blade tension limit switch screws.

4. Start hydraulic motor.
5. Turn tension handwheel counterclockwise $\frac{1}{2}$ turn. The motor should turn **OFF**. If it does not, adjust switch closer to plate and repeat **Steps 3–5**.

Adjusting Upper & Lower Limit Switches

The upper limit switch should only be adjusted if the blade does not shut off or the headstock does not move back to the top of travel after the cut is complete.

The lower limit switch can be adjusted to limit saw headstock travel to match the height of the workpiece. This speeds up repetitive cuts by eliminating unnecessary saw headstock travel.

To adjust limit switches:

1. Raise headstock several inches, start blade, and lower headstock. When blade reaches bottom of travel, it should be just below table level but not touching it, and headstock should briefly contact stop bolt (see **Figure 87**) before blade shuts off and headstock moves back to top of its travel.
 - If headstock touched stop bolt and moved back to top of its travel, proceed to **Step 6**.
 - If blade continued moving or headstock *did not* move upward, proceed to **Step 2**.
 - If headstock *did not* contact stop bolt, adjust stop bolt height (refer to **Downfeed Stop Bolt on Page 54**), then repeat **Step 1**.

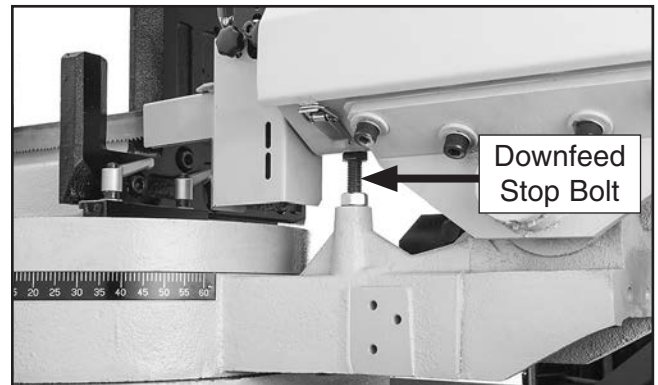


Figure 87. Headstock stopped against downfeed stop bolt.

2. DISCONNECT MACHINE FROM POWER!



- Loosen Phillips head screws and hex nuts that secure upper limit switch (see **Figure 88**).
- Adjust upper limit switch so roller plunger is depressed against feed stop (see **Figure 88**), then tighten screws and hex nuts.

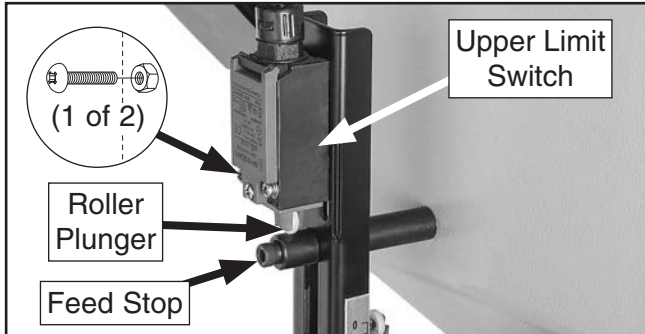


Figure 88. Upper limit switch and feed stop.

- Connect machine to power and repeat **Steps 1–4** until upper limit switch works correctly.
- Without running blade, lower headstock to lowest position.
- Loosen auto stop lever (see **Figure 89**), adjust lower limit switch until white indicator aligns with approximate cutting height marked in inches on scale.

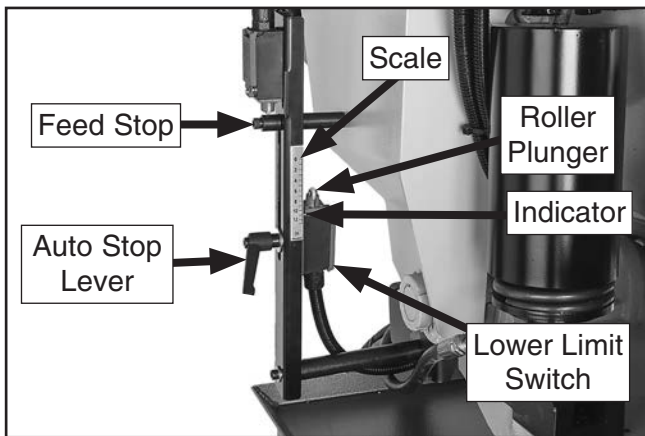


Figure 89. Lower limit switch controls.

- Raise headstock. It should automatically stop at approximate height previously set on scale. Adjust limit switch position as needed to fine tune the height setting for your workpiece.

Angle Stops

The swivel base is equipped with three angle stops to provide quick adjustments to 60° to the left, 0°, and 45° to the right. If cuts made using these stops are not sufficiently accurate, the stops will need to be adjusted.

Tools Needed

	Qty
Open-End Wrench 12mm.....	1
Open-End Wrench 14mm.....	1
45° Square	1
60° Square	1
90° Square	1

Setting 0° (90°) Angle Stop

- Raise headstock to highest position.
- DISCONNECT MACHINE FROM POWER!
- Rotate swivel lock handle (see **Figure 90**) toward base.

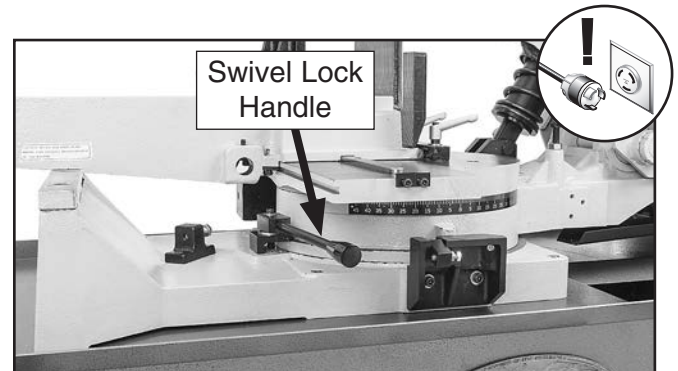


Figure 90. Swivel lock handle location.

- While standing by motor, rotate headstock to right approximately 5°, rotate flip-stop inward to engage it (see **Figure 91**), then rotate headstock to left until turret just contacts stop bolt.

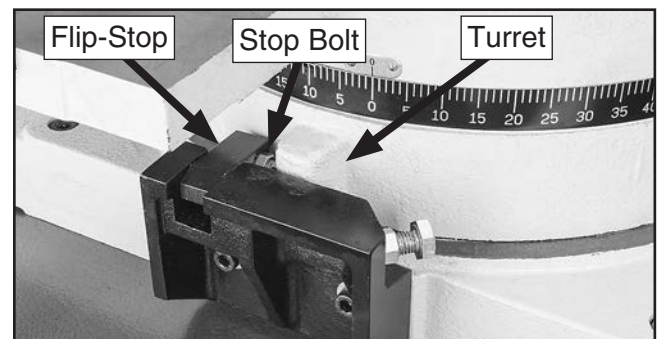


Figure 91. Flip-stop engaged.



5. Connect machine to power and lower headstock all the way until it stops moving.
6. DISCONNECT MACHINE FROM POWER and place a 90° square flat on table and against both fixed vise jaw and blade, as shown in **Figure 92**. The square should fit snugly against fixed jaw and blade.

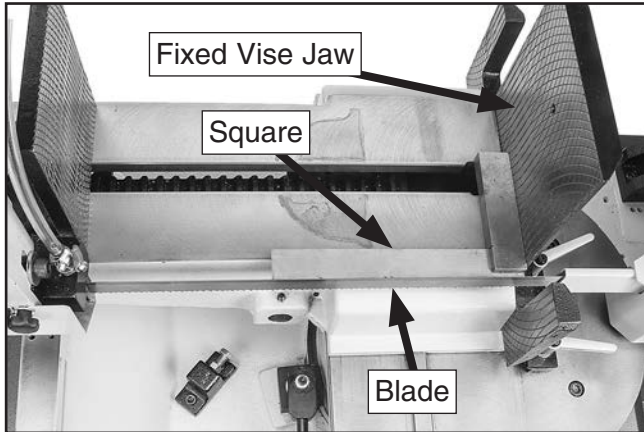


Figure 92. Testing vise/blade squareness.

- If square fits snugly against fixed jaw and blade, no further steps are necessary.
- If square *does not* fit snugly against stationary jaw and blade, rotate flip-stop out to disengage it, and loosen jam nut shown in **Figure 93**. Thread stop bolt inward or outward as necessary, then re-engage flip-stop.

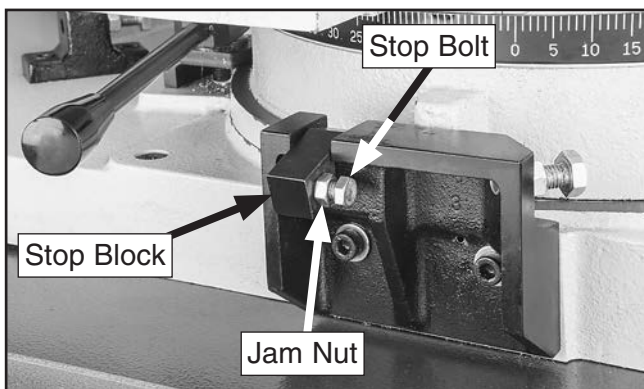


Figure 93. Flip-stop bolt and jam nut location.

7. Rotate headstock until turret stops against flip-stop bolt. Blade should be square to vise.
8. Repeat **Steps 6–7** as necessary, then tighten jam nut against stop block (see **Figure 93**) without turning stop bolt.

Setting 45° Right Angle Stop

1. Raise headstock to highest position.
2. DISCONNECT MACHINE FROM POWER!
3. Rotate flip-stop out completely (see **Figure 93**).
4. Rotate swivel lock handle toward base, then rotate headstock *counterclockwise* until base contacts 45° stop bolt (see **Figure 94**).

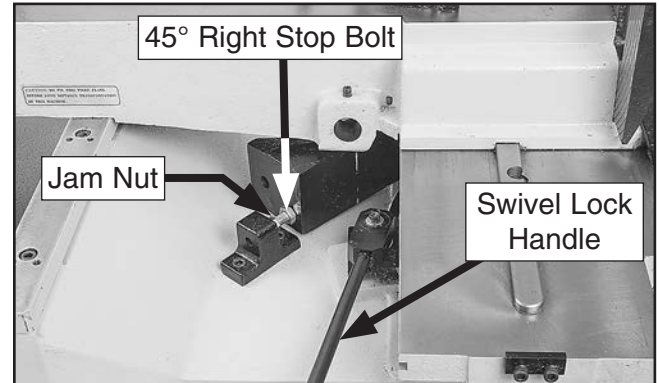


Figure 94. 45° right stop bolt and jam nut location.

5. Slide vise to left position and secure it. Refer to **Changing Vise Position** on **Page 34**.
6. Connect machine to power and lower headstock all the way until it stops moving.
7. DISCONNECT MACHINE FROM POWER and place 45° square between vise jaw and blade, as shown in **Figure 95**. The square should fit snugly against outer fixed jaw and blade.

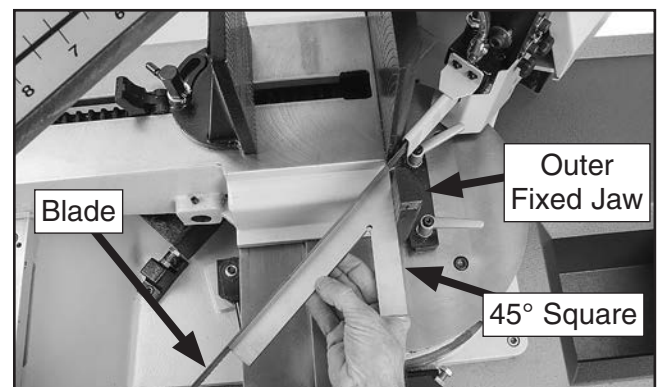


Figure 95. Using 60° square to check 45° stop.



- If square fits snugly against outer fixed jaw and blade, no further steps are necessary.
- If square *does not* fit snugly against outer fixed jaw and blade, loosen jam nut shown in **Figure 94** on **Page 59**. Thread stop bolt inward or outward as necessary, until square fits snugly against fixed jaw base while base contacts stop bolt.

8. Tighten jam nut without turning stop bolt.

Setting 60° Left Angle Stop

1. Repeat **Steps 1–3** from **Setting 45° Right Angle Stop** on **Page 59**.
2. Rotate swivel lock handle toward base, then rotate headstock *clockwise* until base contacts 60° left stop bolt (see **Figure 96**).

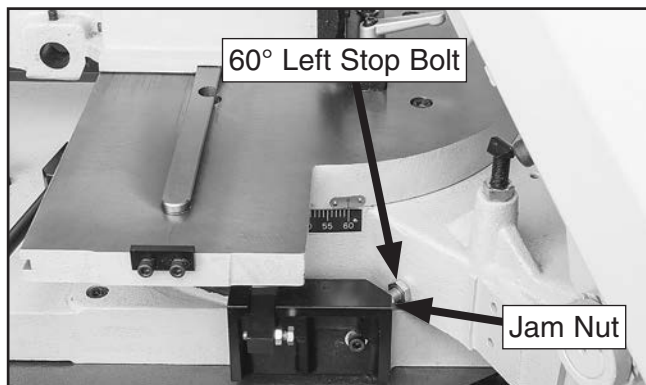


Figure 96. 60° left stop bolt and jam nut location.

3. Slide vise to right position and secure it. Refer to **Changing Vise Position** on **Page 34**.
4. Connect machine to power and lower headstock all the way until it stops moving.

5. **DISCONNECT MACHINE FROM POWER** and place 60° square between outer fixed jaw and blade, as shown in **Figure 97**. The square should fit snugly against outer fixed jaw and blade.

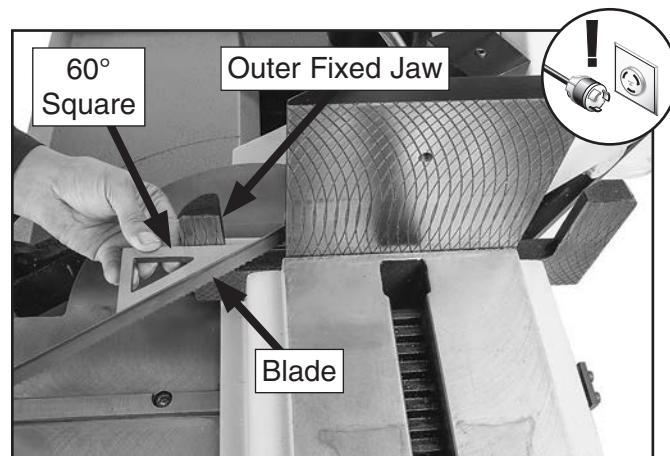


Figure 97. Using 60° square to check 60° left angle stop.

- If square fits snugly against outer fixed jaw and blade, no further steps are necessary.
- If square *does not* fit snugly against outer fixed jaw and blade, loosen jam nut shown in **Figure 96**. Thread stop bolt inward or outward as necessary until square fits snugly against outer fixed jaw and blade while base contacts stop bolt.

6. Tighten jam nut without turning stop bolt, then tighten swivel lock handle to secure headstock.



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.













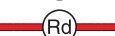

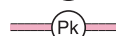
CAPACITORS/INVERTERS. Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

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

NOTICE

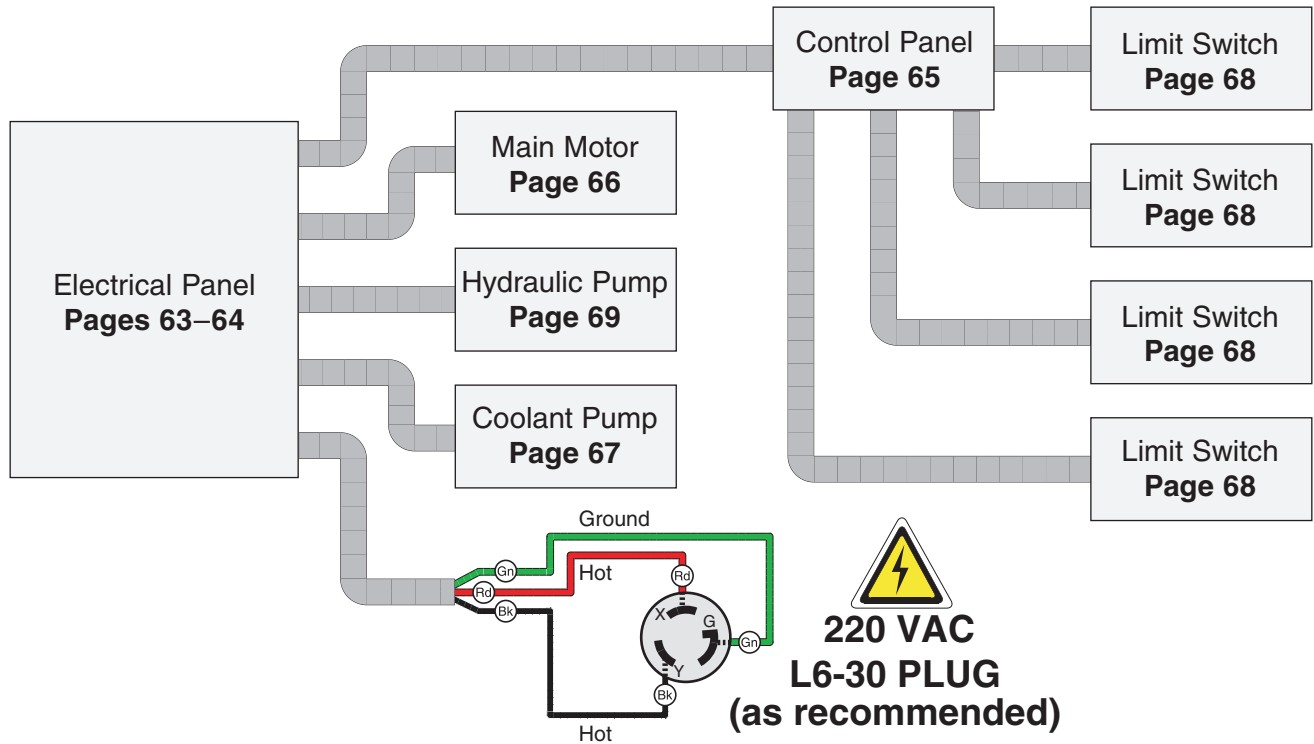
The photos and diagrams included in this section are best viewed in color. You can view these pages in color at www.grizzly.com.

COLOR KEY

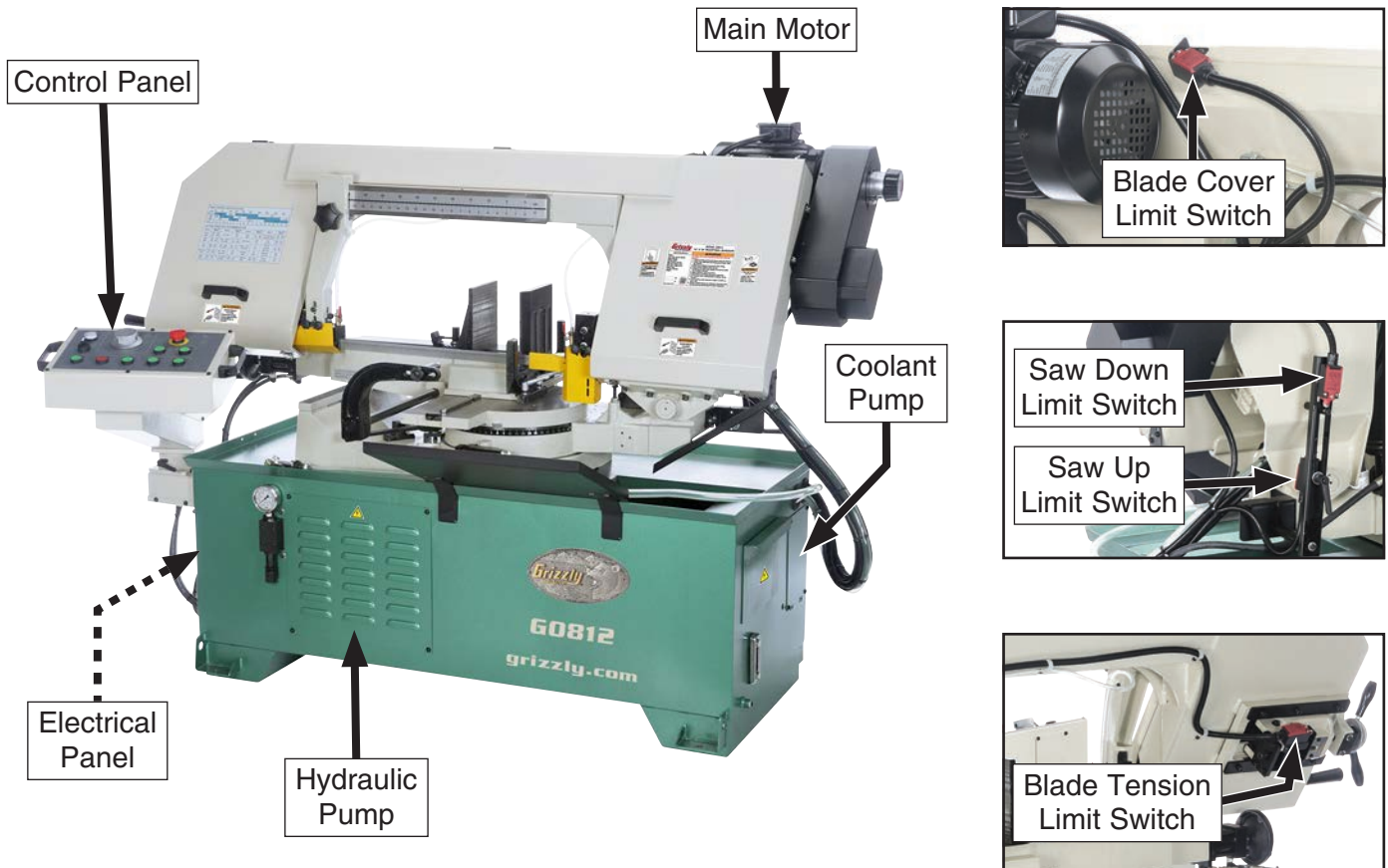
BLACK		BLUE		YELLOW		LIGHT BLUE	
WHITE		BROWN		YELLOW GREEN		BLUE WHITE	
GREEN		GRAY		PURPLE		TURQUOISE	
RED		ORANGE		PINK			



Electrical Overview



Component Locations



Electrical Panel Photo

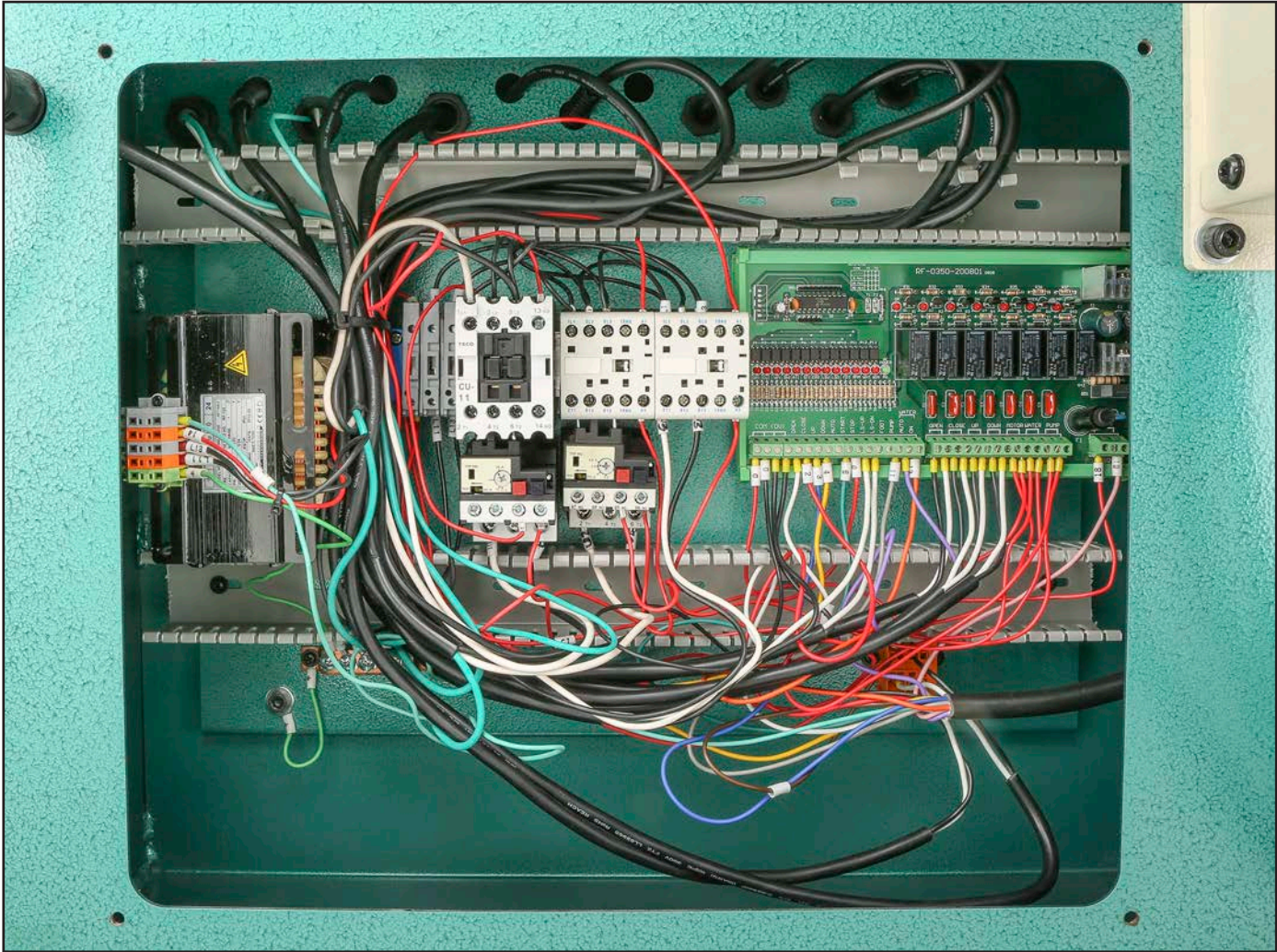
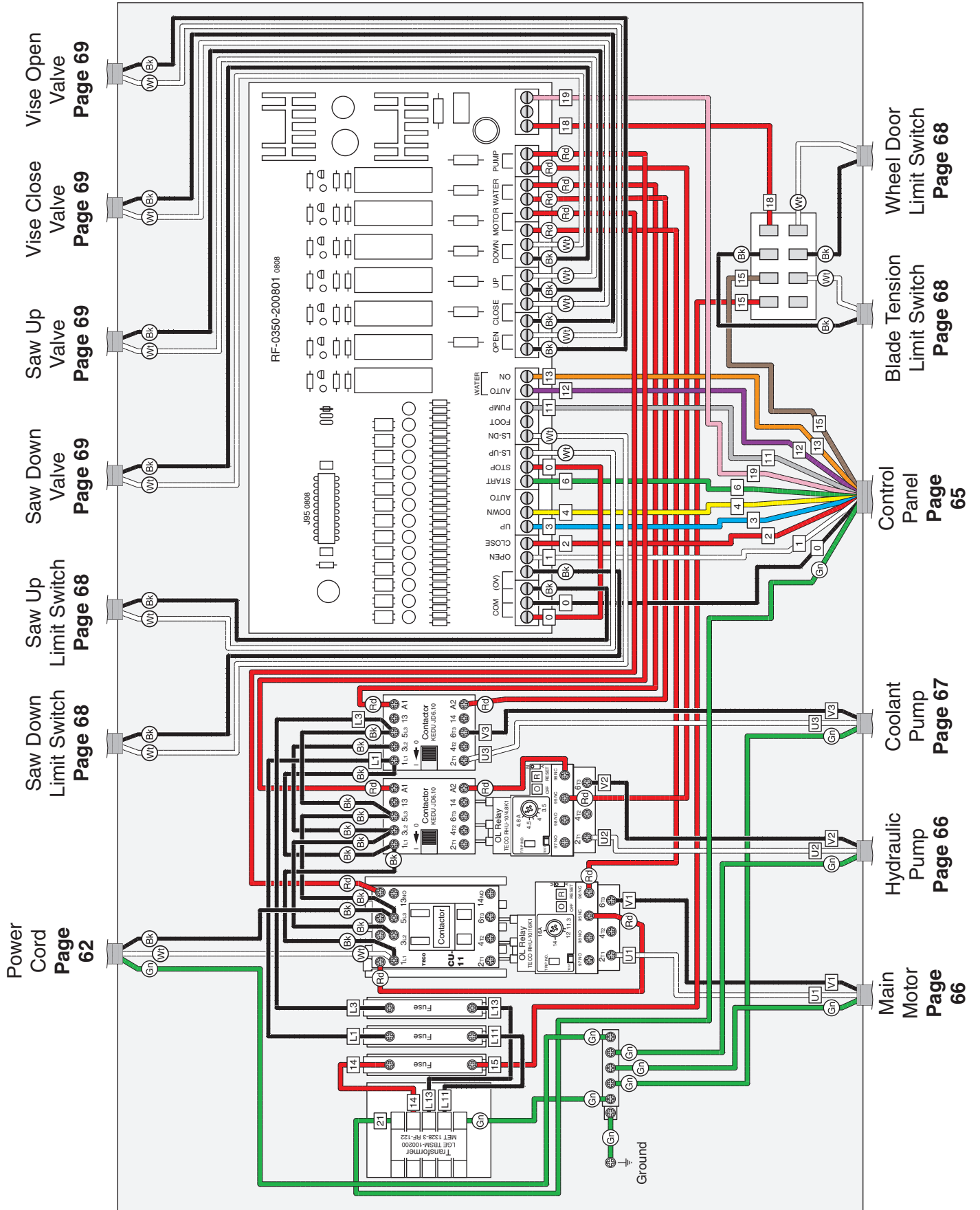


Figure 98. Electrical panel wiring.

Electrical Panel Wiring Diagram



Control Panel Wiring

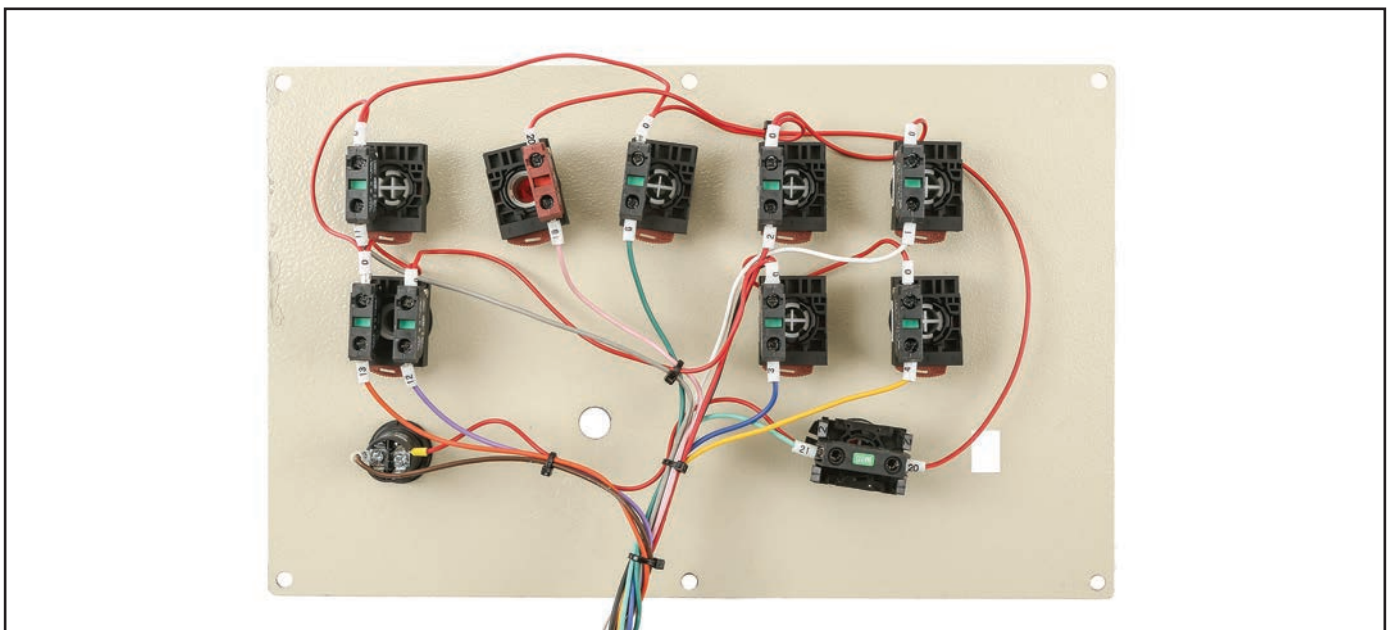
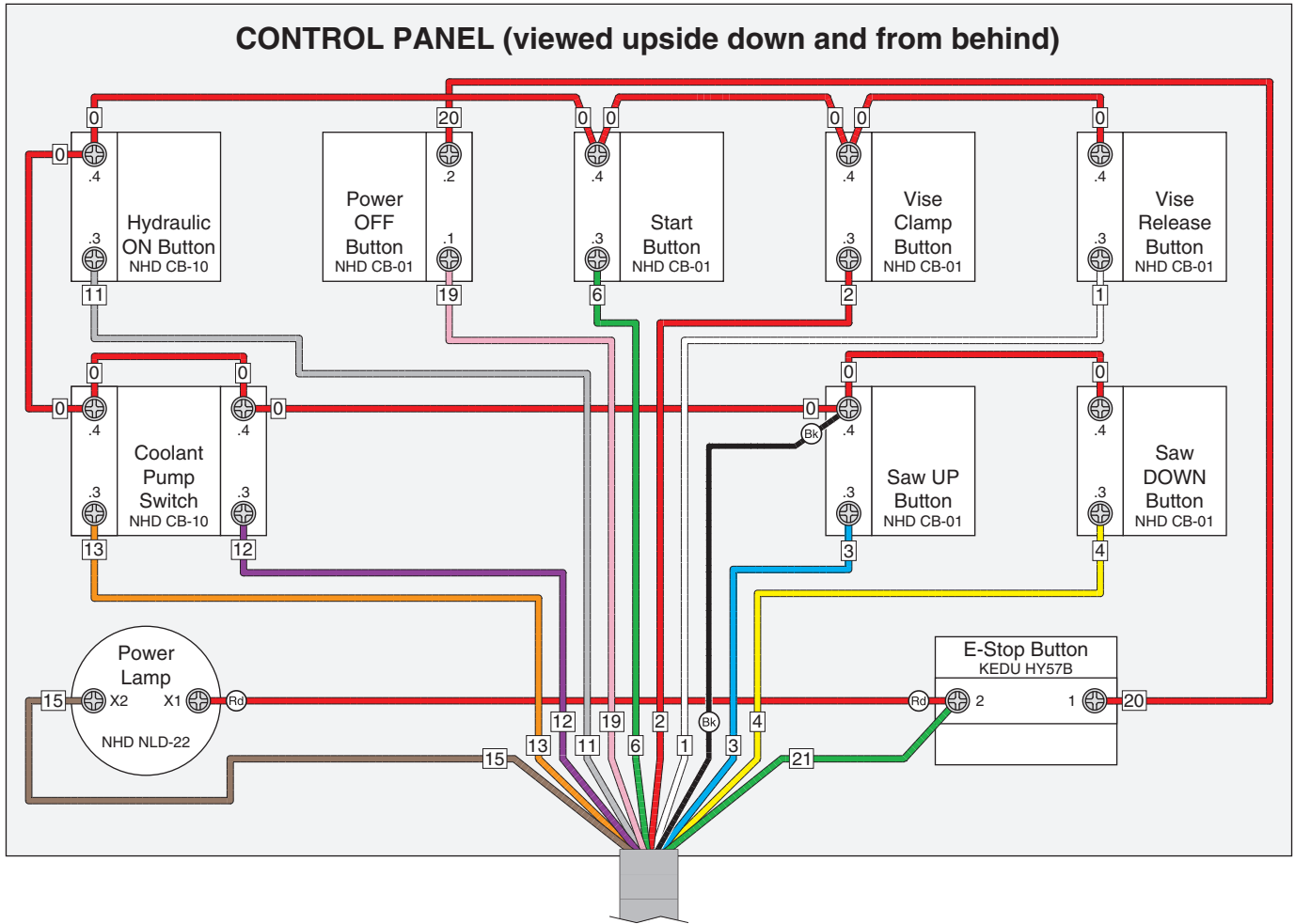


Figure 99. Control panel wiring.



Main Motor Wiring

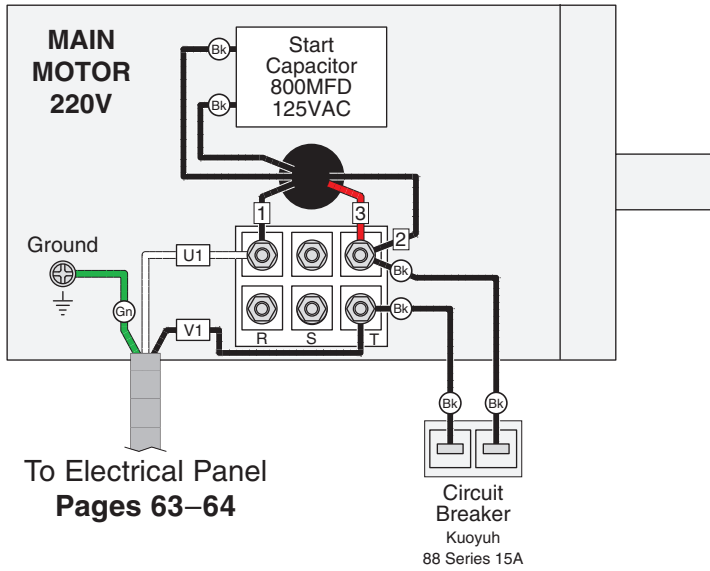


Figure 101. Main motor wiring.



Figure 100. Main motor circuit breaker wiring.



Figure 102. Main motor start capacitor wiring.

Hydraulic Pump Wiring

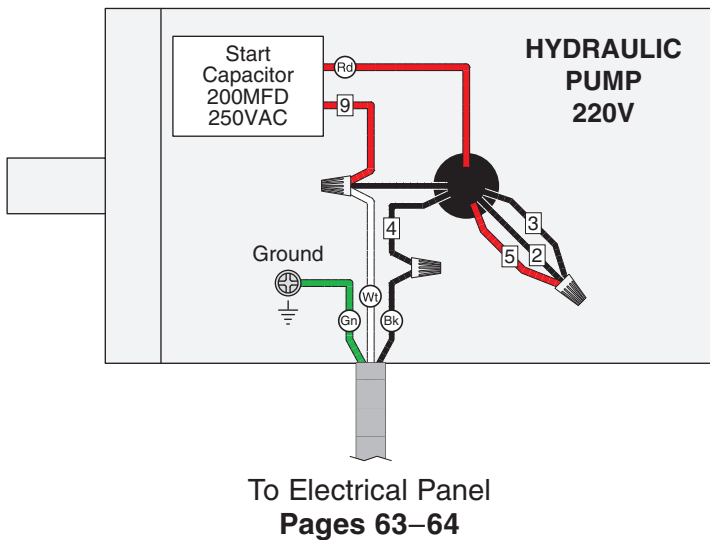


Figure 103. Hydraulic pump wiring.



Coolant Pump Wiring

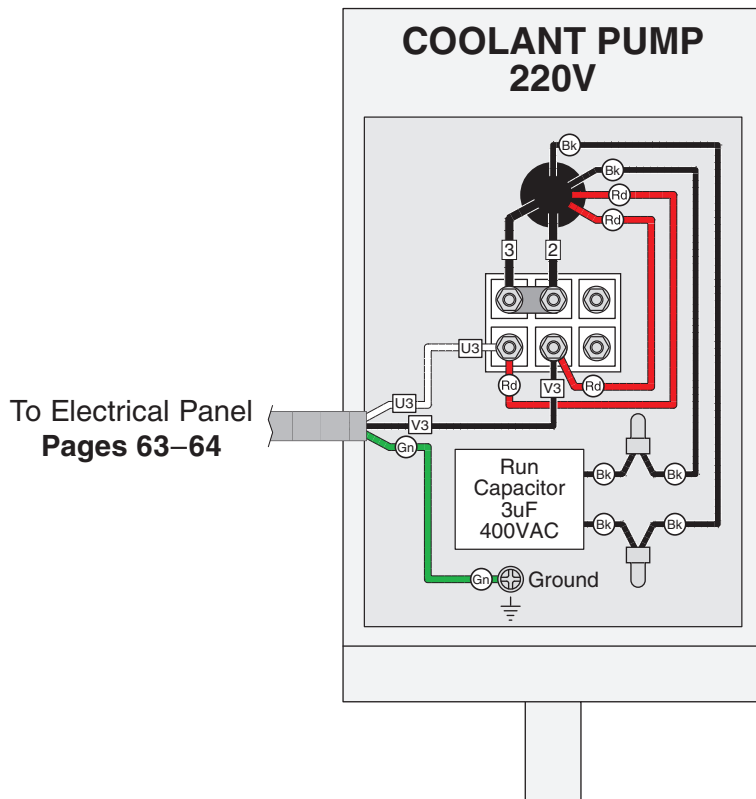


Figure 104. Coolant pump wiring.



Limit Switch Wiring

To
Electrical Panel
Pages 63–64

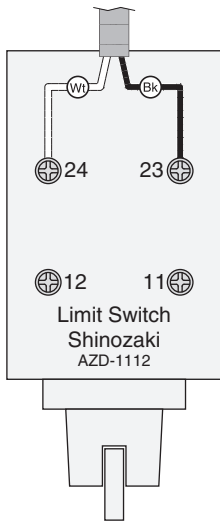


Figure 105.
Saw Down limit
switch wiring.

To
Electrical Panel
Pages 63–64

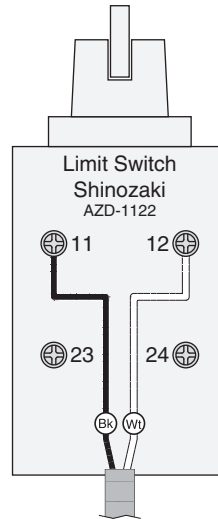
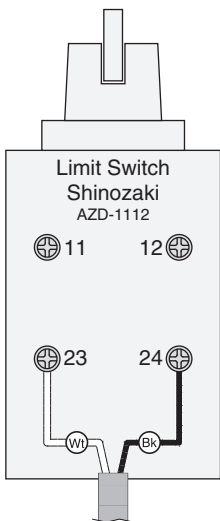


Figure 107.
Blade cover limit
switch wiring.



To
Electrical Panel
Pages 63–64



Figure 106.
Saw Up limit
switch wiring.

To
Electrical Panel
Pages 63–64

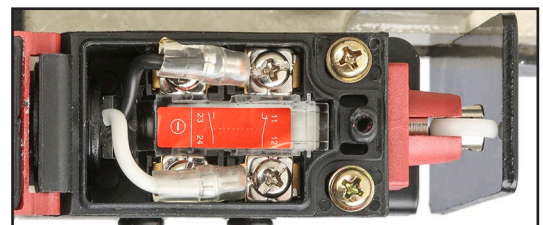
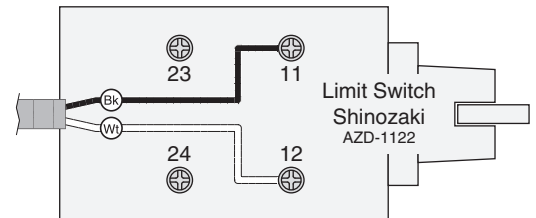
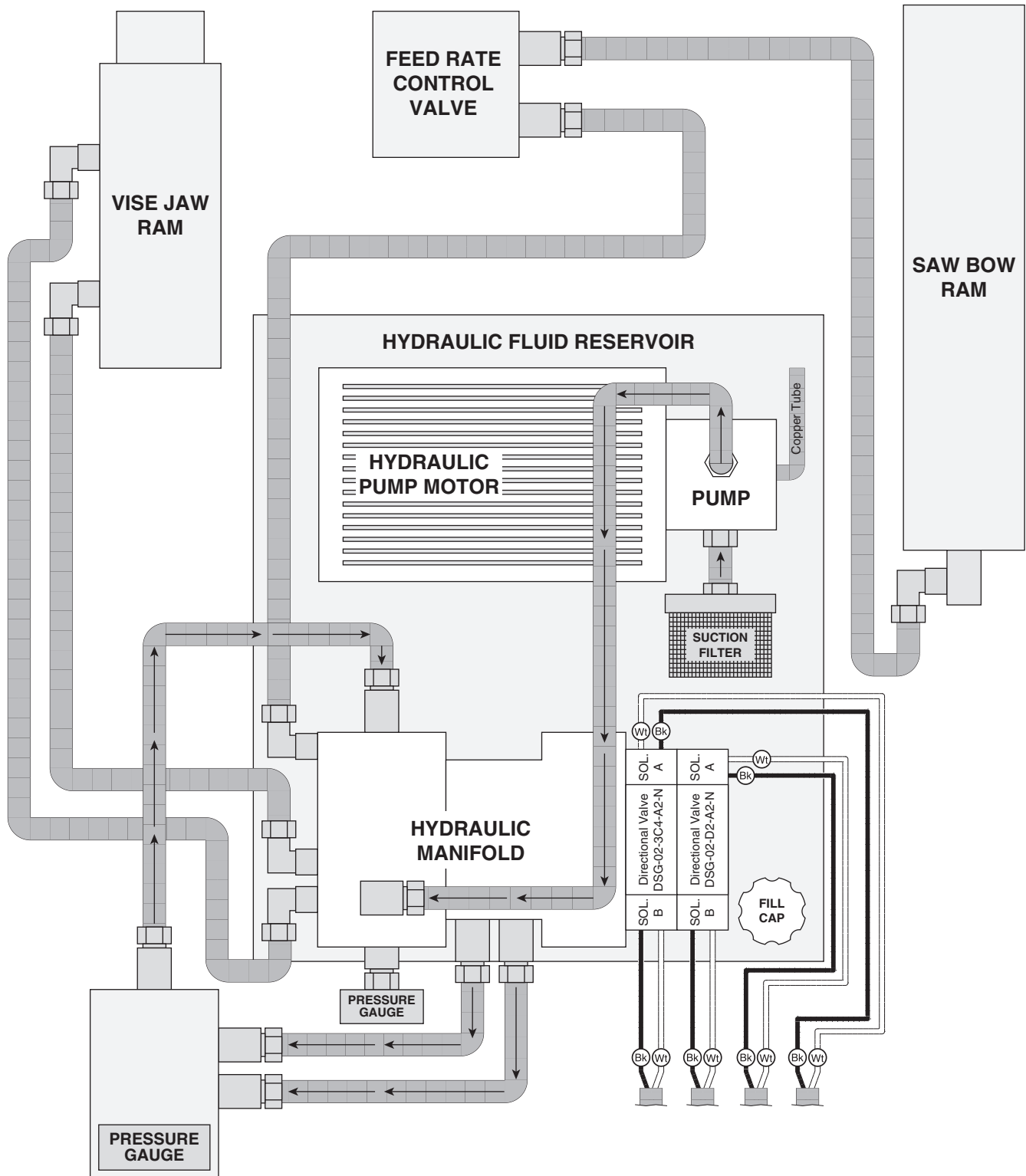


Figure 108. Blade tension limit
switch wiring.

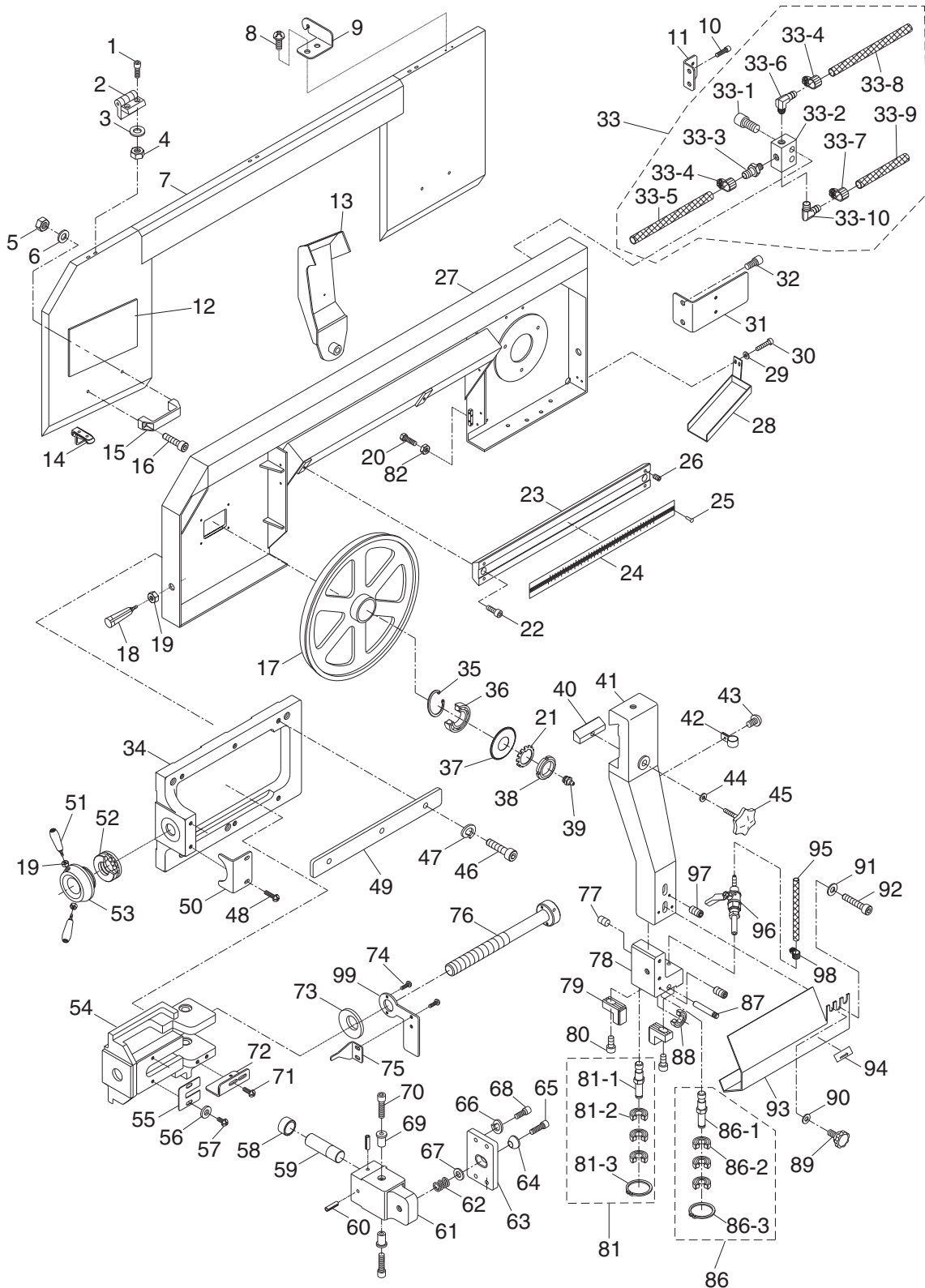


Hydraulic System Diagram



SECTION 9: PARTS

Frame



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



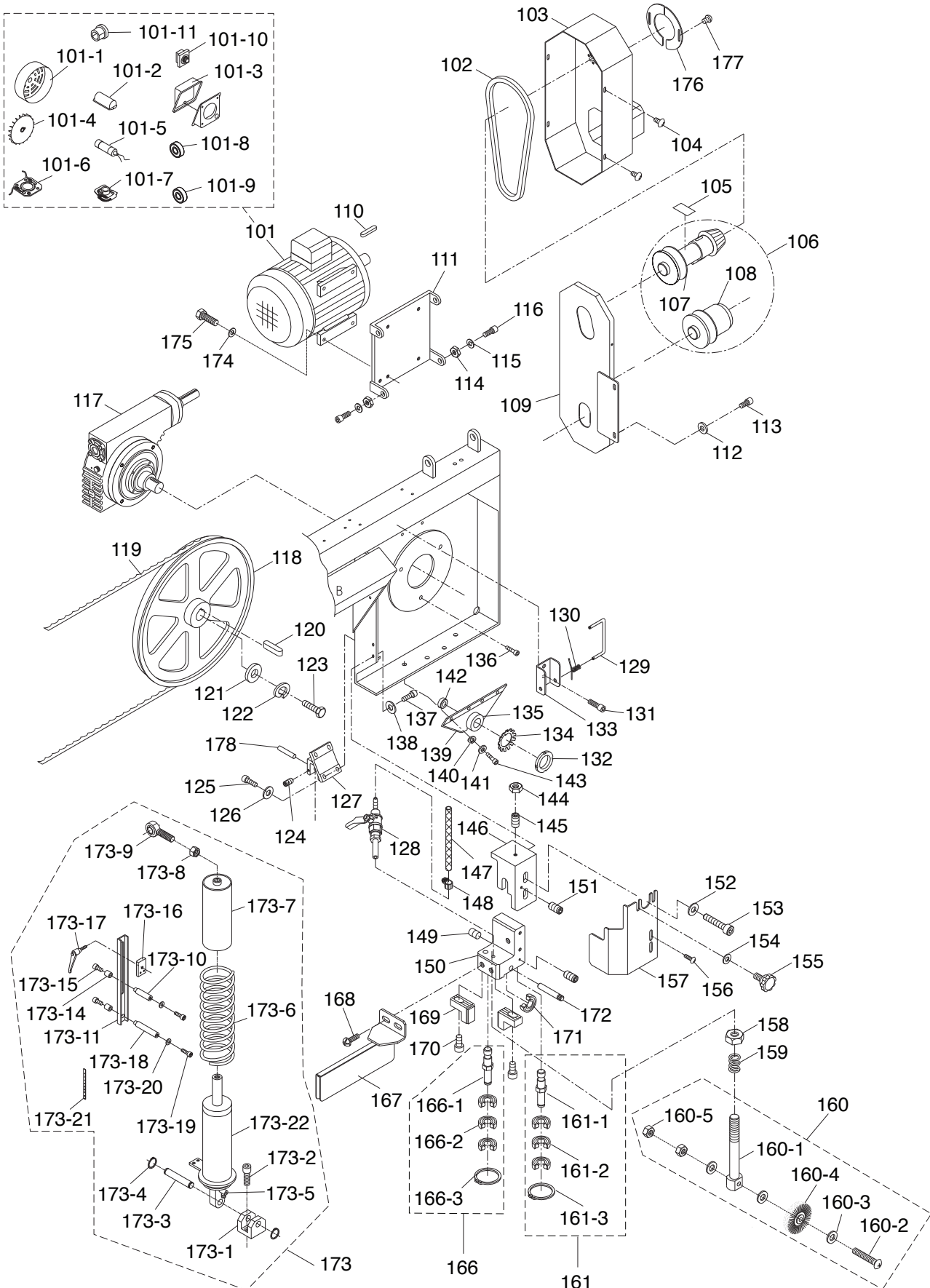
Frame Parts List

REF	PART #	DESCRIPTION
1	P0812001	CAP SCREW M6-1 X 20
2	P0812002	HINGE
3	P0812003	FLAT WASHER 6MM
4	P0812004	HEX NUT M6-1
5	P0812005	HEX NUT M8-1.25
6	P0812006	FLAT WASHER 8MM
7	P0812007	BLADE BACK COVER
8	P0812008	PHLP HD SCR M5-.8 X 10
9	P0812009	BRACKET
10	P0812010	PHLP HD SCR M5-.8 X 10
11	P0812011	LIMIT SWITCH SUPPORT
12	P0812012	BLADE SELECTION CHART
13	P0812013	REAR PIVOT BRACKET
14	P0812014	LOCKING LATCH
15	P0812015	HANDLE
16	P0812016	CAP SCREW M8-1.25 X 20
17	P0812017	IDLER WHEEL ASSEMBLY
18	P0812018	HANDLE M10-1.5 X 15
19	P0812019	HEX NUT M10-1.5
20	P0812020	HEX BOLT M8-1.25 X 20
21	P0812021	TABBED WASHER 5MM ID
22	P0812022	CAP SCREW M12-1.75 X 20
23	P0812023	ARM GUIDE
24	P0812024	SCALE
25	P0812025	RIVET 2 X 5MM
26	P0812026	SET SCREW M8-1.25 X 20
27	P0812027	BODY FRAME
28	P0812028	SPLASH BOARD
29	P0812029	FLAT WASHER 6MM
30	P0812030	CAP SCREW M6-1 X 12
31	P0812031	BLADE COVER
32	P0812032	CAP SCREW M6-1 X 10
33	P0812033	3-WAY VALVE ASSEMBLY
33-1	P0812033-1	CAP SCREW M6-1 X 30
33-2	P0812033-2	3-WAY VALVE
33-3	P0812033-3	CONNECTOR 1/4" NPT, STRAIGHT
33-4	P0812033-4	HOSE CLAMP 12MM
33-5	P0812033-5	BRAIDED HOSE 1/4" ID X 3/32" T X 56" L
33-6	P0812033-6	MICRO CONTROL BLOCK 1/4" NPT X 1/4"
33-7	P0812033-7	HOSE CLAMP 19MM
33-8	P0812033-8	BRAIDED HOSE 1/4" ID X 3/32" T X 25" L
33-9	P0812033-9	BRAIDED HOSE 1/2" ID X 7/64" T X 126" L
33-10	P0812033-10	MICRO CONTROL BLOCK 1/4" NPT X 1/2"
34	P0812034	TENSION BRACKET
35	P0812035	INT RETAINING RING 52MM
36	P0812036	TAPERED ROLLER BEARING 30205J
37	P0812037	BEARING COVER
38	P0812038	SPANNER NUT
39	P0812039	GREASE FITTING 1/8 NPT STRAIGHT
40	P0812040	GIB
41	P0812041	ARM (LEFT)
42	P0812042	HOSE CLIP 12MM
43	P0812043	PHLP HD SCR M5-.8 X 10
44	P0812044	FLAT WASHER 10MM
45	P0812045	KNOB BOLT M10-1.5 X 60 6-LOBE
46	P0812046	CAP SCREW M8-1.25 X 40

REF	PART #	DESCRIPTION
47	P0812047	LOCK WASHER 8MM
48	P0812048	PHLP HD SCR M5-.8 X 10
49	P0812049	GIB
50	P0812050	BRACKET
51	P0812051	BLADE TENSION HANDLE M10-1.5 X 20, 30 X 84L
52	P0812052	THRUST BEARING 51204
53	P0812053	HANDLE HUB
54	P0812054	BLADE TENSION SLIDING PLATE
55	P0812055	TENSION INDICATING PLATE
56	P0812056	FLAT WASHER 5MM
57	P0812057	PHLP HD SCR M5-.8 X 8
58	P0812058	BUSHING
59	P0812059	SHAFT
60	P0812060	ROLL PIN 5 X 45
61	P0812061	BLADE ANGLE ADJUSTING BRACKET
62	P0812062	COMPRESSION SPRING (SIZE?)
63	P0812063	BRACKET
64	P0812064	CONE WASHER 10MM
65	P0812065	CAP SCREW M10-1.5 X 40
66	P0812066	LOCK WASHER 6MM
67	P0812067	FLAT WASHER 10MM
68	P0812068	CAP SCREW M6-1 X 15
69	P0812069	SHAFT BUSHING
70	P0812070	CAP SCREW M6-1 X 25
71	P0812071	PHLP HD SCR M5-.8 X 10
72	P0812072	SWITCH BASE
73	P0812073	BELLEVILLE LOCK WASHER
74	P0812074	PHLP HD SCR M4-.7 X 20
75	P0812075	TENSION SCALE POINTER
76	P0812076	LEADSCREW
77	P0812077	SET SCREW M5-.8 X 10
78	P0812078	BEARING BRACKET (LEFT)
79	P0812079	CARBIDE BLADE GUIDE
80	P0812080	CAP SCREW M6-1 X 20
81	P0812081	BEARING SHAFT ASSEMBLY
81-1	P0812081-1	BEARING SHAFT
81-2	P0812081-2	BALL BEARING 609ZZ
81-3	P0812081-3	EXT RETAINING RING 10MM
82	P0812082	HEX NUT M8-1.25
86	P0812086	ECCENTRIC SHAFT ASSEMBLY
86-1	P0812086-1	ECCENTRIC SHAFT
86-2	P0812086-2	BALL BEARING 609ZZ
86-3	P0812086-3	EXT RETAINING RING 10MM
87	P0812087	BEARING PIN
88	P0812088	BALL BEARING 609ZZ
89	P0812089	KNOB BOLT M6-1 X 10
90	P0812090	FLAT WASHER 6MM
91	P0812091	FLAT WASHER 8MM
92	P0812092	CAP SCREW M8-1.25 X 25
93	P0812093	BLADE GUARD (FRONT)
94	P0812094	BLADE DIRECTION LABEL
95	P0812095	BRAIDED HOSE 1/4" ID X 3/32" T X 56" L
96	P0812096	VALVE ASSEMBLY
97	P0812097	SET SCREW M6-1 X 10
98	P0812098	HOSE CLAMP 1/2"
99	P0812099	LEADSCREW GUIDE PLATE



Drive Wheel & Motor



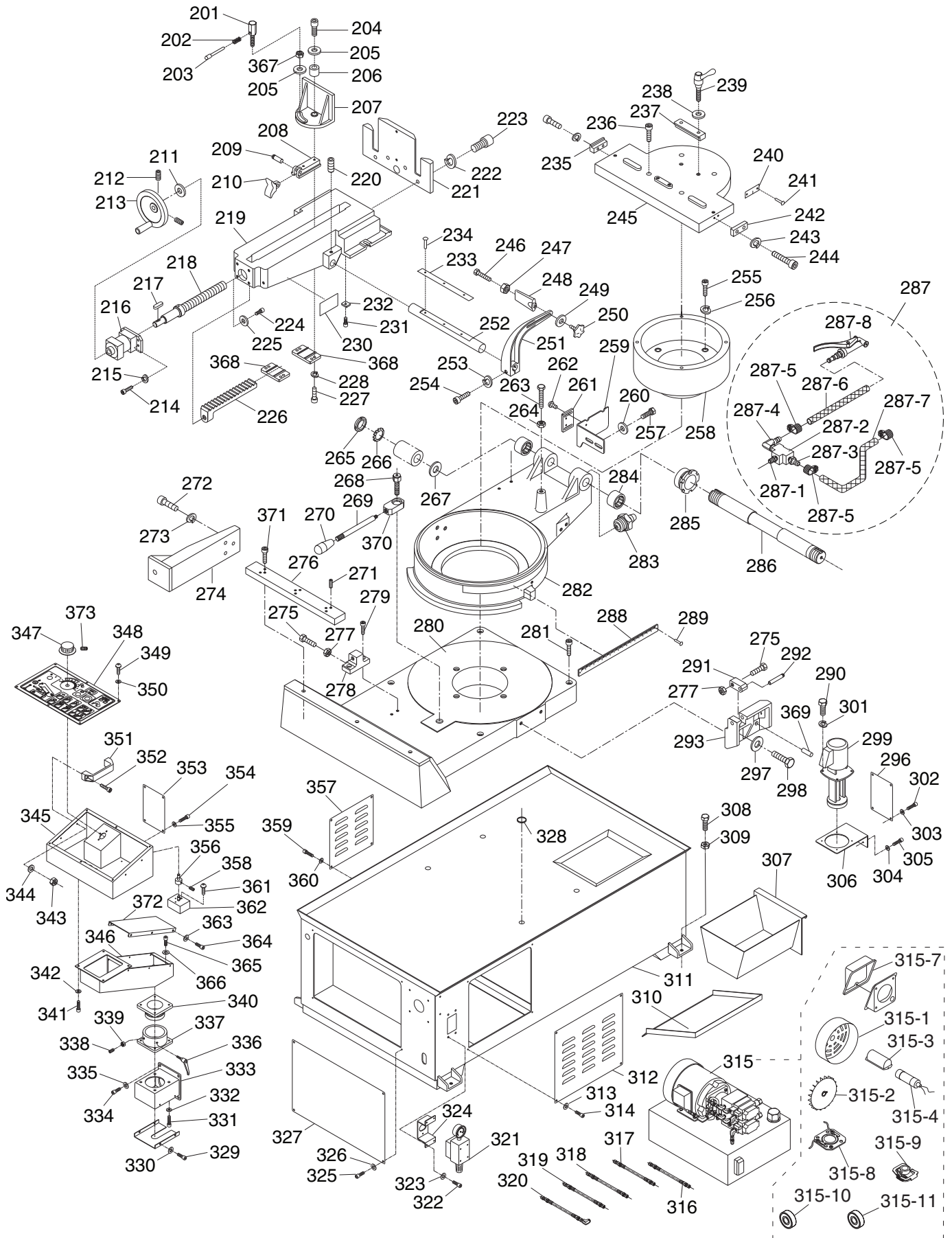
Drive Wheel & Motor Parts List

REF	PART #	DESCRIPTION
101	P0812101	MOTOR 2HP 220V 1-PH
101-1	P0812101-1	MOTOR FAN COVER
101-2	P0812101-2	CAPACITOR COVER
101-3	P0812101-3	MOTOR JUNCTION BOX
101-4	P0812101-4	MOTOR FAN
101-5	P0812101-5	S CAPACITOR 800M 125V 1-3/4 X 3-3/8
101-6	P0812101-6	CONTACT PLATE
101-7	P0812101-7	CENTRIFUGAL SWITCH
101-8	P0812101-8	FRONT MOTOR BEARING
101-9	P0812101-9	REAR MOTOR BEARING
101-10	P0812101-10	CIRCUIT BREAKER KUOYUH 88 15A
101-11	P0812101-11	STRAIN RELIEF
102	P0812102	BELT 1422 360V
103	P0812103	MOTOR PULLEY COVER
104	P0812104	CROSS ROUND HEAD SCREW M5 X 10L
105	P0812105	SPEED LABEL
106	P0812106	SPINDLE PULLEY ASSEMBLY
107	P0812107	VARIABLE SPEED PULLEY
108	P0812108	SPINDLE PULLEY
109	P0812109	LOWER PULLEY COVER
110	P0812110	KEY 7 X 7 X 30L
111	P0812111	MOTOR PLATE
112	P0812112	FLAT WASHER 6MM
113	P0812113	HEX SOCKET HEAD SCREW M6 X 10L
114	P0812114	HEX NUT M12
115	P0812115	FLAT WASHER 12MM
116	P0812116	HEX SOCKET HEAD SCREW M12 X 50L
117	P0812117	GEAR BOX ASSEMBLY
118	P0812118	DRIVE WHEEL
119	P0812119	BLADE 27 X 0.9 X 3810L-4/6T
120	P0812120	KEY 7 X 7 X 30
121	P0812121	FLAT WASHER 10MM
122	P0812122	LOCK WASHER 10MM
123	P0812123	HEX HEAD SCREW M10 X 25L
124	P0812124	HEX SOCKET HEADLESS SCREW M6 X 10L
125	P0812125	HEX SOCKET HEAD SCREW M8 X 20L
126	P0812126	FLAT WASHER 8MM
127	P0812127	CYLINDER UPPER SUPPORT
128	P0812128	VALVE ASSEMBLY
129	P0812129	SUPPORT ROD
130	P0812130	TORSION SPRING
131	P0812131	HEX SOCKET HEAD SCREW M6 X 10L
132	P0812132	NUT AN07
133	P0812133	BRACKET
134	P0812134	WASHER AW07
135	P0812135	BRACKET SPACER
136	P0812136	HEX SOCKET HEAD SCREW M10 X 20L
137	P0812137	HEX SOCKET HEAD SCREW M8 X 20L
138	P0812138	FLAT WASHER 8MM
139	P0812139	BRACKET
140	P0812140	LOCK WASHER 10MM
141	P0812141	FLAT WASHER 10MM
142	P0812142	GAP RING
143	P0812143	HEX SOCKET HEAD SCREW M10 X 20L
144	P0812144	HEX NUT M8-1.25
145	P0812145	HEX SOCKER HEADLESS SCREW M8 X 25L
146	P0812146	ARM (RIGHT)
147	P0812147	NET TUBE ID1/4" X 2.2T X 143CM
148	P0812148	HOSE CLAMP 12MM

REF	PART #	DESCRIPTION
149	P0812149	HEX SOCKER HEADLESS SCREW M5 X 10L
150	P0812150	BLADE ADJUSTMENT BRACKET (REAR)
151	P0812151	HEX SOCKER HEADLESS SCREW M6 X 10L
152	P0812152	FLAT WASHER 8MM
153	P0812153	HEX SOCKET HEAD SCREW M8 X 25L
154	P0812154	FLAT WASHER 6MM
155	P0812155	PLUM SCREW M6 X 10L
156	P0812156	CROSS ROUND HEAD SCREW M5 X 8
157	P0812157	BLADE GUARD (REAR)
158	P0812158	HEX NUT M10
159	P0812159	COMPRESSION SPRING
160	P0812160	BRUSH ASSEMBLY
160-1	P0812160-1	BRUSH SHAFT
160-2	P0812160-2	CROSS ROUND HEAD SCREW M6-1.0 X 40L
160-3	P0812160-3	FLAT WASHER 6MM
160-4	P0812160-4	BRUSH
160-5	P0812160-5	HEX NUT M6
161	P0812161	BEARING SHAFT ASSEMBLY
161-1	P0812161-1	BEARING SHAFT
161-2	P0812161-2	BALL BEARING 609ZZ
161-3	P0812161-3	C-RETAINER RING S10
166	P0812166	ECCENTRIC SHAFT ASSEMBLY
166-1	P0812166-1	ECCENTRIC SHAFT
166-2	P0812166-2	BALL BEARING 609ZZ
166-3	P0812166-3	C-RETAINER RING S10
167	P0812167	BLADE GUARD II (REAR)
168	P0812168	CROSS ROUND HEAD SCREW M5 X 10L
169	P0812169	CARBIDE GUIDE
170	P0812170	HEX SOCKET HEAD SCREW M6 X 20L
171	P0812171	BALL BEARING 609ZZ
172	P0812172	BEARING PIN
173	P0812173	CYLINDER ASSEMBLY
173-1	P0812173-1	SUPPORT FLANGE
173-2	P0812173-2	HEX SOCKET HEAD SCREW M8 X 20L
173-3	P0812173-3	SHAFT
173-4	P0812173-4	C-RETANINER RING S20
173-5	P0812173-5	CONNECTOR
173-6	P0812173-6	SPRING
173-7	P0812173-7	SPRING CYLINDER SLEEVE
173-8	P0812173-8	HEX NUT M20 X P1.5
173-9	P0812173-9	BEARING POS 20
173-10	P0812173-10	SHAFT
173-11	P0812173-11	CYLINDER SUPPORT
173-14	P0812173-14	BUSHING
173-15	P0812173-15	HEX SOCKET HEAD SCREW M6 X 30L
173-16	P0812173-16	BRACKET
173-17	P0812173-17	KNOB M8 X P1.25 X 20L
173-18	P0812173-18	SHAFT
173-19	P0812173-19	HEX SOCKET HEAD SCREW M8 X 12L
173-20	P0812173-20	FLAT WASHER 8MM
173-21	P0812173-21	GAUGE INCH
173-22	P0812173-22	CYLINDER
174	P0812174	FLAT WASHER 8MM
175	P0812175	HEX HEAD SCREW M8 X 25L
176	P0812176	COVER
177	P0812177	CROSS ROUND HEAD SCREW M5 X 5L
178	P0812178	PIVOT PIN
179	P0812179	LIMIT SWITCH



Base & Vise



Base & Vise Parts List

REF	PART #	DESCRIPTION
201	P0812201	HEX LOCK BOLT 80L M10-1.5 X 40
202	P0812202	COMPRESSION SPRING 1.9 X 9 X 30
203	P0812203	LOCK BOLT PIN
204	P0812204	CAP SCREW M10-1.5 X 40
205	P0812205	FLAT WASHER 10MM
206	P0812206	WISE PIVOT BUSHING
207	P0812207	WISE JAW (MOVABLE)
208	P0812208	SLIDING JAW MOUNT
209	P0812209	PIN 29 X 10MM
210	P0812210	RACK HOOK
211	P0812211	FLAT WASHER 10 X 23 X 3MM
212	P0812212	SET SCREW M6-1 X 10
213	P0812213	HANDWHEEL TYPE-9 126D X 15B-K X M8-1.25
214	P0812214	CAP SCREW M8-1.25 X 30
215	P0812215	LOCK WASHER 8MM
216	P0812216	LEADSCREW SUPPORT
217	P0812217	KEY 5 X 5 X 15
218	P0812218	WISE LEADSCREW
219	P0812219	WISE BASE
220	P0812220	SET SCREW M8-1.25 X 10
221	P0812221	WISE JAW (FIXED)
222	P0812222	LOCK WASHER 12MM
223	P0812223	CAP SCREW M12-1.75 X 40
224	P0812224	CAP SCREW M8-1.25 X 20
225	P0812225	LOCK WASHER 8MM
226	P0812226	LEADSCREW RACK
227	P0812227	CAP SCREW M8-1.25 X 20
228	P0812228	LOCK WASHER 8MM
230	P0812230	CAUTION LABEL
231	P0812231	CAP SCREW M8-1.25 X 20
232	P0812232	BASE SUPPORT
233	P0812233	STOP BLOCK SCALE
234	P0812234	RIVET 2 X 5MM NAMEPLATE, STEEL
235	P0812235	2-WAY LIMIT BLOCK (LEFT)
236	P0812236	CAP SCREW M10-1.5 X 30
237	P0812237	FIXED BLOCK
238	P0812238	FLAT WASHER 10 X 19 X 5MM
239	P0812239	ADJ HANDLE M10-1.5 X 40, 60L (METAL)
240	P0812240	SCALE INDICATOR
241	P0812241	RIVET 2 X 5MM NAMEPLATE, STEEL
242	P0812242	2-WAY LIMIT BLOCK (RIGHT)
243	P0812243	LOCK WASHER 6MM
244	P0812244	CAP SCREW M6-1 X 20
245	P0812245	SLIDE BASE
246	P0812246	HEX BOLT M10-1.5 X 30
247	P0812247	HEX NUT M10-1.5
248	P0812248	DISTANCE SET BRACKET
249	P0812249	FLAT WASHER 6MM
250	P0812250	KNOB M6-1 X 12 6-LOBE
251	P0812251	STOP BLOCK SUPPORT
252	P0812252	DISTANCE SET ROD
253	P0812253	LOCK WASHER 8MM
254	P0812254	CAP SCREW M8-1.25 X 45
255	P0812255	CAP SCREW M10-1.5 X 35
256	P0812256	LOCK WASHER 10MM

REF	PART #	DESCRIPTION
257	P0812257	CAP SCREW M5-.8 X 15
258	P0812258	SLIDE BASE SHAFT
259	P0812259	SWITCH BRACKET
260	P0812260	FLAT WASHER 5MM
261	P0812261	SWITCH ADJUSTING PLATE
262	P0812262	PHLP HD SCR M5-.8 X 12
263	P0812263	STOP BOLT M12-1.75 X 50
264	P0812264	HEX NUT M12-1.75
265	P0812265	SPANNER NUT M35-1.5
266	P0812266	EXT TOOTH WASHER 35MM
267	P0812267	SPACER RING
268	P0812268	CAP SCREW M6-1 X 30
269	P0812269	STUD-DE 1/2 X 7-3/4, 1/2-20 X 1, 3/8-24 X 1/2
270	P0812270	KNOB 1/2-20 X 1 X 2
271	P0812271	SET SCREW M6-1 X 12
272	P0812272	CAP SCREW M8-1.25 X 20
273	P0812273	LOCK WASHER 8MM
274	P0812274	FEED SUPPORT
275	P0812275	HEX BOLT M10-1.5 X 40
276	P0812276	ADJUSTABLE SUPPORT
277	P0812277	HEX NUT M10-1.5
278	P0812278	ANGLE MARGIN
279	P0812279	CAP SCREW M8-1.25 X 20
280	P0812280	SWIVEL ARM BASE
281	P0812281	CAP SCREW M10-1.5 X 35
282	P0812282	SWIVEL BASE (UPPER)
283	P0812283	GREASE FITTING 1/8 NPT, STRAIGHT
284	P0812284	TAPERED ROLLER BEARING 32007
285	P0812285	PIVOT SHAFT NUT
286	P0812286	PIVOT SHAFT
287	P0812287	SPRAY GUN ASSEMBLY
287-1	P0812287-1	HOSE FITTING 3/8 X 3/8 NPT, STRAIGHT
287-2	P0812287-2	3-WAY HOSE FITTING 3/8 NPT
287-3	P0812287-3	HOSE FITTING 3/8 X 1/2 NPT, STRAIGHT
287-4	P0812287-4	HOSE FITTING 3/8 X 1/2 NPT, ELBOW
287-5	P0812287-5	HOSE CLAMP 19MM
287-6	P0812287-6	BRAIDED HOSE 1/2" ID X 7/64" T X 49" L
287-7	P0812287-7	BRAIDED HOSE 1/2" ID X 7/64" T X 126" L
287-8	P0812287-8	SPRAY GUN A-1061
288	P0812288	ANGLE SCALE
289	P0812289	RIVET 2 X 5MM NAMEPLATE, STEEL
290	P0812290	HEX BOLT M6-1 X 15
291	P0812291	ANGLE LOCATING BLOCK
292	P0812292	BEARING PIN
293	P0812293	ANGLE POSITION BRACKET
296	P0812296	PUMP COVER
297	P0812297	FLAT WASHER 8MM
298	P0812298	HEX BOLT M8-1.25 X 25
299	P0812299	COOLANT PUMP 1/8HP 220V 1-PH
301	P0812301	LOCK WASHER 6MM
302	P0812302	CAP SCREW M6-1 X 12
303	P0812303	FLAT WASHER 6MM
304	P0812304	FLAT WASHER 6MM
305	P0812305	CAP SCREW M6-1 X 12
306	P0812306	COOLANT PUMP BRACKET



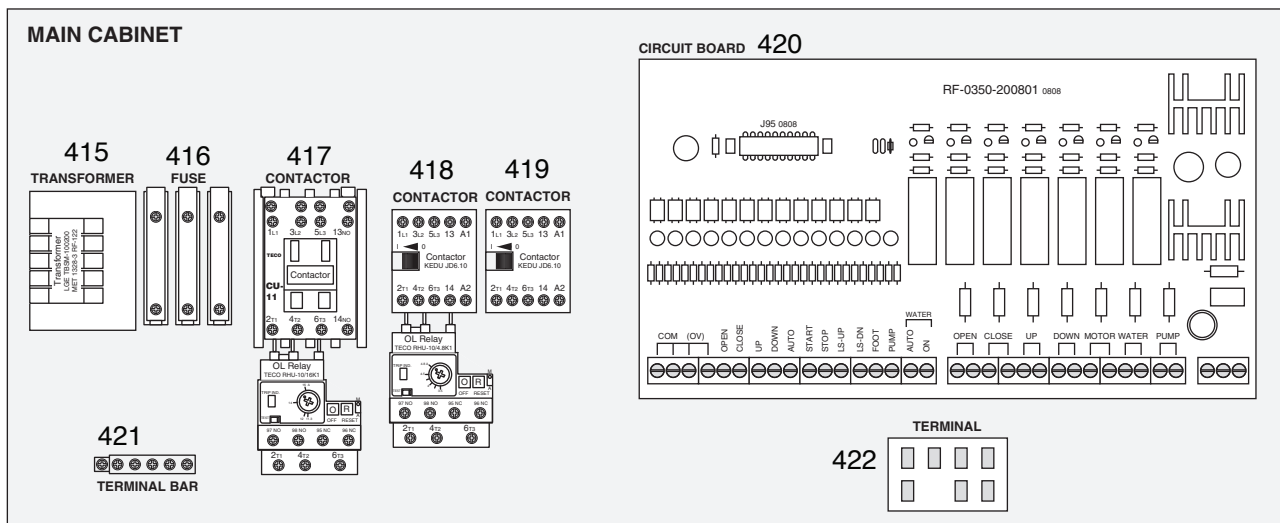
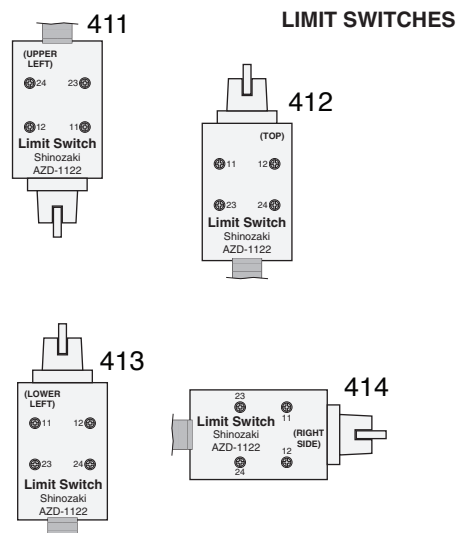
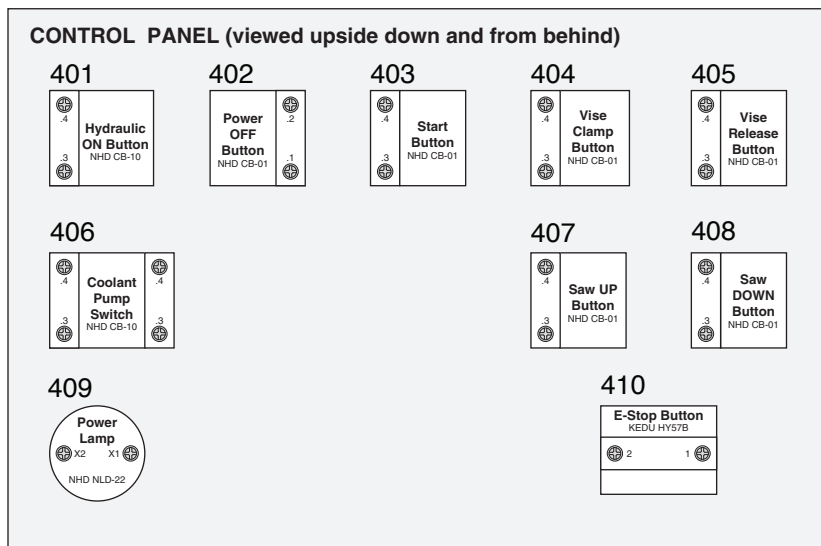
Base & Vise Parts List (Cont.)

REF	PART #	DESCRIPTION
307	P0812307	COOLANT RESERVOIR
308	P0812308	HEX BOLT M16-2 X 80
309	P0812309	HEX NUT M16-2
310	P0812310	SPLASH BOARD
311	P0812311	BASE
312	P0812312	ACCESS PANEL (FRONT)
313	P0812313	FLAT WASHER 6MM
314	P0812314	CAP SCREW M6-1 X 15
315	P0812315	HYDRAULIC UNIT 3-1/4 HP 220V
315-1	P0812315-1	MOTOR FAN COVER
315-2	P0812315-2	CAPACITOR COVER
315-3	P0812315-3	MOTOR JUNCTION BOX
315-4	P0812315-4	MOTOR FAN
315-5	P0812315-5	S CAPACITOR 800M 125V 1-3/4 X 3-3/8
315-6	P0812315-6	CONTACT PLATE
315-7	P0812315-7	CENTRIFUGAL SWITCH
315-8	P0812315-8	FRONT MOTOR BEARING (TYPE?)
315-9	P0812315-9	REAR MOTOR BEARING (TYPE?)
316	P0812316	HYDRAULIC TUBING 1/4 W X 39-1/2 L
317	P0812317	HYDRAULIC TUBING 1/4 W X 78-3/4 L
318	P0812318	HYDRAULIC TUBING 1/4 W X 118 L
319	P0812319	HYDRAULIC TUBING 1/4 W X 149 L
320	P0812320	HYDRAULIC TUBING 1/4 W X 39-1/2 L, 90-DEG
321	P0812321	HYDRAULIC PRESSURE GAUGE
322	P0812322	CAP SCREW M6-1 X 12
323	P0812323	FLAT WASHER 6MM
324	P0812324	PRESSURE GAUGE BRACKET
325	P0812325	CAP SCREW M6-1 X 15
326	P0812326	FLAT WASHER 6MM
327	P0812327	ACCESS PANEL (LEFT)
328	P0812328	O-RETAINER RING P12
329	P0812329	CAP SCREW M6-1 X 12
330	P0812330	FLAT WASHER 6MM
331	P0812331	CAP SCREW M8-1.25 X 15
332	P0812332	FLAT WASHER 8MM
333	P0812333	CONTROL BOX MOUNT
334	P0812334	CAP SCREW M8-1.25 X 20
335	P0812335	FLAT WASHER 8MM

REF	PART #	DESCRIPTION
336	P0812336	ADJUSTABLE HANDLE M8-1.25 X 25, 60L
337	P0812337	CONTROL BOX PIVOT BRACKET
338	P0812338	SET SCREW M8-1.25 X 20
339	P0812339	HEX NUT M8-1.25
340	P0812340	CONTROL ARM PIVOT BRACKET
341	P0812341	CAP SCREW M5-.8 X 12
342	P0812342	FLAT WASHER 5MM
343	P0812343	HEX NUT M8-1.25
344	P0812344	FLAT WASHER 8MM
345	P0812345	CONTROL BOX
346	P0812346	CONTROL BOX SUPPORT ARM
347	P0812347	HYDRAULIC CONTROL UNIT
348	P0812348	SWITCH PLATE
349	P0812349	CAP SCREW M5-.8 X 12
350	P0812350	FLAT WASHER 5MM
351	P0812351	HANDLE
352	P0812352	CAP SCREW M8-1.25 X 20
353	P0812353	COVER
354	P0812354	CAP SCREW M5-.8 X 12
355	P0812355	FLAT WASHER 5MM
356	P0812356	CONNECTION SHAFT
357	P0812357	VENTED ACCESS PANEL (REAR)
358	P0812358	SET SCREW M6-1 X 10
359	P0812359	CAP SCREW M6-1 X 12
360	P0812360	FLAT WASHER 6MM
361	P0812361	PHLP HD SCR M5-.8 X 10
362	P0812362	VALVE
363	P0812363	FLAT WASHER 6MM
364	P0812364	CAP SCREW M6-1 X 12
365	P0812365	CAP SCREW M8-1.25 X 15
366	P0812366	FLAT WASHER 8MM
367	P0812367	HEX NUT M10-1.5
368	P0812368	RACK SUPPORT
369	P0812369	ROLL PIN 5 X 20
370	P0812370	BRACKET
371	P0812371	CAP SCREW M8-1.25 X 25
372	P0812372	CONTROL PEDESTAL SUPPORT COVER
373	P0812373	SET SCREW M8-1.25 X 8



Electrical

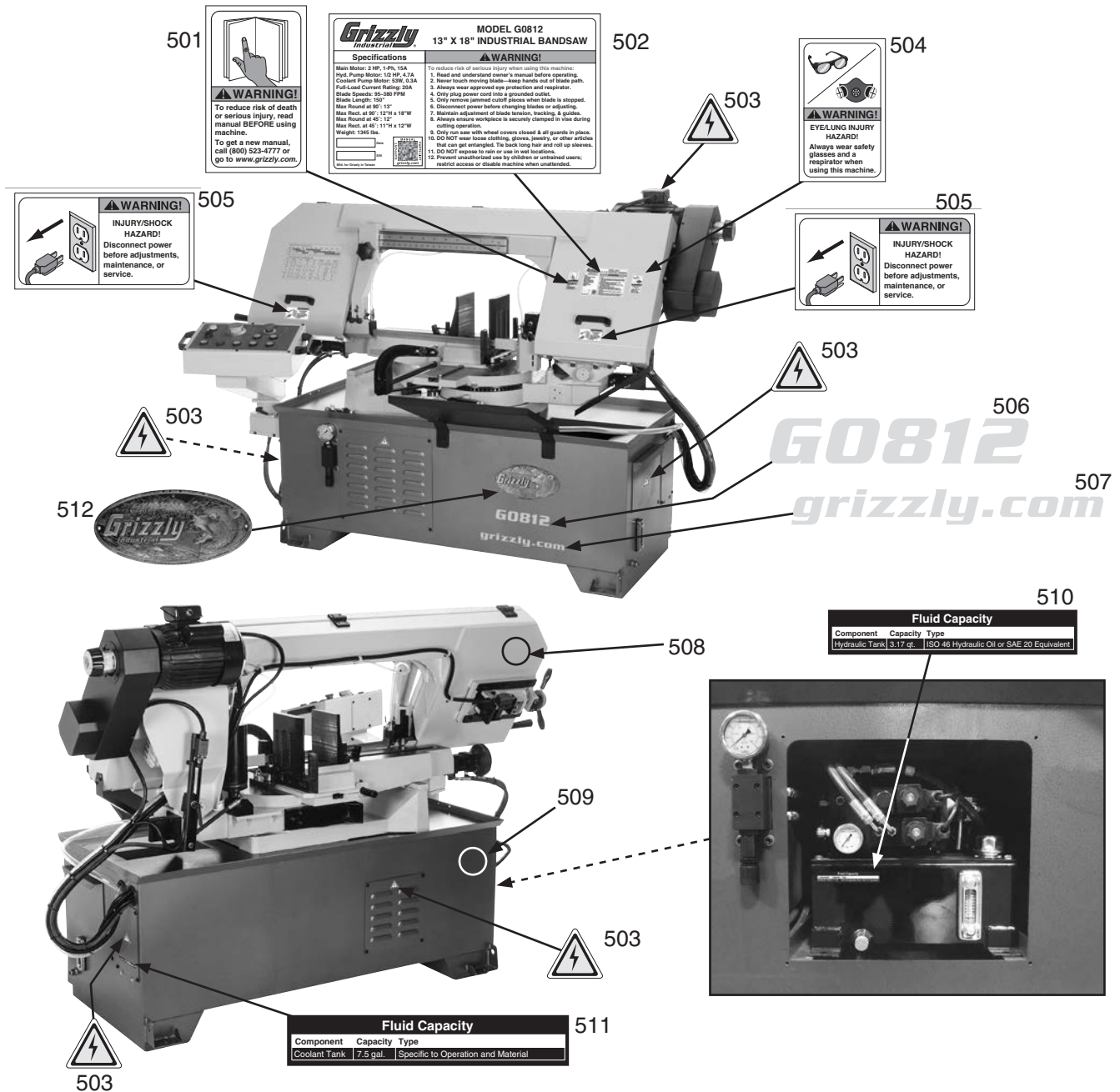


REF	PART #	DESCRIPTION
401	P0812401	HYDRAULIC ON BUTTON NHD CB-10
402	P0812402	POWER OFF BUTTON NHD CB-01
403	P0812403	START BUTTON NHD CB-01
404	P0812404	WISE CLAMP BUTTON NHD CB-01
405	P0812405	WISE RELEASE BUTTON NHD CB-01
406	P0812406	COOLANT PUMP SWITCH NHD CB-10
407	P0812407	SAW UP BUTTON NHD CB-01
408	P0812408	SAW DOWN BUTTON NHD CB-01
409	P0812409	POWER LAMP NHD NLD-22
410	P0812410	E-STOP BUTTON KEDU HY57B
411	P0812411	LIMIT SWITCH (UPPER LEFT) AZD-1122

REF	PART #	DESCRIPTION
412	P0812412	LIMIT SWITCH (TOP) AZD-1122
413	P0812413	LIMIT SWITCH (LOWER LEFT) AZD-1122
414	P0812414	LIMIT SWITCH (RIGHT SIDE) AZD-1122
415	P0812415	TRANSFORMER LGE TBSM-100200
416	P0812416	FUSE
417	P0812417	CONTACTOR TECO CU-11
418	P0812418	CONTACTOR KEDU JD6.10
419	P0812419	CONTACTOR KEDU JD6.10
420	P0812420	CIRCUIT BOARD RF-0350-200801
421	P0812421	TERMINAL BAR
422	P0812422	TERMINAL



Labels & Cosmetics



REF	PART #	DESCRIPTION
501	P0812501	READ MANUAL LABEL
502	P0812502	MACHINE ID LABEL
503	P0812503	ELECTRICITY LABEL
504	P0812504	GLASSES/RESPIRATOR LABEL
505	P0812505	DISCONNECT POWER 110V
506	P0812506	MODEL NUMBER LABEL

REF	PART #	DESCRIPTION
507	P0812507	GRIZZLY.COM LABEL
508	P0812508	TOUCH-UP PAINT, GRIZZLY BEIGE
509	P0812509	TOUCH-UP PAINT, GRIZZLY GREEN
510	P0812510	HYDRAULIC FLUID CAPACITY LABEL
511	P0812511	COOLANT FLUID CAPACITY LABEL
512	P0812512	GRIZZLY NAMEPLATE

⚠ WARNING

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





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.**

- 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:
- 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	
- 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+
- 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+
- 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
------------------------------------	------------------------------------	-------------------------------------	------------------------------------
- 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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- Do you think your machine represents a good value? Yes No
- Would you recommend Grizzly Industrial to a friend? Yes No
- Would you allow us to use your name as a reference for Grizzly customers in your area?
Note: We never use names more than 3 times. Yes No

10. Comments: _____

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FOLD ALONG DOTTED LINE



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P.O. BOX 2069
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WARRANTY & RETURNS

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

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

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

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

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

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

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