

# READ THIS FIRST



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

## Model G0886

### \*\*\*IMPORTANT UPDATE\*\*\*

For Machines Mfd. Since 7/19  
and Owner's Manual Printed 4/19

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

- Shipping brace installed on machine.
- **Steps 1–2** in **Assembly** section have changed.

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

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

## Revised Assembly Steps

1. Remove shipping brace at base of headstock support column (see **Figure 1**).
2. Re-install two cap screws (see **Figure 1**) and washers in column. Fasteners at bottom of brace do not need to be re-installed.

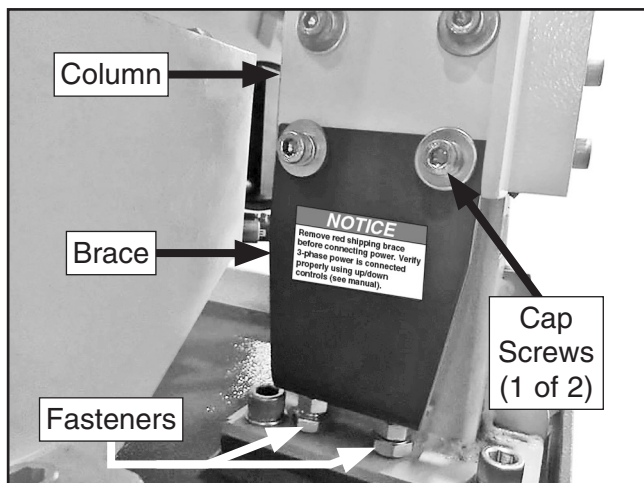


Figure 1. Location of shipping brace.

# **Grizzly** **Industrial, Inc.**®

## **MODEL G0886** **12" X 14" 3 HP AUTO** **METAL-CUTTING BANDSAW** **OWNER'S MANUAL** *(For models manufactured since 01/19)*



COPYRIGHT © APRIL, 2019 BY GRIZZLY INDUSTRIAL, INC.  
**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE  
OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.**  
#ES20255 PRINTED IN TAIWAN

V1.04.19



## **WARNING!**

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

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

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

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



## **WARNING!**

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

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

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

# Table of Contents

<b>INTRODUCTION</b> .....	<b>2</b>	<b>SECTION 5: ACCESSORIES</b> .....	<b>41</b>
Contact Info.....	2	<b>SECTION 6: MAINTENANCE</b> .....	<b>42</b>
Manual Accuracy .....	2	Schedule .....	42
Identification.....	3	Cleaning & Protecting .....	42
Controls & Components.....	4	Lubrication .....	43
Machine Data Sheet .....	6	Hydraulic System.....	46
<b>SECTION 1: SAFETY</b> .....	<b>8</b>	Coolant System.....	48
Safety Instructions for Machinery .....	8	Inspecting V-Belt.....	49
Additional Safety for Horizontal Metal Bandsaws .....	10	Machine Storage.....	50
<b>SECTION 2: POWER SUPPLY</b> .....	<b>11</b>	<b>SECTION 7: SERVICE</b> .....	<b>51</b>
<b>SECTION 3: SETUP</b> .....	<b>13</b>	Troubleshooting .....	51
Needed for Setup.....	13	Adjusting Lower Limit Stop Bolt.....	54
Unpacking .....	14	Adjusting Blade Tracking .....	54
Inventory .....	14	Adjusting Blade Brush .....	55
Hardware Recognition Chart .....	15	Adjusting Blade Guides .....	56
Cleanup.....	16	Squaring Blade to Table .....	58
Site Considerations.....	17	<b>SECTION 8: WIRING</b> .....	<b>59</b>
Lifting & Placing .....	18	Wiring Safety Instructions .....	59
Anchoring to Floor .....	19	Electrical Schematics.....	60
Assembly .....	20	Electrical Photos .....	63
Lubricating Machine.....	21	<b>SECTION 9: PARTS</b> .....	<b>65</b>
Test Run .....	21	Base.....	65
Recommended Adjustments.....	24	Headstock.....	67
Disabling & Locking Switch.....	24	Gearbox .....	70
<b>SECTION 4: OPERATIONS</b> .....	<b>25</b>	Feed System.....	71
Operation Overview .....	25	Electrical .....	73
Blade Selection.....	26	Labels & Cosmetics .....	75
Changing Blades.....	28	<b>WARRANTY &amp; RETURNS</b> .....	<b>77</b>
Tensioning Blade .....	30		
Blade Breakage .....	31		
Blade Care & Break-In.....	31		
Changing Blade Speed.....	32		
Blade Speed Chart .....	33		
Chip Inspection Chart .....	34		
Using Vise.....	35		
Blade Guides .....	35		
Setting Headstock Height .....	36		
Setting Blade Feed Rate.....	36		
Feed System.....	37		
Proximity Sensor.....	37		
Coolant.....	39		
Using Coolant System .....	39		
Operation Tips .....	40		
Workpiece Inspection.....	40		

# 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](http://www.grizzly.com).

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

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

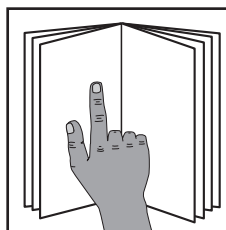
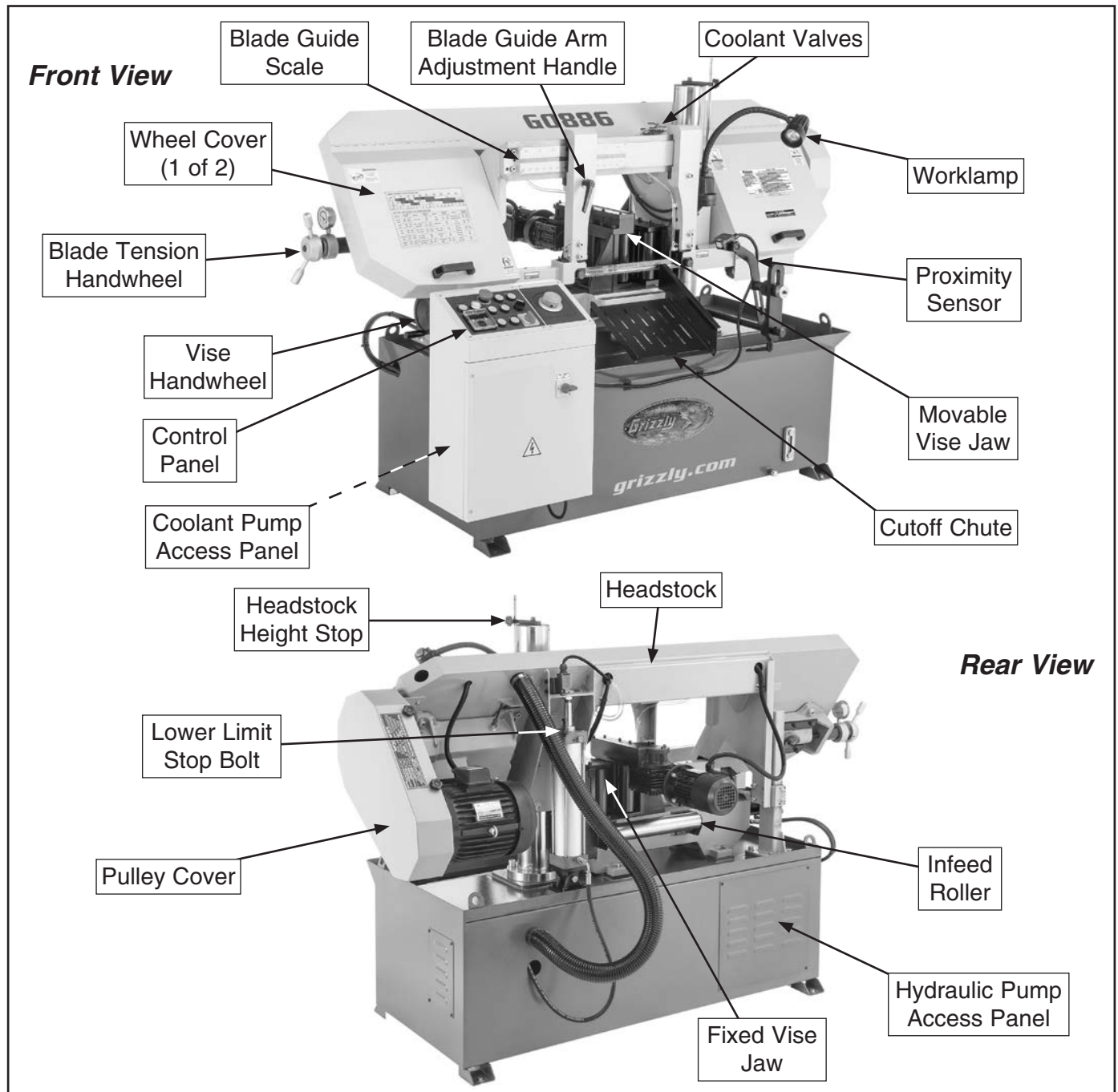
Manufacture Date

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.



## **! WARNING**

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



# Controls & Components



Refer to the following figures and 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 minimize your risk of injury when operating this machine.

## Control Panel

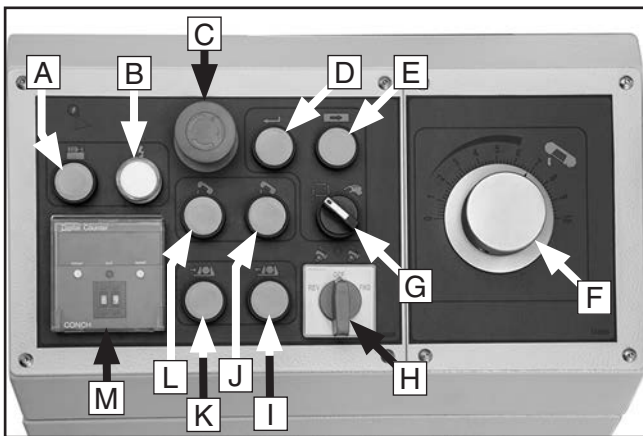


Figure 1. Model G0886 control panel.



Figure 2. Master power switch location.

- A. Hydraulic Pump Button** : Turns hydraulic pump **ON**. Must be pressed for other bandsaw controls to function.
- B. Power Lamp**: Illuminates when master power switch is turned **ON**.
- C. Emergency Stop Button**: Stops all machine functions. Twist clockwise to reset.
- D. Feed System Button** : Turns feed motor **ON** when machine is in Manual operation mode.
- E. Blade Start Button** : Turns main motor **ON** and starts saw blade. For button to work, hydraulic pump button (A) must be pressed, headstock must be raised, and vise close button (K) must be pressed.
- F. Blade Feed Rate Dial**: Controls rate at which blade feeds into workpiece.
- G. Operation Mode Switch**: Selects between Auto or Manual operation mode.
- H. Feed Roller Switch**: Turns feed motor **OFF** and **ON** when FWD or REV are selected. FWD must be selected for Auto operation mode.
- I. Vise Open Button** : Hydraulically opens vise to release workpiece after cut(s).
- J. Lower Headstock Button** : Hydraulically lowers headstock at rate determined by blade feed rate dial (F). Continues lowering blade until lower limit switch is activated or button is released.
- K. Vise Close Button** : Hydraulically closes vise to lock workpiece during cut(s). Button must be pressed for blade start button (E) to function.
- L. Raise Headstock Button** : Hydraulically raises headstock. Continues raising blade until upper limit switch is activated or button is released.
- M. Digital Counter**: Sets number of consecutive cuts machine will perform. The number of completed cuts is displayed. Push RESET to clear display and reset counter.
- N. Master Power ON/OFF Switch**: Turns incoming power **ON** and **OFF**.



## Headstock

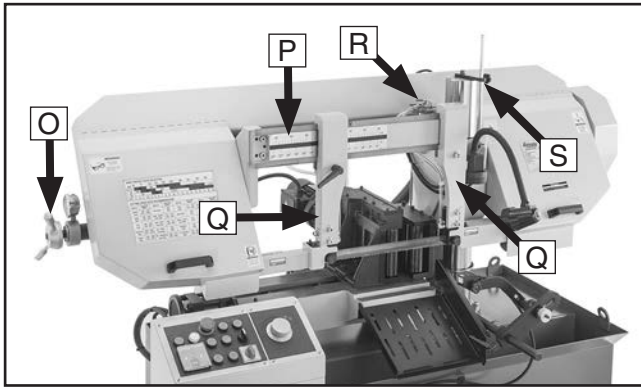


Figure 3. Headstock controls and components.

- O. Blade Tension Handwheel w/Gauge:** Increases or decreases blade tension. Gauge ensures accurate tensioning of blade.
- P. Blade Guide Scale:** Displays position of left blade guide arm relative to workpiece.
- Q. Blade Guide Arms:** Hold blade guides that support bandsaw blade. Left arm is adjustable; right arm is fixed. Place left arm as close to workpiece as possible during cutting to prevent blade from twisting.
- R. Coolant Valves:** Control flow of coolant through blade guides and onto blade.
- S. Headstock Height Stop:** Adjustable rod and bracket that controls upper travel of headstock by triggering a limit switch.

## Vise Table

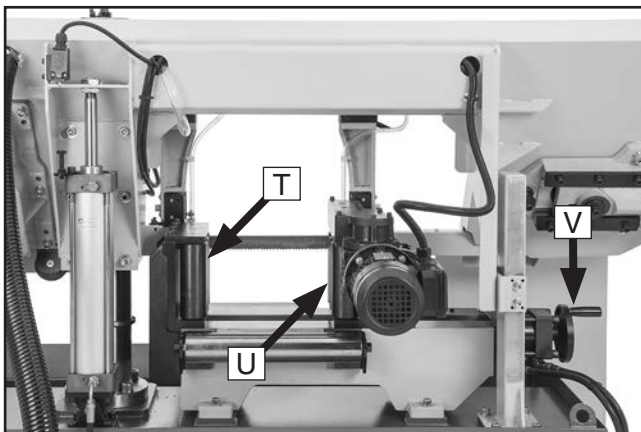


Figure 4. Vise table controls and components.

- T. Fixed Vise Jaw:** Helps hold workpiece during cutting operations. Has rollers that help feed material into cutting position.

**U. Movable Vise Jaw:** Holds workpiece during cutting operations. Jaw is positioned manually and locked hydraulically. Has motorized rollers that feed material into cutting position.

**V. Vise Handwheel:** Adjusts position of movable vise jaw relative to fixed vise jaw.

## Proximity Sensor

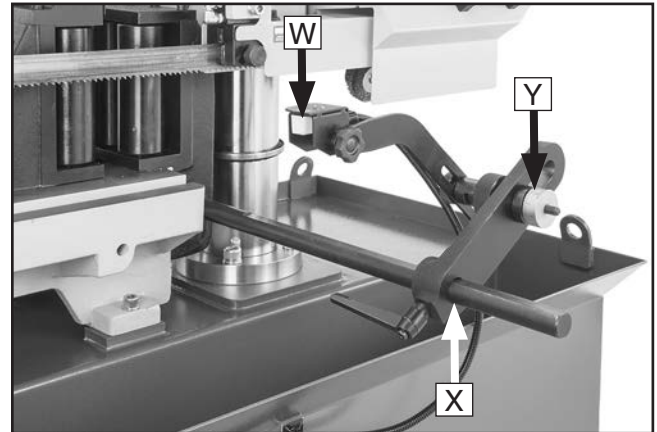


Figure 5. Proximity sensor components.

**W. Proximity Sensor Head:** Detects the presence (within 1/4") of metal materials. In combination with proximity sensor bracket and bar, functions as a work stop during automated and repetitive cutting operations.

**X. Proximity Sensor Bracket and Bar:** Supports and positions the proximity sensor head.

**Y. Proximity Sensor Adjustment Knob:** Moves proximity sensor bracket and head laterally in fine increments for precision cutting operations.







# MACHINE DATA SHEET

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

## MODEL G0886 12" X 14" 3 HP 3-PHASE AUTO METAL-CUTTING BANDSAW

### Product Dimensions:

Weight..... 1630 lbs.  
 Width (side-to-side) x Depth (front-to-back) x Height..... 83 x 43 x 55 in.  
 Footprint (Length x Width)..... 56 x 28 in.

### Shipping Dimensions:

Type..... Wood Crate  
 Content..... Machine  
 Weight..... 1800 lbs.  
 Length x Width x Height..... 85 x 48 x 62 in.  
 Must Ship Upright..... Yes

### Electrical:

Power Requirement..... 220V, 3-Phase, 60 Hz  
 Full-Load Current Rating..... 13.02A  
 Minimum Circuit Size..... 20A  
 Connection Type..... Cord & Plug  
 Power Cord Included..... Yes  
 Power Cord Length..... 12 ft.  
 Power Cord Gauge..... 12 AWG  
 Plug Included..... No  
 Recommended Plug Type..... L15-20  
 Switch Type..... Control Panel w/Magnetic Switch

### Motors:

#### Main

Horsepower..... 3 HP  
 Phase..... 3-Phase  
 Amps..... 8A  
 Speed..... 1735 RPM  
 Type..... TEFC Induction  
 Power Transfer ..... V-Belt  
 Bearings..... Sealed & Permanently Lubricated

#### Feed

Horsepower..... 1/8 HP  
 Phase..... 3-Phase  
 Amps..... 1.16A  
 Speed..... 1620 RPM  
 Type..... TEFC Induction  
 Power Transfer ..... Gear  
 Bearings..... Sealed & Permanently Lubricated



**Hydraulic Pump**

Horsepower..... 1 HP  
Phase..... 3-Phase  
Amps..... 3.6A  
Speed..... 1420 RPM  
Type..... TEFC Induction  
Power Transfer ..... Direct  
Bearings..... Sealed & Permanently Lubricated

**Coolant Pump**

Horsepower..... 1/8 HP  
Phase..... 3-Phase  
Amps..... 0.26A  
Speed..... 3600 RPM  
Type..... TEFC Induction  
Power Transfer ..... Direct  
Bearings..... Sealed & Permanently Lubricated

**Main Specifications:**

**Operation Info**

Blade Speeds..... 92, 161, 236, 338 FPM  
Std. Blade Length..... 155-1/2 in.  
Blade Length Range..... 155-1/4 - 155-3/4 in.

**Cutting Capacities**

Vise Jaw Depth..... 14 in.  
Vise Jaw Height..... 6-11/16 in.  
Max. Capacity Rectangular Height at 90 Deg..... 11-13/16 in.  
Max. Capacity Rectangular Width at 90 Deg..... 14 in.  
Max. Capacity Round at 90 Deg..... 11-13/16 in.

**Construction**

Table..... Cast Iron  
Upper Wheel..... Cast Iron  
Lower Wheel..... Cast Iron  
Body..... Steel  
Stand..... Steel  
Paint Type/Finish..... Epoxy

**Other**

Wheel Size..... 15-3/4 in.  
Blade Guides Upper..... Carbide Steel  
Blade Guides Lower..... Carbide Steel, Ball Bearings  
Coolant Capacity..... 6.5 gal.  
Hydraulic Capacity..... 16 qt.

**Other Specifications:**

Country of Origin ..... Taiwan  
Warranty ..... 1 Year  
Approximate Assembly & Setup Time ..... 1-1/2 Hour  
Serial Number Location ..... Machine ID Label  
ISO 9001 Factory ..... Yes  
Certified by a Nationally Recognized Testing Laboratory (NRTL) ..... No



# 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.

## **WARNING**

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

## **WARNING**

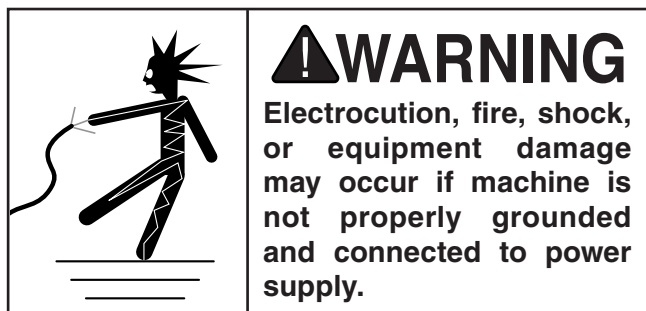
**No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment,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



# SECTION 2: POWER SUPPLY

## Availability

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



## Full-Load Current Rating

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

### Full-Load Current Rating at 220V ..13.02 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** ..... 3-Phase  
**Power Supply Circuit** ..... 20 Amps  
**Plug/Receptacle** ..... NEMA L15-20  
**Cord** ..... “S”-Type, 4-Wire, 12 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).

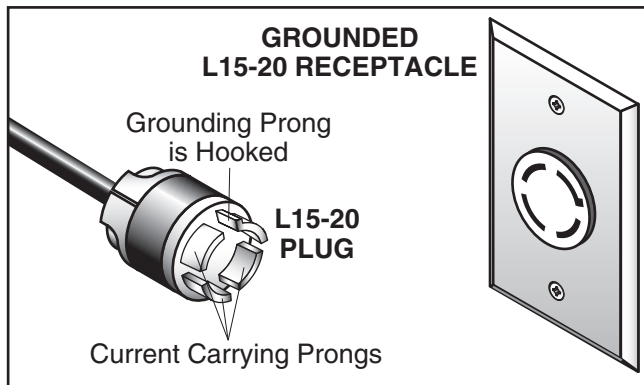
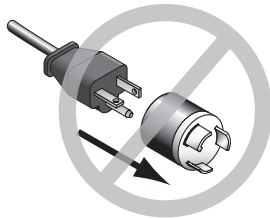


Figure 6. Typical L15-20 plug and receptacle.

## **⚠️ WARNING**

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

## **⚠️ CAUTION**



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

## **⚠️ 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.

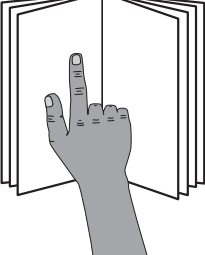
Extension cords cause voltage drop, which can damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

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



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



**!WARNING**  
Wear safety glasses during the entire setup process!



**!WARNING**

This is an extremely heavy machine! Serious personal injury or death may occur if safe lifting and moving methods are not followed. To be safe, you will need assistance and power lifting equipment when moving shipping crate and removing machine from crate. Seek assistance from a professional rigger if you are unsure about your abilities or maximum load ratings of your lifting equipment.

## Needed for Setup

The following are needed to complete the setup process:

- **For Lifting and Moving:**
  - Two additional people
  - A forklift or other power lifting equipment rated for at least 2250 lbs.
  - Four lifting straps rated for at least 2250 lbs. each
  - Four heavy-duty lifting hooks or shackles rated for at least 2250 lbs.
- **For Power Connection:**
  - A power source that meets minimum circuit requirements for machine (review **Power Supply** on **Page 11** for details)
  - An electrician or qualified service personnel to ensure a safe and code-compliant connection to power source
- **For Assembly:**
  - Safety glasses for each person
  - Leather gloves for each person
  - Disposable Shop Rags
  - Cleaner/degreaser (see **Page 16**)
  - Quality metal protectant/lubricant
  - Hammer & Pry Bar
  - Open-End or Socket Wrench 14mm
  - Hex Wrench 5mm
  - Piece of metal stock





# 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.***

# 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. Drip Tray .....	1
B. Cutoff Chute .....	1
C. Proximity Sensor Bracket Assembly .....	1
D. Proximity Sensor Bar.....	1
E. Lock Handle (Proximity Sensor).....	1
F. Knob Bolt (Proximity Sensor) .....	1

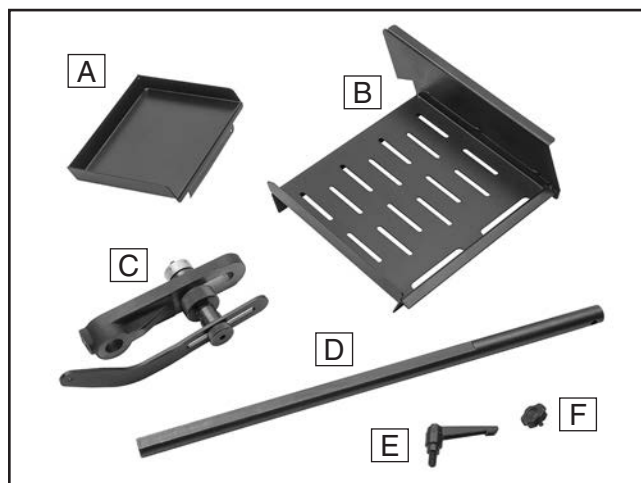


Figure 7. Box inventory.

## 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.

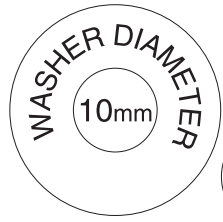
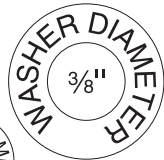
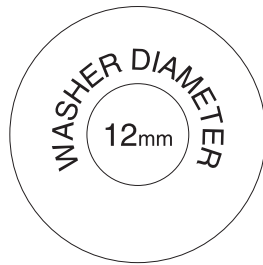
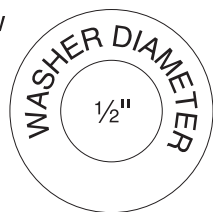
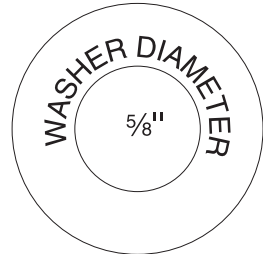
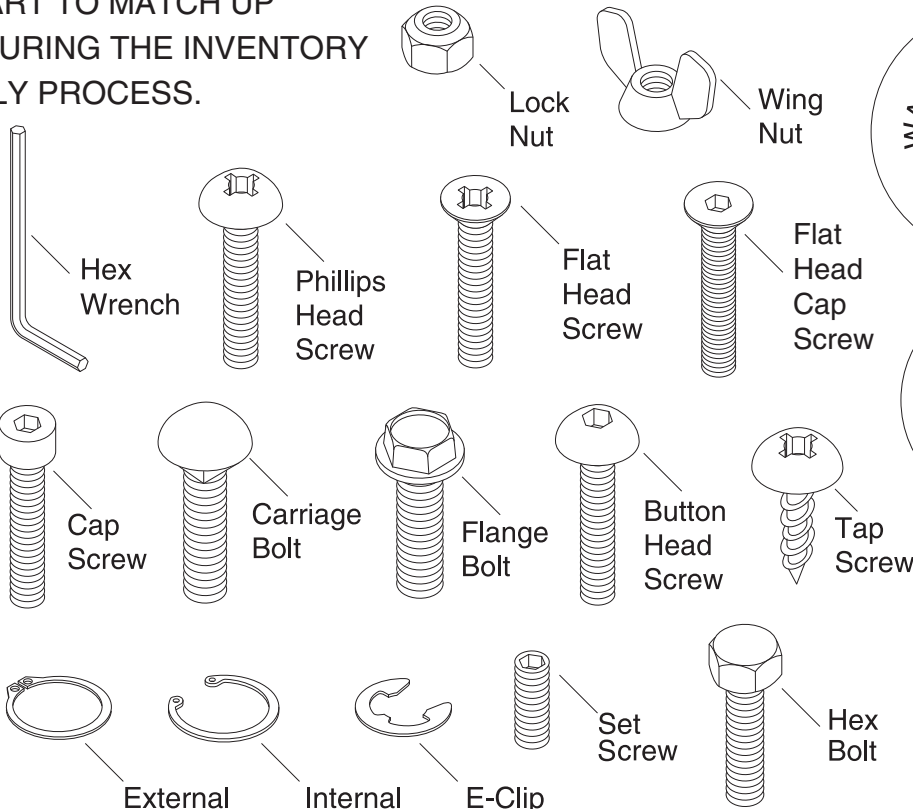


# Hardware Recognition Chart

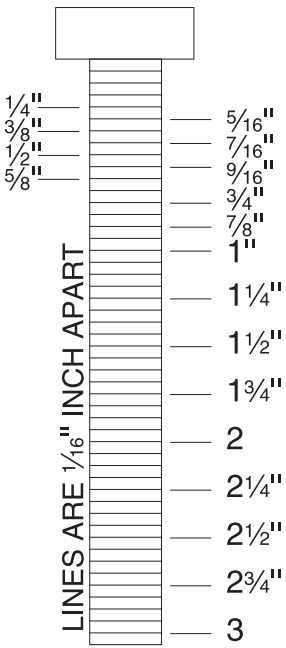
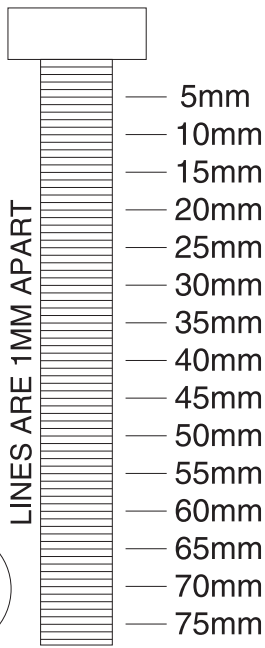
USE THIS CHART TO MATCH UP  
HARDWARE DURING THE INVENTORY  
AND ASSEMBLY PROCESS.

MEASURE BOLT DIAMETER BY PLACING INSIDE CIRCLE

- #10
- 1/4"
- 5/16"
- 3/8"
- 7/16"
- 1/2"



- 4mm
- 5mm
- 6mm
- 8mm
- 10mm
- 12mm
- 16mm



WASHERS ARE MEASURED BY THE INSIDE DIAMETER



# Cleanup

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

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

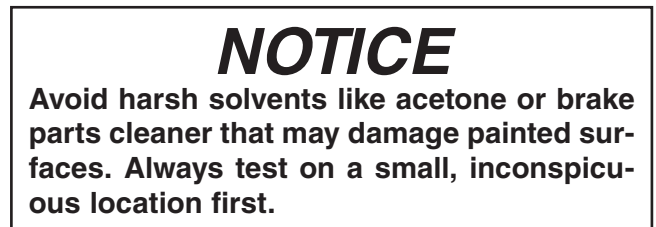
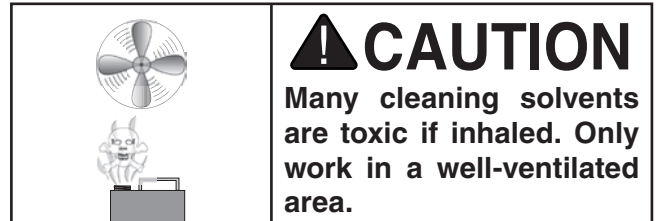
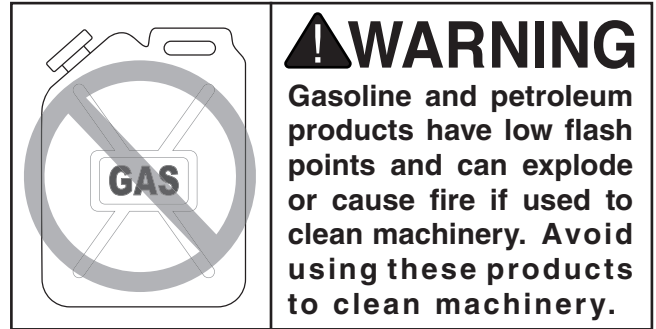
There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

## Before cleaning, gather the following:

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

## Basic steps for removing rust preventative:

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



## T23692—Orange Power Degreaser

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



**Figure 8.** T23692 Orange Power Degreaser.



# Site Considerations

## Weight Load

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

## Space Allocation

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



## Physical Environment

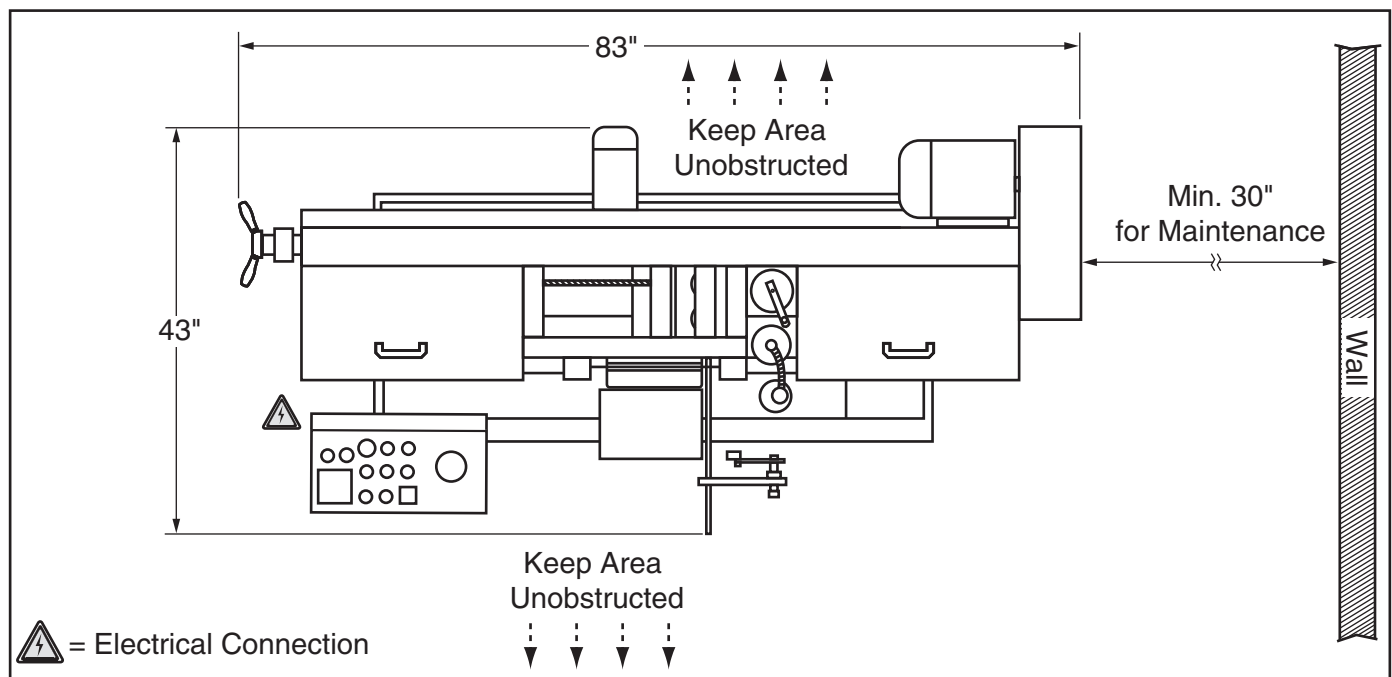
The physical environment where the machine is operated is important for safe operation and longevity of machine components. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions. Extreme conditions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

## Electrical Installation

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

## Lighting

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



**Figure 9.** Minimum working clearances.



# Lifting & Placing

**⚠ WARNING**



**This is an extremely heavy machine! Serious personal injury or death may occur if safe lifting and moving methods are not followed. To be safe, you will need assistance and power lifting equipment when moving shipping crate and removing machine from crate. Seek assistance from a professional rigger if you are unsure about your abilities or maximum load ratings of your lifting equipment.**

DO NOT attempt to lift or move machine without using proper lifting equipment (such as a forklift) and assistance from other people. Each piece of lifting equipment must be rated for **at least 2250 lbs.** to support dynamic loads that may be applied while lifting.

Review the **Power Supply** section beginning on **Page 11**, then prepare a permanent location for the machine.

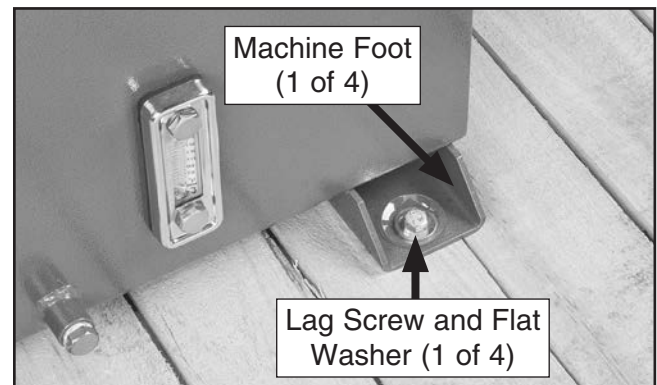
**IMPORTANT:** Make sure prepared location is clean, flat, and reasonably level.

## To lift and place machine:

1. Move machine over its prepared location while still inside shipping crate.
2. Remove top and sides of shipping crate, then place small items aside in safe location.

**Note:** Do not destroy shipping crate and packaging until after Test Run.

3. Remove (4) lag screws and flat washers that secure machine to shipping pallet (see **Figure 10**).

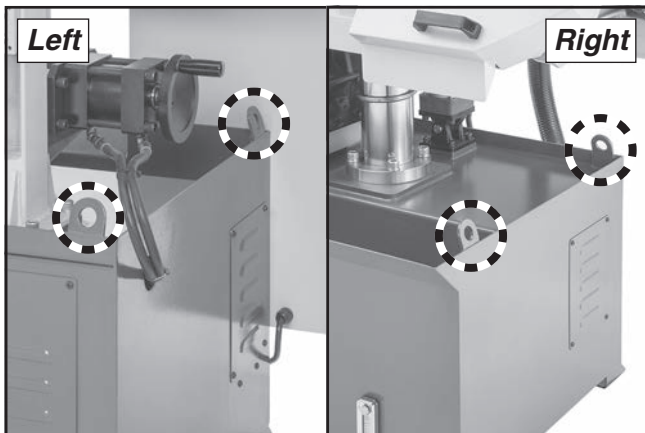


**Figure 10.** Machine secured to shipping pallet.

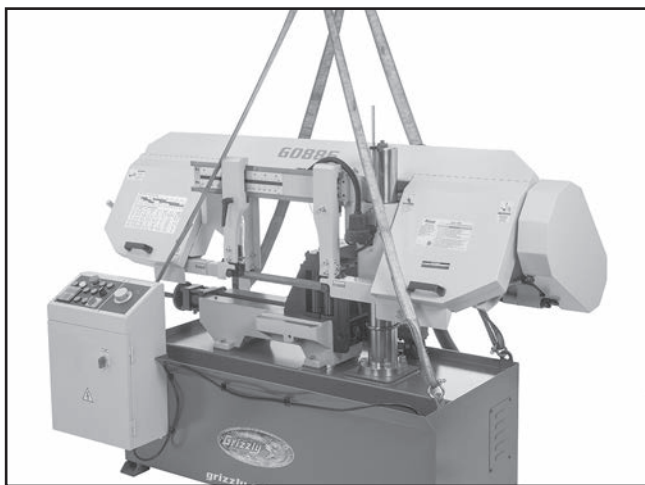


- Secure lifting straps to (4) hoist rings on machine (see **Figure 11**) with heavy-duty lifting hooks or shackles, and attach straps to lifting equipment (see **Figure 12**).

**Note:** Hoist rings are positioned on machine to balance weight of machine when using four lifting straps of equal length.



**Figure 11.** Location of hoist rings.



**Figure 12.** Lifting machine with lifting slings.

- Raise machine a couple of inches and check balance of load. Have two other people carefully steady machine to help prevent it from swinging while lifting.
- Raise machine enough to clear shipping pallet and carefully remove pallet.
- Slowly lower machine into position.
- Anchor machine to floor (refer to **Anchoring to Floor**).

## Anchoring to Floor

Number of Mounting Holes ..... 4  
 Diameter of Mounting Hardware..... 3/8"

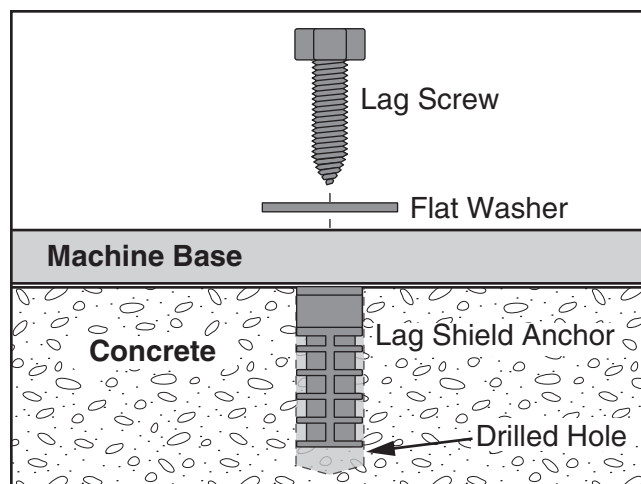
Anchoring machinery to the floor prevents tipping or shifting and reduces vibration that may occur during operation, resulting in a machine that runs slightly quieter and feels more solid.

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 13.** Popular method for anchoring machinery to a concrete floor.



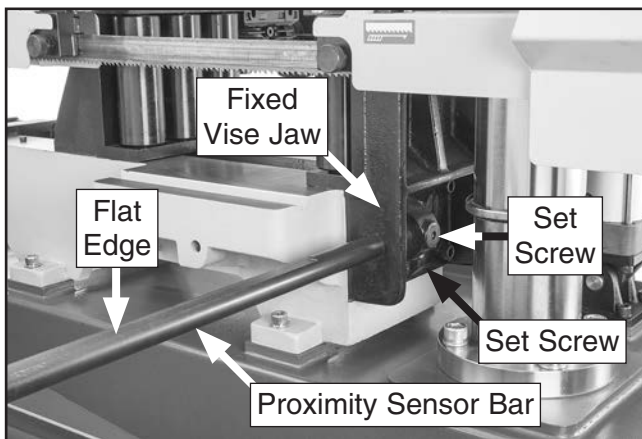
# Assembly

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 proximity sensor, drip tray, and cutoff chute, the Model G0886 comes fully assembled from the factory.

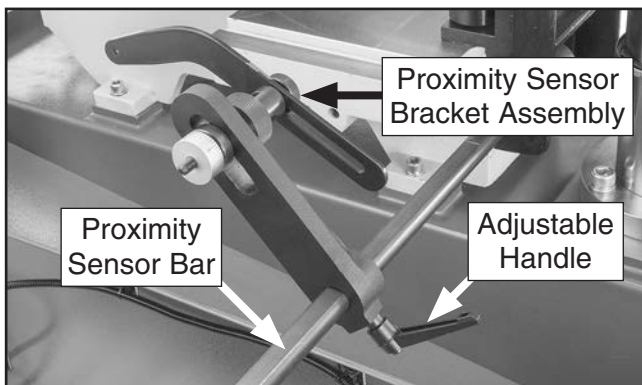
## To assemble machine:

1. Slide proximity sensor bar into hole in fixed vise jaw with flat edge on bar upward, as shown in **Figure 14**, then tighten set screws.



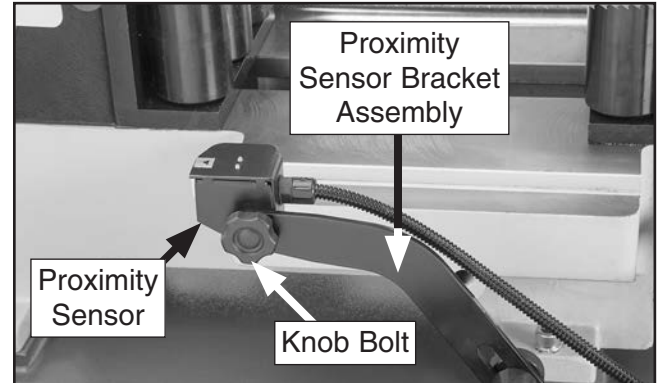
**Figure 14.** Proximity sensor bar attached.

2. Slide proximity sensor bracket assembly onto proximity sensor bar, as shown in **Figure 15**, then tighten adjustable handle.



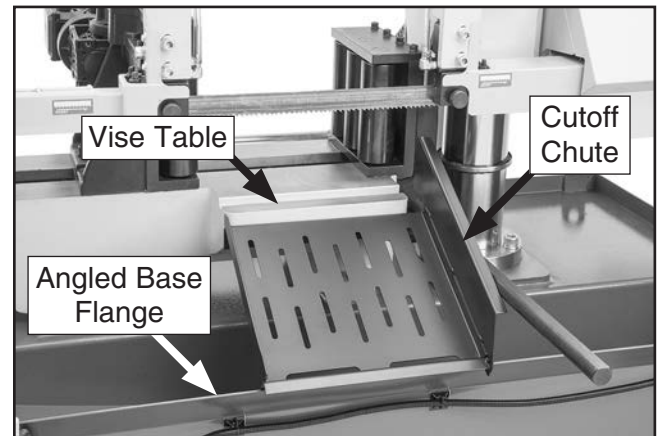
**Figure 15.** Proximity sensor bracket attached.

3. Attach proximity sensor to proximity sensor bracket assembly with pre-installed knob bolt, as shown in **Figure 16**.



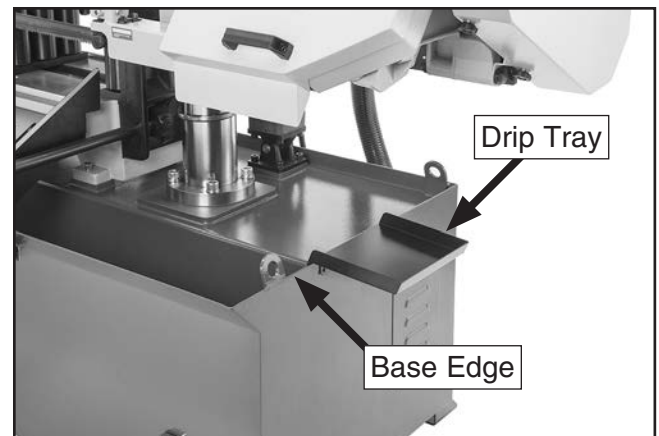
**Figure 16.** Proximity sensor attached.

4. Position cutoff chute between vise table and angled base flange, as shown in **Figure 17**.



**Figure 17.** Cutoff chute positioned.

5. Position drip tray on base edge, as shown in **Figure 18**.



**Figure 18.** Drip tray positioned.



# Lubricating Machine



The gearbox must have the proper amount of gear oil in it before the machine can be operated. Refer to the **Lubrication** section, beginning on **Page 43**, for checking and adding gear oil.

**IMPORTANT:** Damage caused to the bearings, and gears from running the machine without gear oil in the gearbox will not be covered under warranty.

# 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 verifies the following: 1) all motors power up and run correctly, 2) the hydraulic system runs correctly, 3) 3-phase power supply polarity is correct, (4) the Emergency Stop button safety feature works correctly, and (5) the lower limit switch safety feature works correctly.

Refer to **Figure 19** during **Test Run**. Each control has an alphabetical callout for identification.

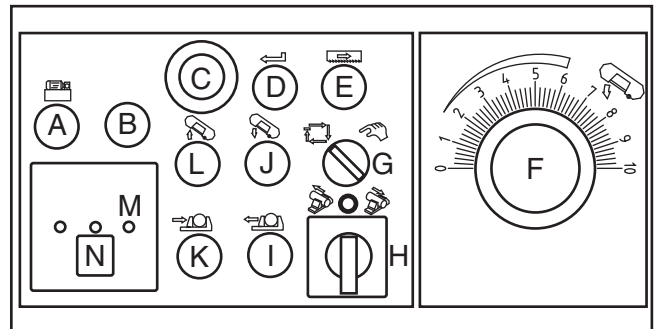


Figure 19. G0886 control panel.

## ⚠ 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.

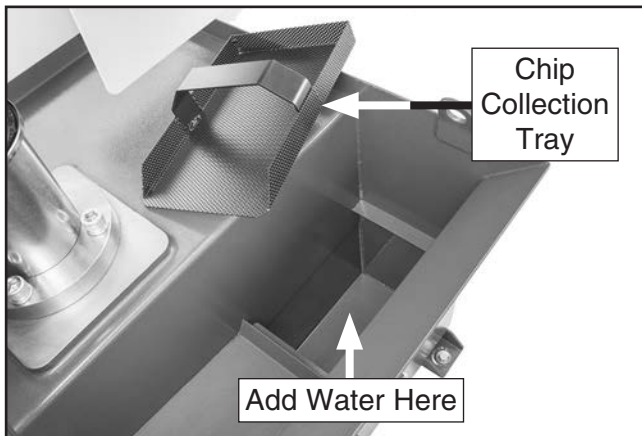




### To test run machine:

1. Read and follow safety instructions at beginning of manual, take all required safety precautions, and make sure all previous setup/assembly steps in this manual have been followed and completed.
2. Clear all setup tools and loose items away from machine.
3. Make sure machine is disconnected from power source.
4. Remove chip collection tray and add 6.5 gallons of water to coolant reservoir (see **Figure 20**). DO NOT run machine without coolant in reservoir or coolant pump will be damaged.

**Note:** For the **Test Run**, there is no need to mix cutting fluid with the water.

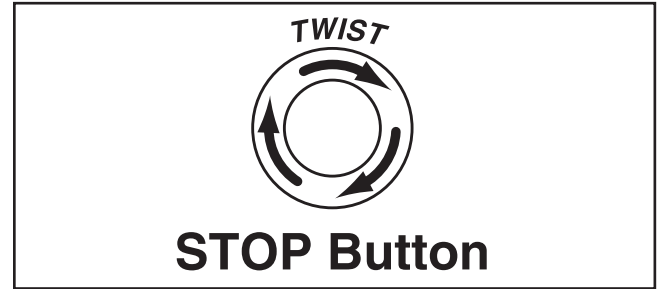


**Figure 20.** Coolant reservoir opening.

5. Push Emergency Stop button (C).
6. Connect machine to power source.
7. Turn master power switch **ON**. Power lamp (B) on control panel should illuminate to indicate power is connected.

**Note:** Master power switch is located on electrical panel access door, just below control panel (see **Figure 2** on **Page 4**).





8. Twist Emergency Stop button (C) clockwise until it pops out (see **Figure 21**). This resets button so machine will start.




**Figure 21.** Resetting Emergency Stop button.

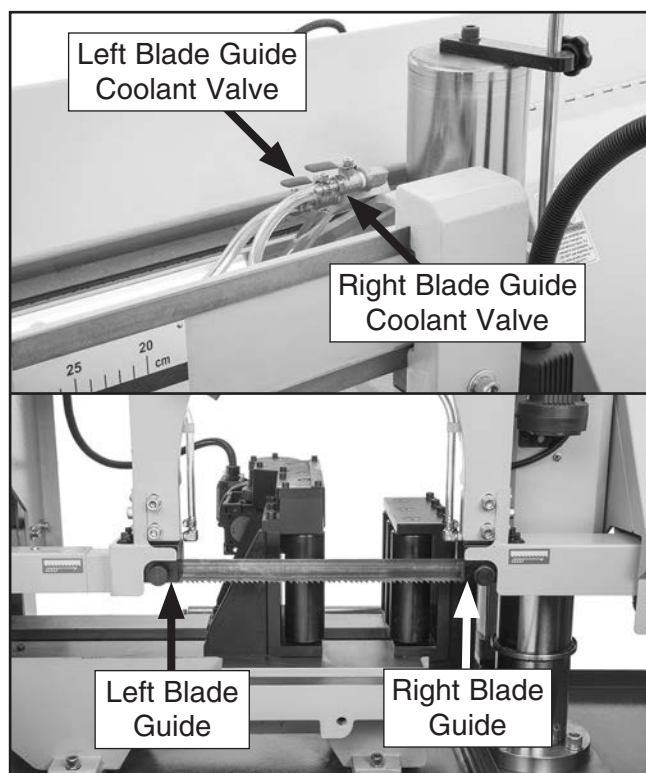
9. Push hydraulic pump button (C). You should hear hydraulic pump (located in machine base) turn **ON**.
10. Turn operation mode switch (G) to manual mode.
11. Check function of headstock hydraulics and 3-phase power supply polarity by using raise headstock button (L) and lower headstock button (J) to raise and lower headstock.
  - If headstock *raises* when raise headstock button (L) is pushed and *lowers* when lower headstock button (J) is pushed, then phase polarity *is correct*. Remove related shipping tag from control panel and continue to **Step 12**.
  - If headstock *does not raise or lower* when raise headstock button (L) and lower headstock button (J) are pushed, then power phase polarity *is not correct*. Push Emergency Stop button (C), disconnect machine from power source, switch any two of three power supply wires on plug or hardwired connection, then restart **Test Run**.
12. Check function of vise hydraulics by pressing vise open button (I) and vise close button (K).




13. Check function of feed system by pressing feed system button  (D), then turning feed roller switch (H) to FWD , REV , and OFF .

**Note:** Vise must be in closed position for feed system to function.

14. Push and hold raise headstock button  (L) and raise headstock several inches.
15. Open coolant valves (see **Figure 22**). Coolant should flow through blade guides (see **Figure 22**) and onto blade when main motor starts in **Step 16**.






**Figure 22.** Location of coolant valves and blade guides.

16. Start main motor and blade movement by pushing blade start button  (E). Keep your finger near Emergency Stop button (C). Verify coolant flows through blade guides and onto blade. The machine should run smoothly and without problems or unusual noises.






**Note:** Vise must be in closed position for main motor and blade movement to start.

17. Press Emergency Stop button (C) to completely to stop machine.

18. WITHOUT resetting Emergency Stop button (C), push hydraulic pump button  (C), vise close button  (K), then blade start button  (E). The machine should *not* start.

— If machine *does not* start, Emergency Stop button safety feature is working correctly. Continue to **Step 19**.

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

19. Close coolant valves (see **Figure 22**).
20. Reset Emergency Stop button (C).
21. Turn operation mode switch (G) to auto  mode, and turn feed roller switch (H) to forward .
22. Push reset button (M) on the digital counter, then use tabs (N) to set digital counter to 3.
23. Push hydraulic pump button  (C), vise close button  (K), then blade start button  (E).
24. Trigger proximity sensor with a piece of metal stock to start cutting cycle. (Metal stock must be within 1/4" of proximity sensor to trigger it.) When headstock reaches bottom of travel, blade should shut off and headstock should move back to top of its travel.

— If blade *does* shut off and headstock *does* move back to top of its travel, lower limit stop *is* working correctly. Continue to **Step 25**.

— If blade *does not* shut off or headstock *does not* move back to top of its travel, lower limit stop *is not* working correctly. This safety feature must work properly before proceeding with regular operations. Refer to **Page 54** to adjust lower limit stop bolt.



25. Trigger proximity sensor with a piece of metal stock to start cutting cycle again.
26. Press Emergency Stop button (C) to completely to stop machine.
27. WITHOUT resetting Emergency Stop button (C), attempt to trigger proximity sensor with a piece of metal stock to start cutting cycle again.
  - If cutting cycle *does not* start, Emergency Stop button safety feature is working correctly. Congratulations! Test Run is complete.
  - If cutting cycle *does* start (with Emergency Stop button pushed in), immediately disconnect power. The Emergency Stop button safety feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

## Recommended Adjustments

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**.

### Factory adjustments that should be verified:

1. Blade Tracking (Page 54).
2. Blade Guides (Page 56).
3. Squaring Blade to Table (Page 58).

## Disabling & Locking Switch

The master power switch can be disabled and locked by inserting a padlock through it, as shown. Locking the switch in this manner can prevent unauthorized operation of the machine, which is especially important if the machine is not stored inside an access-restricted building.

**IMPORTANT:** Locking the switch with a padlock only restricts its function. It is not a substitute for disconnecting power from the machine when adjusting or servicing.

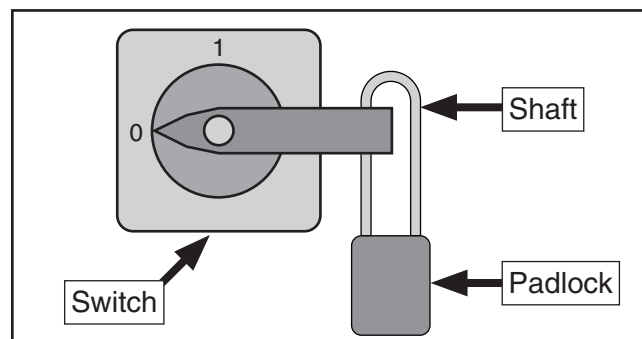


Figure 23. Switch disabled by a padlock.

## ⚠ WARNING

Children or untrained people can be seriously injured by this machine. This risk increases with unsupervised operation. To help prevent unsupervised operation, disable and lock the switch before leaving machine unattended! Place key in a well-hidden or secure location.

## NOTICE

The padlock shaft diameter is important to the disabling function of the switch. With any padlock used to lock the switch, test the switch after installation to ensure that it is properly disabled.

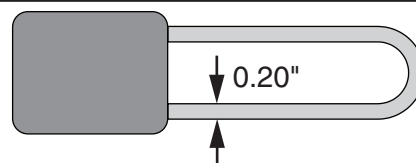


Figure 24. Maximum lock shaft requirements.

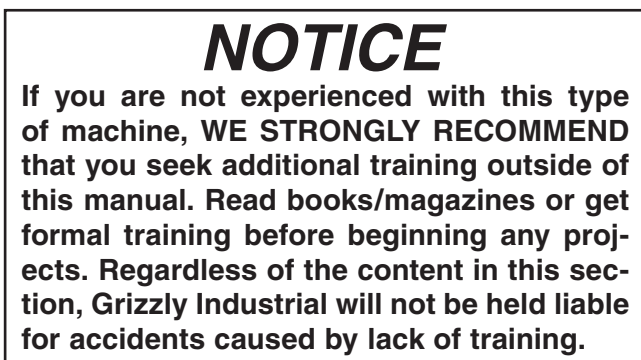
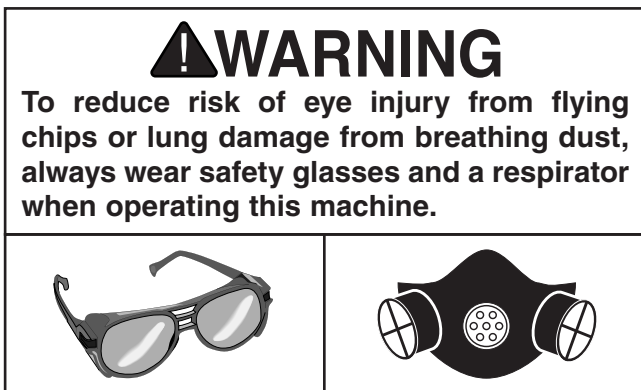


# SECTION 4: OPERATIONS

## 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. Ensures machine has correct type and amount of coolant for workpiece material (refer to **Coolant** on **Page 39** and **Coolant System** on **Page 48**).
3. If needed, changes blade for workpiece material (refer to **Blade Selection** on **Page 26** and **Changing Blades** on **Page 28**).
4. Sets proper blade speed for workpiece material (refer to **Blade Speed Chart** on **Page 33**).
5. Verifies blade is properly tensioned (refer to **Tensioning Blade** on **Page 30**).
6. Turns master power switch **ON**, then turns hydraulic pump **ON**.
7. Securely clamps workpiece in vise using manual and hydraulic controls (refer to **Using Vise** on **Page 35**). Ensures workpiece is stable and cutting area is free of obstructions.
8. Adjusts blade guide arm as close to workpiece as possible (refer to **Blade Guides** on **Page 35**).
9. Raises headstock to required height for workpiece (refer to **Setting Headstock Height** on **Page 36**).
10. Sets proper blade feed rate for workpiece material (refer to **Setting Blade Feed Rate** on **Page 36**).
11. Sets up proximity sensor as needed for cutting operations (refer to **Proximity Sensor** on **Page 37**).
12. Selects manual or auto operation mode, depending on number of cuts needed (refer to **Feed System** on **Page 37**).



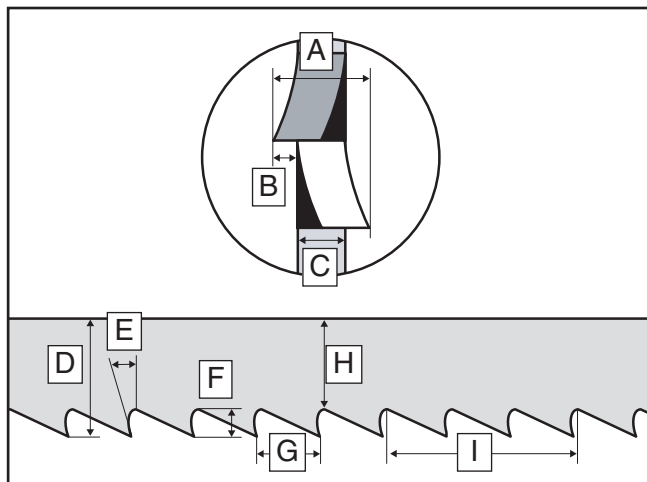
13. Puts on safety glasses and respirator.
14. Opens coolant valves (refer to **Using Coolant System** on **Page 39**).
15. Starts blade movement, and allows machine to complete cut(s).
16. Inspects chips and adjusts blade feed rate as needed (refer to **Chip Inspection Chart** on **Page 34**).
17. When finished, turns machine **OFF**.

- 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 Selection

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

### Blade Terminology



**Figure 25.** 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.

### 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
G0886.....	155 <sup>1</sup> / <sub>4</sub> "–155 <sup>3</sup> / <sub>4</sub> "

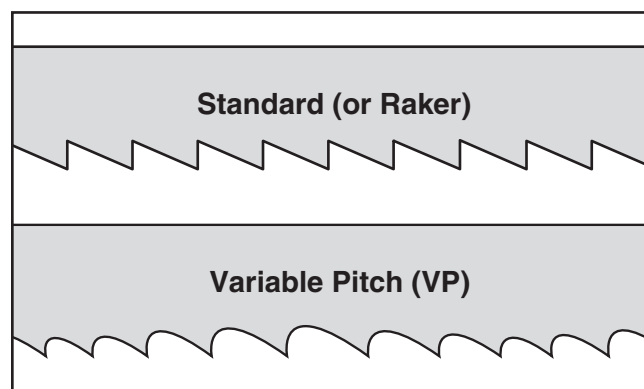
### Blade Width

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

Model	Blade Width
G0886.....	1 <sup>3</sup> / <sub>8</sub> "

### Tooth Type

The most common tooth types are described as follows, and illustrated in **Figure 26**.



**Figure 26.** 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.

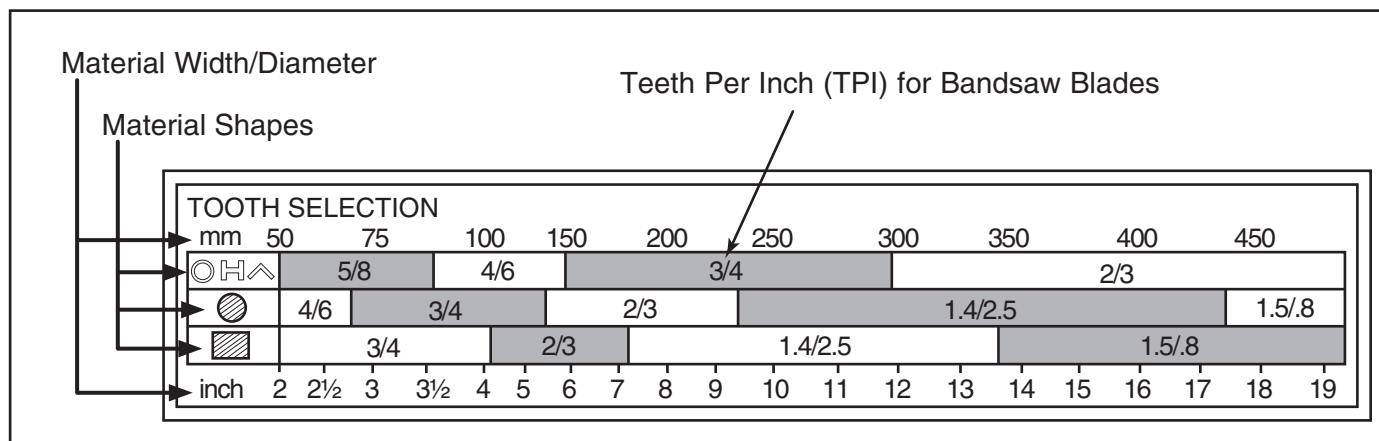
### To select correct blade pitch:

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 27**, 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 33** for further details.



**Figure 27.** General guidelines for blade selection and speed chart.





# Changing Blades

	<p><b>⚠ CAUTION</b>  <b>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.</b></p>
---	--

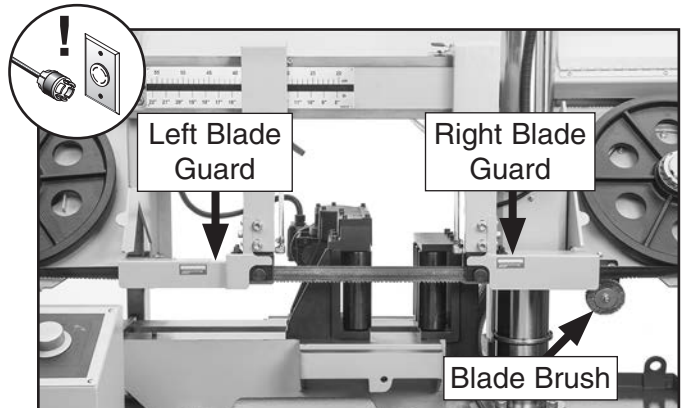
Item(s) Needed	Qty
Assistant.....	1
Leather Gloves (per person).....	1
Hex Wrenches 4, 5mm.....	1 ea.

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

## To change blade on bandsaw:

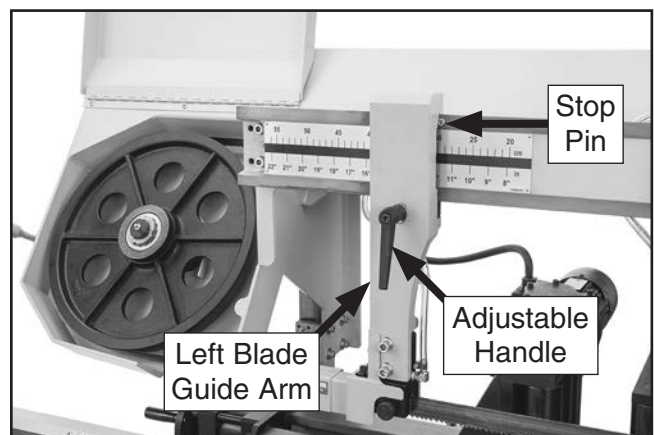
1. Push hydraulic pump button  to turn hydraulic pump **ON**.
2. Push raise headstock button  and raise headstock approximately 6 inches.
3. **DISCONNECT MACHINE FROM POWER!**
4. Remove cutoff chute and move proximity sensor out of the way.
5. Open both wheel covers.
6. Clean out all chips and shavings with a brush and shop vacuum.

7. Remove both blade guards and blade brush (see **Figure 31**).



**Figure 28.** Location of blade guards and blade brush.

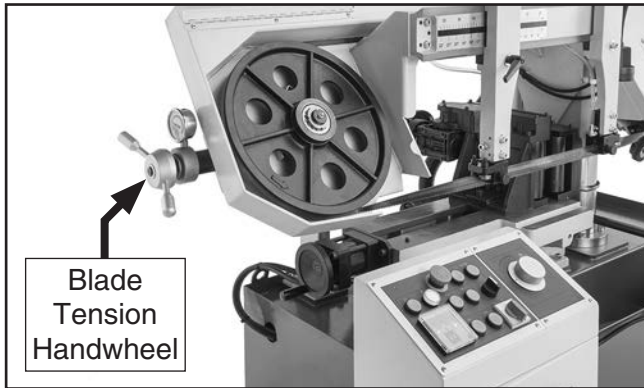
8. Loosen adjustable handle on left blade guide arm and move arm until it contacts stop pin on scale, as shown in **Figure 29**.



**Figure 29.** Left blade guide arm positioned.

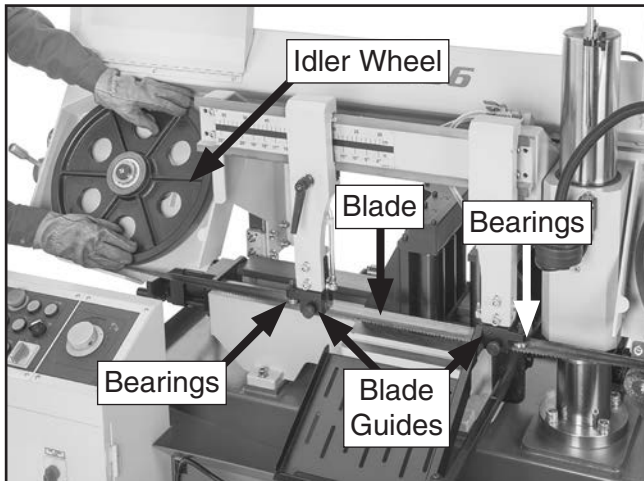


- Loosen blade tension handwheel (see **Figure 30**), and remove blade from wheels.



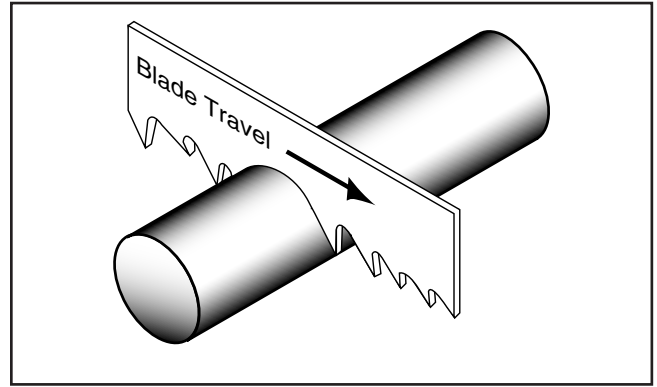
**Figure 30.** Location of blade tension handwheel.

- With help of an assistant, insert new blade through both blade guides and bearings (see **Figure 31**), then position it around wheels.



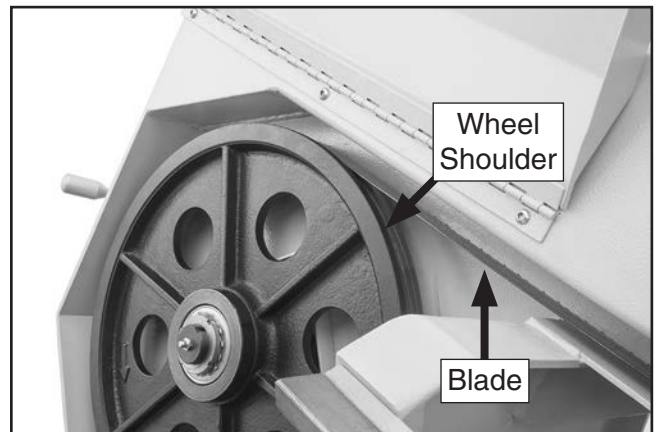
**Figure 31.** Installing new blade.

**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 32**). Some blades will have a directional arrow as a guide.



**Figure 32.** Example of blade cutting direction.

- Apply a light amount of tension to hold blade in place. Work your way around blade to adjust position so back of blade is against shoulder of wheels, as shown in **Figure 33**.



**Figure 33.** Blade installed on wheels.

- Perform **Tensioning Blade** procedure that follows this section.
- Re-install blade brush and blade guards, then close wheel covers. Ensure guards do not touch blade.





# Tensioning Blade

Proper blade tension is essential to avoid blade vibration, twist, or slippage on the wheels. A correctly tensioned blade provides long blade life, straight cuts, and efficient cutting times.

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

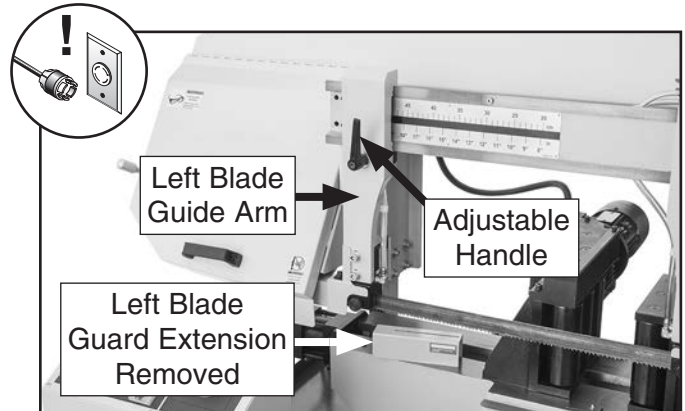
## **NOTICE**

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

### To tension bandsaw blade:

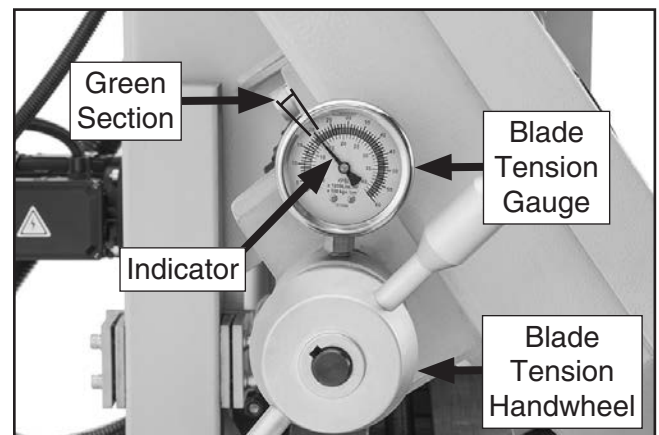
1. DISCONNECT MACHINE FROM POWER!
2. Perform a quick blade tracking check by sliding a fingernail between end of blade and wheel shoulder.
  - If there is *just enough* space to fit a fingernail, then blade tracking is properly adjusted. Continue to **Step 3**.
  - If there is *too little or too much* space to fit a fingernail, then blade tracking must be properly adjusted before tensioning blade. (Refer to **Adjusting Blade Tracking** on **Page 54**.)

3. Remove left blade guard extension, as shown in **Figure 34**.
4. Loosen adjustable handle on left blade guide arm and move arm as far left as it will go, as shown in **Figure 34**. Tighten adjustable handle to secure arm position.



**Figure 34.** Left blade guide arm positioned for blade tensioning.

5. Turn blade tension handwheel (see **Figure 35**) clockwise to tighten blade or counterclockwise to loosen blade.
6. Adjust blade tension handwheel until indicator on blade tension gauge moves into green section, as shown in **Figure 35**.



**Figure 35.** Blade tension properly set.



# 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.
- 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 33** and **Chip Inspection Chart** on **Page 34**). 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.

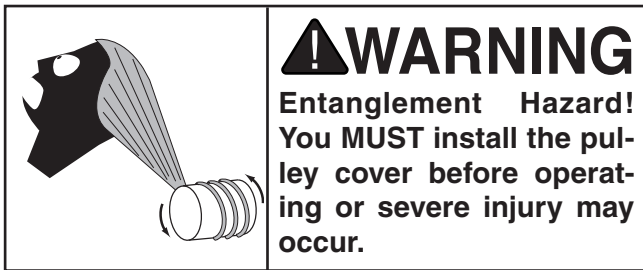
Use the **Chip Inspection Chart** on **Page 34** as a guide to evaluate the chips and ensure that the optimal blade speed and feed rate are being used.

### To properly break in new blade:

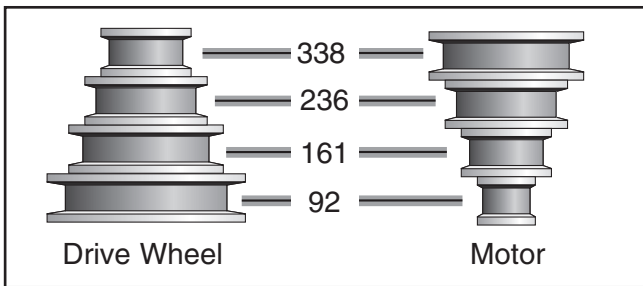
1. Choose correct speed for blade and material type.
2. Reduce feed pressure by half for first 50–100 in<sup>2</sup> of material cut.
3. To avoid twisting blade when cutting, adjust feed pressure when total width of blade is in cut.



# Changing Blade Speed



The Model G0886 has four speed settings—92, 161, 236, and 338 feet per minute (FPM). These different speed settings are changed by moving belt position on pulleys (see **Figure 36**). Refer to the chart on **Page 33** for cutting speed recommendations by material type.



**Figure 36.** V-belt positions in FPM.

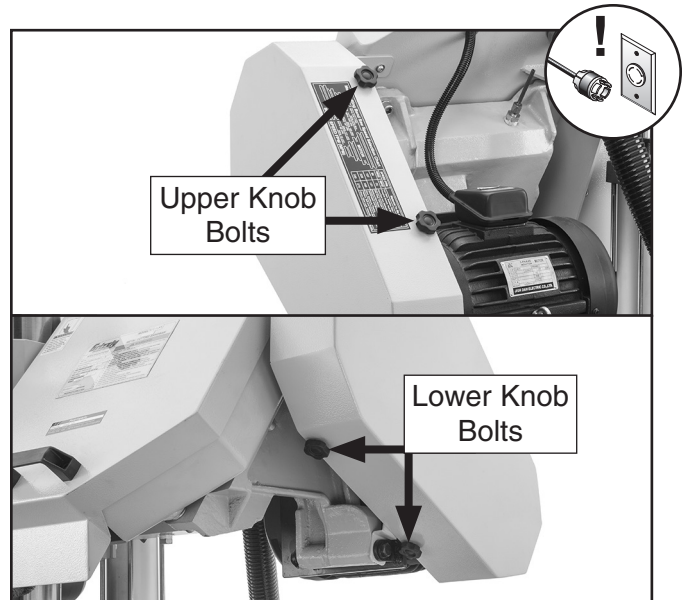
During operation, pay attention to the chips being produced from the cut and compare them to the **Chip Inspection Chart** on **Page 34** to properly set the blade speed.

Item(s) Needed	Qty
Open-End or Socket Wrench 19mm .....	1
Scrap 2x4 12" .....	1

## To change blade speeds:

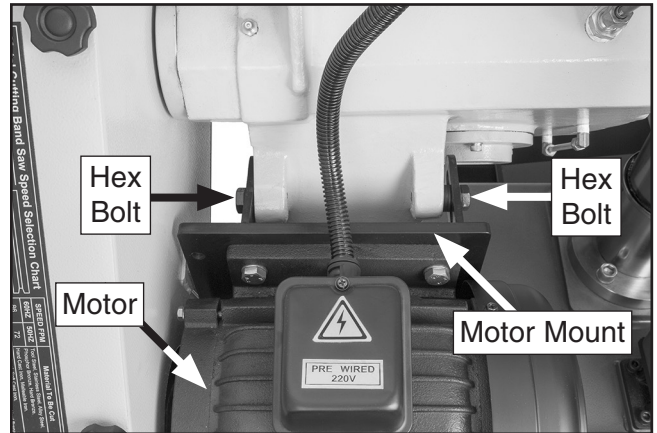
1. DISCONNECT MACHINE FROM POWER!

2. Remove (4) knob bolts (see **Figure 37**) that secure pulley cover to frame. Support pulley cover as you remove knob bolts.



**Figure 37.** Location of pulley cover knob bolts.

3. Loosen upper motor mount hex bolts (see **Figure 38**), allowing motor to pivot and V-belt to slacken.



**Figure 38.** Location of motor mount hex bolts.

4. Move V-belt to required pulley combination (see **Figure 36**).
5. Use 2x4 to leverage motor and tension V-belt, then tighten hex bolts loosened in **Step 3**.
6. Close and secure pulley cover with knob bolts removed in **Step 2**.



# Blade Speed Chart

The chart in **Figure 39** 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 39.** 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 40.** Chip inspection chart.

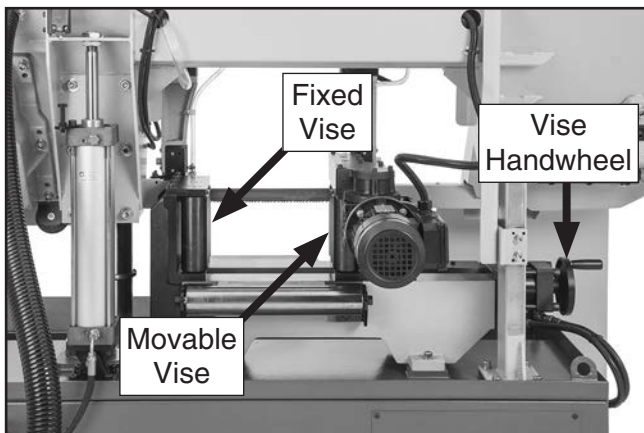


# Using Vise

## ⚠ CAUTION



To avoid serious injury, always turn saw **OFF** and allow blade to come to complete stop before adjusting vise!

The movable vise jaw (see **Figure 41**) is adjusted manually with the vise handwheel and is locked in position hydraulically. Motorized rollers on the clamping surface of the vise jaw move workpieces into and out of cutting position. The fixed vise jaw is a stationary clamping surface that has non-motorized rollers.





**Figure 41.** Location of vise components.

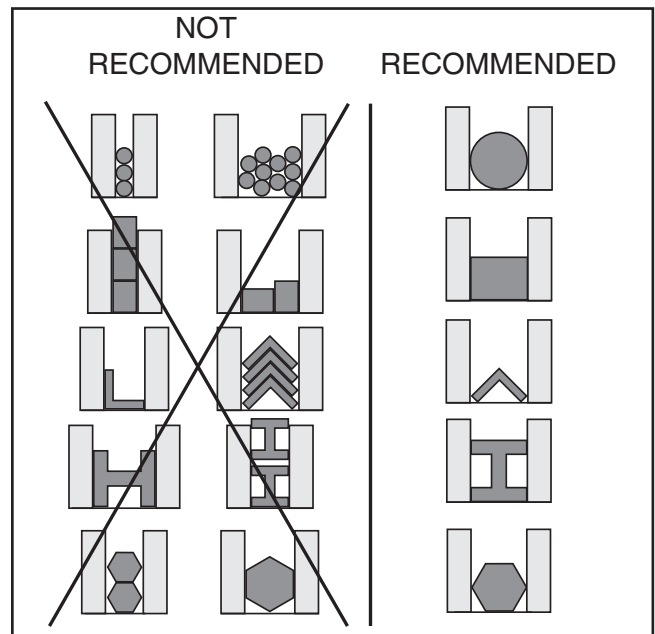
### To use vise:

1. Push hydraulic pump button  to turn hydraulic pump **ON**.
2. Push vise open button  to release any pressure on movable vise jaw.
3. Insert workpiece between jaws. Use vise handwheel to move vise jaw until it just contacts workpiece.

**IMPORTANT:** Use roller stands or tables to support long workpieces.

4. Push vise close button  to clamp workpiece. Between cuts, use vise open button  to release and reposition/reload a new workpiece.

**Note:** **Figure 42** shows correct methods of holding different workpiece shapes.

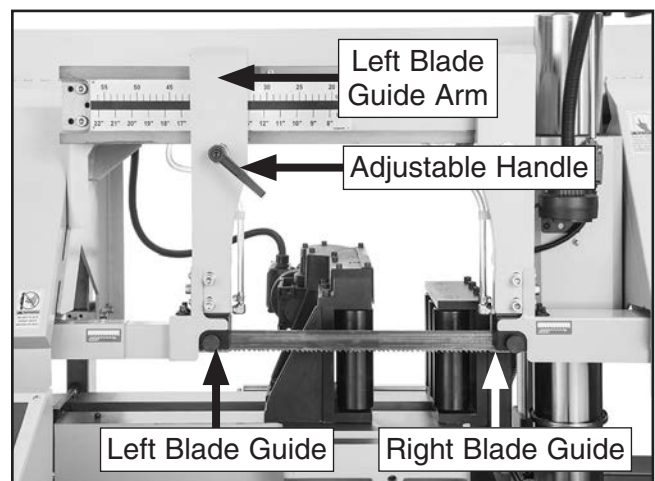


**Figure 42.** Example of workpiece holding options by material shape.

## Blade Guides

The left blade guide should be as close to the workpiece as possible during cutting operations. 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 adjustable handle on left blade guide arm (see **Figure 43**) and slide the arm/guide as close to the workpiece as possible, then tighten the adjustable handle.

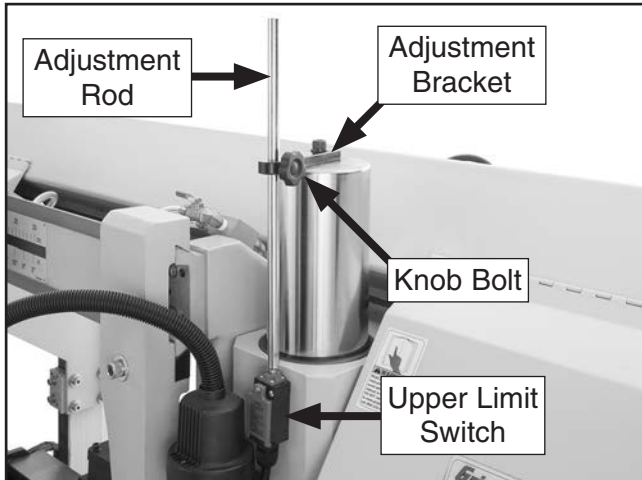


**Figure 43.** Blade guides.





# Setting Headstock Height

The height that the headstock will travel is controlled by the upper limit switch and the height adjustment rod and bracket (see **Figure 44**). Headstock height should be set to match the height of the workpiece. This speeds up repetitive cuts by eliminating unnecessary headstock travel.



**Figure 44.** Headstock height controls.

## To set headstock height:



1. Push hydraulic pump button  to turn hydraulic pump **ON**.
2. Insert workpiece between jaws (refer to **Using Vise** on **Page 35**). Use roller stands or tables to support long pieces.
3. Push raise headstock button  and raise headstock so bottom of blade is approximately 1/2" above top of workpiece.
4. **DISCONNECT MACHINE FROM POWER!**
5. Loosen knob bolt on height adjustment bracket, and position adjustment rod so it just touches upper limit switch trigger.
6. Tighten knob bolt.

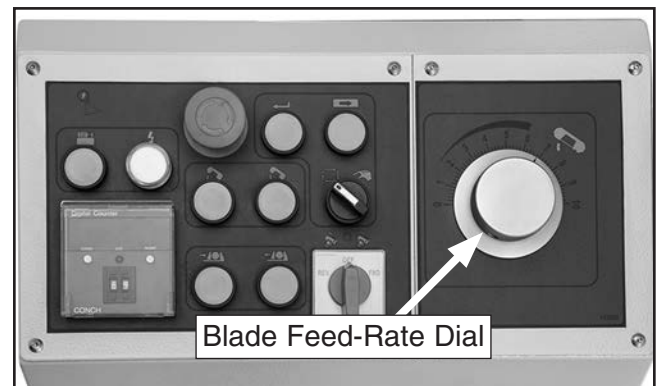
# Setting Blade Feed Rate

The speed at which the saw blade will cut through a workpiece is determined by blade type, feed rate, and feed pressure. The feed rate is controlled by the blade 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 blade feed rate:

1. Push hydraulic pump button  to turn hydraulic pump **ON**.
2. Push raise headstock button  and raise headstock to required height for workpiece.
3. Adjust blade feed-rate dial shown in **Figure 45** to desired feed rate from 0 (slowest) to 10 (fastest).



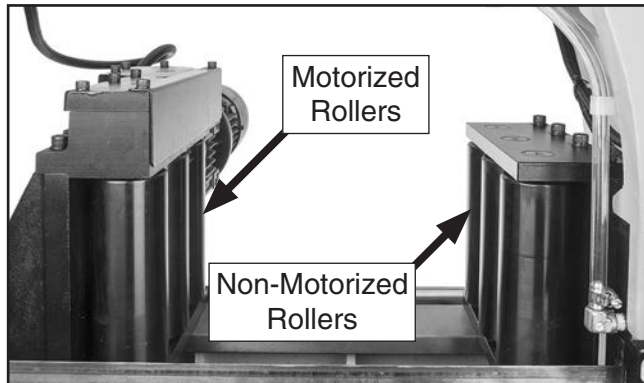
**Figure 45.** Feed rate dial.

4. Proceed with cutting operations.
5. Examine metal chips created from cutting operation, and adjust feed rate as necessary for optimum cutting performance (refer to **Chip Inspection Chart** on **Page 34** for more details).










# Feed System

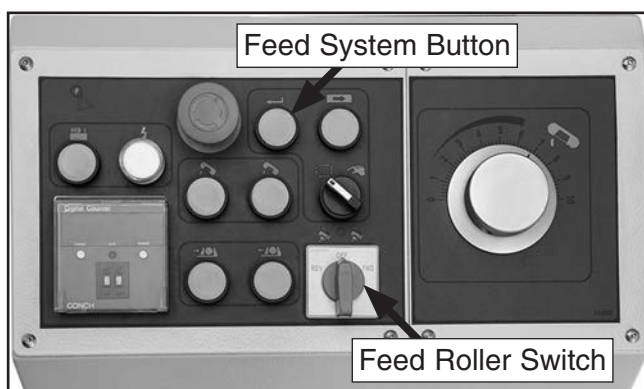
The feed system allows you to make repetitive cuts without adjusting the vise and moving the workpiece after every cut. The movable vise jaw (see **Figure 46**) is equipped with motorized rollers that move the workpiece into cutting position. The fixed vise jaw has non-motorized rollers. The rollers are precisely aligned at the factory and do not require adjustment.



**Figure 46.** Vise jaw rollers.

The feed system works in manual  and auto  operation mode. In both operation modes, the feed system is stopped when the workpiece reaches the proximity sensor head (refer to **Proximity Sensor** section).

In manual operation mode, the feed system button  (see **Figure 47**) must be pushed to engage the feed system, and then the feed roller switch is used to control the feed rollers. The feed roller switch has three settings: OFF , FWD , and REV . The feed system is automatically engaged in auto operation mode; however, the feed roller switch must be set to FWD  for cutting operations.



**Figure 47.** Feed system controls.

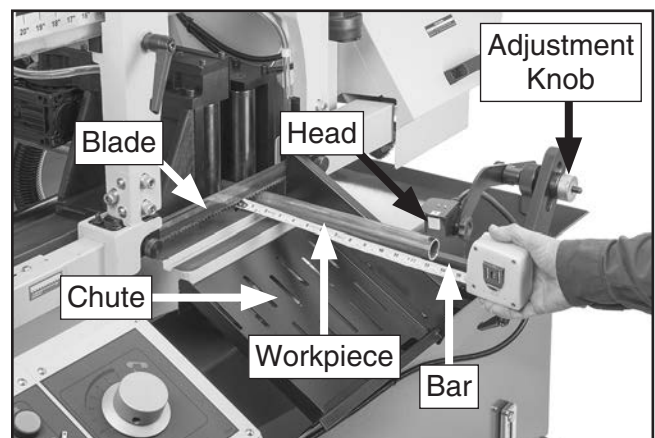
Model G0886 (Mfd. Since 01/19)

# Proximity Sensor

The proximity sensor (see **Figure 48**) on the Model G0886 functions as a work stop in manual operation mode and as a work stop and trigger for the feed system in auto operation mode. It can be set for repetitive cutting operations up to 16" long.

There are three components to the proximity sensor. The head (see **Figure 48**) detects the presence of metal materials within a 1/4" range. The bracket and bar allow the sensor head to be positioned to accommodate a variety of workpiece shapes and sizes. The adjustment knob moves the sensor bracket and head in fine increments to ensure exact cut lengths.

The cutoff chute (see **Figure 48**) must be installed when using the proximity sensor. Processed material needs to be quickly removed from the area for the proximity sensor to function correctly.










**Figure 48.** Proximity sensor set to cut 13" lengths of pipe.

## Using Proximity Sensor in Manual Operation Mode


1. Make sure master power switch is turned **OFF**.
2. Place workpiece between jaws. Use roller stands or tables to support long pieces.
3. Turn master power switch **ON**.






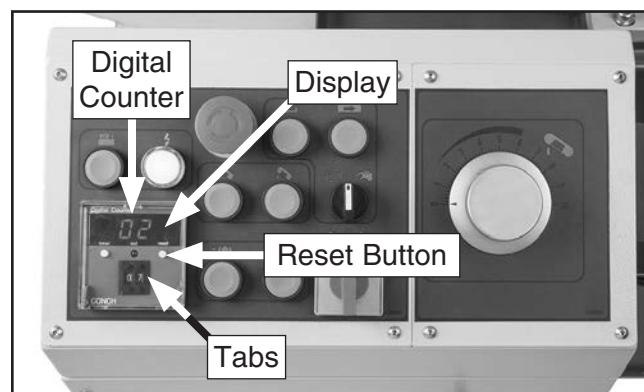


4. Push hydraulic pump button  to turn hydraulic pump **ON**.
5. Set headstock to required height for workpiece (refer to **Setting Headstock Height** on **Page 36**).
6. Make sure operation mode switch is set to manual  mode and feed roller switch is set to **OFF** .
7. Extend workpiece past blade the same length of pieces needed. Measure from outside of blade to end of workpiece, as shown in **Figure 48**.
8. Push vise close button  to clamp workpiece.
9. Position proximity sensor so arrow on sensor head points directly at end of workpiece, as shown in **Figure 48**. Sensor head needs to be within 1/4" of material for detection.
10. If needed, open coolant valves.
11. Push blade start button  to start cutting operation. Processed material will slide down chute after cut is made.
12. Set feed roller switch to FWD , and push feed system button . Feed rollers will advance workpiece until it reaches proximity sensor.
13. Repeat **Steps 11–12** as needed to complete cutting operations


## Using Proximity Sensor in Auto Operation Mode

1. Make sure master power switch is turned **OFF**.
2. Place workpiece between jaws. Use roller stands or tables to support long pieces.
3. Turn master power switch **ON**.
4. Push hydraulic pump button  to turn hydraulic pump **ON**.
5. Set headstock to required height for workpiece (refer to **Setting Headstock Height** on **Page 36**).

6. Make sure operation mode switch is set to auto  mode and feed roller switch is set to FWD .
7. Extend workpiece past blade the same length of pieces needed. Measure from outside of blade to end of workpiece, as shown in **Figure 48**.
8. Push vise close button  to clamp workpiece.
9. Position proximity sensor so arrow on sensor head points directly at end of workpiece, as shown in **Figure 48**. Sensor head needs to be within 1/4" of material for detection.
10. If needed, open coolant valves.
11. Use tabs on digital counter (see **Figure 49**) to set the number of cuts to be made.



**Figure 49.** Digital counter set to 7 with 2 cuts completed.

12. Push blade start button  to start cutting operation. During cutting operation, feed roller will automatically advance workpiece until it reaches proximity sensor, and digital counter will display number of cuts completed (see **Figure 49**). Cutoff pieces will slide down chute after each cut is made.
13. When cutting operation is complete, press RESET button on digital counter to clear display.



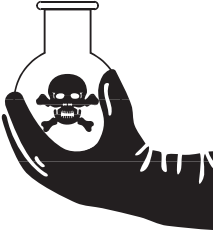
# Coolant

Coolant is a mixture of cutting fluid and water. While simple in concept and function, many issues must be taken into account to mix and use the correct coolant. Always follow all product warnings, specifications, and contact the cutting fluid manufacturer for unanswered questions.

Use the information below as a guideline to choose the appropriate coolant. Always refer to the cutting fluid 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 cutting fluid.
- 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.

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

# Using Coolant System

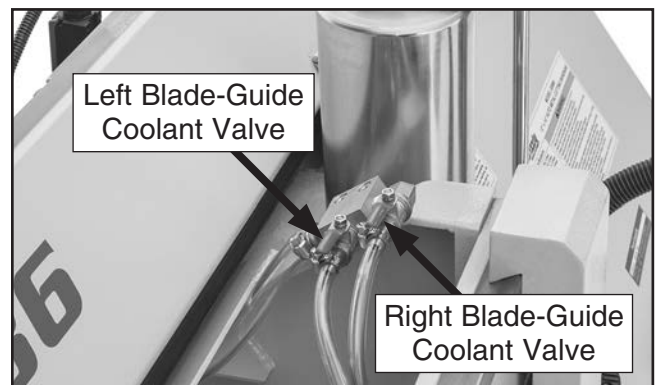
	<p><b>WARNING</b> <b>FIRE HAZARD! DO NOT cut magnesium when using oil-water solutions as coolant! Always use coolant intended for magnesium. Water in the solution could cause a magnesium-chip fire.</b></p>
--	---

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.

<p><b>NOTICE</b> <b>NEVER run machine without coolant in the reservoir or when coolant is below low mark or you will overheat pump and void warranty! See Adding Coolant on Page 48 for instructions.</b></p>
---

The coolant pump runs automatically when the main motor is **ON** (i.e. the blade is running). Two coolant valves (see **Figure 50**) control the flow of coolant onto the blade through the blade guides.

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



**Figure 50.** Coolant valves open.



# 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 cutting:

- Use the proximity sensor to quickly and accurately cut multiple pieces of stock to the same length.
- Clamp workpiece firmly in the vise jaws to ensure a straight.
- Use auto operation mode to speed production.
- Allow blade to reach full speed before cutting 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 blade has completely stopped before removing workpiece from vise. Avoid touching the cut end—it could be very hot!
- Support long pieces so they will not fall when cut. Flag long 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, and keep the chip collection tray clear so coolant can recycle to reservoir and pump.

## **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.

### Replacement Bi-Metal Bandsaw Blades

T30686—155" x 1-1/4" x 0.043 3–4 TPI

T30687—155" x 1-1/4" x 0.043 4–6 TPI

T30688—155" x 1-1/4" x 0.043 5–8 TPI

T30689—155" x 1-1/4" x 0.043 6–10 TPI



Figure 51. Typical variable pitch bi-metal cutting blade.

### T28172—14" x 39" Heavy-Duty Roller Table

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



Figure 52. T28172 Heavy-Duty 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 53. H9240 Rustlick Machining Oil.

### Basic Eye Protection

T20501—Face Shield Crown Protector 4"

T20502—Face Shield Crown Protector 7"

T20503—Face Shield Window

T20451—"Kirova" Clear Safety Glasses

T20452—"Kirova" Anti-Reflective S. Glasses

T20456—DAKURA Safety Glasses

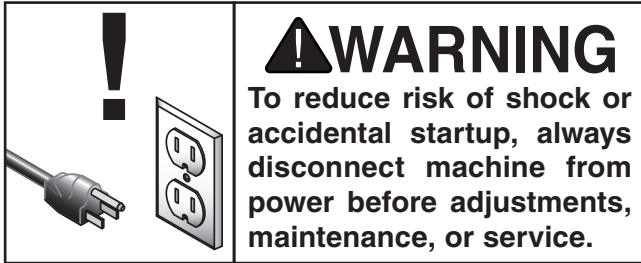


Figure 54. Assortment of basic eye protection.

**order online at [www.grizzly.com](http://www.grizzly.com) or call 1-800-523-4777**



# SECTION 6: MAINTENANCE



## Schedule

For optimum performance from this machine, this maintenance schedule must be strictly followed.

### Ongoing

To maintain a low risk of injury and proper machine operation, if you ever observe any of the items below, shut down the machine immediately and fix the problem before continuing operations:

- Loose mounting bolts.
- Damaged or dull saw blade.
- Worn or damaged wires.
- Any other unsafe condition.

### Daily:

- Protect headstock pillar and ram strut (see **Figure 55**).
- Lubricate blade and blade guides (**Page 43**).
- Clean/lubricate vise table (**Page 44**).
- Clean metal chips from upper and lower wheel areas.

### Monthly:

- Lubricate blade tension leadscrew (**Page 43**).
- Clean/lubricate vise leadscrew (**Page 44**).
- Lubricate headstock column (**Page 44**).
- Lubricate blade guide arm gib (**Page 44**).
- Remove blade and clean wheels.
- Check gearbox oil level (**Page 45**).

### Bi-annually:

- Change gearbox oil (**Page 45**).

## 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.

Use a shop rag to apply a thin coat of quality metal protectant to the headstock pillar and ram strut (see **Figure 55**) to prevent corrosion.



**Figure 55.** Location of headstock pillar and ram strut.

**G2870—T-9 Boeshield, 4 Oz.**

**G2871—T-9 Boeshield, 12 Oz.**

This protective spray penetrates deep and holds up the longest against corrosive environments.



**Figure 56.** T-9 Boeshield.



# 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 & Blade Guides	8 Hrs.	42
Blade Tension Leadscrew	40 Hrs.	42
Vise Table	8 Hrs.	44
Vise Leadscrew	40 Hrs.	44
Headstock Column	40 Hrs.	44
Blade Guide Arm Gib	40 Hrs.	44
Drive Shaft, Headstock Pillar	160 Hrs.	44
Gearbox	Special	45

**Figure 57.** Recommended lubrication tasks.

Item(s) Needed	Qty
NLGI#2 Grease (T26419 or Equivalent). As Needed	As Needed
ISO 68 Oil (SB1365 or Equivalent).....	As Needed
ISO 320 Oil (T28042 or Equivalent).....	As Needed
Clean Shop Rags.....	As Needed
Stiff Brush.....	1
Clean Brush.....	1
Grease Gun.....	1
1-Gallon Drain Pan.....	1
Funnel.....	1
Teflon Thread Tape.....	As Needed
Open-End Wrenches 19, 21mm.....	1 Ea.

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



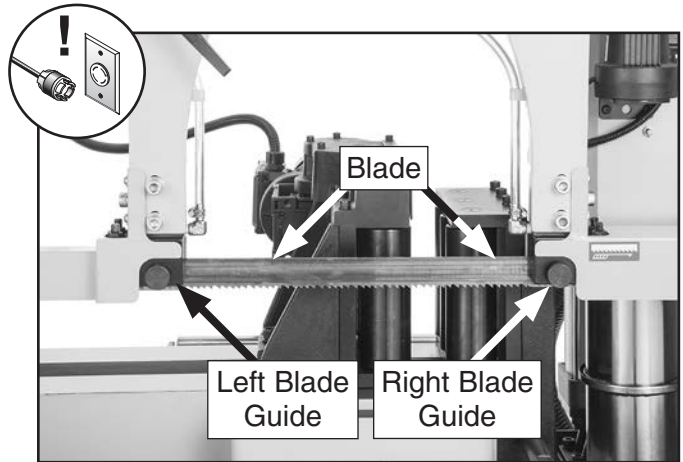
**Figure 58.** Recommended products for machine lubrication.

Model G0886 (Mfd. Since 01/19)

## Blade & Blade Guides

Lube Type.. Model SB1365 or ISO 68 Equivalent  
 Oil Amount.....1–2 Drops  
 Lubrication Frequency..... Daily

Place one or two drops of light machine oil on blade and blade guides (see **Figure 59**) daily, especially when cutting cast iron, as no coolant is required when cutting cast iron.

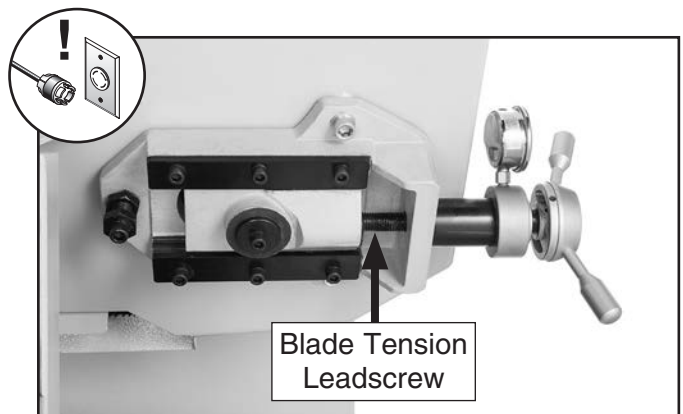


**Figure 59.** Blade and blade guides.

## Blade Tension Leadscrew

Lube Type.. Model SB1365 or ISO 68 Equivalent  
 Oil Amount.....1–2 Drops  
 Lubrication Frequency.....Weekly

Lubricate the blade tension leadscrew with 1–2 drops of light machine oil weekly (see **Figure 60**). Wipe off excess oil with a clean rag.



**Figure 60.** Blade tension leadscrew.



## Vise Table

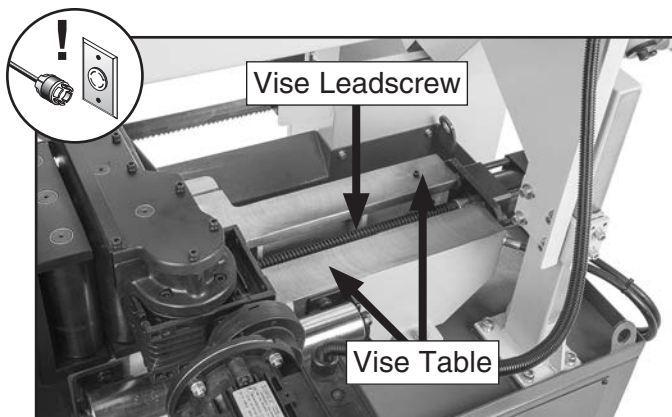
Lube Type.. Model SB1365 or ISO 68 Equivalent  
 Oil Amount.....Thin Coat  
 Lubrication Frequency..... Daily

Keep the vise table (see **Figure 61**) surface rust-free with regular applications of a quality way oil.

## Vise Leadscrew

Lube Type..... SB1365 or ISO 68 Equivalent  
 Oil Amount.....Thin Coat  
 Lubrication Frequency.....Weekly

Use mineral spirits, shop rags, and a stiff brush to clean the vise leadscrew. When dry, use a clean brush to apply a thin coat of oil to the leadscrew threads (see **Figure 61**).

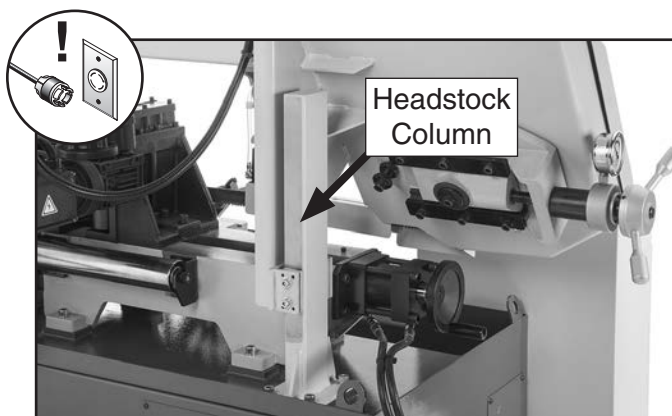


**Figure 61.** Vise table and vise leadscrew.

## Headstock Column

Lube Type.. Model SB1365 or ISO 68 Equivalent  
 Oil Amount.....Thin Coat  
 Lubrication Frequency.....Weekly

Keep the unpainted surfaces of the headstock column (see **Figure 62**) rust-free with regular applications of a quality way oil.

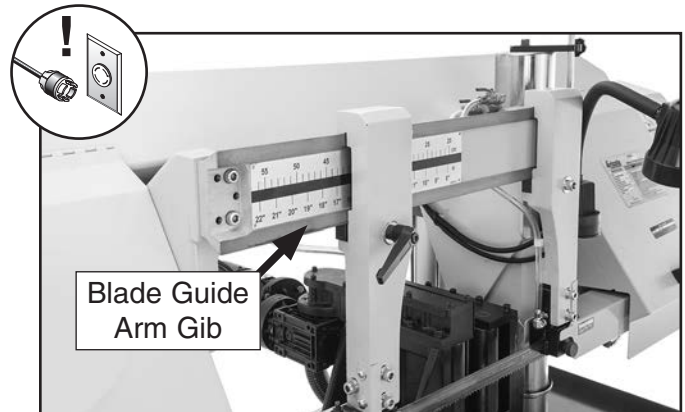


**Figure 62.** Headstock column.

## Blade Guide Arm Gib

Lube Type.. Model SB1365 or ISO 68 Equivalent  
 Oil Amount.....Thin Coat  
 Lubrication Frequency.....Weekly

Keep the unpainted surfaces of the blade guide arm gib (see **Figure 63**) rust-free with regular applications of a quality way oil.

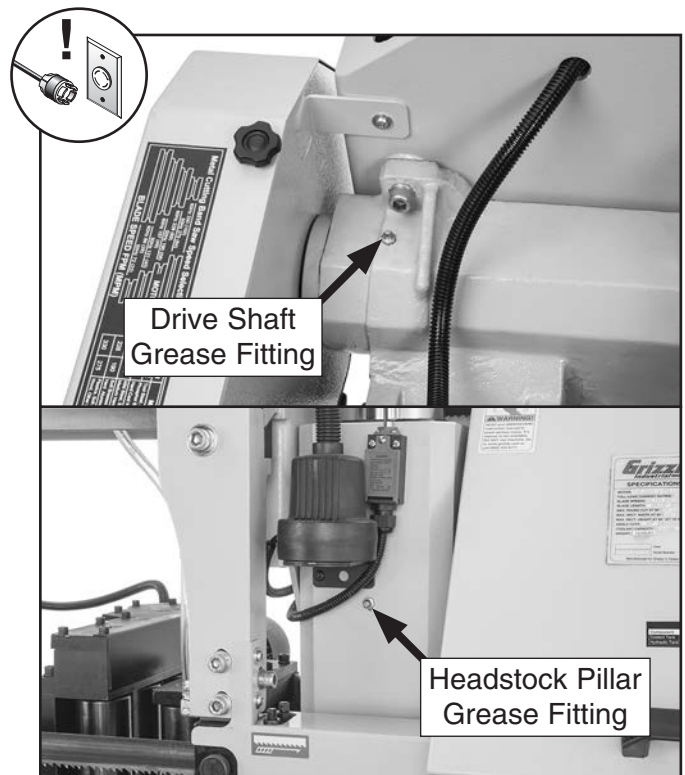


**Figure 63.** Blade guide arm gib.

## Drive Shaft & Headstock Pillar

Lube Type..... T26419 or NLGI#2 Equivalent  
 Amount ..... 1–2 Pumps  
 Lubrication Frequency.....Monthly

Apply grease to drive shaft and headstock pillar using grease fittings shown in **Figure 64**.



**Figure 64.** Grease fitting locations.

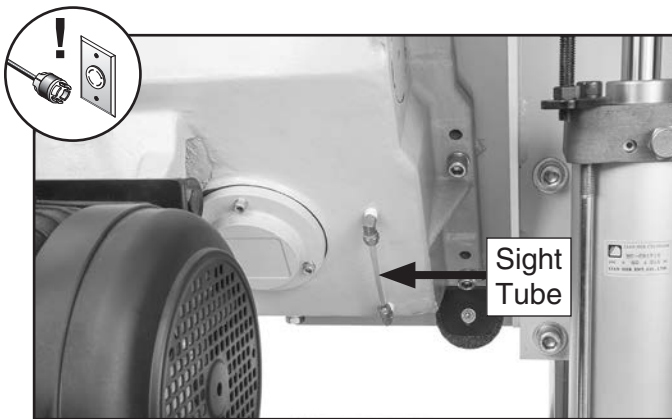


## Gearbox

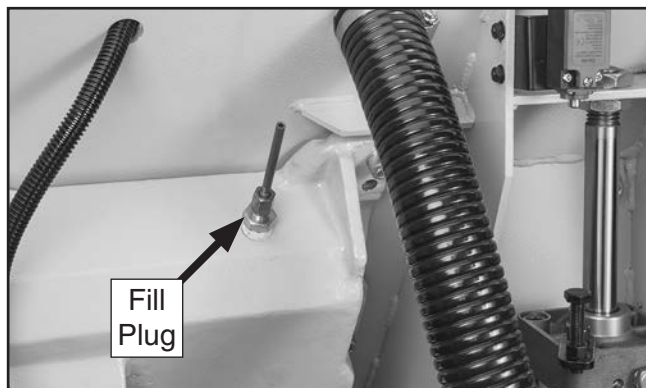
Lube Type.....T28042 or ISO 320 Equivalent  
Amount ..... 0.84 Qt.  
Check Frequency .....Weekly  
Lubrication Frequency ..After 50 Hrs, Bi-annually

**IMPORTANT:** To maximize gearbox life, drain and refill it after the first 50 hours of use.

After the first 50 hours of use, the fluid level of the gearbox should be checked weekly. The gearbox has a sight tube (see **Figure 65**) to check fluid level. The sight tube should be filled with gear oil. If it's not, remove fill plug with breather tube (see **Figure 66**), and slowly add just enough gear oil to fill sight tube. When replacing fill plug, be sure to re-wrap threads with Teflon tape to prevent leaks.



**Figure 65.** Gearbox sight tube location.

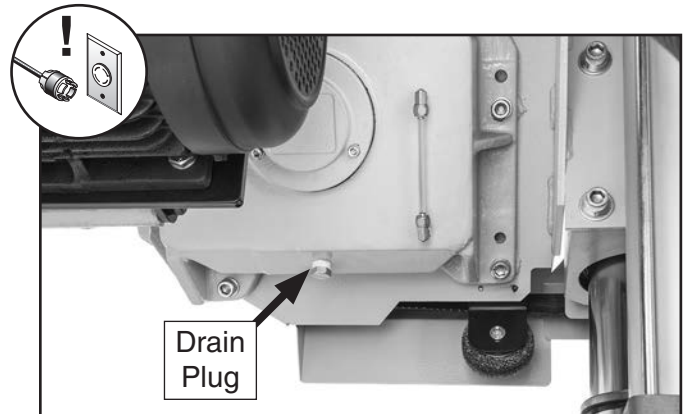


**Figure 66.** Gearbox fill plug location.

As routine maintenance, the gearbox should be completely drained and refilled every 6 months.

### To drain and refill gearbox:

1. Run blade continuously for approximately 10 minutes to warm up gear oil.
2. Raise headstock to highest position.
3. DISCONNECT MACHINE FROM POWER!
4. Remove gearbox fill plug (see **Figure 66**).
5. Place drain pan under drain plug (see **Figure 67**), remove drain plug, and then drain gear oil.



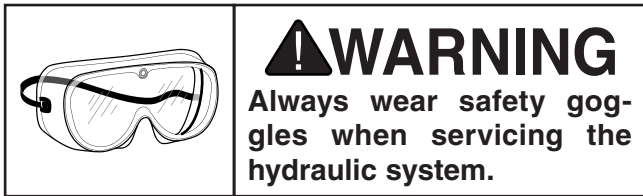
**Figure 67.** Location of drain plug.

6. Re-wrap drain plug threads with Teflon tape, replace drain plug, then remove drain pan.
7. Connect machine to power supply, then lower headstock to its lowest position.
8. DISCONNECT MACHINE FROM POWER!
9. Slowly add gear oil until sight tube is completely filled.
10. Re-wrap fill plug threads with Teflon tape, then re-install fill plug.





# 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

The hydraulic fluid level and temperature should be checked weekly.

Item(s) Needed	Qty
T23963 or ISO 32 Equivalent.....	As Needed
Safety Goggles.....	1
Hex Wrench 4mm.....	1
Wood Blocks .....	As Needed
Funnel.....	1
Clean Shop Rags .....	As Needed

### To check hydraulic fluid:

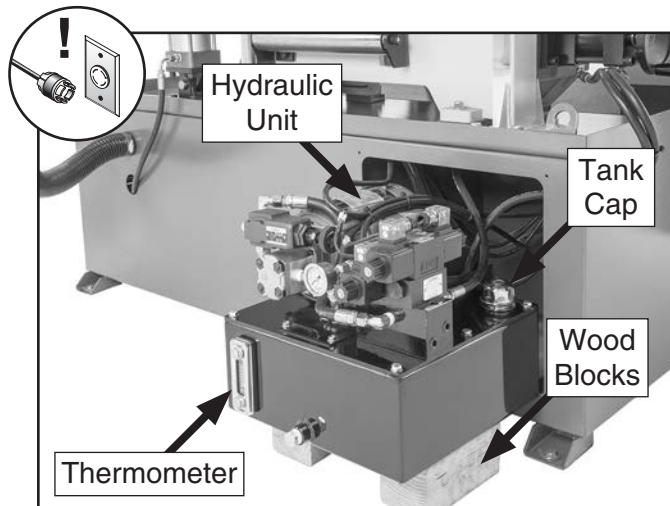
1. Raise/lower headstock repeatedly for approximately 10 minutes to warm up hydraulic fluid.
2. DISCONNECT MACHINE FROM POWER!
3. Remove hydraulic unit access panel on rear of machine.
4. Check fluid temperature on thermometer mounted to hydraulic fluid tank (see **Figure 68**). The temperature should read between 50–95°F (10–35°C).

— If fluid temperature exceeds 140°F (60°C), then review **Troubleshooting** on **Page 51** for solutions. If you still cannot fix the problem, contact a qualified hydraulic service technician or Tech Support.

5. Slide hydraulic unit out of machine base and support weight of hydraulic unit with wood blocks (see **Figure 68**).

6. Remove tank cap (see **Figure 68**) and inspect for burnt-smelling or tan-colored, water-contaminated hydraulic fluid.

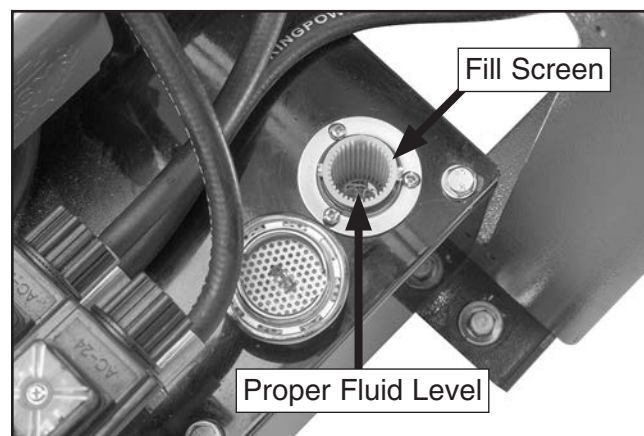
— If fluid is contaminated, proceed to **Changing Hydraulic Fluid** on **Page 47**.



**Figure 68.** Hydraulic unit removed from base.

7. Check fluid level. Fluid should just cover the bottom of the fill screen (see **Figure 69**).

— If fluid level is low, slowly add hydraulic fluid until it just covers the bottom of the fill screen.



**Figure 69.** Checking fluid level.

8. Re-install tank cap, slide hydraulic unit back into base, and re-install front access panel.



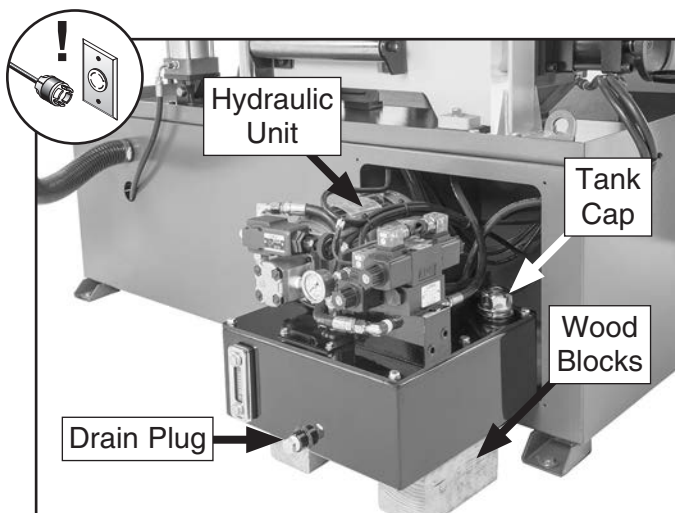
## Changing Hydraulic Fluid

The hydraulic fluid should be changed and the fluid tank cleaned every 5,000 hours of use.

Item(s) Needed	Qty
T23963 or ISO 32 Equivalent.....	16 Qt.
Safety Goggles.....	1
Hex Wrench 4mm.....	1
Wood Blocks .....	As Needed
5-Gallon Drain Pan.....	1
Open-End or Socket Wrench 21mm.....	1
Funnel.....	1
Clean Shop Rags .....	As Needed
Mineral Spirits.....	As Needed
Teflon Thread Tape .....	As Needed

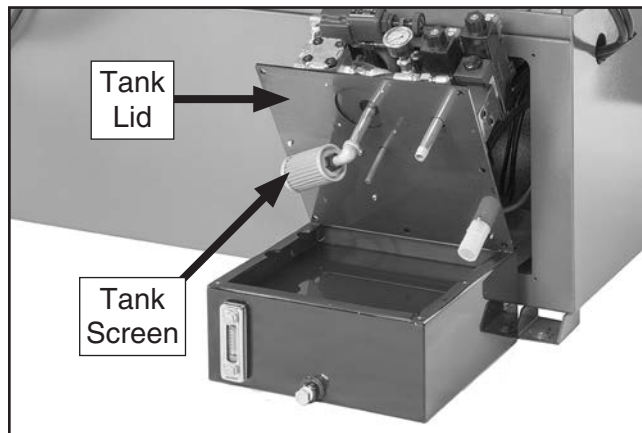
### To change hydraulic fluid:

1. Raise/lower headstock repeatedly for approximately 10 minutes to warm up hydraulic fluid.
2. DISCONNECT MACHINE FROM POWER!
3. Remove hydraulic unit access panel on rear of machine.
4. Slide hydraulic unit out of machine base and support weight of hydraulic unit with wood blocks (see **Figure 70**).
5. Remove tank cap (see **Figure 70**), then remove drain plug and allow tank to empty into drain pan.



**Figure 70.** Hydraulic unit removed from base.

6. Clean tank cap and fill screen (see **Figure 69** on **Page 46**) with mineral spirits and allow to air dry.
7. Open tank by removing (8) hex bolts that secure lid (see **Figure 71**).
8. Clean tank and tank screen (see **Figure 71**) with mineral spirits. Wipe out as much residual fluid and contaminants from tank as possible. Allow tank and tank screen to air dry.



**Figure 71.** Hydraulic fluid tank lid removed.

9. Re-install tank lid and screen.
10. Re-wrap drain plug threads with Teflon tape, re-install drain plug, then fill tank with 16 quarts of ISO 32 or equivalent hydraulic fluid.
11. Re-install tank cap, slide hydraulic unit back into base, and re-install front access panel.



# Coolant System

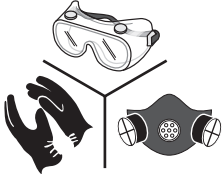
The coolant system consists of a reservoir, pump, and hoses with valves. The pump pulls coolant from the tank and sends it to the valves, which control the flow of coolant. As the coolant leaves the work area, it drains through the machine base, where the swarf and metal chips are screened out, and back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

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 reservoir 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 coolant on a monthly basis, or as indicated by the manufacturer of the cutting fluid.

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.

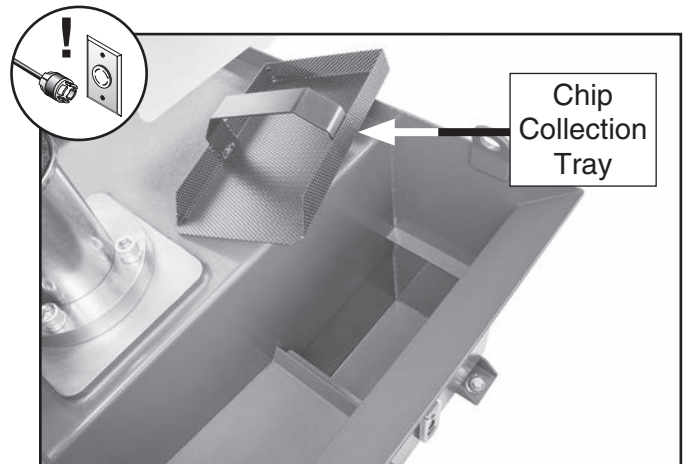
	<p><b>⚠️ WARNING</b></p> <p><b>BIOLOGICAL &amp; POISON HAZARD!</b></p> <p>Use correct personal protection equipment when handling coolant. Follow federal, state, and fluid manufacturer requirements for proper disposal.</p>
	

## Adding Coolant

Item(s) Needed	Qty
Safety Wear.....	See <b>Hazards</b>
Coolant.....	As needed
Clean Jug or Bucket.....	1
Disposable Shop Rags.....	As Needed

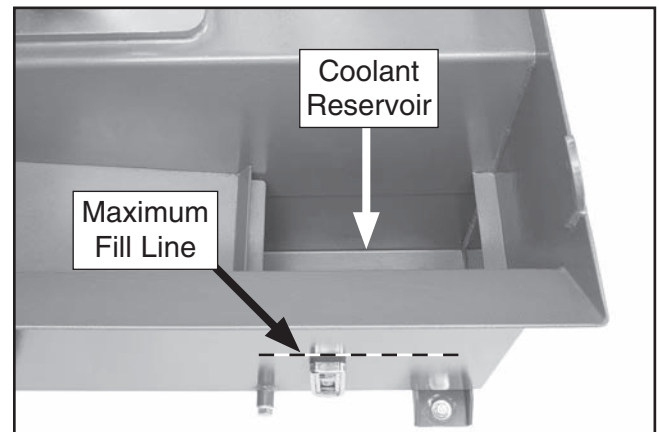
### To add coolant:

1. DISCONNECT MACHINE FROM POWER!
2. Remove chip collection tray from machine base (see **Figure 72**) and clean chip collection tray.



**Figure 72.** Chip collection tray removed.

3. Mix coolant according to cutting fluid manufacturer's specifications.
4. Fill reservoir with coolant until it is at the maximum fill line shown in **Figure 73**. Fill line is just above top hex bolt that secures thermometer to machine base.



**Figure 73.** Approximate maximum fill line.

5. Replace chip collection tray.

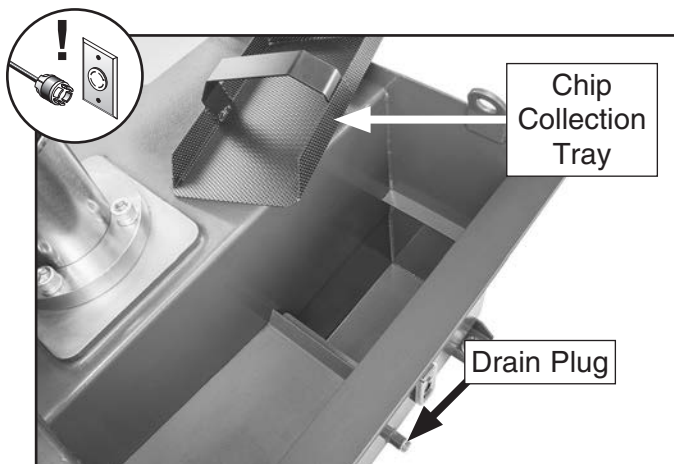


## Changing Coolant

Item(s) Needed	Qty
Safety Wear.....	See <b>Hazards</b>
Coolant.....	6.5 Gallons
Open-End or Socket Wrench 17mm.....	1
Hex Wrench 4mm.....	1
10-Gallon Drain Pan.....	1
Clean Jug or Bucket.....	1
Water Hose w/Spray Gun.....	1
Antibacterial Soap.....	As Needed
Disposable Shop Rags.....	As Needed
Teflon Thread Tape.....	As Needed

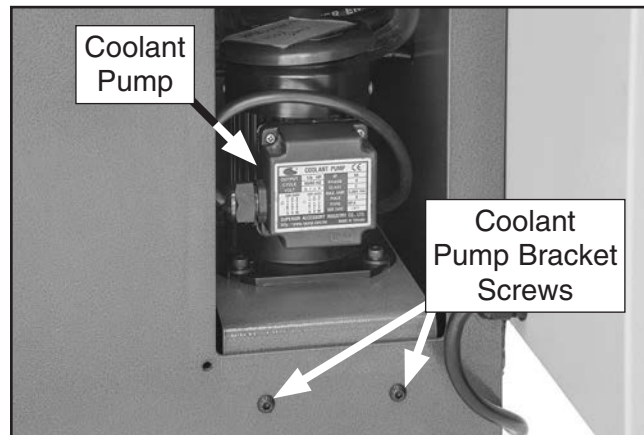
### To change coolant:

1. DISCONNECT MACHINE FROM POWER!
2. Remove chip collection tray (see **Figure 74**) from machine base. Clean chip collection tray.
3. Remove drain plug (see **Figure 74**), empty tank contents into drain pan, and dispose of coolant following federal, state, and cutting fluid manufacturer requirements.



**Figure 74.** Coolant drain plug location.

4. Remove coolant pump access panel on left side of machine, as shown in **Figure 75**.
5. Thoroughly clean reservoir and pump filter with hot, soapy water, then rinse with clean water. You may need to remove coolant pump bracket screws to access pump filter.



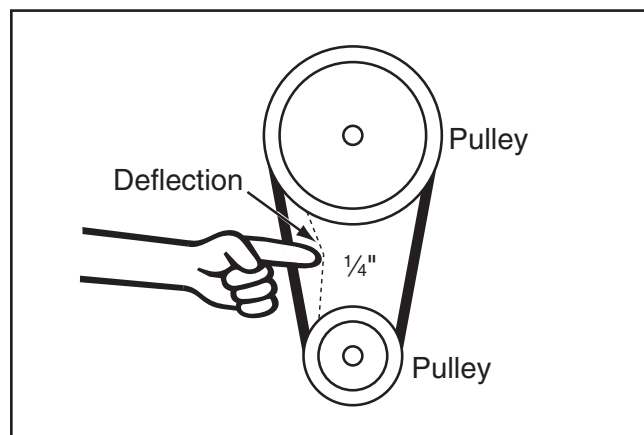
**Figure 75.** Coolant pump access panel removed.

6. Re-wrap drain plug threads with Teflon tape, then re-install drain plug.
7. Mix 6.5 gallons of coolant according to cutting fluid manufacturer's specifications, then refill tank with coolant.
8. Replace chip collection tray.

## Inspecting V-Belt

Inspect V-belt regularly for tension and wear. Refer to **Figure 76** for proper belt tension. Belt deflection should be approximately 1/4" under moderate pressure. The replacement V-belt can be found in the back of this manual in the parts breakdown.

To replace the V-belt, refer to **Changing Blade Speed** on **Page 32** to loosen it. Remove the old belt from the pulleys, then install a new V-belt and ensure it is properly tensioned.



**Figure 76.** Checking belt tension.



# 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
T26419 or NLGI#2 Grease Equivalent...	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

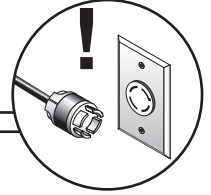
1. DISCONNECT MACHINE FROM POWER!
2. Remove moisture-absorbing desiccant packs from electrical box.
3. Re-tension blade as described on **Page 30**.
4. Repeat **Test Run** on **Page 21**.
5. Add coolant, as described in **Coolant System** on **Page 48**.



# 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
Hydraulic motor does not start, or power supply breaker immediately trips after startup.	<ol style="list-style-type: none"> <li>Emergency stop button depressed/at fault.</li> <li>Master power switch turned OFF/at fault.</li> <li>Power supply circuit breaker tripped or fuse blown.</li> <li>Incorrect power supply voltage or circuit size.</li> <li>Wiring disconnected, broken, or corroded.</li> <li>Thermal overload relay(s) tripped/at fault.</li> <li>Hydraulic motor contactor not energized/poor contacts/at fault.</li> </ol>	<ol style="list-style-type: none"> <li>Rotate button to reset; test/replace if at fault.</li> <li>Turn master power switch ON; test/replace if at fault.</li> <li>Ensure circuit is sized correctly and free of shorts. Reset circuit breaker or replace fuse</li> <li>Ensure correct power supply voltage and circuit size.</li> <li>Replace/fix broken, disconnected, or corroded wires.</li> <li>Reset; adjust trip load dial; replace if at fault.</li> <li>Test all legs for power; replace if at fault.</li> </ol>
Main motor does not start.	<ol style="list-style-type: none"> <li>Hydraulic pump, vise close, and blade start buttons not pressed/buttons at fault.</li> <li>Lower limit switch triggered/at fault.</li> <li>Proximity sensor too far from workpiece.</li> <li>Main motor contactor not energized/poor contacts/at fault.</li> </ol>	<ol style="list-style-type: none"> <li>Press hydraulic pump, vise close, and blade start buttons; test/replace if at fault.</li> <li>Adjust limit switch; replace if at fault (<b>Page 54</b>).</li> <li>Position proximity sensor with ¼" of workpiece.</li> <li>Test all legs for power; replace if at fault.</li> </ol>
Headstock does not raise/lower.	<ol style="list-style-type: none"> <li>Incoming power supply out of phase.</li> </ol>	<ol style="list-style-type: none"> <li>Switch any two of three incoming power supply wires on plug or hardwire connection.</li> </ol>
Machine stalls or is underpowered.	<ol style="list-style-type: none"> <li>Feed rate too fast; blade speed too low.</li> <li>Machine undersized for task.</li> <li>Blade not correct for material being cut.</li> <li>Improper workpiece material for saw/blade.</li> <li>Blade slipping on wheels.</li> <li>Belt slipping; motor pulley slipping on shaft.</li> <li>Blade dull, or installed backwards.</li> <li>Main motor overheated.</li> <li>Main motor contactor has poor contacts.</li> <li>Main motor at fault.</li> </ol>	<ol style="list-style-type: none"> <li>Reduce feed rate (<b>Page 36</b>); increase blade speed (<b>Page 32</b>).</li> <li>Use correct, sharp blade; reduce feed rate (<b>Page 36</b>); use applicable coolant/lubricant.</li> <li>Use correct blade for operation (<b>Page 26</b>).</li> <li>Only cut correct material for saw blade/type.</li> <li>Adjust blade tracking (<b>Page 54</b>), tension (<b>Page 30</b>).</li> <li>Tension/replace belt (<b>Page 49</b>); replace pulley/shaft.</li> <li>Replace blade (<b>Page 28</b>). Ensure teeth face cutting direction.</li> <li>Clean main motor, let cool, reduce workload.</li> <li>Test all legs for power; repair/replace if at fault.</li> <li>Test/repair/replace.</li> </ol>
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> <li>Main motor, motor mount, or components loose.</li> <li>Blade damaged or dull.</li> <li>Belt worn or loose.</li> <li>Main motor fan rubbing on fan cover.</li> <li>Pulley loose.</li> <li>Main motor bearings at fault.</li> <li>Gearbox at fault.</li> </ol>	<ol style="list-style-type: none"> <li>Re-tighten component; inspect/replace damaged bolts/nuts.</li> <li>Replace blade (<b>Page 28</b>).</li> <li>Inspect/tension/replace belt (<b>Page 49</b>).</li> <li>Fix/replace fan cover; replace loose/damaged fan.</li> <li>Re-align/replace shaft, pulley, set screw, and key.</li> <li>Turn shaft; loose shaft requires bearing replacement.</li> <li>Rebuild gearbox and replace bad gear(s)/bearing(s).</li> </ol>



## Operation

Symptom	Possible Cause	Possible Solution
Vibration when operating or cutting.	<ol style="list-style-type: none"> <li>Loose or damaged blade.</li> <li>Worn wheel bearing.</li> <li>Bent or dull blade.</li> <li>Machine component(s) loose.</li> <li>Wheels worn or incorrectly installed.</li> <li>Wheel appears bent.</li> <li>Gearbox at fault.</li> </ol>	<ol style="list-style-type: none"> <li>Tension blade (<b>Page 30</b>); replace blade (<b>Page 28</b>).</li> <li>Check/replace wheel bearing.</li> <li>Replace blade (<b>Page 28</b>).</li> <li>Inspect/re-tighten component(s).</li> <li>Replace wheels; adjust blade tracking (<b>Page 54</b>).</li> <li>Check/replace wheel/wheel bearing.</li> <li>Rebuild gearbox; replace bad gear(s)/bearing(s).</li> </ol>
Ticking sound when saw is running.	<ol style="list-style-type: none"> <li>Blade weld contacting blade guides.</li> <li>Blade weld may be failing.</li> <li>Blade teeth missing or broken.</li> </ol>	<ol style="list-style-type: none"> <li>Grind weld down flush with blade.</li> <li>Cut and reweld blade, or replace blade (<b>Page 28</b>).</li> <li>Inspect/replace blade (<b>Page 28</b>).</li> </ol>
Machine or blade bogs down in cut.	<ol style="list-style-type: none"> <li>Feed rate too fast; blade speed too low.</li> <li>Belt slipping.</li> <li>Blade loading up.</li> <li>Blade dull.</li> <li>Blade not supported; blade tracking incorrectly.</li> <li>Blade TPI incorrect.</li> <li>Blade tension too low.</li> <li>Material requires cutting fluid/lubrication.</li> </ol>	<ol style="list-style-type: none"> <li>Reduce feed rate (<b>Page 36</b>); increase blade speed (<b>Page 32</b>).</li> <li>Tension/replace belt (<b>Page 49</b>).</li> <li>Install blade with fewer TPI/different style of teeth (<b>Page 26</b>).</li> <li>Replace blade (<b>Page 28</b>).</li> <li>Move left blade guide arm closer to workpiece; adjust blade tracking (<b>Page 54</b>).</li> <li>Verify blade has at least 3 teeth contacting material at all times (<b>Page 26</b>).</li> <li>Clean wheels; increase blade tension (<b>Page 30</b>).</li> <li>Use applicable coolant/lubricant.</li> </ol>
Cuts not square.	<ol style="list-style-type: none"> <li>Blade not square to table.</li> </ol>	<ol style="list-style-type: none"> <li>Adjust blade square to table (<b>Page 58</b>).</li> </ol>
Blade dulls prematurely, or metal sticks to blade.	<ol style="list-style-type: none"> <li>Blade improperly broken in.</li> <li>Blade gullets loading up with chips.</li> <li>Blade TPI too fine; teeth load up and overheat.</li> <li>Incorrect coolant mixture for workpiece/cut.</li> </ol>	<ol style="list-style-type: none"> <li>Replace blade (<b>Page 28</b>); complete blade break-in procedure (<b>Page 31</b>).</li> <li>Use blade with larger gullets.</li> <li>Use coarser-tooth blade; adjust feed rate (<b>Page 36</b>); adjust blade speed (<b>Page 32</b>); make sure blade brush works (<b>Page 55</b>).</li> <li>Use correct coolant mixture.</li> </ol>
Blade wears on one side or shows overheating.	<ol style="list-style-type: none"> <li>Blade guides worn or mis-adjusted.</li> <li>Blade not supported.</li> <li>Dull/incorrect blade.</li> <li>Incorrect coolant mixture for workpiece/cut.</li> <li>Blade is bell-mouthed.</li> </ol>	<ol style="list-style-type: none"> <li>Re-adjust/replace.</li> <li>Move left blade guide arm closer to workpiece.</li> <li>Replace blade (<b>Page 28</b>).</li> <li>Use correct coolant mixture.</li> <li>Replace blade (<b>Page 28</b>).</li> </ol>
Blade tracks incorrectly, or comes off wheels.	<ol style="list-style-type: none"> <li>Feed rate too fast/wrong TPI.</li> <li>Blade tension/tracking requires adjustment.</li> <li>Blade guides need adjustment.</li> <li>Blade bell-mouthed.</li> </ol>	<ol style="list-style-type: none"> <li>Reduce feed rate (<b>Page 36</b>)/decrease blade TPI (<b>Page 26</b>).</li> <li>Adjust blade tracking (<b>Page 54</b>), tension (<b>Page 30</b>).</li> <li>Adjust blade guides (<b>Page 56</b>).</li> <li>Replace blade (<b>Page 28</b>).</li> </ol>
Cuts are crooked.	<ol style="list-style-type: none"> <li>Feed rate too fast; blade speed too low.</li> <li>Blade not supported.</li> <li>Carbide blade guides/roller bearings out of adjustment.</li> </ol>	<ol style="list-style-type: none"> <li>Reduce feed rate (<b>Page 36</b>); increase blade speed (<b>Page 32</b>).</li> <li>Move left blade guide arm closer to workpiece.</li> <li>Adjust carbide blade guides/roller bearings (<b>Page 56</b>).</li> </ol>
Blade keeps moving or headstock not raising after cut.	<ol style="list-style-type: none"> <li>Lower limit switch not engaged/at fault.</li> </ol>	<ol style="list-style-type: none"> <li>Adjust lower limit stop bolt; test/replace lower limit switch if at fault (<b>Page 54</b>).</li> </ol>
Headstock not raising to desired height.	<ol style="list-style-type: none"> <li>Upper limit switch not engaged/at fault.</li> </ol>	<ol style="list-style-type: none"> <li>Adjust headstock height adjustment rod; test/replace upper limit switch if at fault (<b>Page 36</b>).</li> </ol>



## Hydraulic System

Symptom	Possible Cause	Possible Solution
Hydraulics are not functioning.	<ol style="list-style-type: none"> <li>1. Hydraulic fluid level is low.</li> <li>2. Hydraulic system is leaking.</li> <li>3. Flow blocked or impeded.</li> <li>4. Control panel wiring at fault.</li> <li>5. Hydraulic pump at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check/fill hydraulic fluid level (<b>Page 46</b>).</li> <li>2. Inspect/test for leaks/repair.</li> <li>3. Make sure hydraulic line(s) are not pinched or damaged.</li> <li>4. Check that hydraulic pump motor is running and that solenoids are activating (indicated by red LED in solenoid plug). Repair/replace if at fault.</li> <li>5. Test/repair/replace.</li> </ol>
Vise does not open/close.	<ol style="list-style-type: none"> <li>1. Vise valve solenoids at fault.</li> <li>2. Vise valve solenoids connections are bad.</li> <li>3. Vise hydraulic system is leaking.</li> <li>4. Control panel wiring at fault.</li> <li>5. Hydraulic pump at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Test/repair/replace.</li> <li>2. Check solenoid plugs.</li> <li>3. Test for leaks/repair.</li> <li>4. Check that hydraulic pump motor is running and that solenoids are activating (indicated by red LED in solenoid plug).</li> <li>5. Test/repair/replace.</li> </ol>
Headstock doesn't raise/lower.	<ol style="list-style-type: none"> <li>1. Headstock valve solenoids at fault.</li> <li>2. Headstock valve solenoids connections are bad.</li> <li>3. Headstock hydraulic system is leaking.</li> <li>4. Control panel wiring at fault.</li> <li>5. Hydraulic pump at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Test/repair/replace.</li> <li>2. Check solenoid plugs.</li> <li>3. Test for leaks/repair.</li> <li>4. Check that hydraulic pump motor is running and that solenoids are activating (indicated by red LED in solenoid plug).</li> <li>5. Test/repair/replace.</li> </ol>
Hydraulic tank fluid burnt or has tan discoloration.	<ol style="list-style-type: none"> <li>1. Hydraulic fluid is old or contaminated with water.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace hydraulic fluid (<b>Page 46</b>).</li> </ol>





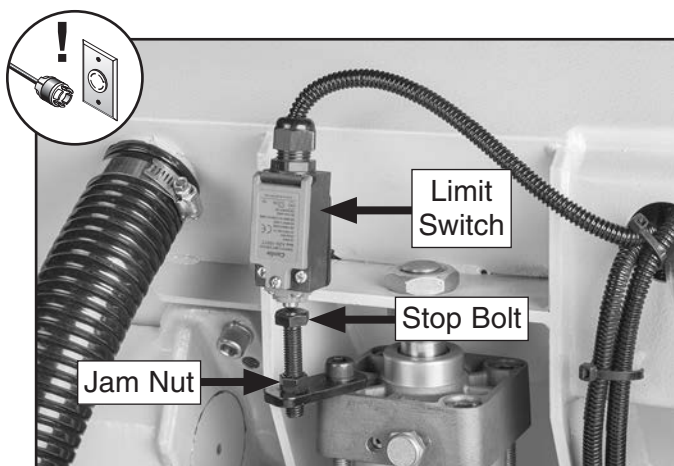
# Adjusting Lower Limit Stop Bolt

If the blade does not travel far enough to complete the cut, or the blade contacts the vise table, or the machine does not turn **OFF** after it completes a cut, then the lower limit stop bolt will need to be adjusted.

Item(s) Needed	Qty
Open-End Wrenches 14mm, 17mm .....	1 Ea.

## To adjust lower limit switch stop bolt:

- Without starting blade, lower headstock all the way. When headstock stops, blade should be just below vise table, but not contacting it.
  - If blade stops above vise table, lower headstock until blade is just below vise table surface.
  - If blade contacts vise table, raise headstock until blade is just below vise table surface.
- DISCONNECT MACHINE FROM POWER!**
- Loosen stop bolt jam nut (see **Figure 77**), then adjust stop bolt until head of stop bolt just begins to press the limit switch trigger.



**Figure 77.** Limit switch stop bolt and jam nut location.

- While holding stop bolt in place, tighten jam nut to secure setting.

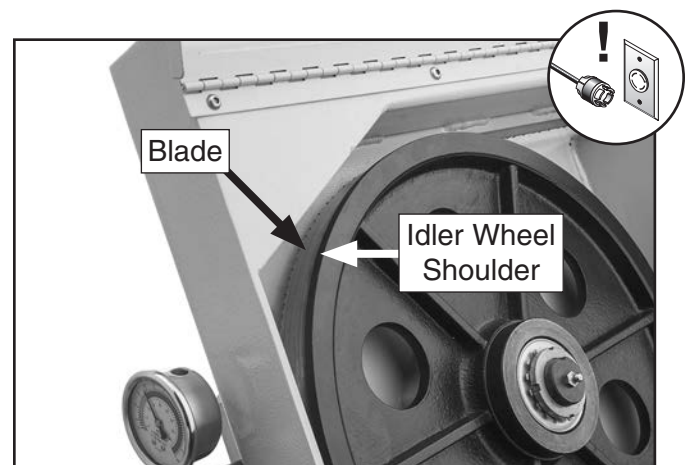
# Adjusting Blade Tracking

The blade tracking has been properly set at the factory. The tracking will rarely need to be adjusted if the bandsaw is used properly.

Item(s) Needed	Qty
Adjustable Wrench .....	1
Hex Wrench 10mm.....	1

## To adjust blade tracking:

- Make sure blade is properly tensioned (refer to **Tensioning Blade** on **Page 30**).
- Raise headstock all the way up and open both wheel covers.
- Start blade movement and watch how blade tracks around idler wheel, then stop blade movement.
  - If blade lightly touches shoulder of idler wheel without rubbing (see **Figure 78**), blade *is* tracking properly and no adjustments are needed.
  - If blade moves away from shoulder of idler wheel or rubs against it, blade *is not* tracking properly. Proceed to **Step 4**.



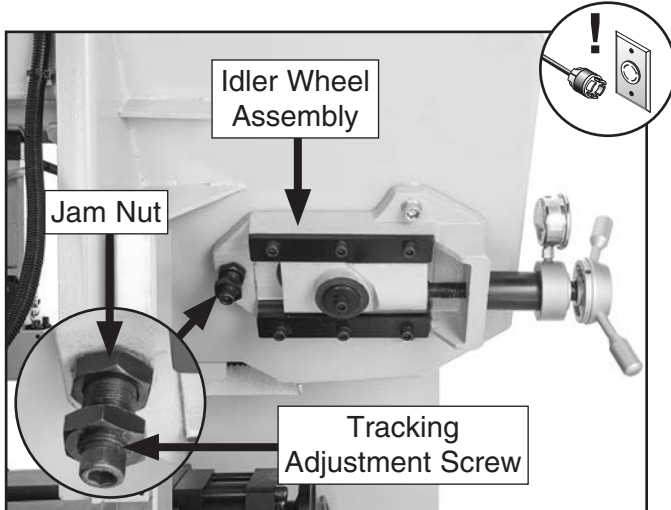
**Figure 78.** Blade tracking properly against idler wheel shoulder.

- DISCONNECT MACHINE FROM POWER!**



- Loosen jam nut on tracking adjustment screw (see **Figure 79**), then tighten or loosen tracking adjustment screw to move idler wheel assembly forward or backward.

**Tip:** Make small, incremental adjustments with tracking adjustment screw.



**Figure 79.** Blade tracking controls on idler wheel.

- Repeat **Steps 3–5** as needed until back of blade lightly touches shoulder of idler wheel.
- Tighten jam nut to secure setting.

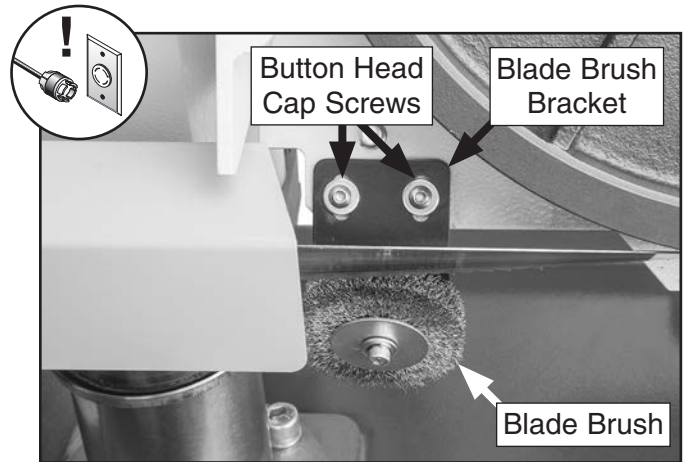
# Adjusting Blade Brush

The Model G0886 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.

Item(s) Needed	Qty
Hex Wrench 4mm.....	1

### To adjust blade brush:

- DISCONNECT MACHINE FROM POWER!
- Open drive wheel cover.
- Loosen button head cap screws on blade brush bracket (see **Figure 80**).



**Figure 80.** Blade brush and components.

- Adjust blade brush bracket so blade extends approximately 1/8" into bristles of brush, then tighten button head cap screws. Holes in bracket are slotted for easy adjustment.



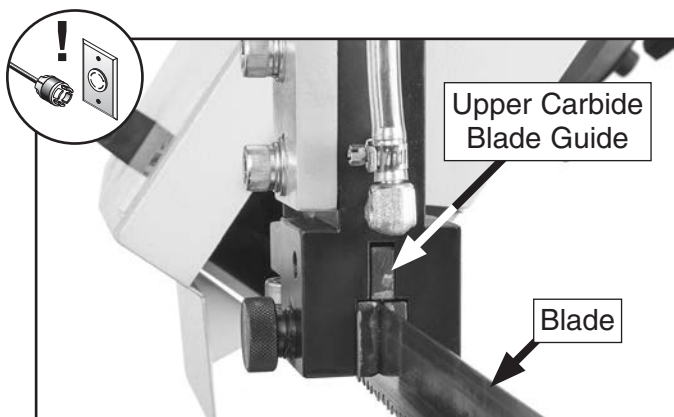
# Adjusting Blade Guides

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

Item(s) Needed	Qty
Hex Wrenches 4, 8mm.....	1 ea.
Open-End Wrenches 7, 14mm .....	1 ea.
Feeler Gauge (Optional).....	1

## Adjusting Carbide Blade Guides

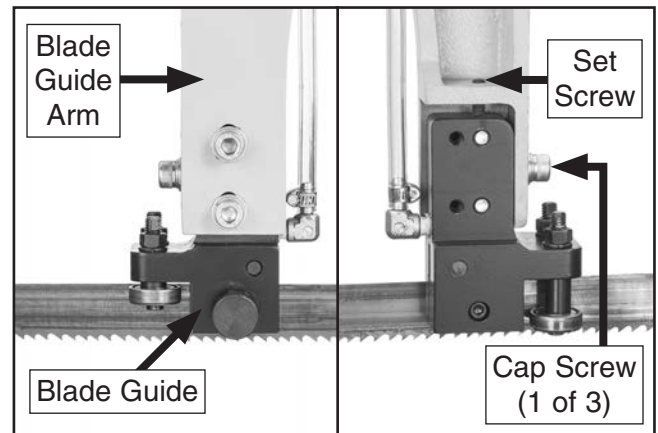
1. Make sure blade is properly tensioned and tracking correctly (refer to **Tensioning Blade** on **Page 30** and **Adjusting Blade Tracking** on **Page 54**).
2. Raise headstock high enough to give you room to work around blade guides.
3. DISCONNECT MACHINE FROM POWER!
4. Remove blade guards from blade arms.
5. On left blade guide, verify back of blade lightly contacts upper carbide blade guide (see **Figure 81**).
  - If blade *does* lightly contact upper carbide blade guide, skip to **Step 7**.
  - If blade *does not* lightly contact upper carbide blade guide, proceed to **Step 6**



**Figure 81.** Upper carbide blade guide location.

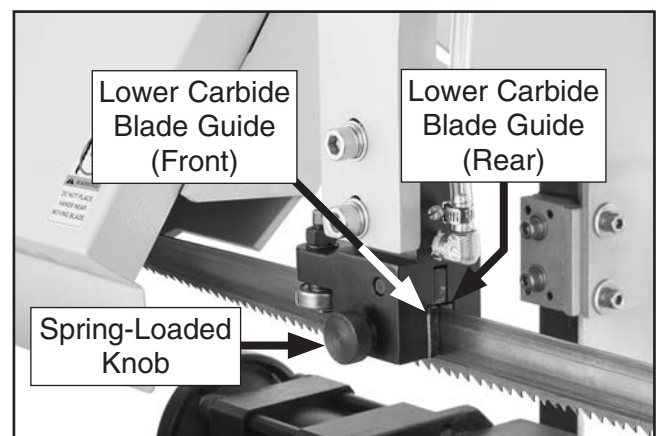
6. Loosen cap screws on blade guide arm (see **Figure 82**), and adjust set screw to move blade guide up or down until upper carbide blade guide lightly touches back of blade, then tighten cap screws.

**Note:** If it is difficult to move blade guide up or down, loosen lower carbide blade guides (refer to **Step 7**), and if necessary, adjust roller bearings away from blade (refer to **Adjusting Roller Bearings**).



**Figure 82.** Components for adjusting upper carbide blade guide.

7. Repeat **Step 5** on right blade guide.
8. On left blade guide, tighten spring-loaded knob until lower carbide blade guides (see **Figure 83**) are snug against blade, then back off knob 1/2 turn. DO NOT over-tighten knobs.



**Figure 83.** Lower carbide blade guides location.

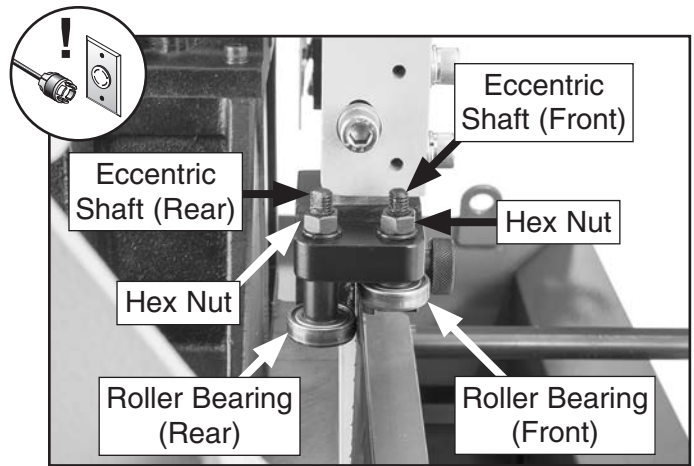
9. Repeat **Step 7** on right blade guide.
10. Adjust roller bearings (refer to **Adjusting Roller Bearings**).



## Adjusting Roller Bearings

1. Complete **Adjusting Carbide Blade Guides** procedure.
2. **DISCONNECT MACHINE FROM POWER!**
3. On left blade guide, loosen hex nut on front eccentric shaft (see **Figure 84**).
4. Turn eccentric shaft and adjust roller bearing (see **Figure 84**) so it lightly contacts blade or has 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.*



**Figure 84.** Location of roller bearings.

5. While holding eccentric shaft in place, tighten hex nut to secure setting.
6. Repeat **Steps 3–4** on rear eccentric shaft.
7. Repeat **Steps 3–6** on right blade guard.



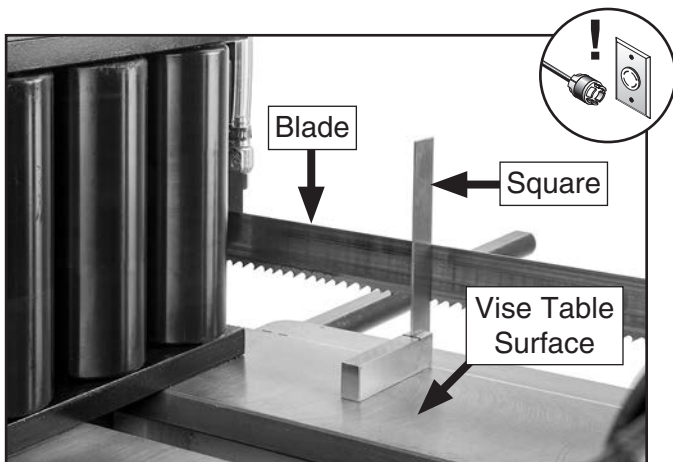
# Squaring Blade to Table

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 ruling out other potential factors, such as excessive feed rate or the blade guide being set too far away from the workpiece.

Item(s) Needed	Qty
Hex Wrenches 4, 8mm.....	1 ea.
Machinist's Square .....	1

## To square blade to table:

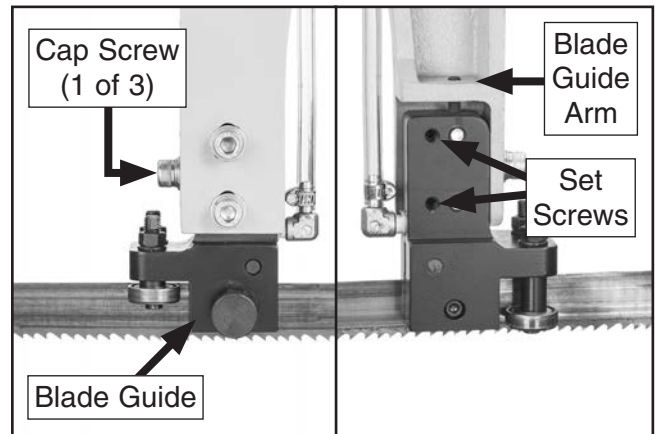
1. Lower headstock until blade teeth are approximately even with vise table surface.
2. DISCONNECT MACHINE FROM POWER!
3. Move left blade guide arm and movable vise all the way left.
4. Remove blade guards from blade arms.
5. Place machinist's square on vise table surface and against edge of blade (see **Figure 85**). Check for squareness at different points along length of vise table between blade guides.



**Figure 85.** Checking blade-to-table squareness.

- If blade *is* square to vise table, no further adjustments need to be made.
- If blade *is not* square to vise table, Loosen cap screws on both blade guide arms (see **Figure 86**).
  - If top of blade tilts away from square, loosen top set screws (see **Figure 86**) and tighten bottom set screws an equal amount while keeping an eye on blade squareness.
  - If bottom of blade tilts away from square, tighten top set screws (see **Figure 86**) and loosen bottom set screws an equal amount while keeping an eye on blade squareness.

**Note:** The amount you need to tighten and loosen the set screws depends on how out-of-square the blade has become.



**Figure 86.** Components for squaring blade to table.

6. Tighten cap screws loosened in **Step 5**.
7. Repeat **Step 5** as needed until blade and vise table are square.



# 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.

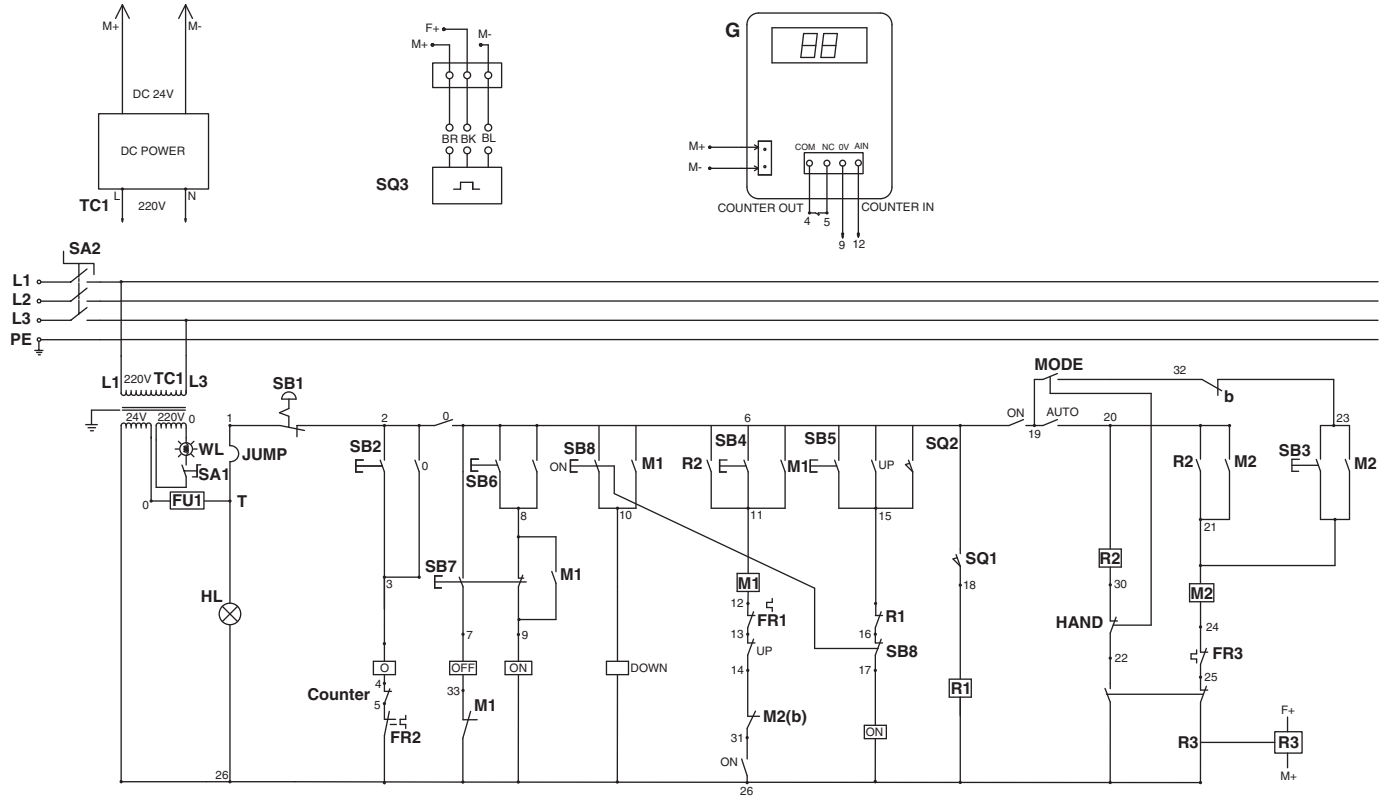
**CAPACITORS/INVERTERS.** Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

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



# Electrical Schematics

## Main Controls



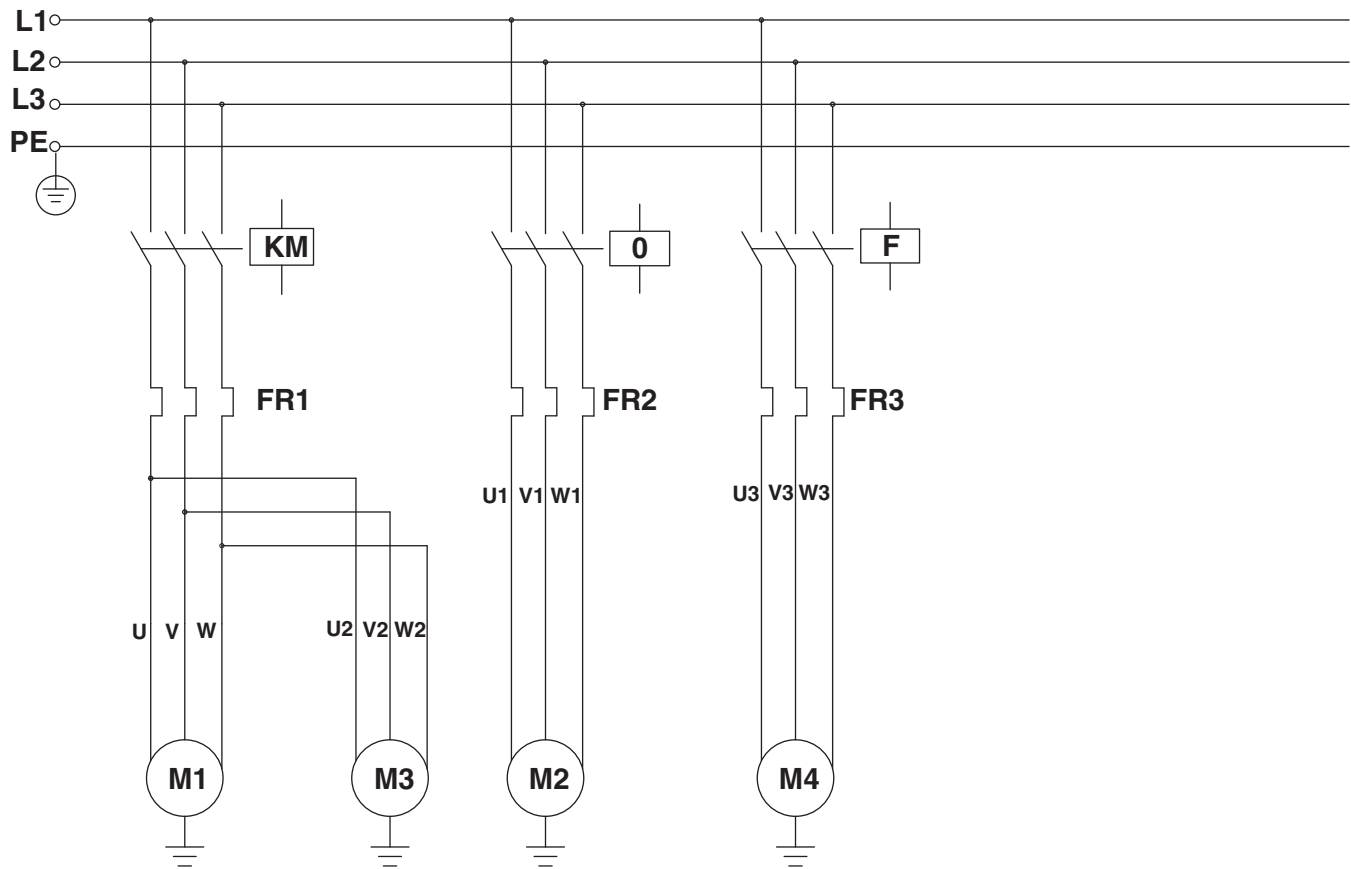
- TC1: Transformer
- SA1: Power Lamp
- SA2: Main Power Switch (600VAC 20A)
- WL: Work Lamp
- FU1: Fuse 5A
- HL: Signal
- JUMP: Optional Limit Switch
- SB1: E-STOP BUTTON
- SB2: Hydraulic Motor ON Button
- SB3: Feed System Motor ON Button
- SB4: Blade START Button
- SB5: Headstock UP Button
- SB6: Vise CLOSE Button
- SB7: Vise OPEN Button
- SB8: Headstock DOWN Button
- G: Digital Counter
- SQ1: Upper Limit Switch
- SQ2: Lower Limit Switch
- SQ3: Proximity Sensor

- FR1: Main Motor Overload
- FR2: Hydraulic Motor Overload
- FR3: Feed Motor Overload
- M1: Main Motor Contactor
- M2: Feed Motor Contactor
- ON: Vise Close Contactor
- OFF: Vise Open Contactor
- UP: Headstock Up Contactor
- DOWN: Headstock Down Contactor
- O: Hydraulic Motor Contactor
- R1: Relay 1A1B
- R2: Relay 1A
- R3: DC Relay
- MODE: Operation Mode Switch
- HAND: Feed Roller Switch
- VOFF: Vise Off Valve



# Motors

3~  
220V  
60Hz

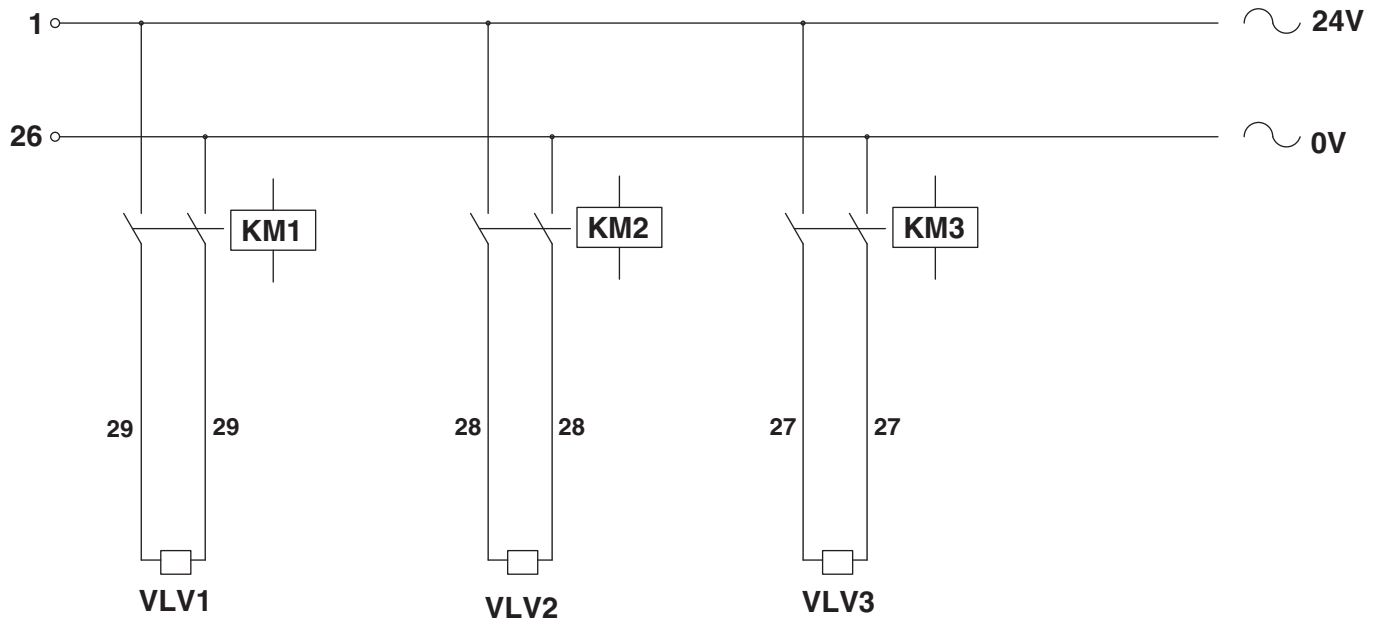


- KM:** Main Motor Contactor
- O:** Hydraulic Motor Magnetic Contactor
- F:** Feed Motor Contactor
- FR1:** Main Motor Overload Relay
- FR2:** Hydraulic Motor Overload Relay
- FR3:** Feed Motor Overload Relay
- M1:** Main Motor
- M2:** Hydraulic Motor
- M3:** Water Pump
- M4:** Feed Motor





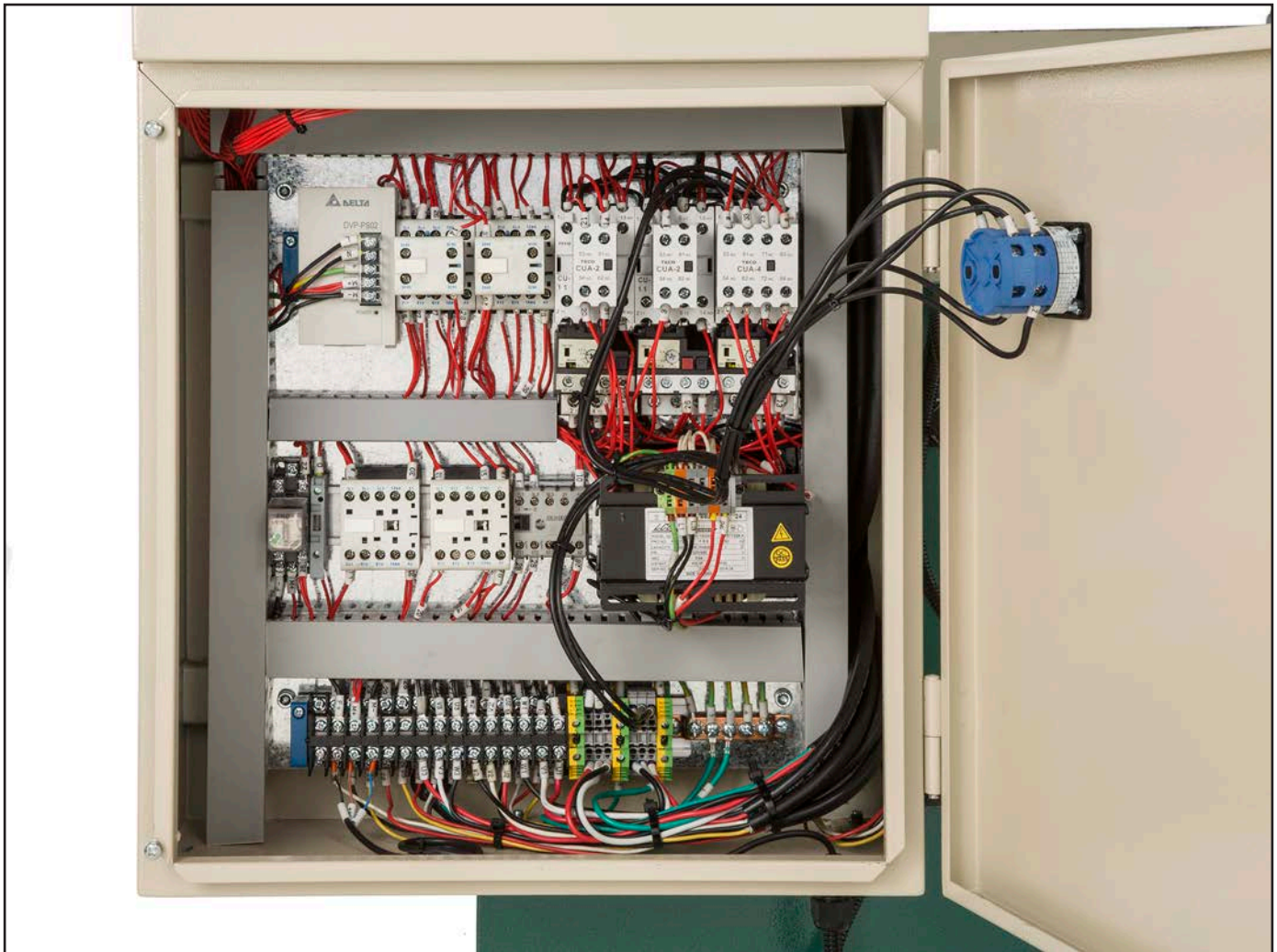
## Hydraulic Valves



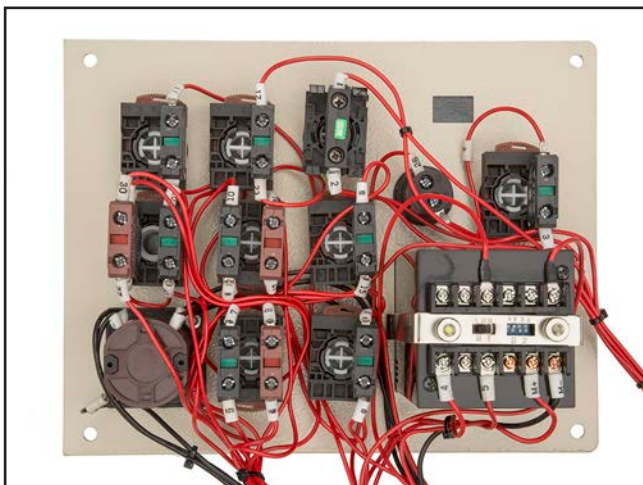
- KM1:** Vise Close Contactor
- VLV1:** Vise Close Valve
- KM2:** Headstock Down Contactor
- VLV2:** Headstock Down Valve
- KM3:** Headstock Up Contactor
- VLV3:** Headstock Up Valve



# Electrical Photos



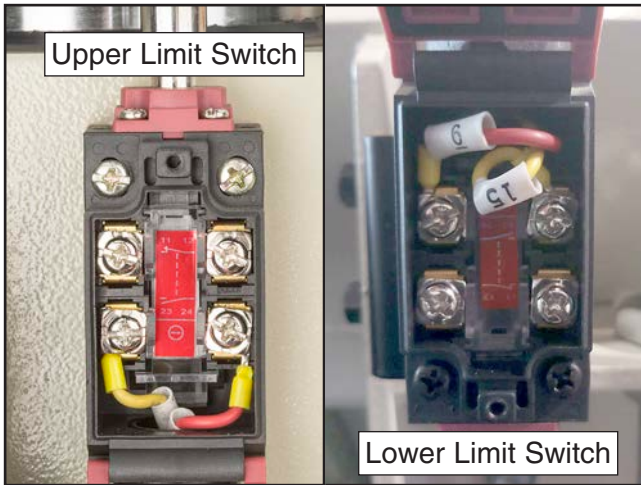
**Figure 87.** Electrical cabinet components and wiring connections (see **Page 73** for breakdown of individual components).



**Figure 88.** Control panel components and wiring connections (see **Page 73** for breakdown of individual components).



**Figure 89.** Proximity sensor head.



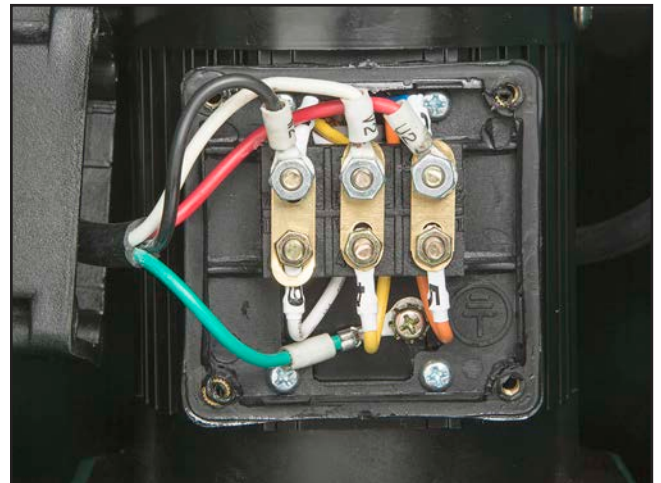
**Figure 90.** Upper and lower limit switch wiring connections.



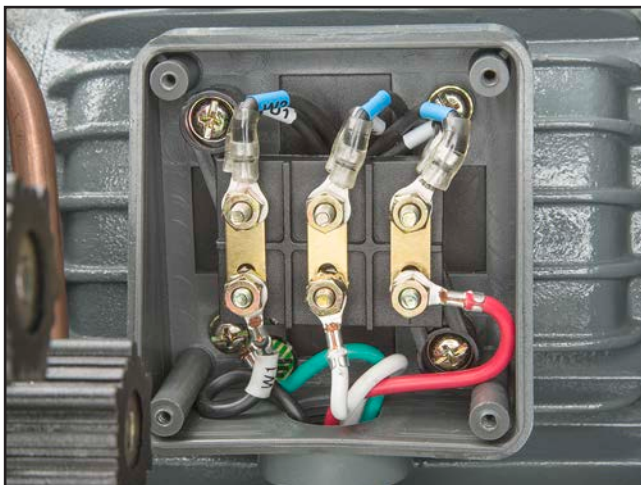
**Figure 93.** Main motor wiring connections.



**Figure 91.** Feed system motor wiring connections.



**Figure 94.** Coolant pump wiring connections.



**Figure 92.** Hydraulic pump motor wiring connections.



**Figure 95.** Hydraulic unit solenoids.

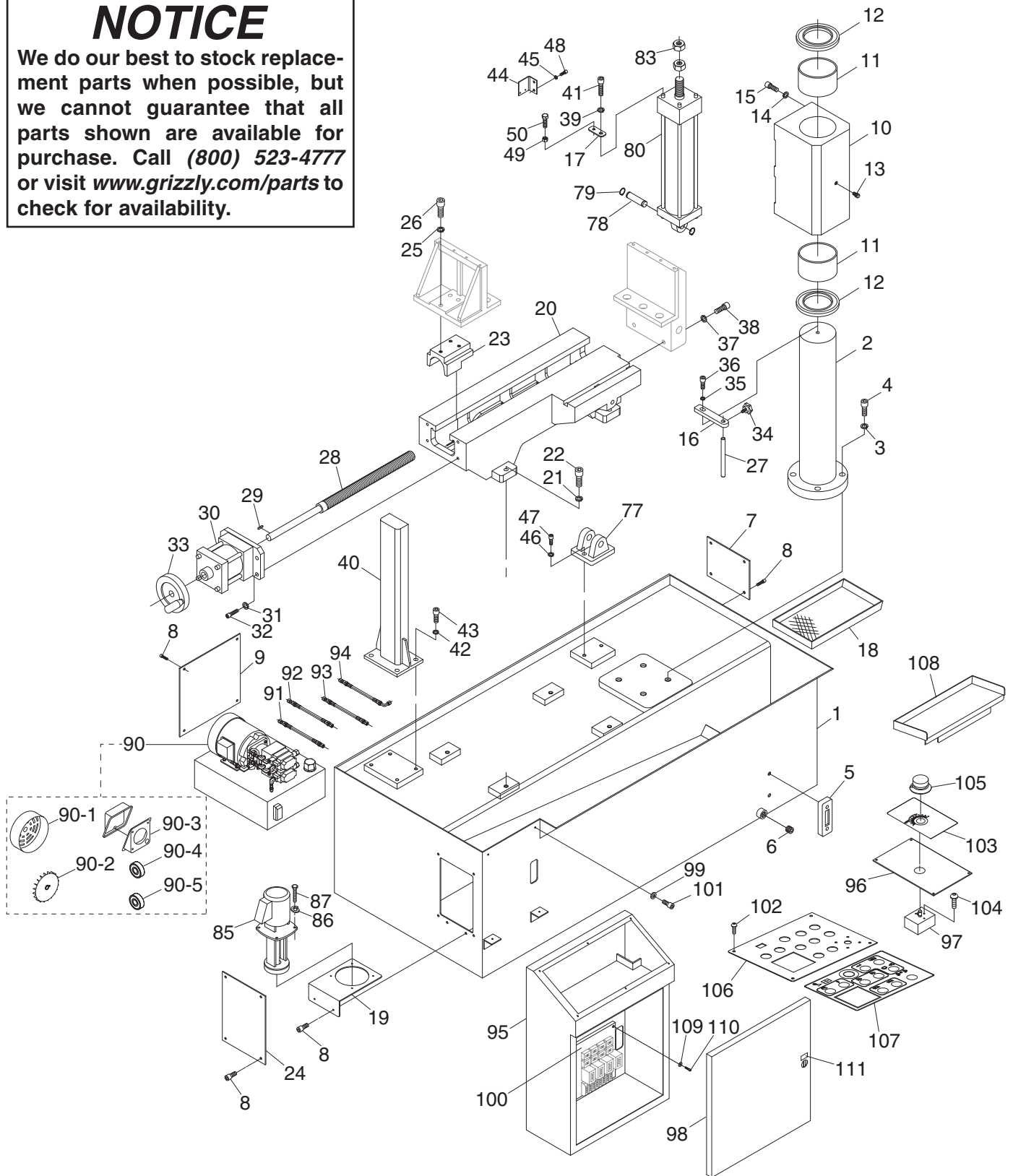


# SECTION 9: PARTS

## Base

### NOTICE

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



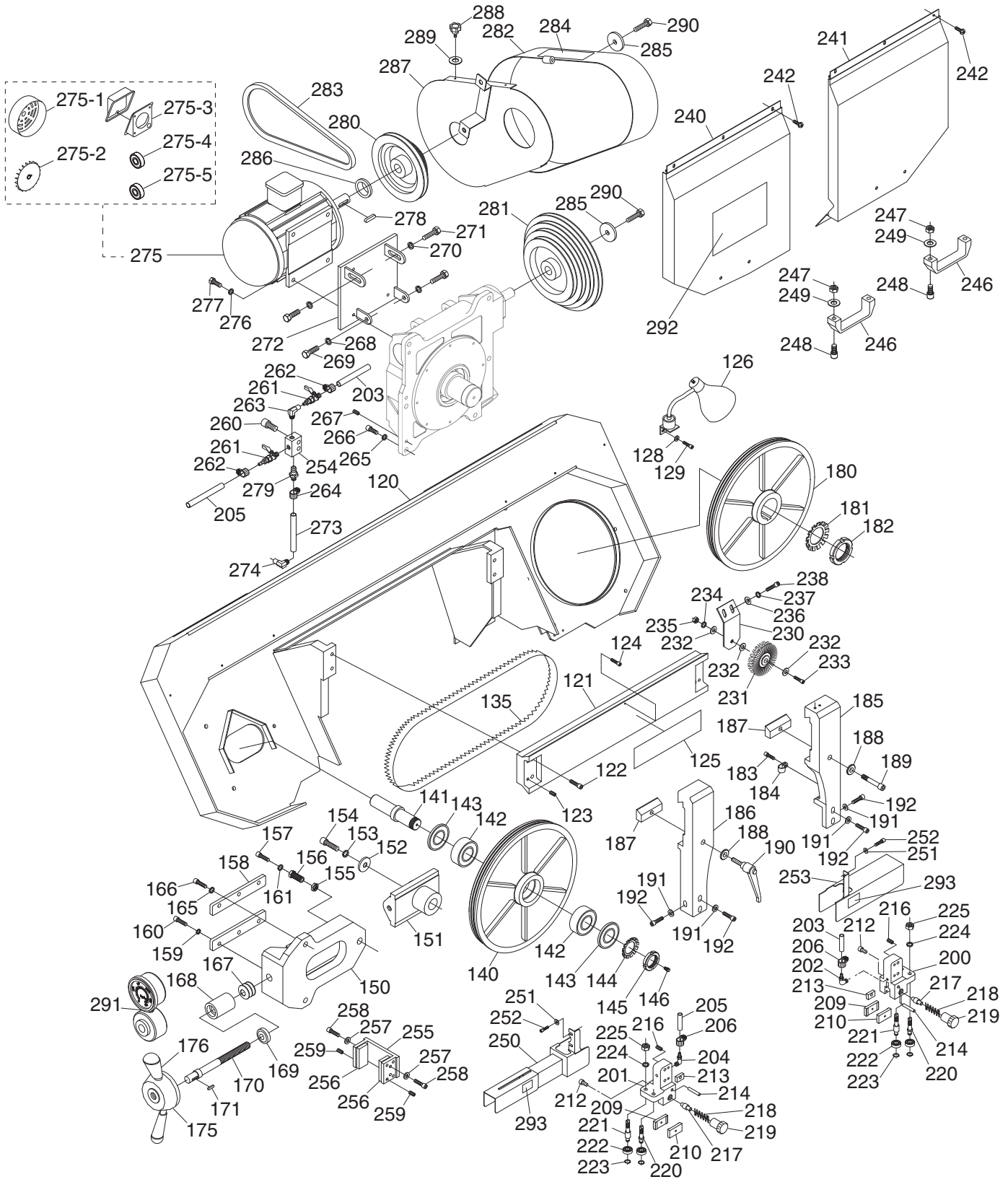
# Base Parts List

REF	PART #	DESCRIPTION
1	P0886001	BASE
2	P0886002	HEADSTOCK PILLAR
3	P0886003	LOCK WASHER 16MM
4	P0886004	CAP SCREW M16-2 X 45
5	P0886005	COOLANT THERMOMETER UNIT
6	P0886006	RESERVOIR DRAIN PLUG 1/2 PT
7	P0886007	ACCESS PANEL (RIGHT)
8	P0886008	BUTTON HD CAP SCR M6-1 X 12
9	P0886009	ACCESS PANEL (REAR)
10	P0886010	HEADSTOCK GUIDE BLOCK
11	P0886011	BUSHING ID110 X OD115 X L95
12	P0886012	OIL SEAL 110 X 126 X 12
13	P0886013	GREASE FITTING 1/8 PT STRAIGHT
14	P0886014	LOCK WASHER 12MM
15	P0886015	CAP SCREW M12-1.75 X 35
16	P0886016	HEIGHT ADJUSTMENT BRACKET
17	P0886017	LIMIT STOP BOLT BRACKET
18	P0886018	CHIP COLLECTION TRAY
19	P0886019	COOLANT PUMP BRACKET
20	P0886020	WISE TABLE
21	P0886021	LOCK WASHER 12MM
22	P0886022	CAP SCREW M12-1.75 X 45
23	P0886023	SLIDING JAW MOUNT
24	P0886024	ACCESS PANEL (LEFT)
25	P0886025	LOCK WASHER 12MM
26	P0886026	CAP SCREW M12-1.75 X 50
27	P0886027	HEIGHT ADJUSTMENT ROD
28	P0886028	WISE LEADSCREW
29	P0886029	KEY 5 X 5 X 25
30	P0886030	WISE HYDRAULIC CYLINDER
31	P0886031	LOCK WASHER 10MM
32	P0886032	CAP SCREW M10-1.5 X 40
33	P0886033	HANDWHEEL TYPE-8 125D X 15 B-K
34	P0886034	KNOB BOLT M6-1 X 13, D35, ROUND KD
35	P0886035	LOCK WASHER 10MM
36	P0886036	CAP SCREW M10-1.5 X 25
37	P0886037	LOCK WASHER 12MM
38	P0886038	CAP SCREW M12-1.75 X 50
39	P0886039	LOCK WASHER 10MM
40	P0886040	HEADSTOCK SUPPORT COLUMN
41	P0886041	CAP SCREW M10-1.5 X 20
42	P0886042	LOCK WASHER 12MM
43	P0886043	CAP SCREW M12-1.75 X 30

REF	PART #	DESCRIPTION
44	P0886044	LIMIT SWITCH BRACKET
45	P0886045	LOCK WASHER 6MM
46	P0886046	LOCK WASHER 10MM
47	P0886047	CAP SCREW M10-1.5 X 40
48	P0886048	CAP SCREW M6-1 X 15
49	P0886049	LOCK WASHER 10MM
50	P0886050	CAP SCREW M10-1.5 X 35
77	P0886077	HYDRAULIC CYLINDER BRACKET
78	P0886078	SHAFT 20 X 80
79	P0886079	EXT RETAINING RING 20MM
80	P0886080	HEADSTOCK HYDRAULIC CYLINDER
83	P0886083	HEX NUT M24-2 THIN
85	P0886085	COOLANT PUMP 1/8HP 220V 3-PH
86	P0886086	LOCK WASHER 6MM
87	P0886087	HEX BOLT M6-1 X 12
90	P0886090	HYDRAULIC PUMP ASSY 1HP 220V 3-PH
90-1	P0886090-1	MOTOR FAN COVER
90-2	P0886090-2	MOTOR FAN
90-3	P0886090-3	MOTOR JUNCTION BOX
90-4	P0886090-4	BALL BEARING 6205ZZ (FRONT)
90-5	P0886090-5	BALL BEARING 6203ZZ (REAR)
91	P0886091	HYDRAULIC HOSE 1/4 D X 41-1/2 L
92	P0886092	HYDRAULIC HOSE 1/4 D X 41-1/2 L
93	P0886093	HYDRAULIC HOSE 1/4 D X 63 L
94	P0886094	HYDRAULIC HOSE 1/4 D X 110-1/4 L, 90-DEG
95	P0886095	ELECTRICAL CABINET
96	P0886096	CONTROL PANEL COVER (RIGHT)
97	P0886097	BLADE FEED RATE CONTROL UNIT
98	P0886098	ELECTRICAL CABINET DOOR
99	P0886099	LOCK WASHER 6MM
100	P0886100	ELECTRICAL PANEL BASE
101	P0886101	CAP SCREW M6-1 X 10
102	P0886102	BUTTON HD CAP SCR M5-.8 X 10
103	P0886103	BLADE FEED RATE CONTROL LABEL
104	P0886104	FLAT HD CAP SCR M5-.8 X 10
105	P0886105	BLADE FEED RATE DIAL
106	P0886106	CONTROL PANEL (LEFT)
107	P0886107	MAIN CONTROL PANEL LABEL
108	P0886108	DRIP TRAY
109	P0886109	LOCK WASHER 6MM
110	P0886110	CAP SCREW M6-1 X 20
111	P0886111	WIRED 220V LABEL



# Headstock



# Headstock Parts List

REF	PART #	DESCRIPTION
120	P0886120	HEADSTOCK FRAME
121	P0886121	BLADE GUIDE ARM SUPPORT
122	P0886122	CAP SCREW M10-1.5 X 45
123	P0886123	SET SCREW M10-1.5 X 20
124	P0886124	CAP SCREW M6-1 X 15
125	P0886125	BLADE GUIDE ARM SCALE LABEL
126	P0886126	LED WORK LAMP
128	P0886128	LOCK WASHER 6MM
129	P0886129	CAP SCREW M6-1 X 15
135	P0886135	BLADE 155-1/2" X 1-3/8" 4-TPI HOOKED
140	P0886140	IDLER WHEEL
141	P0886141	IDLER WHEEL SHAFT
142	P0886142	TAPERED ROLLER BEARING 30207J
143	P0886143	BEARING COVER
144	P0886144	BEARING LOCK WASHER 35MM AW07
145	P0886145	BEARING LOCK NUT M35-1.5 AN07
146	P0886146	GREASE FITTING 1/8 PT STRAIGHT
150	P0886150	TENSION BRACKET
151	P0886151	TENSION SLIDE
152	P0886152	TENSION SLIDE WASHER 10 X 45 X 6
153	P0886153	LOCK WASHER 10MM
154	P0886154	CAP SCREW M10-1.5 X 20
155	P0886155	HEX NUT M22-1.5 THIN
156	P0886156	HEX ADAPTER MF M22-1.5 X 55, M12-1.75
157	P0886157	CAP SCREW M12-1.75 X 75
158	P0886158	TENSION GIB
159	P0886159	LOCK WASHER 10MM
160	P0886160	CAP SCREW M10-1.5 X 25
161	P0886161	LOCK WASHER 12MM
165	P0886165	LOCK WASHER 14MM
166	P0886166	CAP SCREW M14-1.5 X 45
167	P0886167	COMPRESSION SPRING 5.5 X 37 X 70
168	P0886168	SPACER 41 X 50 X 65
169	P0886169	THRUST BEARING 51104
170	P0886170	BLADE TENSION LEADSCREW
171	P0886171	KEY 6 X 6 X 25
175	P0886175	HANDWHEEL 83D X 18B X M12-1.5
176	P0886176	FIXED HANDLE 25 X 97, M12-1.5 X 10
180	P0886180	DRIVE WHEEL
181	P0886181	BEARING LOCK WASHER 65MM AW13
182	P0886182	BEARING LOCK NUT M65-2 AN13
183	P0886183	BUTTON HD CAP SCR M5-.8 X 10
184	P0886184	RETAINING CLIP 1/4"
185	P0886185	BLADE GUIDE ARM (RIGHT)
186	P0886186	BLADE GUIDE ARM (LEFT)
187	P0886187	BLADE GUIDE ARM GIB
188	P0886188	LOCK WASHER 12MM
189	P0886189	CAP SCREW M12-1.75 X 60
190	P0886190	ADJUSTABLE HANDLE M12-1.75 X 65, 92L
191	P0886191	LOCK WASHER 10MM
192	P0886192	CAP SCREW M10-1.5 X 30
200	P0886200	BLADE GUIDE BLOCK (RIGHT)
201	P0886201	BLADE GUIDE BLOCK (LEFT)
202	P0886202	HOSE FITTING 1/4PT 90-DEG CP
203	P0886203	COOLANT HOSE 1/4" X 18-3/4"

REF	PART #	DESCRIPTION
204	P0886204	HOSE FITTING 1/4PT 90-DEG CP
205	P0886205	COOLANT HOSE 1/4" X 32-1/2"
206	P0886206	HOSE CLAMP 1/4"
209	P0886209	CARBIDE BLADE GUIDE (REAR)
210	P0886210	CARBIDE BLADE GUIDE (FRONT)
212	P0886212	CAP SCREW M6-1 X 12
213	P0886213	CARBIDE BLADE GUIDE (UPPER)
214	P0886214	DOWEL PIN 8 X 50
216	P0886216	SET SCREW M8-1.25 X 20
217	P0886217	BLADE GUIDE SHAFT
218	P0886218	COMPRESSION SPRING 1.2 X 10.8 X 24.2
219	P0886219	BLADE GUIDE SCREW M18-1.5 X 25 KD
220	P0886220	BEARING SHAFT (FRONT)
221	P0886221	BEARING SHAFT (REAR)
222	P0886222	BALL BEARING 6200-2RS
223	P0886223	EXT RETAINING RING 10MM
224	P0886224	LOCK WASHER 10MM
225	P0886225	HEX NUT M10-1.5
230	P0886230	BLADE BRUSH BRACKET
231	P0886231	BLADE BRUSH WHEEL
232	P0886232	FLAT WASHER 8MM
233	P0886233	CAP SCREW M8-1.25 X 40
234	P0886234	LOCK WASHER 8MM
235	P0886235	HEX NUT M8-1.25
236	P0886236	FLAT WASHER 6MM
237	P0886237	LOCK WASHER 6MM
238	P0886238	CAP SCREW M6-1 X 15
240	P0886240	IDLER WHEEL COVER
241	P0886241	DRIVE WHEEL COVER
242	P0886242	BUTTON HD CAP SCR M6-1 X 16
246	P0886246	WHEEL COVER HANDLE
247	P0886247	HEX NUT M8-1.25
248	P0886248	CAP SCREW M8-1.25 X 20
249	P0886249	FLAT WASHER 8MM
250	P0886250	BLADE GUARD (LEFT) W/EXTENSION
251	P0886251	FLAT WASHER 6MM
252	P0886252	BUTTON HD CAP SCR M6-1 X 16
253	P0886253	BLADE GUARD (RIGHT)
254	P0886254	3-WAY VALVE BLOCK 3/8PT
255	P0886255	HEADSTOCK SUPPORT COLUMN BRACKET
256	P0886256	HEADSTOCK SUPPORT COLUMN GUIDE
257	P0886257	FLAT WASHER 8MM
258	P0886258	CAP SCREW M8-1.25 X 20
259	P0886259	SET SCREW M6-1 X 10
260	P0886260	CAP SCREW M6-1 X 30
261	P0886261	VALVE ASSEMBLY 1/4PT X 3/8PT CP
262	P0886262	HOSE CLAMP 1/4"
263	P0886263	HOSE FITTING 1/4PT X 3/8PT 90-DEG CP
264	P0886264	HOSE CLAMP 1/2"
265	P0886265	LOCK WASHER 12MM
266	P0886266	CAP SCREW M12-1.75 X 35
267	P0886267	SET SCREW M12-1.75 X 20
268	P0886268	FLAT WASHER 12MM
269	P0886269	HEX BOLT M12-1.75 X 30
270	P0886270	FLAT WASHER 12MM



# Headstock Parts List (Cont.)

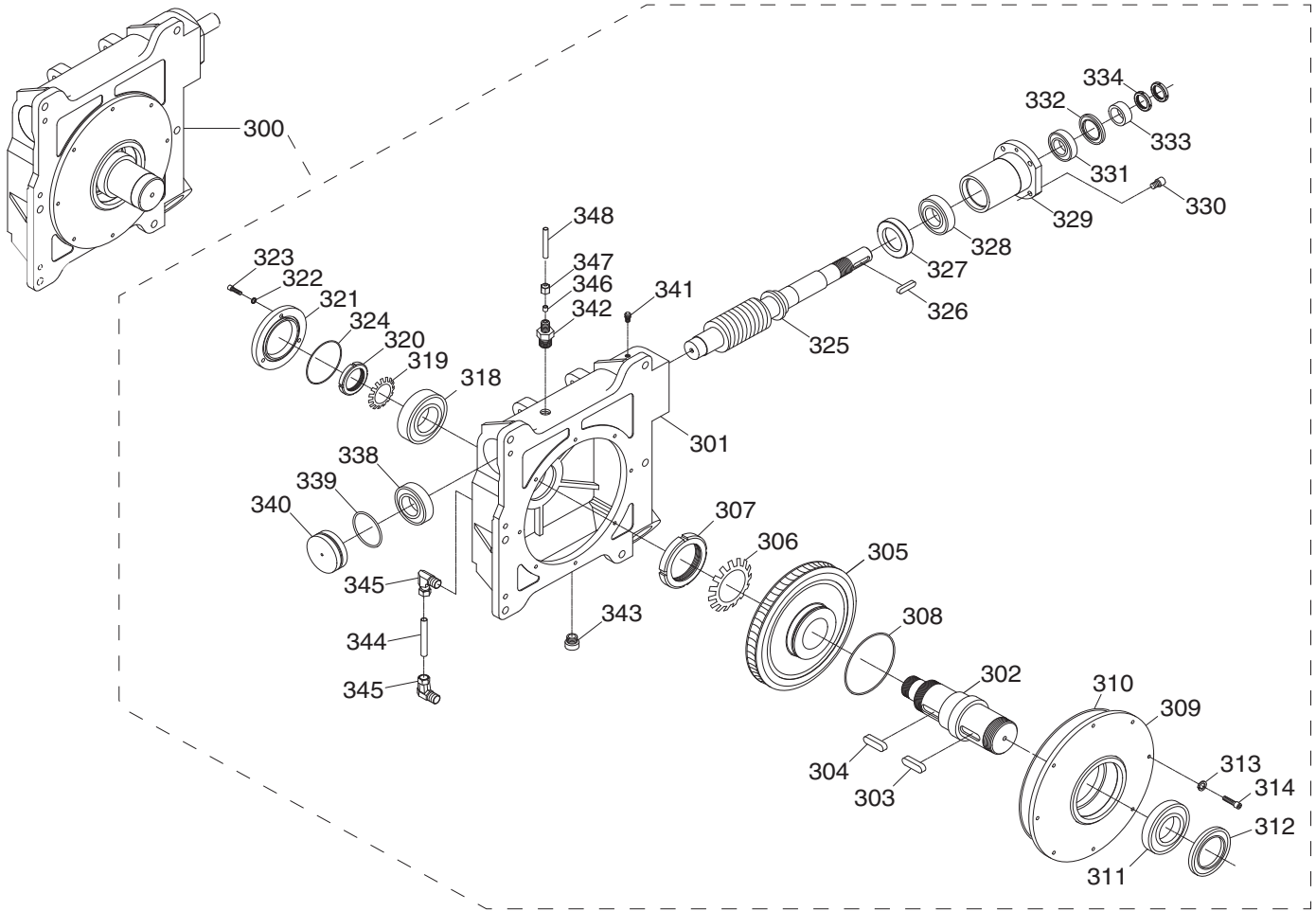
REF	PART #	DESCRIPTION
271	P0886271	HEX BOLT M12-1.75 X 30
272	P0886272	MOTOR MOUNT PLATE
273	P0886273	COOLANT HOSE 1/2" X 110-1/4"
274	P0886274	HOSE FITTING 1/2PT X 3/8PT 90-DEG CP
275	P0886275	MAIN MOTOR 3HP 220V 3-PH
275-1	P0886275-1	MOTOR FAN COVER
275-2	P0886275-2	MOTOR FAN
275-3	P0886275-3	MOTOR JUNCTION BOX
275-4	P0886275-4	BALL BEARING 6206ZZ (FRONT)
275-5	P0886275-5	BALL BEARING 6204ZZ (REAR)
276	P0886276	LOCK WASHER 10MM
277	P0886277	HEX BOLT M10-1.5 X 25
278	P0886278	KEY 8 X 7 X 40
279	P0886279	HOSE FITTING 1/2PT X 3/8PT STRAIGHT CP

REF	PART #	DESCRIPTION
280	P0886280	MOTOR PULLEY
281	P0886281	GEAR PULLEY
282	P0886282	PULLEY COVER
283	P0886283	BELT A-47
284	P0886284	BLADE SPEED SELECTION LABEL
285	P0886285	PULLEY WASHER 10 X 40 X 6
286	P0886286	MOTOR PULLEY BUSHING
287	P0886287	PULLEY COVER PLATE
288	P0886288	KNOB BOLT M6-1 X 13, 5-LOBE, D35
289	P0886289	FLAT WASHER 6MM
290	P0886290	HEX BOLT M10-1.5 X 20
291	P0886291	BLADE TENSION GAUGE
292	P0886292	BLADE SELECTION LABEL
293	P0886293	BLADE DIRECTION LABEL





# Gearbox

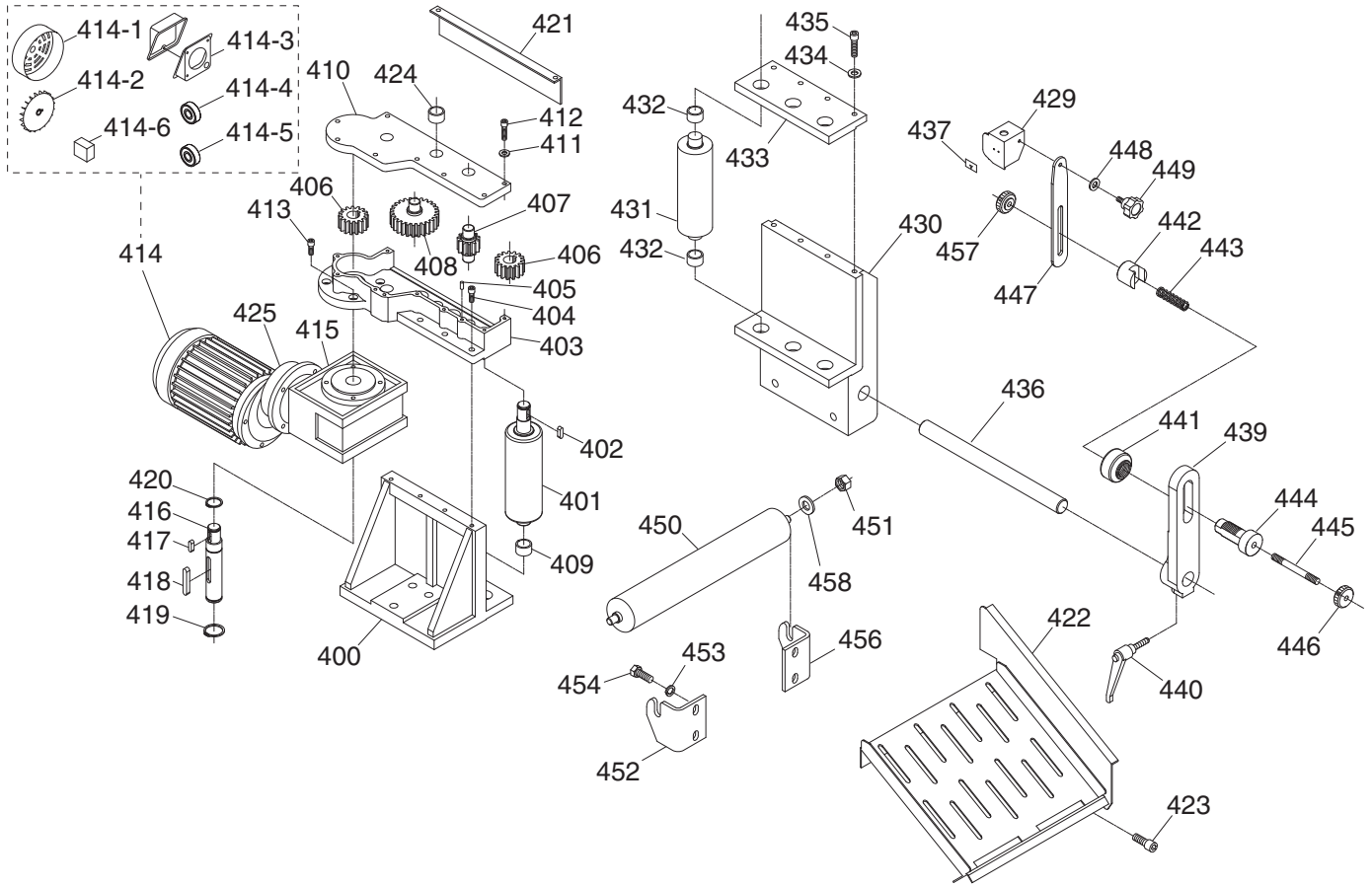


REF	PART #	DESCRIPTION
300	P0886300	GEARBOX ASSEMBLY
301	P0886301	GEARBOX CASE
302	P0886302	OUTPUT SHAFT
303	P0886303	KEY 15 X 10 X 50
304	P0886304	KEY 15 X 10 X 45
305	P0886305	WORM GEAR 45T
306	P0886306	BEARING LOCK WASHER 55MM AW11
307	P0886307	BEARING LOCK NUT M55-2 AN11
308	P0886308	O-RING 84.4 X 3.1 G85
309	P0886309	GEAR CASE COVER (FRONT)
310	P0886310	O-RING 245 X 3.1
311	P0886311	TAPERED ROLLER BEARING 32013J
312	P0886312	OIL SEAL 75 X 100 X 12 NBR TC75
313	P0886313	LOCK WASHER 8MM
314	P0886314	CAP SCREW M8-1.25 X 25
318	P0886318	TAPERED ROLLER BEARING 30208
319	P0886319	BEARING LOCK WASHER 40MM AW08
320	P0886320	BEARING LOCK NUT M40-1.5 AN08
321	P0886321	GEAR CASE COVER (REAR)
322	P0886322	LOCK WASHER 6MM
323	P0886323	CAP SCREW M6-1 X 25
324	P0886324	O-RING 79.4 X 3.1 G80

REF	PART #	DESCRIPTION
325	P0886325	WORM GEAR SHAFT 6T, 421L
326	P0886326	KEY 8 X 7 X 40
327	P0886327	OIL SEAL COVER
328	P0886328	TAPERED ROLLER BEARING 30207J
329	P0886329	SHAFT COVER
330	P0886330	CAP SCREW M8-1.25 X 20
331	P0886331	TAPERED ROLLER BEARING 30206
332	P0886332	OIL SEAL 40 X 62 X 9 NBR TC40
333	P0886333	BUSHING 30 X 40 X 16
334	P0886334	BEARING LOCK NUT M30-1.5 AN06
338	P0886338	BALL BEARING 6207-Z
339	P0886339	O-RING 64.4 X 3.1 G65
340	P0886340	GEAR CASE COVER (LEFT)
341	P0886341	GREASE FITTING 1/8PT STRAIGHT
342	P0886342	HOSE FITTING 1/2PT X 1/4PT STRAIGHT CP
343	P0886343	OIL DRAIN PLUG 1/2PT
344	P0886344	HOSE 6 X 120
345	P0886345	HOSE CONNECTOR 3/8PT X M6-1 90-DEG CP
346	P0886346	TUBING SLEEVE 1/4PT CP
347	P0886347	TUBE CONNECTOR 1/4PT CP
348	P0886348	TUBE 1/4" X 4-3/4" CP



# Feed System



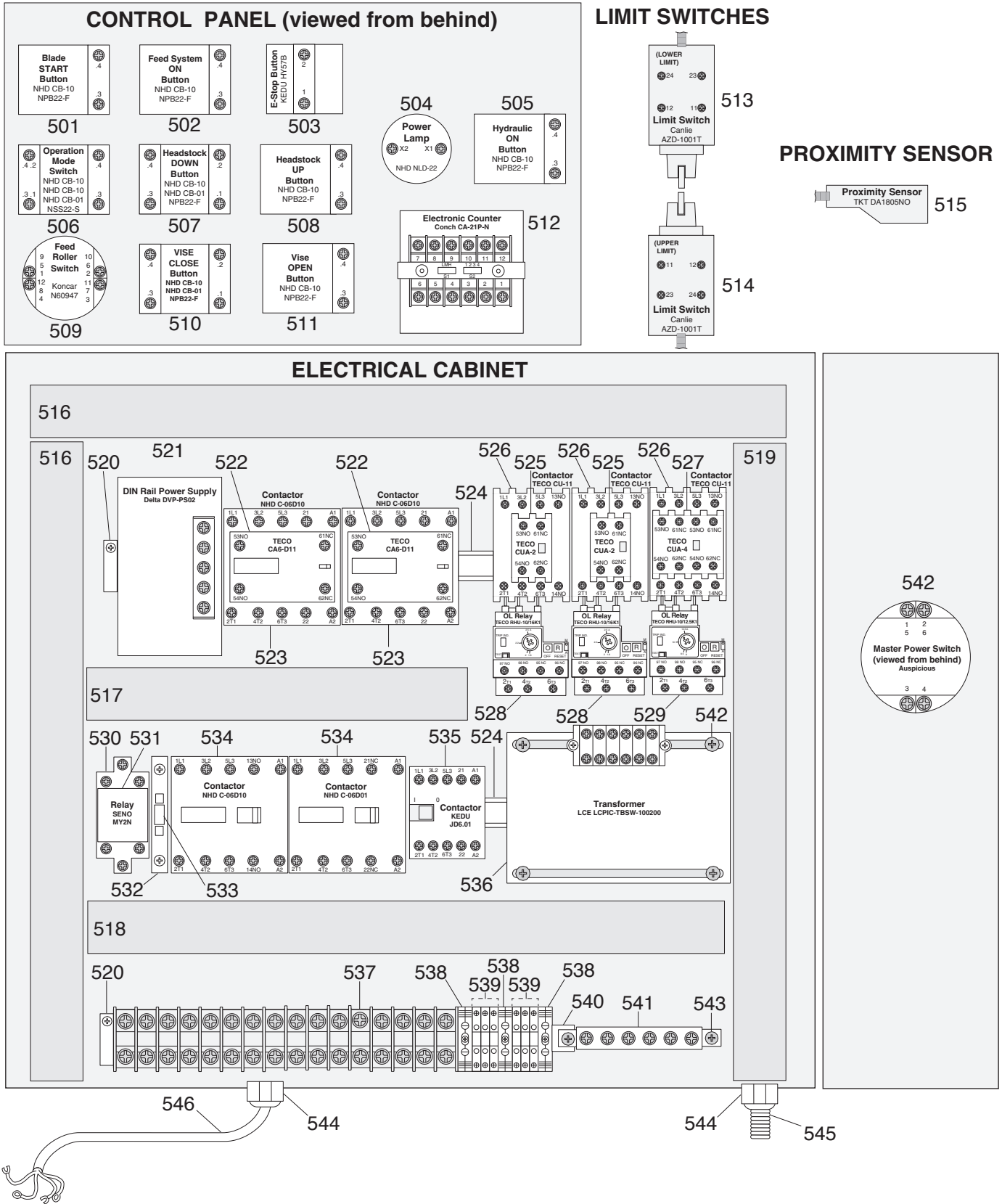
# Feed System Parts List

REF	PART #	DESCRIPTION
400	P0886400	MOVABLE VISE JAW
401	P0886401	MOTORIZED FEED ROLLER
402	P0886402	KEY 6 X 6 X 20
403	P0886403	FEED GEAR BASE
404	P0886404	CAP SCREW M8-1.25 X 30
405	P0886405	DOWEL PIN 5 X 15
406	P0886406	GEAR 15T
407	P0886407	GEAR 11T
408	P0886408	GEAR 26T
409	P0886409	BUSHING 22ID X 25OD X 15L
410	P0886410	FEED GEAR COVER (TOP)
411	P0886411	LOCK WASHER 6MM
412	P0886412	CAP SCREW M6-1 X 25
413	P0886413	CAP SCREW M8-1.25 X 20
414	P0886414	FEED MOTOR 1/8HP 220V 3-PH
414-1	P0886414-1	MOTOR FAN COVER
414-2	P0886414-2	MOTOR FAN
414-3	P0886414-3	MOTOR JUNCTION BOX
414-4	P0886414-4	BALL BEARING 6201ZZ (FRONT)
414-5	P0886414-5	BALL BEARING 6201ZZ (REAR)
414-6	P0886414-6	RECTIFIER AC DC 1.6A SUNSO
415	P0886415	FEED GEARBOX
416	P0886416	FEED DRIVE SHAFT
417	P0886417	KEY 6 X 6 X 20
418	P0886418	KEY 8 X 7 X 50
419	P0886419	EXT RETAINING RING 25MM
420	P0886420	EXT RETAINING RING 20MM
421	P0886421	FEED GEAR COVER (SIDE)
422	P0886422	CHUTE
423	P0886423	CAP SCREW M8-1.25 X 20

REF	PART #	DESCRIPTION
424	P0886424	BUSHING 18ID X 22OD X 15L
425	P0886425	FEED GEARBOX COUPLER
429	P0886429	PROXIMITY SENSOR HOUSING
430	P0886430	FIXED VISE JAW
431	P0886431	IDLER FEED ROLLER
432	P0886432	BUSHING 22ID X 25OD X 15L
433	P0886433	ROLLER PLATE
434	P0886434	LOCK WASHER 8MM
435	P0886435	CAP SCREW M8-1.25 X 30
436	P0886436	PROXIMITY SENSOR SUPPORT ROD
437	P0886437	PROXIMITY SENSOR LABEL
439	P0886439	PROXIMITY SENSOR SUPPORT BRACKET
440	P0886440	ADJUSTABLE HANDLE M10-1.5 X 20, 80L
441	P0886441	KNOB M24-2, D50, ROUND KD
442	P0886442	ADJUSTMENT SHAFT BLOCK M10-1.5
443	P0886443	COMPRESSION SPRING 1.8 X 15 X 30
444	P0886444	ADJUSTMENT SHAFT SCREW M24-2
445	P0886445	STUD-DE M10-1.5 X 140, 35
446	P0886446	KNOB W/SCALE M10-1.5, D40, ROUND
447	P0886447	PROXIMITY SENSOR ADJUSTMENT BRACKET
448	P0886448	FLAT WASHER 6MM
449	P0886449	KNOB BOLT M6-1 X 13, D35, 5-LOBE
450	P0886450	INFEEED ROLLER
451	P0886451	HEX NUT M12-1.75
452	P0886452	INFEEED ROLLER BRACKET (RIGHT)
453	P0886453	LOCK WASHER 10MM
454	P0886454	HEX BOLT M10-1.5 X 25
456	P0886456	INFEEED ROLLER BRACKET (LEFT)
457	P0886457	KNOB M10-1.5, D35, ROUND KD
458	P0886458	FLAT WASHER 12MM



# Electrical



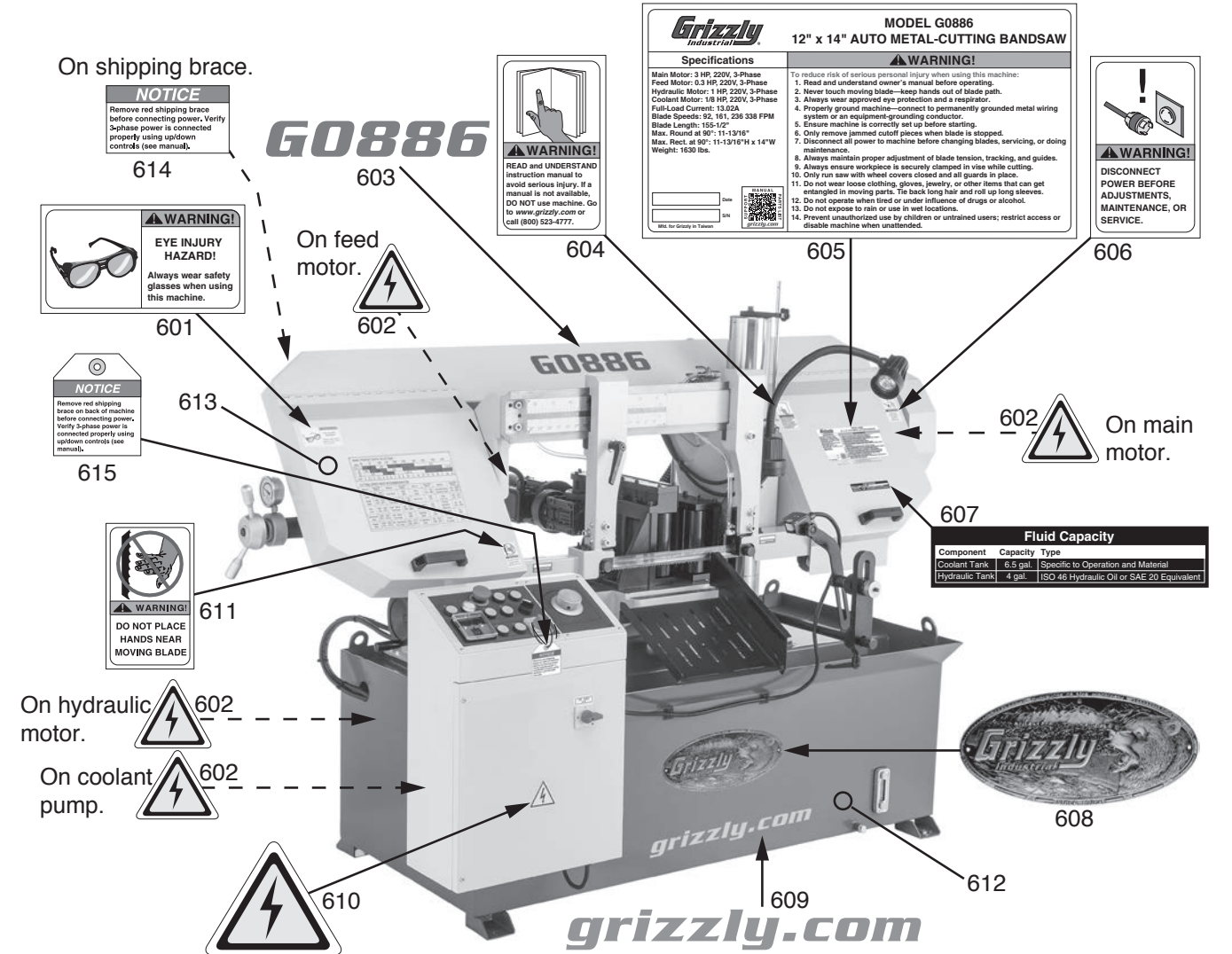
# Electrical Parts List

REF	PART #	DESCRIPTION	REF	PART #	DESCRIPTION
501	P0886501	BUTTON SWITCH NHD CB-01 NPB22-F GRN	524	P0886524	DIN RAIL 1-3/8 X 3/8 X 7"
502	P0886502	BUTTON SWITCH NHD CB-10 NPB22-F GRN	525	P0886525	CONTACTOR TECO CUA-2 24V
503	P0886503	E-STOP BUTTON KEDU HY57B	526	P0886526	CONTACTOR TECO CU-11 24V
504	P0886504	POWER LAMP NHD NLD-22	527	P0886527	CONTACTOR TECO CUA-4 24V
505	P0886505	BUTTON SWITCH NHD CB-10 NPB22-F GRN	528	P0886528	OL RELAY TECO RHU-10/2.5K1 1.8-2.5A
506	P0886506	ROTARY SWITCH NHD CB-10, 01 NSS22-S 2P	529	P0886529	OL RELAY TECO RHU-10/12.5K1 9-12.5A
507	P0886507	BUTTON SWITCH NHD CB-10, 01 NPB22-F GRN	530	P0886530	RELAY BASE DYF08A
508	P0886508	BUTTON SWITCH NHD CB-10 NPB22-F GRN	531	P0886531	RELAY SENO MY2N
509	P0886509	ROTARY SWITCH KONCAR N60947 3P	532	P0886532	FUSE HOLDER
510	P0886510	BUTTON SWITCH NHD CB-10, 01 NPB22-F GRN	533	P0886533	FUSE 5A 250V CERAMIC
511	P0886511	BUTTON SWITCH NHD CB-10 NPB22-F GRN	534	P0886534	CONTACTOR NHD C-06D01 24V
512	P0886512	ELECTRONIC COUNTER CONCH CA-21P-N	535	P0886535	CONTACTOR KEDU JD6.01 24V
513	P0886513	LIMIT SWITCH CANLIE AZD-1001T	536	P0886536	TRANSFORMER LCE LCPICTBSW-100200
514	P0886514	LIMIT SWITCH CANLIE AZD-1001T	537	P0886537	TERMINAL BAR 16-POLE 1-PIECE
515	P0886515	PROXIMITY SENSOR TKT DA1805NO	538	P0886538	TERMINAL BAR 1-PIECE
516	P0886516	WIRING LOOM 1-1/4 X 1-3/4 X 15"	539	P0886539	TERMINAL BAR 3-PIECE
517	P0886517	WIRING LOOM 1 X 1-3/4 X 6-1/2"	540	P0886540	DIN RAIL 1-3/8 X 3/8 X 9"
518	P0886518	WIRING LOOM 1-1/4 X 1-3/4 X 12-1/2"	541	P0886541	GROUND TERMINAL 6-POLE 1-PIECE
519	P0886519	WIRING LOOM 1 X 1-3/4 X 15"	542	P0886542	MASTER POWER SWITCH AUSPICIOUS C027L
520	P0886520	DIN RAIL END CAP	543	P0886543	PHLP HD SCR M5-.8 X 10
521	P0886521	POWER SUPPLY DELTA DVP-PS02	544	P0886544	STRAIN RELIEF TYPE-3 3/4
522	P0886522	CONTACTOR NHD CA6-D11 24V	545	P0886545	CONDUIT 3/8"
523	P0886523	CONTACTOR NHD C-06D10 24V			

**BUY PARTS ONLINE AT GRIZZLY.COM!**  
Scan QR code to visit our Parts Store.




# Labels & Cosmetics



**Grizzly Industrial** MODEL G0886  
12" x 14" AUTO METAL-CUTTING BANDSAW

**Specifications**

Main Motor: 3 HP, 220V, 3-Phase  
Feed Motor: 0.3 HP, 220V, 3-Phase  
Hydraulic Motor: 1 HP, 220V, 3-Phase  
Coolant Motor: 1/8 HP, 220V, 3-Phase  
Full-Load Current: 13.02A  
Blade Speeds: 92, 181, 338, 338 FPM  
Blade Length: 155-1/2"  
Max. Round at 90°: 11-1/2"  
Max. Rect. at 90°: 11-1/2" H x 14" W  
Weight: 1630 lbs.

**WARNING!**

To reduce risk of serious personal injury when using this machine:

1. Read and understand owner's manual before operating.
2. Never touch moving blade—keep hands out of blade path.
3. Always wear approved eye protection and a respirator.
4. Properly ground machine—connect to permanently grounded metal wiring system or an equipment-grounding conductor.
5. Ensure machine is correctly set up before starting.
6. Only remove jammed cutoff pieces when blade is stopped.
7. Disconnect all power to machine before changing blades, servicing, or doing maintenance.
8. Always maintain proper adjustment of blade tension, tracking, and guides.
9. Always ensure workpiece is securely clamped in vise while cutting.
10. Only run saw with wheel covers closed and all guards in place.
11. Do not wear loose clothing, gloves, jewelry, or other items that can get entangled in moving parts. Tie back long hair and roll up long sleeves.
12. Do not operate when tired or under influence of drugs or alcohol.
13. Do not expose to rain or use in wet locations.
14. Prevent unauthorized use by children or untrained users; restrict access or disable machine when unattended.

**Fluid Capacity**

Component	Capacity	Type
Coolant Tank	6.5 gal.	Specific to Operation and Material
Hydraulic Tank	4 gal.	ISO 46 Hydraulic Oil or SAE 20 Equivalent

REF	PART #	DESCRIPTION
601	P0886601	SAFETY GLASSES LABEL
602	P0886602	ELECTRICITY LABEL
603	P0886603	MODEL NUMBER LABEL
604	P0886604	READ MANUAL LABEL
605	P0886605	MACHINE ID LABEL
606	P0886606	DISCONNECT 220V LABEL
607	P0886607	FLUID CAPACITY LABEL
608	P0886608	GRIZZLY NAMEPLATE-LARGE

REF	PART #	DESCRIPTION
609	P0886609	GRIZZLY.COM LABEL
610	P0886610	ELECTRICITY LABEL-LARGE
611	P0886611	BANDSAW BLADE LABEL
612	P0886612	TOUCH-UP PAINT, GRIZZLY GREEN
613	P0886613	TOUCH-UP PAINT, GRIZZLY PUTTY
614	P0886614	REMOVE SHIPPING BRACE NOTICE
615	P0886615	POWER CONNECTION NOTICE

**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](http://www.grizzly.com).





# 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.

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.

In the event you need to use 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.

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.

To take advantage of this warranty, you must register it at <https://www.grizzly.com/secureforms/warranty-card>, or you can scan the QR code below to be automatically directed to our warranty registration page. Enter all applicable information for the product.





# *grizzly.com*<sup>®</sup>

**TOOL WEBSITE**

Buy Direct and Save with Grizzly<sup>®</sup> – Trusted, Proven and a Great Value!  
~Since 1983~

*Visit Our Website Today For  
Current Specials!*

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

