READ THIS FIRST



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

- Variable Frequency Drive has changed.
- · Electrical Cabinet Wiring Diagram has changed.
- Electrical Cabinet Parts Diagram has 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.

Old VFD



New VFD



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Electrical Cabinet Wiring Diagram

ELECTRICAL CABINET



-2-

(Replaces Page 83 in Manual)



Figure 122. Electrical cabinet components and wiring connections.





(Replaces Page 102 in Manual) Electrical Cabinet





(Replaces Page 103 in Manual) Electrical Cabinet Parts List

REF	PART #	DESCRIPTION
801	P0887801	WIRING LOOM 1-1/4 X 1-3/4 X 14"
802	P0887802	WIRING LOOM 1-1/4 X 1-3/4 X 13"
803	P0887803	WIRING LOOM 1-3/4 X 1-3/4 X 20-1/2"
804	P0887804	WIRING LOOM 1 X 1-3/4 X 13"
805	P0887805	DIN RAIL 1-3/8 X 3/8 X 12"
806	P0887806	DIN RAIL 1-3/8 X 3/8 X 12"
807	P0887807	DIN RAIL END CAP
808	P0887808	POWER SWITCH ASSY ABB 0T25F3/YJ1/20
809	P0887809	CONTACTOR NHD C-06D10 24V
810	P0887810	OL RELAY TECO RHU-10/1K1 0.75-1A
811	P0887811	CONTACTOR TECO CU-18 24V
812	P0887812	OL RELAY TECO RHU-10/16K1 11.3-16A
813	P0887813	FUSE HOLDER
814	P0887814	FUSE 5A 250V CERAMIC 0.18"
815	P0887815	PHLP HD SCR M47 X 15
816	P0887816	PHLP HD SCR 1/4-20 X 3/8

REF	PART #	DESCRIPTION
817	P0887817	GROUND TERMINAL 16-POLE 1-PIECE
818	P0887818	TERMINAL BAR 1P
819	P0887819	TERMINAL BAR 3P
820	P0887820	TERMINAL BAR 2P
821	P0887821	TERMINAL BAR 1P
822	P0887822	TERMINAL BAR 16P
823	P0887823	FUSE HOLDER WOHNER AES 10 X 38
824	P0887824	FUSE 32A 250V CERAMIC 0.36"
825V2	P0887825V2	VFD DELTA VFD4A8MS23ANSAA V2.05.23
827	P0887827	PHLP HD SCR M58 X 10
828	P0887828	TRANSFORMER 250VA 0/250V-24/200V
829	P0887829	CIRCUIT BOARD RF500M 0904
830	P0887830	PHLP HD SCR M35 X 8
831	P0887831	STRAIN RELIEF TYPE-3 1
832	P0887832	POWER CORD 10G 4W 120" L15-30
833	P0887833	OL RELAY TECO RHU-10/1K1 5.5-7.5A





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MODEL G0887 20" X 26" 5 HP INDUSTRIAL METAL-CUTTING BANDSAW OWNER'S MANUAL

(For models manufactured since 01/19)



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V1.06.21

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.



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

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

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

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INTRODUCTION

Contact Info

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

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

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

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

Manual Accuracy

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

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

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

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

		MODEL GXXXX MACHINE NAME
SPECIFIC/	ATIONS	A WARNING!
Motor: Specification: Specification: Specification: Weight: Manufactured for Grizz	Date	To reduce risk of serious injury when using this machine inual before operation. facture Date here y glasses and respirator. rectly adjusted/setup and power is connected to grounded circuit before starting 4. Make sure the motor has stopped and disconnect power before adjustments, maintenance, or service. 5. DO NOT expose to rain or dampness. 6. DO NOT modify this machine in any way. 7. 8. 9. 9. 9. 10. Maintain machine carefully to prevent accidents.



Identification

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





Controls & Components



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

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.

Headstock



Figure 1. Headstock controls and components.

- A. Blade Tension Handwheel w/Gauge: Increases or decreases blade tension. Gauge ensures accurate tensioning of blade.
- **B. Blade Guide Scale:** Displays position of left blade guide arm relative to workpiece.
- **C. Blade Guide Arms:** Hold guides that support blade. Adjust left arm as close to workpiece as possible to prevent blade from twisting.
- D. Coolant Valves (1 of 3): Control flow of coolant through blade guides and onto blade.
- E. Work Stop: Provides outfeed scale for repetitive cutting operations.
- F. Support Vise: Adjusts to provide outfeed workpiece support.

Vise Table



Figure 2. Vise table controls and components.

- **G.** Movable Vise Jaw: Holds workpiece against fixed vise jaw during cutting operations.
- H. Vise Lock Handle: Loosen to adjust vise or tighten to secure its position.

Blade Speed



Figure 3. Blade speed dial.

I. Blade Speed Dial: Controls blade speed. Rotate knob clockwise to decrease speed or counterclockwise to increase speed.

Electrical Box



Figure 4. Electrical cabinet power switch.

J. Master Power ON/OFF Switch: Turns incoming power ON and OFF.



Control Panel



Figure 5. Control panel functions.

- K. Emergency Stop Button: Stops all machine functions. Twist clockwise to reset.
- L. Blade Feed Rate Dial: Controls rate at which blade feeds into workpiece.
- M. Auto Cycle Start Button : Starts automatic cutting cycle. Coolant pump starts, blade starts, headstock cuts down into workpiece, saw blade stops, headstock raises, and vise opens to release workpiece.
- N. Cut Counter: The number of completed cuts is displayed. Push tab to clear.
- **O. Headstock Angle Joystick:** Manually controls angle of headstock after target angle has been set.
- P. Headstock Digital Readout: Displays angle and height of headstock.
- **Q. Headstock Increase/Decrease Buttons:** Adjusts headstock height or angle setting up/down.
- R. Height Limit Button in: Enters height limit entry mode to edit maximum headstock height.
- S. Angle Control Button (∞): Enters angle entry mode to edit headstock angle.
- T. Coolant Pump Button <a>?: Turns coolant pump ON and OFF.

- U. Motor Stop Button O: Turns all motors OFF.
- V. Blade Start/Stop Button: Starts and stops saw blade and blade brush. IMPORTANT: For button to start blade, hydraulic start button and vise close button must be pressed first, and headstock raised.
- W. Hydraulic Start/Stop Button I : Turns hydraulic motor *ON* and *OFF*.
- X. Headstock Height Controls 1/18: Adjusts height of headstock while in manual mode.
- Y. Vise Controls · Hydraulically opens and closes workpiece vise.
- Z. Manual Operation Button A: Selects manual operation mode.
- AA. Auto Operation Button : Selects Auto operation mode.
- **AB. Failure Indicator:** Illuminates to display where on machine a setting requires operator intervention.
- AC. Power Indicator: Illuminates when machine is connected to power.
- AD. Master Power ON/OFF Key Switch: Turns incoming power ON and OFF when key is inserted.





MACHINE DATA SHEET

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

MODEL G0887 20" X 26" 5 HP INDUSTRIAL METAL-CUTTING BANDSAW

Weight	
Width (side-to-side) x Depth (front-to-back) x Height	
Footprint (Length x Width)	
hipping Dimensions:	
Туре	Wood Crate
Content	Machine
Weight	
Length x Width x Height	120 x 55 x 79 in.
Must Ship Upright	Yes
lectrical:	
Power Requirement	
Full-Load Current Rating	
Minimum Circuit Size	
Connection Type	Cord Connected
Power Cord Included	Yes
Power Cord Length	
Power Cord Gauge	10 AWG
Plug Included	No
Recommended Plug Type	L15-30 (Grizzly #T24832)
Switch Type	Control Panel w/Magnetic Switch
Recommended Phase Converter	

Motors:

Main

. . . .

Horsepower	
Phase	
Amps	
Speed	
Туре	
Power Transfer	V-Belt
Bearings	Sealed & Permanently Lubricated

Hydraulic Pump

2 HP
3-Phase
5.7A
1720 RPM
TEFC Induction
Direct
manently Lubricated



Table

Horsepower	1 HP
Phase	3-Phase
Amps	
Speed	1680 RPM
, Туре	TEFC Induction
Power Transfer	Direct
Bearings	Sealed & Permanently Lubricated

Coolant Pump

Horsepower	
Phase	
Amps	
Speed	
Type	Universal
Power Transfer	Direct
Bearings	Sealed & Permanently Lubricated

Blade Brush

Horsepower	
Phase	
Amps	
Speed	
Type	TEFC Induction
Power Transfer	Direct
Bearings	Sealed & Permanently Lubricated

Main Specifications:

Operation Info

Blade Speeds	106 - 315 FPM
Std. Blade Length	
Blade Length Range	
Std. Blade Width	1-1/2 in.

Cutting Capacities

Cutting Height	20 in.
Angle Cuts	0-60 deg. R/L
Vise Jaw Depth	11-3/4 in.
Vise Jaw Height	10-1/4 in.
Max. Capacity Rectangular Height at 90 Deg	20 in.
Max. Capacity Rectangular Width at 90 Deg	25-7/8 in.
Max. Capacity Round at 90 Deg	20 in.
Max. Capacity Rectangular Height at 30 Deg	20 in.
Max. Capacity Rectangular Width at 30 Deg	23-5/8 in.
Max. Capacity Round at 30 Deg	20 in.
Max. Capacity Rectangular Height at 45 Deg	20 in.
Max. Capacity Rectangular Width at 45 Deg	20 in.
Max. Capacity Round at 45 Deg	20 in.
Max. Capacity Rectangular Height at 60 Deg	14 in.
Max. Capacity Rectangular Width at 60 Deg	14 in.
Max. Capacity Round at 60 Deg	14-7/8 in.
Max. Capacity Rectangular Height at -45 Deg	20 in.
Max. Capacity Rectangular Width at -45 Deg	20 in.
Max. Capacity Round at -45 Deg	20 in.

Construction

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

Other

Wheel Size	
Blade Guides	Carbide Steel, Ball Bearings
Coolant Capacity	
Hydraulic Capacity	

Other Specifications:

Country of Origin	Taiwan
Warranty	1 Year
Approximate Assembly & Setup Time	1 Hour
Serial Number Location	ne ID Label
ISO 9001 Factory	Yes

Features:

20" H x 25-7/8" L Cutting Capacity Cuts 0-60 Deg. Left or Right Hydraulic Headstock Lifting, Vise Clamping, and Angle Adjustment Automatic Headstock Lifting w/Programmable Height Stop Blade Tension Meter Sliding Vise w/Material Outfeed Support 106 - 315 FPM Variable-Speed Blade Control 10-Gallon Coolant Tank Coolant Hose w/Spray Nozzle



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.



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

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

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

AWARNING

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.



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

AWARNING

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 cuttingfluid safety instructions. Pay particular attention to contact, contamination, inhalation, storage and disposal warnings. Spilled cutting fluid invites slipping hazards.

Additional Safety for Hydraulic Systems

AWARNING

Infection, amputation, or death can result from contact with leaking hydraulic fluid under high pressure. Additionally, leaking hydraulic fluid is a serious slip hazard and fire hazard. To reduce these risks, anyone operating this machine MUST completely heed the hazards and warnings below.

INJECTION INJURIES. Immediately seek medical attention if injection injury occurs. Leaking hydraulic fluid often has enough pressure to penetrate skin, which can lead to infection, amputation, or death. Hydraulic fluid can enter the skin through small wounds that are barely noticeable. Minimizing the time between injury and removal of the injected material is critical to successful treatment.

CHECK FOR LEAKS. Never use your hands to check for hydraulic leaks. Small leaks can be invisible to the naked eye. Use a piece of wood or cardboard to find suspected leaks.

EYE INJURIES. Safety glasses may not be sufficient to protect against pressurized hydraulic fluid. Depressurize hydraulic system before approaching a known leak.

FLUID CONTAMINATION. Make sure hydraulic system maintenance is performed in a clean and dust-free work area. Remove all contaminants from near hydraulic system openings and components prior to maintenance, to prevent debris from entering the hydraulic system. Always use lint-free rags when cleaning components. Contaminated hydraulic fluid may damage the machine and cause hydraulic system failure that can result in serious injury or death.

DO NOT OPERATE WITH LEAKS. Immediately stop machine and depressurize hydraulic system if a leak is discovered or suspected. Operating hydraulic system with leaks may increase the hazard of the situation and damage the machine.

COMPONENT REPLACEMENT. Only use highpressure hydraulic hose and steel hydraulic fittings with compatible threads when replacing components in the hydraulic system. DO NOT overtighten or use soft metal fittings such as brass or aluminum.

DEPRESSURIZE FOR MAINTENANCE. Always depressurize hydraulic system before performing any service or maintenance. Always stop machine and disconnect power before relieving hydraulic pressure. Verify hydraulic pressure is at 0 PSI before proceeding with maintenance.

PREVENTING LEAKS. Always support and restrain hydraulic hoses to minimize friction during operation that could lead to machine damage that may result in serious injury. Regularly inspect and perform maintenance on the hydraulic system. Following a regular schedule will decrease the likelihood of damage to the machine and reduce the risk of associated hazards.

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.

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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.



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

Full-Load Current Rating

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

Full-Load Current Rating at 220V 25 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	
Plug/Receptacle	NEMA L15-30
Cord"S"-Type, 4-	Wire, 10 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.)

For your own safety and protection of property, consult an electrician if you are unsure about wiring practices or electrical codes in your area.

Note: 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 L15-30 plug and receptacle.

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.



AWARNING

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 Size10 AWG Maximum Length (Shorter is Better)......50 ft.



SECTION 3: SETUP



AWARNING

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!



Wear safety glasses during

the entire setup process!



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

Description

- Additional People2

- Lifting Equipment (Rated for 6000 lbs.).....1
 Pry Bar1
- Hammer.....1
- Precision Level1
- Cleaner/DegreaserAs Needed
- Disposable RagsAs Needed
- Disposable GlovesAs Needed
- Quality Metal Protectant.....As Needed
- L15-30 Plug1
 Coolant10 Gallons
- Open-End Wrench 24, 30mm 1 Ea.
- Hex Wrench 12mm.....1
- Feeler Gauge or Calipers1
- Machinist's Square1

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.



Qtv

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.

Вох	Inventory (Figure 7)	Qty
Α.	Drip Trays	2
В.	Adjustable Open-End Wrench (0-30mm)	1
С.	Hex Wrench Set (1.5–10mm)	1
D.	Support Vise Guide	1
Ε.	Work Stop	1
F.	Tool Box	1
G.	Grease Gun	1
Н.	Open-End Wrench Set (8 x 9, 10 x 12,	
	12 x 14, 14 x 17, 17 x 19, 21 x 23mm)	1
I.	Phillips Head Screwdriver #1	1
J.	Flat Head Screwdriver ¹ / ₄ "	1
Κ.	Hex Bolts M16-2 x 75 DOG-PT	4
L.	Hex Nuts M16-2	4
М.	Foot Pads	4

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.



Figure 7. Box inventory.



Hardware Recognition Chart



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.



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



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

NOTICE

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

T23692—Orange Power Degreaser

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



Figure 8. T23692 Orange Power Degreaser.



Neight 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 nstalled on the machine, and the heaviest workviece that will be used. Additionally, consider the weight of the operator and any dynamic loading hat 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, eave enough space around the machine to open or remove doors/covers as required by the mainenance and service described in this manual. See below for required space allocation.



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

Physical Environment

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

Electrical Installation

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

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).

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 6000 Ibs.** to support dynamic loads that may be applied while lifting.

Review the **Power Supply** section beginning on **Page 13**, then prepare a permanent location for the machine.

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



ties or maximum load ratings of your lifting

To assemble 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 pallet (see **Figure 10**).



Figure 10. Machine secured to shipping pallet.

4. Use forklift (see **Figure 11**) to lift machine just enough to clear pallet, then remove pallet.



Figure 11. Lifting machine with forklift example.



equipment.

- Install (1) M16-2 x 75 DOG-PT hex bolt and M16-2 hex nut at each lag screw hole from Step 3 (see Figure 12).
- Place foot pads under hex bolts from Step
 and lower machine onto foot pads (see
 Figure 12).



Figure 12. Foot pad installation components.

- 7. Lower machine so hex bolts from **Step 5** rest on foot pads.
- 8. Adjust nuts from Step 5 until machine is level.
- 9. Screw long work stop bar into hole in fixed outfeed table with scale on bar facing upward, as shown in **Figure 13**.



Figure 13. Work stop installed.

 Position drip tray on base edge, as shown in Figure 14.



Figure 14. Drip tray positioned on base edge.

11. Slide support vise guide onto support vise base shaft (see **Figure 15**), then tighten preinstalled set screw to secure.



Figure 15. Support vise guide installed on base shaft.

Power Connection

Before the machine can be connected to the power source, an electrical circuit and connection device must be prepared per the **POWER SUPPLY** section in this manual, and all previous setup instructions in this manual must be complete to ensure that the machine has been assembled and installed properly.



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

We do not recommend connecting this machine to a phase converter to supply 3-phase power as it could damage or decrease the life of sensitive electrical components.

Connecting Plug to Power Cord

To connect plug to power cord, install L15-30 plug on end of power cord per plug manufacturer's instructions. If no instructions were included, use wiring diagram on **Page 81**.

Note About Extension Cords: Using an incorrectly-sized extension cord may decrease the life of electrical components on your machine. If you must use an extension cord, refer to Extension Cords on Page 14 for more information.

Correcting Phase Polarity

This sub-section is provided for troubleshooting 3-phase power connections. If you discover during the test run that the machine will not operate, or that the motor runs backwards, the plug may be wired "out of phase," meaning that the polarity is incorrectly wired. This is a common situation with 3-phase power and it is easy to correct.

To correct phase polarity:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Open electrical cabinet and swap wires connected to **R** and **S** terminals (see Figure 16).



Figure 16. Location of R and S terminals.

- **3.** Close and latch electrical cabinet and reconnect machine to power.
- 4. Follow **Test Run** to ensure that machine functions properly.



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

Refer to **Figure 18** on the following page during **Test Run**. Each control has an alphabetical callout for identification.

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.

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

To test run machine:

- 1. Clear all setup tools and loose items away from machine.
- Fill coolant reservoir with coolant (refer to Coolant System Maintenance on Page 56), if you have not already done so. DO NOT run pump without coolant or you will damage it.

- **3.** Connect machine to power source.
- **4.** Turn electrical cabinet master power switch from OFF to ON position.
- Use key on control panel to turn power switch (B) from OFF to ON position. Power lamp (J) will illuminate.
- 6. Push Emergency Stop button (A), then twist it clockwise so it pops out. When button pops out, switch is reset, and machine is ready for operation.
- Press hydraulic start/stop button (U). You should hear hydraulic motor (located in machine base) turn ON.
- 8. Press manual operation button (M).
- Set feed dial (C) to a number over "0", then check function of saw headstock hydraulics and 3-phase power supply polarity by pressing raise headstock button (O) and lower headstock button (Q).
 - If headstock *raises* when raise headstock button (**O**) is pushed and *lowers* when lower headstock button (**Q**) is pushed, then phase polarity *is correct*. Remove related shipping tag from control panel and continue to **Step 10**.
 - If headstock *does not raise* when raise headstock button (O) is pushed or *lower* when lower headstock button (Q) is pushed, then power phase polarity *is not correct*. Refer to Correcting Phase Polarity on Page 22 before proceeding with Test Run.
- Check function of vise hydraulics by pressing vise open button (P) and close button (R).
 - If vise does not open or close, disconnect machine from power and refer to Troubleshooting on Page 60 before proceeding with Test Run.



11. Open coolant valves (see **Figure 17**).



Figure 17. Coolant valve (1 of 3) opened.

- **12.** Press coolant pump button (**T**). Coolant should flow through blade guides and onto blade when blade starts in **Step 14**.
- **13.** Press raise headstock button (**O**) and raise headstock several inches, then press vise close button (**R**).

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

14. Start blade by pressing blade start button (S) while keeping your finger near Emergency Stop button (A). Verify coolant flows through blade guides and onto blade and that blade brush spins. The machine should run smoothly and without unusual problems or noises.

- If machine does not run smoothly, disconnect machine from power and refer to **Troubleshooting** on **Page 60** before proceeding with **Test Run**.
- **15.** Press Emergency Stop button (**A**) to stop machine.

Note: Failure indicator Emergency Stop button light (*K*) will illuminate and control panel will beep to indicate Emergency Stop button has been pressed and that it must be reset before operation can resume.

- WITHOUT resetting Emergency Stop button, press hydraulic start/stop button (U), vise close button (R), then blade start button (S). The machine should *not* start.
 - If machine *does not* start, Emergency Stop button safety feature is working correctly. Proceed to Step 17.
 - If machine *does* start (with Emergency Stop button pushed in), immediately disconnect power. Emergency Stop button is NOT working properly and must be replaced before further using machine.
- Reset Emergency Stop button, press coolant pump button (T), press hydraulic start/stop button (U), vise close button (R), then blade start button (S).



Figure 18. G0887 control panel.



- Press motor stop button (V). All motors should turn OFF.
- Press hydraulic start/stop button (U) and press raise headstock button (O) to raise headstock until indicator light on height control button (H) illuminates.
- **20.** Press vise close button (**R**) until vise close button illuminates.
- **21.** Press automatic operation button (N). Saw will enter auto mode.
- **22.** Turn feed rate dial (C) to a value other than zero.
- **23.** Press auto cycle button (**D**). Automatic cut cycle should begin: coolant pump will start, blade will start, vise will close, headstock will lower, and bandsaw will perform cut. Then blade will stop, headstock will raise to top of its travel, and vise will open.
 - If blade *does* shut off and headstock *does* raise to top of its travel, lower limit stop *is* working correctly. Continue to Step 24.
 - If blade *does not* shut off or headstock *does not* raise, lower limit stop *is not* working correctly. This safety feature must work properly before proceeding with regular operations. Refer to **Page 72** to adjust downfeed stop bolt.
- 24. Remove (4) button head cap screws to open blade cover (see Figure 19).



Figure 19. Blade cover secure screws (2 of 4).

Note: Failure indicator door safety light (L) will illuminate to indicate wheel cover is open and that it must be closed before operation can resume.

- While staying safely away from blade, press hydraulic start/stop button (U), vise close button (R), then automatic operation button (N).
 - If blade *does not* start, blade cover safety switch is working correctly. Proceed to Step 26.
 - If blade *does* start, immediately turn machine *OFF* and disconnect power.
 Blade cover safety switch feature is *not* working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.
- **26.** Press Emergency Stop button (**A**), then close wheel cover and secure.

Congratulations! Test Run is complete.

Recommended Adjustments

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

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

Factory adjustments that should be verified:

- 1. Downfeed Stop Bolt (Page 72).
- 2. Blade Tracking (Page 68).
- 3. Blade Guide Bearings (Page 66).
- 4. Squaring Blade to Table (Page 70).
- 5. Hydraulic Pressure (Page 53).



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

AWARNING

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



NOTICE

If you are not experienced with this type of machine, WE STRONGLY RECOMMEND that you seek additional training outside of this manual. Read books/magazines or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training. 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.
- **3.** If necessary, changes blade for workpiece material.
- 4. Verifies blade is tensioned correctly.
- 5. Sets up splash guards and work stop if needed for operation.
- 6. Turns both master power switches *ON*, then turns hydraulic pump *ON*.
- 7. Securely clamps workpiece in vise using hydraulic controls. Ensures workpiece is stable and cutting area is free of obstructions.
- 8. If necessary, adjusts blade guide arm as close to workpiece as possible.
- 9. Puts on safety glasses and respirator.
- **10.** Reconnects to power, turns blade motor *ON*, and sets proper blade speed for workpiece material.
- **11.** Opens coolant valves and turns coolant pump *ON*.
- **12.** Raises headstock to required height for workpiece and adjusts to desired angle.
- 13. Adjusts feed rate.
- 14. Selects auto operation mode.
- **15.** Completes cut.
- **16.** Once machine has stopped, turns machine *OFF* then removes workpiece.





Disabling Switch

The main power switch can be disabled by removing the key, as shown below. Disabling the switch in this manner can prevent unauthorized operation of the machine, which is important if it is not kept inside an access-restricted building or in a location where children may be present.

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



Figure 20. Main power switch and removable key.

WARNING

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

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 work stop to quickly and accurately cut multiple pieces of stock to the same length.
- Clamp workpiece firmly in the vise jaws to ensure a straight cut through the material.
- 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.

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.

Selecting Blades

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

Blade Terminology



Figure 21. Bandsaw blade terminology.

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


Blade Length

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

Model	Blade Length Range
G0887	

Blade Width

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

Model	Blade Width
G0887	1 ½"

Tooth Type

The most common tooth types are described as follows, and illustrated in **Figure 22**.



Figure 22. Bandsaw blade tooth types.

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

Variable Pitch (VP): Varying gullet depth and tooth spacing, "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 23, 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 32** for further details.



Figure 23. General guidelines for blade selection and speed chart.



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 far from 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 and blade speed, and pay attention to the chip characteristics (Refer to **Blade Speed Chart** on **Page 32** and **Chip Inspection Chart** on **Page 33**). 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 33** 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 rate by half for first 50–100 in² of material cut.
- **3.** To avoid twisting blade when cutting, adjust feed rate when total width of blade is in cut.





Setting Blade Feed Rate

Changing Blade Speed

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.

If the feed rate is not consistent, the headstock spring tension (see **Page 73**) or flow control valve (see **Page 77**) may need to be adjusted.

During operation, pay attention to the chips being produced from the cut and compare them to the **Chip Inspection Chart** on **Page 33** to properly set the downfeed rate.

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 (I) 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 24** to desired feed rate from 0 (slowest) to 10 (fastest).



Figure 24. Feed rate dial.

- 4. Proceed with cutting operations.
- 5. Examine chips created from cutting operation, and adjust feed rate as necessary for optimum cutting performance (refer to Chip Inspection Chart on Page 33 for details).

Model G0887 blade speeds: 106–315 FPM.

NOTICE

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

To change blade speeds:

- 1. Turn bandsaw *ON* and allow motor to reach full speed.
- 2. Rotate blade speed dial (see Figure 25) clockwise to decrease blade speed and counterclockwise to increase blade speed until blade speed display shows desired speed.



Figure 25. Blade speed dial location.

Blade Speed Chart

The chart in **Figure 26** 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 26. 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
0	Thin & Curled	Silver	Good	Good	
~1,~	Hard, Thick & Short	Brown or Blue	Increase	Decrease	
\mathcal{A}	Hard, Strong & Thick	Brown or Blue	Increase	Decrease	
Ø	Hard, Strong, Curled & Thick	Silver or Light Brown	Good	Decrease Slightly	Check Blade Pitch
() ()	Hard, Coiled & Thin	Silver	Increase	Decrease	Check Blade Pitch
\int	Straight & Thin	Silver	Good	Increase	
	Powdery	Silver	Decrease	Increase	
	Coiled, Tight & Thin	Silver	Good	Decrease	Check Blade Pitch

Figure 27. Chip inspection chart.



Changing Blade



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.

Item(s) Needed	Qty
Assistant	1
Leather Gloves (per person)	1
Hex Wrench 4mm	1

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:

- 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. Open wheel cover by removing (4) button head cap screws (see Figure 28).



Figure 28. Blade cover secure screws (2 of 4).

- 5. Clean out all chips and shavings with a brush and shop vacuum.
- 6. Remove both blade guards and blade guard extension by removing (6) button head cap screws and flat washers (see **Figure 29**).



Figure 29. Location of blade guards and blade guard extension.

7. Release blade tension by turning blade tension handwheel counterclockwise (see Figure 30).



Figure 30. Location of blade tension handwheel.





- 8. Remove blade, beginning at top of blade wheels.
- 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.

- **11.** Perform **Tensioning Blade** procedure that follows this section.
- **12.** Install blade guards and blade guard extension, then close and secure wheel cover. Ensure guards do not touch blade.
- Reposition left blade guide (refer to Blade Guides on Page 37 for details).



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.

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.

The blade tension failure indicator light will illuminate and the control panel will beep (see **Identifying Failures** on **Page 40**) if the bandsaw is turned *ON* and the tension is not set correctly.

NOTICE

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

Tools Needed	Qty
Hex Wrench 4mm	1

To tension blade:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Open wheel cover by removing (4) button head cap screws (see Figure 34).



Figure 34. Wheel cover secure screws (2 of 4).

3. Perform quick blade tracking check by sliding fingernail between end of blade and wheel shoulder.

- If there is *just enough* space to fit fingernail, then blade tracking is properly adjusted. Continue to Step 3.
- If there is too little or too much space to fit fingernail, then blade tracking must be properly adjusted before tensioning blade. (Refer to Adjusting Blade Tracking on Page 68.)
- 4. Remove blade guard extension (see Figure 35).



Figure 35. Blade guard extension location.

5. Loosen adjustable handle on left blade guide arm and move arm as far left as it will go (see **Figure 36**). Tighten adjustable handle to secure arm position.



Figure 36. Left blade guide adjustable handle.



- Turn blade tension handwheel (see Figure 37) clockwise to tighten blade or counterclockwise to loosen blade.
 - Adjust blade tension handwheel until indicator on blade tension gauge moves into green section (21,000 to 24,000 PSI).



Figure 37. Blade tension handwheel and gauge location.

7. Close and secure wheel cover.

Adjusting 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 the left blade guide arm (see **Figure 38**) and slide the arm/guide as close to the workpiece as possible, then tighten the adjustable handle. Whenever the blade guide is adjusted, the blade guard extension should also be adjusted (see **Adjusting Blade Guard Extension** on **Page 38**).



Figure 38. Left blade guide components.

The right blade guide has a wire brush that makes contact with the blade to help clear away chips and extend blade life (see **Figure 39**).



Figure 39. Blade brush location.



Adjusting Blade Guard Extension

The blade guard extension provides support for the left blade guard. When the left blade guide is adjusted to the right, the left blade guard is extended from under the blade cover to cover the exposed blade. Adjust the blade guard extension so the left blade guard is as supported as possible.

To adjust blade guard extension:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Open wheel cover by removing (4) button head cap screws (see Figure 40).



Figure 40. Wheel cover secure screw locations (2 of 4).

- 3. Loosen (2) button head cap screws shown in Figure 41.
- Adjust blade guard extension until left blade guard is supported, then tighten screws from Step 3 to secure (see Figure 41).



Figure 41. Blade guard extension components.





Manual & Automatic Controls

The Model G0887 has two operation modes: automatic and manual. Manual mode includes the controls necessary to prepare a workpiece for a cutting operation while automatic mode will complete the cut through a series of pre-established settings. Manual mode can be used to accomplish the same operation as the automatic mode, but the automatic mode requires less user intervention and therefore result in less user error.

See the following steps for the controls required for each to accomplish a typical cutting operation (see **Figure 42**).



Figure 42. Manual and automatic controls.

Preparing a Cut

Plan your cut before connecting to power, and determine whether the vise or support vise components will need to be moved out of the blade path (see **Using Vise** on **Page 42**).

To prepare a cut:

- 1. Connect machine to power and turn both master power switches *ON*.
- 2. Enter manual mode (🖚).
- **3.** Turn on hydraulic pump (I).
- 4. Set headstock height (see Setting Headstock Height on Page 40).
- 5. Set headstock angle (see Setting Headstock Angle on Page 41).

- **6.** Raise headstock (∞) to height set in **Step 4**.
- Open vise (***), place workpiece for cut, then close vise (***).
- 8. Proceed to Performing an Automatic Cut.

Performing an Automatic Cut

Automatic mode can only be used to perform a cut when the preceding manual setup steps have been performed (see **Preparing a Cut**).

To perform an automatic cut:

1. Open coolant valves (see Figure 43).



Figure 43. Coolant valve (1 of 3) opened.

- 2. Enter automatic mode (1).
- **3.** Press auto cycle button $(\overrightarrow{1})$.
 - Coolant pump and blade will start. Turn feed rate dial to adjust feed rate and headstock will lower to complete cut.
 - When cut is complete, blade will stop, headstock will raise, and vise will open to release workpiece.

Note: If pre-established settings are incorrect for operation, or if a motor has overloaded, light(s) on failure indicator will illuminate. User intervention is required before automatic cut can take place (see **Identifying Failures** on **Page 40**).



Identifying Failures

The control panel comes equipped with a failure indicator panel, which will illuminate if a setting needs to be addressed in order to perform an operation.

If one of the lights illuminates, edit the setting indicated to proceed with your operation (see **Figure 44**).



Figure 44. Failure indicator panel.

- A. Blade Tension: Blade tension is not correct. Control panel will beep until correctly set (see Tensioning Blade on Page 36).
- **B. Blade Cover:** Blade cover is open. Control panel will beep and will not operate until cover is closed.
- C. Blade Motor: Blade motor is overloaded.
- D. Height: Headstock needs to be raised or height is at or higher than height limit setting (see Setting Headstock Height).
- E. Downfeed Limit: Downfeed limit is not set correctly or downfeed limit switch is engaged (see Adjusting Downfeed Stop Bolt on Page 72).
- F. Coolant Pump: Coolant pump motor is overloaded.
- **G. Hydraulic Power Unit:** Hydraulic motor is overloaded.
- H. Vise: Open and close vise to secure workpiece (see Using Vise on Page 42).
- I. Emergency Stop Button: Emergency Stop button is depressed. Twist to reset.

Setting Headstock Height

The height that the headstock will travel is controlled by the control panel (see **Figure 45**). Headstock height should be set to match the height of the workpiece. This speeds up repetitive cuts by eliminating unnecessary headstock travel.



Figure 45. Headstock height controls.

To set headstock height:

- 1. Enter manual mode (<a>).
- 2. Turn on hydraulic pump (I).
- **3.** Press height control button (ℕ) to edit headstock height setting (see **Figure 45**).
- Use headstock increase/decrease buttons to adjust height until headstock digital readout displays desired height (see Figure 45). Each press will change height by 25mm.
 - Input light will illuminate while in edit mode. Once setting has not been adjusted for two seconds, light will go out to signal that setting has been inputted. If input light does not go out, headstock is currently at or above height limit.
- **5.** Raise headstock (∞) to highest position.
 - Input light will illuminate and headstock will not raise further when height value is reached.



Setting Headstock Angle

The headstock can be swiveled to cut angles from $0^{\circ}-60^{\circ}$ to the left or right for a total swing of 120°. The headstock angle is controlled with hydraulics, and can be adjusted using the headstock control section of the control panel (see **Figure 46**).



Figure 46. Headstock control section.

If an operation will require the removal of the movable vise, usually the workpiece can be repositioned or oriented to allow for a left angle cut instead to allow for vise support.

WARNING

Before adjusting headstock angle, always consider any clamping or vise components that may interfere with headstock movement. If headstock contacts anything while moving, it could result in operator or bystander injury and damage machine.

Setting Angle Other Than 0°

Set the angle to the absolute value then use the joystick to swivel the headstock in either direction. For example, inputting 15° will allow the headstock to swivel 15° or -15° .

To set headstock angle:

- 1. Enter manual mode (<>>).
- 2. Turn on hydraulic pump (I).
- **3.** Raise headstock () to highest position.

Note: If headstock does not clear vise and table components at highest position, set headstock height higher so it will (see **Setting Headstock Height** on **Page 40**).

- **4.** Press angle control button (♠) to edit headstock angle setting (see **Figure 46**).
- Use headstock increase/decrease buttons to adjust angle until headstock digital readout displays desired angle (see Figure 46). Each press will change angle by 0.2°.
 - Once setting has not been adjusted for two seconds, value will return to current headstock angle to indicate it has been inputted.
- **6.** Use headstock angle joystick to adjust headstock until desired angle is displayed.
 - Headstock will not travel further than inputted angle setting in either direction.
 - As headstock approaches target angle, headstock will jog and stop so as not to pass target.



Setting Angle to 0°

The control panel has been calibrated at the factory to return the headstock angle to 0° .

To set angle to 0°:

- 1. Enter manual mode (<>>>).
- **2.** Turn on hydraulic pump (I).
- **3.** Raise headstock (\bigotimes) to highest position.

Note: If headstock does not clear vise and table components at highest position, set headstock height higher so it will (see **Setting Headstock Height** on **Page 40**).

- **4.** Press angle control button (*∞*) to edit headstock angle setting (see **Figure 47**).
- 5. Press both headstock increase and decrease buttons and hold them until headstock digital readout changes to zero (see **Figure 47**).
- Wait until headstock digital readout returns to current angle, then use headstock angle joystick to adjust headstock to 0° (see Figure 47).



Figure 47. Headstock control section.

Using Vise

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

The Model G0887 vise consists of a movable vise jaw that is manually positioned near the workpiece, hydraulic vise clamping controls for opening and closing, and adjustable vise clamping pressure.

Adjusting Vise Clamping Pressure

The Model G0887 features adjustable clamping pressure so the vise will not crush fragile workpieces.

Tool Needed Qty

Open-End Wrench 27mm	1	
----------------------	---	--

To adjust vise clamping pressure:

- 1. Loosen nut shown in Figure 48.
- 2. Adjust pressure adjustment knob until desired pressure on gauge has been achieved, then tighten nut to secure (see Figure 48).

IMPORTANT: Do not exceed 497 PSI (35 kg/cm²).



Figure 48. Vise clamping pressure adjustment components.



Moving Movable Vise Jaw

Once the headstock angle has been adjusted, move the movable vise jaw as close to the blade as possible to provide the utmost support for the workpiece. Only move the jaw along the dovetail track where it can secure workpiece without intersecting blade path.

To move movable vise jaw:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Loosen vise position lock handle by turning handle counterclockwise (see Figure 49).
- **3.** Push or pull movable vise on vise track until it is close to blade but will not intersect blade path (see **Figure 49**).



Figure 49. Location of vise components.

4. Secure vise position by tightening vise position lock handle.

Opening and Closing Vise

The hydraulics that open and close the movable vise can be adjusted using the control panel (see **Figure 50**).



Figure 50. Vise controls.

To open and close vise:

- 1. Turn *ON* hydraulics (I).
- 2. Push vise open button (****) to release any pressure on movable vise jaw.
- **3.** Insert workpiece between jaws.

Note: *Figure 51* shows correct methods of holding different workpiece shapes.



Figure 51. Example of workpiece holding options by material shape.

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





Adjusting Support Vise Guide

The support vise guide provides workpiece support on the outfeed side of the cut, guiding cut-off pieces down the cutoff chute. The support vise guide should be adjusted when the cut had been planned and the workpiece has already been clamped in the vise. Use the adjustment controls (see **Figure 52**) to support the workpiece close to where the blade will contact it.



Figure 52. Support vise guide adjustment controls.

To adjust support vise guide:

- 1. Loosen position lock handle (see Figure 52).
- 2. Move vise guide close to planned cut on vise track (see Figure 52).
- **3.** Tighten position lock handle to secure position.
- 4. Loosen extension lock handle (see Figure 52).
- 5. Adjust support vise guide until it contacts workpiece (see Figure 52).
- 6. Tighten extension lock handle.
- 7. Tighten fine-adjustment handle until plate is secure against workpiece (see **Figure 52**).

Adjusting Work Stop

The Model G0887 is equipped with a work stop for repetitive cutting operations up to 24" long. The work stop will need to be adjusted any time it is removed or repositioned.

To adjust work stop:

- 1. Adjust headstock to desired angle.
- 2. Lower headstock completely.
- 3. DISCONNECT MACHINE FROM POWER.
- 4. Screw work stop support rod into hole in outfeed table with scale facing upward, as shown in **Figure 53**.



Figure 53. Work stop bar installed in table.

 Slide work stop bracket onto support rod, aligning body with "0" mark on rod scale (see Figure 54).



Figure 54. Work stop bracket adjusted to 0 mark.



- 6. Tighten bracket lock handle to secure at 0" (see Figure 55).
- 7. Loosen distance rod lock handle and adjust distance rod until hex bolt on rod just touches blade (see Figure 55).
- 8. Tighten distance rod handle to secure.
 - Confirm hex bolt still touches blade. If it does not, adjust hex bolt until it does, then tighten jam nut to secure setting (see Figure 55).



Figure 55. Work stop adjusted to "0", touching blade.

- **9.** Loosen bracket lock handle, adjust work stop bracket to depth of cut indicated on support rod scale, then tighten to secure.
- **10.** Connect to power, turn on hydraulics, then raise headstock.
- **11.** Place workpiece in vise against table, aligned with work stop (see **Figure 56**).



Figure 56. Work stop set for cutting operation.

Using Coolant System

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 and 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.



AVARNING BIOLOGICAL AND POISON HAZARD! Use proper personal protection equipment when handling coolant and follow federal, state, and fluid manufacturer requirements to properly dispose of coolant.





AWARNING FIRE HAZARD! DO NOT cut magnesium when using oilwater solutions as coolant! Always use coolant intended for magnesium. Water in the solution could cause a magnesium-chip fire.

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.

NOTICE

NEVER run machine without coolant in the reservoir or when coolant is below low mark or you will overheat pump and void warranty!

Using Coolant System

Add coolant (refer to **Adding Coolant** on **Page 57**) before using coolant system.

Turn coolant pump ON with the coolant pump button (R) on the control panel. Open coolant valves to control flow of cutting fluid (see **Figure 57**).



Figure 57. Coolant valve (1 of 3) open.

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

IMPORTANT: Monitor coolant level frequently to keep system working properly. DO NOT let coolant level fall below halfway level on filter screen (see **Figure 58**).



Figure 58. Example of halfway level on filter screen.

Using Spray Gun

The auxiliary hose and sprayer can be used to rinse metal chips into the reservoir.

- 1. Position splash guard on side of base near location of spraying operation.
- 2. Close coolant control valves.
- 3. Press coolant pump button (⇐). Coolant will now spray when the trigger is pressed (see **Figure 59**).



Figure 59. Example of spray gun in use.



SECTION 5: ACCESSORIES

AWARNING

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 T30690—232" x 1½" x 0.051 2–3 TPI T30691—232" x 1½" x 0.051 3–4 TPI T30692—232" x 1½" x 0.051 4–6 TPI T30693—232" x 1½" x 0.051 5–8 TPI



Figure 60. 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 61. 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 62. H9240 Rustlick Machining Oil.

T21321—Hand Punch

For repetitive hole punching, nothing beats the speed of a hand punch. With a throat depth of $6^{9}/_{32}$ ", this versatile punch can make a hole in mild steel up to $^{3}/_{16}$ " thick. Measures $5^{1}/_{2}$ " wide by $31^{1}/_{2}$ " tall (without handle). Approximate shipping weight: 192 lbs.



Figure 63. Model T21321 Hand Punch.

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

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 64. Assortment of basic eye protection.

Milwaukee® Performance Work Gloves

T31087—S T31088—M T31089—L T31090—XL T31091—XXL

Milwaukee® Performance Work Gloves are designed to provide ultimate durability and all day comfort.



Figure 65. Milwaukee® Performance Work Gloves.

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

These Black Grease Resistant Mats are engineered for proper back and leg support, using super-tough virgin rubber material. The nonslip surface features a modular interlock design, which enables the user to create a custom floor. Mats measure 36" x 36" x 34".



Figure 66. Model H6572 Grease-Resistant Mat 3' x 3' x $\frac{3}{4}$ ".

T30024—Powered Respirator Kit

This respirator kit is a lightweight, comfortable, and easy to carry device for protecting the airway from small particulates. Requires 4 AA batteries (not included).



Figure 67. Model T30024 Powered Respirator Kit.

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



SECTION 6: MAINTENANCE



To reduce risk of shock or accidental startup, always disconnect machine from power before adjustments, maintenance, or service.

Schedule

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

Ongoing

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

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

Daily Maintenance

- Lubricate blade and blade guides (Page 51).
- Clean/lubricate table and vise (Page 51).

Weekly Maintenance

- Lubricate headstock pivot points (Page 52).
- Lubricate blade speed pulley (Page 52).
- Lubricate vise shaft (Page 52).
- Lubricate blade guide arm gib (Page 52).
- Lubricate front wheel axle (Page 52).
- Lubricate blade tension leadscrew (Page 53).

Monthly Check

• Inspect drive belt (Page 58).

Cleaning & Protecting

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

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

Keep unpainted cast iron surfaces rust-free with regular applications of products like G96[®] Gun Treatment, SLIPIT[®], or Boeshield[®] T-9.

G2871—Boeshield[®] T-9 12 Oz. Spray G2870—Boeshield[®] T-9 4 Oz. Spray

Perfect for unpainted cast iron surfaces, this ozone-friendly protective spray penetrates deep and really holds up against corrosive environments. Lubricates metals for months and is also safe for use on most paints, plastics, and vinyls. Developed by Boeing engineers for aircraft applications—this is the best!



Figure 68. Boeshield® T-9 spray.



Lubrication

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 & Guides	8 Hrs.	51
Table & Vise	8 Hrs.	51
Headstock Pivot Points	40 Hrs.	52
Blade Speed Pulley	40 Hrs.	52
Vise Shaft	40 Hrs.	52
Blade Guide Arm Gib	40 Hrs.	52
Front Wheel Axle	40 Hrs.	52
Blade Tension Leadscrew	40 Hrs.	53

Figure 69. Recommended lubrication tasks.

Item(s) Needed	Qty
NLGI#2 Grease (T26419 or Equivalent). As	Needed
ISO 68 Oil (SB1365 or Equivalent) As	Needed
Clean Shop RagsAs	Needed
Grease Gun	1
Stiff Brush	1
Clean Brush	1
Hex Wrench 4, 5mm	1 Ea.

T26419—Syn-O-Gen Synthetic Grease

Formulated with 100% pure synthesized hydrocarbon basestocks that are compounded with special thickeners and additives to make Syn-O-Gen non-melt, tacky, and water resistant. Extremely low pour point, extremely high temperature oxidation, and thermal stability produce a grease that is unmatched in performance.



Figure 70. Model T26419 Syn-O-Gen Synthetic Grease.

SB1365—South Bend Way Oil-ISO 68

Engineered for the high pressure exerted on horizontal or vertical ways and slides. Protects against rust and corrosion. Ensures stick-free, smooth motion which maximizes finishes and extends the life of your machine. Won't gum up! 12 oz. AMGA#2 (ISO 68 Equivalent)



Figure 71. Model SB1365 Way Oil.



Blade & Blade Guides

Lube Type	. SB1365 or ISO	68 Equivalent
Oil Amount		1-2 Drops
Lubrication Freque	ency	Daily

Place one or two drops of light machine oil on blade and blade guides (see **Figure 72**) daily, especially when cutting cast iron, as no coolant is required when cutting cast iron.



Figure 72. Blade and blade guides.

Table & Vise

Lube Type	SB1365 or ISO 68 Equivalent
Oil Amount	Thin Coat
Lubrication Freque	ncy Daily

Keep the vise and table (see **Figure 73**) surface rust-free with regular applications of a quality way oil.



Figure 73. Table and vise.

Headstock Pivot Points

Lube Type	T26419 or NLGI#2 Equivalent
Amount	
Lubrication Frequer	ncyWeekly

Apply grease to headstock pivot pin and hydraulic cylinder bearing using grease fittings shown in **Figures 74–75**.



Figure 74. Pivot pin grease fitting locations.



Figure 75. Hydraulic cylinder bearing grease fitting location.



Blade Speed Pulley

Lube Type T	26419 or NLGI#2 Equivalent
Amount	
Lubrication Frequence	cyWeekly

Apply grease to blade speed pulley using grease fitting shown in **Figure 76**.



Figure 76. Blade speed pulley grease fitting location.

Vise Shaft

Lube Type T26419 or N	NLGI#2 Equivalent
Amount	1–2 Pumps
Lubrication Frequency	Weekly

Apply grease to vise shaft using grease fitting shown in **Figure 77**.



Figure 77. Vise shaft grease fitting location.

Blade Guide Arm Gib

Lube Type	SB1365 or ISO 68 Equivalent
Oil Amount	Thin Coat
Lubrication Freque	ncyWeekly

Keep the unpainted surfaces of the blade guide arm gib (see **Figure 78**) rust-free with regular applications of a quality way oil.



Figure 78. Blade guide arm gib.

Front Wheel Axle

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

Apply grease to front wheel axle using grease fitting shown in **Figure 79**.



Figure 79. Front wheel axle grease fitting location.



Blade Tension Leadscrew

Lube Type	SB1365 or ISO	68 Equivalent
Oil Amount		1-2 Drops
Lubrication Freque	ncy	Weekly

The blade tension leadscrew can be found behind the blade tension assembly cover, and can be accessed by removing the four securing cap screws (see Figure 80).



Figure 80. Blade tension assembly cover and securing cap screws.

Lubricate the blade tension leadscrew with 1-2 drops of light machine oil weekly (see Figure 81). Wipe off excess oil with a clean rag.



Figure 81. Blade tension leadscrew location.

Hydraulic System



WARNING Always wear safety goggles when servicing the

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.



Hydraulic systems are highly pressurized and hydraulic fluid is hot after use. Should a leak or malfunction take place, any maintenance to hydraulic lines and valves should only occur when hydraulic pressure has been relieved and fluid has cooled.

Checking Hydraulic Pressure

The hydraulic system pressure should not exceed 498 PSI. Use the following steps to check the system pressure and adjust it as needed.

Item(s) Needed	Qty
Hex Wrench 4mm	1
Open-End Wrench 17, 27mm	1 Ea.

To check hydraulic pressure:

- 1. Raise/lower headstock repeatedly for approximately 10 minutes to warm up hydraulic fluid.
- **DISCONNECT MACHINE FROM POWER!** 2.



3. Remove hydraulic power unit access panel (see **Figure 82**).



Figure 82. Hydraulic power unit access panel location.

- 4. Check pressure gauges shown in **Figure 83**. Gauges should read less than 498 PSI.
 - If vise pressure gauge reads more than 498
 PSI, refer to Adjusting Vise Clamping
 Pressure on Page 42 to adjust pressure.
 - If manifold pressure gauge reads *more than 498 PSI*, proceed to **Step 5**.
 - If both gauges reads 498 PSI or less, no adjustment is necessary. Install hydraulic power unit access panel.



Figure 83. Location of pressure gauges.

5. Adjust pressure relief valve until manifold gauge displays 498 PSI or less (see Hydraulic System Diagram on Page 77).

Note: Connect machine to power and run hydraulic system to check pressure adjustment.

Checking Hydraulic Fluid

The hydraulic fluid level and temperature should be checked weekly.

Item(s) Needed	Qty
Safety Goggles	1
Hex Wrench 4mm	1
T23963 or ISO 32 Equivalent	As Needed
Funnel	1

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 power unit access panel (see **Figure 82**).
- Check fluid temperature on thermometer mounted to hydraulic fluid tank (see Figure 84). The temperature should read between 50–95°F (10–35°C).
 - If fluid temperature exceeds 140°F (60°C), stop machine immediately and allow fluid to cool down. Review **Troubleshooting** on **Page 60** for solutions. If you still cannot fix the problem, contact a qualified hydraulic service technician or Tech Support.
- 5. Remove tank cap (see Figure 84) and inspect for burnt-smelling or tan-colored, water-con-taminated hydraulic fluid.
 - If fluid *is* contaminated, proceed to Changing Hydraulic Fluid.



Figure 84. Hydraulic tank fluid gauge and fill cap location.



6. Check fluid level. Fluid should just cover the bottom of the fill screen (see **Figure 85**).



Figure 85. Example of proper fluid level.

- If fluid level is low, slowly add hydraulic fluid until it just covers the bottom of the fill screen.
- 7. Install fill cap and hydraulic unit 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	30 Qt.
Safety Goggles	1
Hex Wrench 4, 5mm	1 Ea.
Wood Blocks	As Needed
5-Gallon Drain Pan	1
Open-End or Socket Wrench 13mm.	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 power unit access panel (see **Figure 86**).



Figure 86. Hydraulic power unit access panel location.

- 4. Slide hydraulic power unit out of machine base and support weight of unit with wood blocks (see Figure 87).
- 5. Remove fill cap (see Figure 87), then remove drain plug and allow tank to empty into drain pan.



Figure 87. Hydraulic power unit removed from base.

6. Clean fill cap and fill screen (see **Figure 85**) with mineral spirits and allow to air dry.



- 7. Open tank by removing (6) hex bolts and flat washers that secure lid (see **Figure 88**).
- 8. Clean tank and tank screen (see **Figure 88**) with mineral spirits. Wipe out as much residual fluid and contaminants from tank as possible. Allow tank and tank screen to air dry.



Figure 88. Example of hydraulic fluid tank lid removed.

- 9. Install tank lid and screen.
- **10**. Clean and wrap drain plug threads with Teflon tape, install drain plug, then fill tank with 30 quarts of ISO 32 or equivalent hydraulic fluid.
- **11.** Install fill cap, slide hydraulic power unit back into base, and install hydraulic power unit access panel.

Coolant System Maintenance

The coolant system consists of a reservoir, pump, and hoses with valves. The pump pulls coolant from the reservoir 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.



AWARNING BIOLOGICAL & POISON HAZARD! Use correct personal protection equipment when handling coolant. Follow federal, state, and fluid manufacturer requirements for proper disposal.

Adding Coolant

Item(s) Needed	Qty
Safety Wear	See Hazards
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 drawer from machine base (see Figure 89) and clean drawer.



Figure 89. Removing chip collection drawer.

3. Mix coolant according to cutting fluid manufacturer's specifications.

4. Fill reservoir with coolant until it is at maximum fill line shown in **Figure 90**.



Figure 90. Maximum fill line on filter screen.

5. Replace chip collection drawer.

Changing Coolant

Item(s) Needed	Qty
Safety Wear	See Hazards
Coolant	10 Gallons
Open-End or Socket Wrench 17m	m 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 drawer from machine base (see Figure 89) and clean drawer.



3. Remove drain plug, empty tank, and dispose of coolant per federal, state, and manufacturer requirements (see **Figure 91**).



Figure 91. Drain plug location.

4. Remove coolant pump access panel (see Figure 92).



Figure 92. Coolant pump access panel removed.

- 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.
- 6. Clean and wrap drain plug threads with Teflon tape, then install drain plug.
- **7.** Mix 10 gallons of coolant according to cutting fluid manufacturer's specifications, then refill tank with coolant.
- 8. Replace chip collection drawer.

Inspecting Drive Belt

Inspect drive belt regularly for tension and wear. Refer to **Figure 93** for proper belt tension. Belt deflection should be approximately ¹/₄" under moderate pressure. The replacement belt can be found in the back of this manual in the parts breakdown.



Figure 93. Checking belt tension.

To replace the drive belt or adjust the tension, refer to **Replacing/Tensioning Drive Belt** on **Page 74**.



Storing Machine

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.

Preparing Machine for Storage

Qty
entAs Needed
As Needed
As Needed
As Needed
As Needed
1

To prepare machine for storage:

- 1. DISCONNECT MACHINE FROM POWER!
- Thoroughly clean all unpainted, bare metal surfaces, then coat them with lightweight grease or rust preventative. Take care to ensure surfaces are completely covered but grease or rust preventative is kept off of painted surfaces.
 - If machine will be out of service for short period of time, use quality medium-weight machine oil (not auto engine oil).
- **3.** Remove old coolant, then add few drops of way oil and clean lines with compressed air.
- 4. Loosen or remove blade so it does not stretch or rust while machine is stored.
- 5. Place a few moisture-absorbing desiccant packs inside of electrical box.
- 6. Cover machine with tarp or plastic sheet that will keep out dust and resist moisture. If machine will be near direct sunlight, use cover that will block sun's rays.

Bringing Machine Out of Storage

Items Needed	Qty
Disposable Shop Rags	As Needed
Cleaner/Degreaser	As Needed
Safety Glasses	1 Pr.
Disposable Gloves	As Needed
Coolant	10 Gallons

To bring machine out of storage:

- 1. Remove moisture-absorbing desiccant packs from electrical box.
- 2. Put on safety glasses.
- **3.** Coat rust preventative with cleaner/degreaser, then let it soak for 5–10 minutes.
- **4.** Wipe off surfaces. If cleaner/degreaser is effective, rust preventative will wipe off easily.
- 5. Repeat Steps 3–4 as necessary until clean.
- 6. Tension blade as described on Page 36.
- 7. Perform Test Run on Page 23.



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	1. Emergency Stop button depressed/at fault.	1. Rotate button to reset; test/replace if at fault.
motor does not	2. Control panel or electrical cabinet power	2. Turn power switch ON; test/replace if at fault.
start, or power	switch turned OFF/at fault.	
supply breaker	3. Blown fuse.	3. Replace fuse/ensure no shorts.
immediately	4. Incorrect power supply voltage or circuit size.	4. Ensure correct power supply voltage and circuit size.
trips after	5. Plug at fault/wired incorrectly.	5. Test for good contacts; correct wiring.
startup.	6. Wheel cover safety door limit switch	6. Close wheel cover/replace switch.
	engaged/at fault.	
	7. Blade tension limit switch engaged/at fault.	7. Tension blade correctly (Page 36)/replace switch.
	8. Power supply circuit breaker tripped or fuse	8. Ensure circuit is sized correctly and free of shorts.
	blown.	Reset circuit breaker or replace fuse.
	9. Hydraulic motor thermal overload relay	9. Reset; adjust trip load dial; replace if at fault.
	tripped/at fault.	
	10. Hydraulic motor contactor not energized/poor	10. Test all legs for power; replace if at fault.
	contacts/at fault.	
	11. Wiring broken, disconnected, or corroded.	11. Replace/fix broken, disconnected, or corroded wires.
	12. Electrical cabinet or control panel circuit	12. Inspect/replace if at fault.
	board at fault.	
	13. Hydraulic motor at fault.	13. Test/repair/replace.
Headstock	1. Incoming power supply out of phase.	1. Switch any two of three incoming power supply wires
does not raise/		on plug.
Vise does not	1. I able motor thermal overload relay tripped/at	1. Reset; adjust trip load dial; replace if at fault.
close/open.	Tault.	
	2. Table motor contactor not energized/poor	2. Test all legs for power; replace if at fault.
	Wiring broken disconnected or corroded	3 Replace/fix broken disconnected or corroded wires
	4 Electrical cabinet or control panel circuit	4 Inspect/replace if at fault
	board at fault	
	5. VED at fault.	5. Inspect VED: replace if at fault.
	6. Table motor at fault.	6. Test/repair/replace.
Coolant nump	1 Coolant nump motor thermal overload relay	1 Beset: adjust trip load dial: replace if at fault
motor does not	tripped/at fault	
start.	2. Coolant pump motor contactor not energized/	2. Test all legs for power: replace if at fault.
	poor contacts/at fault.	
	3. Wiring broken, disconnected, or corroded.	3. Replace/fix broken, disconnected, or corroded wires.
	4. Electrical cabinet or control panel circuit	4. Inspect/replace if at fault.
	board at fault.	
	5. Coolant pump motor at fault.	5. Test/repair/replace.
		<u>.</u>



Motor & Electrical (Cont.)

Symptom	Possible Cause	Possible Solution
Main motor	1. Hydraulic unit, coolant pump, and blade start	1. Press hydraulic unit, coolant pump, and blade start
does not start.	buttons not pressed.	buttons.
	2. Headstock not raised/vise not closed.	2. Raise headstock/close vise.
	3. Downfeed limit switch engaged/at fault.	3. Raise headstock/adjust downfeed stop bolt and limit
		switch (Page 72)/replace switch.
	4. Main motor thermal overload relay tripped/at	4. Reset; adjust trip load dial; replace if at fault.
	fault.	
	5. Main motor contactor not energized/poor	5. Test all legs for power; replace if at fault.
	contacts/at fault.	
	6. Wiring broken, disconnected, or corroded.	6. Replace/fix broken, disconnected, or corroded wires.
	7. Electrical cabinet or control panel circuit	7. Inspect/replace if at fault.
	board at fault.	
	8. Main motor at fault.	8. Test/repair/replace.
Blade brush	1. Wiring broken, disconnected, or corroded.	1. Replace/fix broken, disconnected, or corroded wires.
motor does not	2. Blade brush motor at fault.	2. Test/repair/replace.
start when main		
motor starts.		
Machine	1. Feed rate too fast; blade speed too low.	1. Reduce feed rate (Page 31); increase blade speed
stalls or is		(Page 31).
underpowered.	2. No cutting lubrication.	2. Use applicable coolant/lubricant.
	3. Blade not correct for material being cut.	3. Use correct blade for operation (Page 28).
	4. Improper workpiece material for saw/blade.	4. Only cut correct material for saw blade/type.
	5. Blade slipping on wheels.	5. Adjust blade tracking (Page 68), tension (Page 36).
	6. Belt slipping; motor pulley slipping on shaft.	6. Tension/replace belt (Page 74); replace pulley/shaft.
	7. Plug at fault/wired incorrectly.	7. Test for good contacts; correct wiring.
	8. Blade dull, or installed backwards.	 Replace blade (Page 34). Ensure teeth face cutting direction.
	9. Motor overheated.	9. Clean offending motor, let cool, reduce workload.
	10. Contactor has poor contacts.	10. Test all legs for power; repair/replace if at fault.
	11. Motor or motor bearings at fault.	11. Test/repair/replace.
Machine has	1. Motor, motor mount, or component loose.	1. Re-tighten component; inspect/replace damaged bolts/
vibration or		nuts.
noisy operation.	2. Blade damaged or dull.	2. Replace blade (Page 34).
	3. Belt worn or loose/slapping cover.	3. Inspect/tension/replace belt (Page 74).
	4. Workpiece loose.	4. Secure workpiece with vise; increase vise clamping
		pressure (Page 42).
	5. Motor fan rubbing on fan cover.	5. Fix/replace fan cover; replace loose/damaged fan.
	6. Pulley loose/misaligned.	6. Re-align/replace shaft, pulley, set screw, and key.
	7. Motor bearings at fault.	7. Turn shaft; loose shaft requires bearing replacement.
	8. Gearbox at fault.	8. Rebuild gearbox and replace bad gear(s)/bearing(s).

Operation

Symptom	Possible Cause	Possible Solution
Vibration when	1. Loose or damaged blade.	1. Tension blade (Page 36)/replace blade (Page 34).
operating or cutting.	2. Worn wheel bearing.	2. Check/replace wheel bearing.
	3. Bent or dull blade.	3. Replace blade (Page 34).
	4. Machine component(s) loose.	4. Inspect/re-tighten component(s).
	5. Wheels worn or incorrectly installed.	5. Replace wheels; adjust blade tracking (Page 68).
	6. Wheel appears bent.	6. Check/replace wheel/wheel bearing.
	7. Gearbox at fault.	7. Rebuild gearbox; replace bad gear(s)/bearing(s).
Ticking sound when	1. Blade weld contacting blade guides.	1. Grind weld down flush with blade.
saw is running.	2. Blade weld may be failing.	2. Cut and reweld blade, or replace blade (Page 34).
	3. Blade teeth missing or broken.	3. Inspect/replace blade (Page 34).
	4. Blade speed sensor adjusted too close to	4. Adjust blade speed sensor 5mm from
	pulley.	pulley (Page 74).
Machine or blade	1. Feed rate too fast; blade speed too low.	1. Reduce feed rate (Page 31); increase blade speed
bogs down in cut.		(Page 31).
	2. Belt slipping.	2. Tension/replace belt (Page 74).
	3. Blade loading up.	3. Install blade with fewer TPI/different style of teeth
		(Page 34).
	4. Blade dull.	4. Replace blade (Page 34).
	5. Blade not supported; blade tracking	5. Move left blade guide arm closer to workpiece
	incorrectly.	(Page 37); adjust blade tracking (Page 68).
	6. Blade TPI incorrect.	6. Verify blade has at least 3 teeth contacting material
		at all times (Page 28).
	7. Blade tension too low.	7. Clean wheels; increase blade tension (Page 36).
	8. Material requires cutting fluid/lubrication.	8. Use applicable coolant/lubricant.
Cuts not square.	1. Blade not square to table.	1. Adjust blade square to table (Page 70).
Blade dulls	1. Blade improperly broken in.	1. Replace blade (Page 34); complete blade break-in
prematurely, or		procedure (Page 30).
metal sticks to	2. Blade gullets loading up with chips.	2. Use blade with larger gullets (Page 34).
blade.	3. Blade tension is too low.	3. Increase blade tension (Page 36).
	4. Blade TPI too fine or course for material;	4. Use coarser-tooth or finer-tooth blade (Page 34);
	teeth load up and overheat.	adjust feed rate (Page 31); adjust blade speed
		(Page 31); make sure blade brush works and is
		adjusted correctly (Page 65).
	5. Incorrect coolant mixture for workpiece/cut.	5. Use correct coolant mixture.
	6. Inadequate feed pressure.	6. Decrease headstock spring tension (Page 73).
Excessive blade	1. Workpiece loose.	1. Secure workpiece with vise; increase vise clamping
breakage.		pressure (Page 42).
	2. Blade contacting workpiece when started.	2. Raise headstock, start blade, then lower blade into
		workpiece.
	3. Blade too thick/blade gullets too large.	3. Use thinner blade/blade with smaller gullets
		(Page 34).
	4. Workpiece too course for blade.	4. Use coarser-tooth blade (Page 34); adjust feed rate
		(Page 31); adjust blade speed (Page 31).
	5. Blade tension/tracking requires adjustment.	5. Adjust blade tracking (Page 68), tension (Page 36).
	6. Blade guide roller bearings require	6. Adjust blade guide roller bearings (Page 66).
	adjustment.	
	7. Blade weld may be failing.	7. Cut and reweld blade, or replace blade (Page 34).



Operation (Cont.)

Symptom	Possible Cause	Possible Solution
Blade wears on	1. Blade guides worn or mis-adjusted.	1. Re-adjust guides and bearings (Page 66)/replace.
one side or shows	2. Blade not supported.	2. Move left blade guide arm closer to workpiece
overheating.		(Page 37).
	3. Dull/incorrect blade.	3. Replace blade (Page 34).
	4. Incorrect coolant mixture for workpiece/cut.	4. Use correct coolant mixture.
	5. Blade is bell-mouthed.	5. Replace blade (Page 34).
Blade tracks	1. Feed rate too fast/wrong TPI.	1. Reduce feed rate (Page 31)/decrease blade TPI
incorrectly, or		(Page 28).
comes off wheels.	2. Blade tension/tracking requires adjustment.	2. Adjust blade tracking (Page 68), tension (Page 36).
	3. Blade guides need adjustment.	3. Adjust blade guides (Page 66).
	4. Blade bell-mouthed.	4. Replace blade (Page 34).
Cuts are crooked/	1. Feed rate too fast; blade speed incorrect.	1. Reduce feed rate (Page 31); adjust blade speed
excessively rough.		(Page 31).
	2. Blade is too course or dull.	2. Replace blade (Page 34).
	3. Blade not supported.	3. Move left blade guide arm closer to workpiece
		(Page 37).
	4. Carbide blade guides/roller bearings out of	4. Adjust carbide blade guides/roller bearings
	adjustment.	(Page 66).
	5. Blade tension/tracking requires adjustment.	5. Adjust blade tracking (Page 68), tension (Page 36).
	6. Feed pressure is too great.	6. Increase headstock spring tension (Page 73).
Blade keeps moving	1. Downfeed stop limit switch not engaged/at	1. Adjust downfeed stop bolt (Page 72); test/replace
or headstock not	fault.	limit switch if at fault.
raising after cut.		

Hydraulic System

Symptom	Possible Cause	Possible Solution
Hydraulics are not	1. Hydraulic fluid level is low.	1. Check/fill hydraulic fluid level (Page 54).
functioning.	2. Insufficient system pressure.	2. Adjust system pressure (Page 53).
	3. Hydraulic system is leaking.	3. Inspect/test for leaks/repair.
	4. Flow blocked or impeded.	4. Make sure hydraulic line(s) are not pinched or
		damaged.
	5. Control panel or electrical cabinet wiring at	5. Check that hydraulic pump motor is running and
	fault.	that solenoids are activating (indicated by red LED
		in solenoid plug). Repair/replace if at fault.
	6. Hydraulic pump at fault.	6. Test/repair/replace.
Vise does not open/	1. Vise valve solenoids at fault.	1. Test/repair/replace.
close.	2. Vise valve solenoids connections are bad.	2. Check solenoid plugs.
	3. Vise hydraulic system is leaking.	3. Test for leaks/repair.
	4. Control panel or electrical cabinet wiring at	4. Check that hydraulic pump motor is running and
	fault.	that solenoids are activating (indicated by red LED
		in solenoid plug). Repair/replace if at fault.
	5. Hydraulic pump at fault.	5. Test/repair/replace.
Headstock does not	1. Headstock valve solenoids at fault.	1. Test/repair/replace.
raise/lower.	2. Headstock valve solenoids connections are	2. Check solenoid plugs.
	bad.	
	3. Headstock hydraulic system is leaking.	3. Test for leaks/repair.
	4. Control panel or electrical cabinet wiring at	4. Check that hydraulic pump motor is running and
	fault.	that solenoids are activating (indicated by red LED
		in solenoid plug). Repair/replace if at fault.
	5. Hydraulic pump at fault.	5. Test/repair/replace.



Hydraulic System (Cont.)

Symptom	Possible Cause	Possible Solution
Hydraulic tank fluid burnt or has tan discoloration.	 Hydraulic fluid is old or contaminated with water. 	1. Replace hydraulic fluid (Page 54).

Coolant System

Symptom	Possible Cause	Possible Solution
Coolant system is	1. Coolant valves are closed.	1. Open coolant valves.
not functioning.	2. Coolant level is low.	2. Check/fill coolant level (Page 57).
	3. Coolant system is leaking.	3. Inspect/test for leaks/repair.
	4. Flow blocked or impeded.	4. Make sure coolant line(s) are not pinched or
		damaged.
	5. Control panel or electrical cabinet wiring at	5. Check that coolant pump motor is running. Repair/
	fault.	replace if at fault.
	6. Coolant pump at fault.	6. Test/repair/replace.
Cooling system is	1. Coolant needs to be changed/reservoir is	1. Clean and change coolant (Page 57).
pulling sludge from	dirty.	
reservoir.	2. Coolant level is low.	2. Check/fill coolant level (Page 57).


Adjusting Blade Brush



AWARNING To reduce risk of shock or accidental startup, always disconnect machine from power before adjustments, maintenance, or service.

The Model G0887 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.

To adjust blade brush:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Open wheel cover by removing (4) button head cap screws (see Figure 94).



Figure 94. Wheel cover secure screw locations (2 of 4 shown).

- 3. Loosen wing nut on blade brush adjustment bracket (see Figure 95).
- Adjust blade brush and cover so blade extends approximately ¹/₈" into bristles of brush, then tighten wing nut (see Figure 95). Hole in bracket is slotted for easy adjustment.



Figure 95. Blade brush adjustment components.

Adjusting Blade Guides & Bearings

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.

Tool(s) Needed

Hex Wrenches 4, 6, 8mm 1	ea.
Feeler Gauge or Calipers	1

Qtv

Adjusting Carbide Blade Guides

The blade should be properly tensioned and tracking correctly before the carbide blade guides are adjusted (see **Tensioning Blade** on **Page 36** and **Adjusting Blade Tracking** on **Page 68**).

To adjust carbide blade guides:

- 1. Raise headstock high enough to give you room to work around blade guides.
- 2. DISCONNECT MACHINE FROM POWER!
- **3.** Open wheel cover by removing (4) button head cap screws (see **Figure 96**).



Figure 96. Wheel cover secure screw locations (2 of 4).

4. Remove both blade guards and blade guard extension by removing (6) button head cap screws and flat washers (see **Figure 97**).



Figure 97. Location of blade guards and blade guard extension.

5. On left blade guide, verify back of blade lightly contacts upper carbide blade guide (see Figure 98).



Figure 98. Upper carbide blade guide adjustment components.



- If blade *does* lightly contact upper carbide blade guide, skip to Step 6.
- If blade *does not* lightly contact upper carbide blade guide, proceed to Step 6.
- 6. Loosen cap screws on blade guide arm (see **Figure 98**), and adjust blade guide up or down until upper 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 8**), and if necessary, adjust roller bearings away from blade (refer to **Adjusting Roller Bearings**).

- 7. Repeat **Step 5** on right blade guide.
- On left blade guide, tighten spring-loaded knob until lower blade guides (see Figure 99) are snug against blade, then back off knob ¹/₂ turn. DO NOT over-tighten knobs.



Figure 99. Lower carbide blade guide adjustment components.

- 9. Repeat Step 8 on right blade guide.
- 10. Adjust roller bearings (refer to Adjusting Roller Bearings).

Adjusting Roller Bearings

Guide roller bearings should only be adjusted after the carbide blade guides (see **Adjusting Carbide Blade Guides** on **Page 66**).

To adjust roller bearings:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. On left blade guide, loosen cap screw of front roller bearings (see **Figure 100**).
- **3.** Turn eccentric bushing clockwise to adjust roller bearings closer to blade, and counter-clockwise to adjust them further from blade (see **Figure 100**). Roller bearings should lightly contact blade or have a 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 100. Roller bearing adjustment components.

- **4.** While holding eccentric bushing in place, tighten cap screw to secure setting.
- 5. Repeat **Steps 2–4** on right blade guide.



Install blade guards and blade guard extension with (6) button head cap screws and flat washers removed in Step 4 of Adjusting Carbide Blade Guards on Page 66 (see Figure 101).



Figure 101. Blade guards and blade guard extension installed.

 Close wheel cover and secure with (4) button head cap screws removed in Step 3 of Adjusting Carbide Blade Guards beginning on Page 66 (see Figure 102).



Figure 102. Wheel cover secured.

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.

If the blade comes off the wheels, or if the blade bogs down in a cut, this is a sign that the tracking needs to be adjusted. Before adjusting the blade tracking, however, be sure that the feed rate and blade speed are correct, the blade is not dull and has correct teeth style and TPI for material, the blade tension is correct, and the blade is properly lubricated.

Items Needed	Qty
Hex Wrench 4, 12mm1	Ea.
Protective Gloves	1 Pr.

To adjust blade tracking:

- 1. Make sure blade is properly tensioned (refer to **Tensioning Blade** on **Page 36**).
- 2. Raise headstock out of vise table.
- 3. DISCONNECT MACHINE FROM POWER!



4. Open wheel cover by removing (4) button head cap screws (see Figure 103).



Figure 103. Wheel cover secure screws (2 of 4).

5. Put on heavy leather gloves.



CAUTION LACERATION HAZARD! Bandsaw blades are sharp and difficult to handle. Wear heavy leather gloves while handling to reduce the risk of being cut.

6. Use hand to turn blade around wheels and watch how blade tracks around idler wheel and on idler wheel shoulder, then stop blade movement (see Figure 104).



Figure 104. Blade tracking properly against idler wheel shoulder.

- If blade lightly touches shoulder of idler wheel without rubbing, 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 7.
- 7. Tighten or loosen tracking adjustment set screw to move idler wheel assembly forward or backward (see Figure 105).



Figure 105. Tracking adjustment set screw location.

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

- 8. Repeat Steps 6–7 as needed until back of blade lightly touches shoulder of idler wheel while tracking.
- **9.** Close wheel cover when proper blade tracking has been achieved.



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.

Items 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 all the way left.
- 4. Open wheel cover by removing (4) button head cap screws (see **Figure 106**). You may need to move vise support for clearance.



Figure 106. Wheel cover secure screws (2 of 4).

5. Remove both blade guards and blade guard extension by removing (6) button head cap screws and flat washers (see **Figure 107**).



Figure 107. Location of blade guards and blade guard extension.

6. Place machinist's square on vise table surface and against edge of blade (see Figure 108). Check for squareness at different points along length of vise table between blade guides.



Figure 108. Checking blade-to-table squareness.



- If blade *is* square to vise table, no adjustments need to be made.
- If blade *is not* square to vise table, loosen two cap screws shown in Figure 109 one to two turns and repeat on second blade guide assembly. Adjust blade guides as necessary until blade is perpendicular to bed, then tighten screws.



Figure 109. Blade guide assembly cap screws location.

- 7. Repeat **Step 6** as needed until blade and vise table are square.
- 8. Install blade guards and extension and close wheel cover.

Adjusting Blade Tension Limit Switch

The blade tension limit switch prevents the machine from operating if the blade is not properly tensioned.

Tools Needed	Qty
Hex Wrench 4mm	1
Open-End Wrench 13mm	1

To adjust blade tension limit switch:

1. Turn blade tension handwheel counterclockwise to loosen blade until indicator on blade tension gauge moves out of green section (see Figure 110).



Figure 110. Blade tension handwheel and gauge components.

- 2. Try to start hydraulic motor.
 - If motor *does not* start, blade tension limit switch is working correctly and no adjustment is required.
 - If motor *does* start, proceed to Step 3 to adjust blade tension limit switch.
- 3. DISCONNECT MACHINE FROM POWER!
- 4. Tension bandsaw blade for blade type (refer to **Tensioning Blade** on **Page 36**).



5. Loosen cap screws that secure blade tension assembly cover and move it out of the way (see Figure 111).



Figure 111. Blade tension assembly cover and securing cap screws.

6. Adjust limit switch hex bolt until it just touches limit switch, then tighten jam nut against tension limit bracket to secure (see Figure 112). Switch should not be depressed.



Figure 112. Blade tension limit switch adjustment components.

- 7. Install blade tension assembly cover.
- 8. Connect machine to power and turn blade tension handwheel ½ turn counterclockwise.
- 9. Try to start hydraulic motor.
 - If motor *does not* start, blade tension limit switch is working correctly and no adjustment is required.
 - If motor *does* start, repeat Steps 4–8 until hydraulic motor does not start without correct blade tension.

Adjusting Downfeed Stop Bolt

If the blade does not travel far enough to complete the cut, or the blade contacts the vise table, then the downfeed stop bolt will need to be adjusted. When the downfeed stop bolt is adjusted, the downfeed limit switch should be adjusted to match so the blade and coolant pump stop at the end of the cut.

To adjust downfeed stop bolt:

- 1. Without starting blade, lower headstock all the way. When headstock stops, blade should be just below vise table, but not contacting it.
 - If blade contacts vise table, raise headstock until blade is just below vise table surface.
- 2. DISCONNECT MACHINE FROM POWER!
- **3.** Loosen stop bolt jam nut, then adjust downfeed stop bolt until head of stop bolt contacts bottom of headstock (see **Figure 113**).



Figure 113. Downfeed stop bolt adjustment components.



4. Loosen stop bolt jam nut, then adjust limit switch stop bolt until head of stop bolt contacts limit switch (see **Figure 114**).



Figure 114. Limit switch stop bolt adjustment components.

5. Tighten both jam nuts against base to prevent stop bolts from loosening during use.

Adjusting Headstock Spring

The spring under the headstock that controls downward pressure of the headstock during cutting operations should have the correct tension. The tension should only be adjusted if tension is too loose, resulting in premature blade dulling or crooked cuts. Consult the **Troubleshooting** section beginning on **Page 60** to confirm this is the source of the problem before adjusting.

Adjust cap screws shown in **Figure 115** to increase or decrease spring tension.

Tool Needed	Qty
Hex Wrench 10mm	1



Figure 115. Spring adjustment screw location.



Replacing/ Tensioning Drive Belt

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

Tools Needed

Hex Wrench 3mm	1
Assistant	1
Open-End Wrench 17mm	1

Qtv

Replacing Belt

If belt is cracked or worn, replace it before continuing operation.

To replace belt:

- 1. DISCONNECT MACHINE FROM POWER!
- Remove (5) button head cap screws and flat washers to remove outer pulley cover (see Figure 116).



Figure 116. Outer pulley cover and securing button head cap screws.

3. Adjust blade speed dial to maximum speed setting.

4. Remove (2) button head cap screws and flat washers to remove pulley cover bracket that holds blade speed sensor so you can access drive belt (see Figure 117).



Figure 117. Pulley cover bracket location.

5. While an assistant holds motor, loosen (4) motor hex bolts (see Figure 118).



Figure 118. Motor mounting bolts location.

- 6. Lower motor to release belt tension and replace drive belt with new one.
- **7.** Lift motor until there is proper belt tension (see **Tensioning Belt** on **Page 75**), then tighten (4) motor hex bolts.
- Install pulley cover bracket removed in Step
 Speed sensor should be 5mm away from pulley.
- 9. Install outer pulley cover removed in Step 2.



Tensioning Belt

Drive belt should have a ¹/₄" of belt deflection.

To tension belt:

- 1. DISCONNECT MACHINE FROM POWER!
- Remove (5) button head cap screws and flat washers to remove outer pulley cover (see Figure 119).



Figure 119. Outer pulley cover and securing button head cap screws.

- **3.** Adjust blade speed dial to maximum speed setting.
- **4.** While an assistant holds motor, loosen (4) motor hex bolts (see **Figure 120**).



Figure 120. Motor mounting bolts location.

5. Adjust motor until there is ¹/₄" belt deflection when pressed in center with moderate pressure (see **Figure 121**).



Figure 121. Checking belt tension.

- **6.** Tighten (4) motor hex bolts to secure tension.
- 7. Install outer pulley cover.



SECTION 8: HYDRAULICS

Hydraulic System Schematic





Hydraulic System Diagram



SECTION 9: 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.*

AWARNING 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 aftermarket 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.

Pk

NOTICE

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

BLACK	Bk	BLUE
WHITE		BROWN
GREEN	Gn	GRAY
RED	Rd	ORANG

COLO	R KEY
BI BI	YELLOW
WN Br	YELLOW GREEN
Y Gy	PURPLE
NGE Or	PINK

LIGHT BLUE BLUE WHITE TUR-QUOISE



Component Locations



1	Control Panel (Page 85)
2	Hydraulic Unit (Page 84)
3	Home Proximity Sensor (Page 85)
4	Coolant Pump Motor (Page 87)
5	Blade Brush Motor (Page 87)
6	Blade Speed Sensor (Page 89)
7	Blade Motor (Page 86)
8	Blade Speed Meter (Page 89)

9	Headstock Lower Limit Switch (Page 89)	
10	Rotary Potentiometer (Page 85)	
1	Table Motor (Page 88)	
Ð	Power Connection (Page 81)	
B	Electrical Cabinet (Page 81-82)	
1	Door Safety Limit Switch (Page 88)	
Ð	Blade Tension Limit Switch (Page 88)	







Electrical Overview





Electrical Cabinet Wiring Diagram



STOP

-81-

READ ELECTRICAL SAFETY

ON PAGE 78!

Electrical Cabinet Wiring Diagram (Cont.)







Figure 122. Electrical cabinet components and wiring connections.







4

Hydraulic System Wiring Diagram



4

Figure 123. Hydraulic unit solenoids.



STOP

READ ELECTRICAL SAFETY

ON PAGE 78!

Control Panel Wiring Diagram





Figure 124. Home proximity switch.



Figure 125. Rotary potentiometer.





Figure 126. Control panel components and wiring connections.

Motor Wiring Diagrams



Figure 127. Main motor junction box.





Motor Wiring Diagrams (Cont.)



COOLANT PUMP MOTOR 220V



Figure 128. Blade brush motor junction box.



Figure 129. Hydraulic unit motor junction box.



Figure 130. Coolant pump motor junction box.







Motor Wiring Diagrams (Cont.)



Figure 131. Table motor junction box.



Other Electrical Component Wiring Diagrams





Figure 132. Door safety limit switch.



Figure 133. Blade tension limit switch.



To Electrical Cabinet See Pg. 81–82



Other Electrical Component Wiring Diagrams (Cont.)

Headstock Lower Limit Switch CANLIE AZD-1001T

To Electrical Cabinet See Pg. 81–82





Figure 134. Headstock lower limit switch.



Figure 135. Blade speed meter.



Figure 136. Blade speed sensor.



SECTION 10: PARTS

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



Headstock Parts List

REF	PART #	DESCRIPTION
1	P0887001	HEADSTOCK FRAME
2	P0887002	BLADE TENSION ASSEMBLY COVER
3	P0887003	FLAT WASHER 6MM
4	P0887004	BUTTON HD CAP SCR M6-1 X 12
5	P0887005	BLADE GUIDE BLOCK
6	P0887006	FLAT WASHER 10MM
7	P0887007	CAP SCREW M10-1.5 X 60
8	P0887008	STAND-OFF ROUND MF 20, M12-1.75
9	P0887009	BLADE GUIDE WHEEL
10	P0887010	BALL BEARING 6205ZZ
11	P0887011	INT RETAINING RING 47MM
12	P0887012	CUP WASHER 12 X 35 X 8
13	P0887013	LOCK WASHER 12MM
14	P0887014	CAP SCREW M12-1.75 X 25
15	P0887015	FLAT WASHER 10MM
16	P0887016	LOCK WASHER 10MM
17	P0887017	CAP SCREW M10-1.5 X 25
18	P0887018	BLADE GUIDE ABM GIB
19	P0887019	CAP SCREW M5- 8 X 8
20	P0887020	CAP SCREW M10-1 5 X 25
21	P0887021	HINGE
22	P0887022	BUTTON HD CAP SCB M6-1 X 12
23	P0887023	WHEEL COVER
24	P0887024	BLADE GUIDE ABM BBACKET (LEET)
25	P0887025	
26	P0887026	
20	P0887027	
28	P0887028	BLADE GOIDE ANN SOALE
20	P0887020	
20	P0887029	
31	P0887031	
30	P0887032	
33	P0887033	
34	P0887034	
35	P0887035	CAR SCREW M10-1 5 X 65
36	P0887036	IDLEB WHEEL SHAFT
37	P0887037	SET SCREW M12-1 75 X 20
38	P0887038	
30	P0887039	
40	P0887040	
40 //1	P08870/1	HEX NUT M8-1 25
42	P0887042	HEX ROLT M8-1 25 X 100
42 //3	P0887043	SPACER 20.5 X 50 X 40
40	P0887044	
44	P0887045	SHAFT COLLAR MR-1 25
45	P0887046	SET SCREW/M8-1 25 X 12
40	P0887047	
47	P0887047	SET SCREW M8-1 25 X 12
40	D0007040	
49 50	P0887050	THOUST READING 51204
50	D0897051	
50	D007051	
52 52	D08970F0	
53	D0007054	
54 55	FU00/U04	
55	D0007050	
50 57	F 0007 050	
57	FU00/U5/	
50	FU00/U00	
39 60	FU88/U59	
00	L,000,000	UNEADE FITTINU 1/0-INPT STRAIGHT

REF	PART #	DESCRIPTION	
61	P0887061	DRIVE WHEEL	
62	P0887062	BEARING LOCK WASHER 60MM AW12	
63	P0887063	BEARING LOCK NUT M60-2 AN12	
64	P0887064	BUTTON HD CAP SCR M58 X 12	
65	P0887065	SPRING ANCHOR BLOCK	
66	P0887066	LOCK WASHER 10MM	
67	P0887067	CAP SCREW M10-1.5 X 25	
68	P0887068	FLAT WASHER 6MM	
69	P0887069	CAP SCREW M6-1 X 15	
70	P0887070	DRIVE WHEEL GEARBOX	
71	P0887071	LOCK WASHER 12MM	
72	P0887072	CAP SCREW M12-1.75 X 30	
73	P0887073	SET SCREW M10-1.5 X 15	
74	P0887074	KEY 18 X 11 X 45	
75	P0887075	KEY 7 X 8 X 60	
76	P0887076	MOTOR PULLEY W/SPEED DIAL	
77	P0887077	V-BELT 1922V504	
78	P0887078	CLEVIS PIN SHAFT 20 X 111 HEADLESS	
79	P0887079	EXT RETAINING RING 20MM	
80	P0887080	MAIN MOTOR 5HP 220V 3-PH	
80-1	P0887080-1	MOTOR FAN W/COVER	
80-3	P0887080-3	MOTOR JUNCTION BOX	
80-4	P0887080-4	BALL BEARING 6306ZZ (FRONT)	
80-5	P0887080-5	BALL BEARING 6306ZZ (REAR)	
81	P0887081	LOCK WASHEB 10MM	
82	P0887082	HEX BOI T M10-1 5 X 35	
83	P0887083	KEY 8 X 7 X 40	
84	P0887084	BLADE GUIDE ABM BBACKET (BIGHT)	
85	P0887085	PULLEY COVER (INNER)	
86	P0887086	FLAT WASHER 5MM	
87	P0887087	BUTTON HD CAP SCB M5- 8 X 12	
88	P0887088	PULLEY COVER (OUTER)	
89	P0887089	FLAT WASHER 5MM	
90	P0887090	BUTTON HD CAP SCB M5- 8 X 12	
91	P0887091	STRUT BRACKET (BIGHT)	
92	P0887092	STRUT BRACKET (LEFT)	
93	P0887093	CAP SCREW M6-1 X 20	
94	P0887094		
95	P0887095	PULLEY COVER BRACKET	
96	P0887096	FLAT WASHER 5MM	
97	P0887097	BUTTON HD CAP SCB M5- 8 X 12	
98	P0887098	HEX NUT M6-1	
99	P0887099	FLAT WASHER 6MM	
100	P0887100	BUTTON HD CAP SCR M6-1 X 12	
101	P0887101	CAP SCREW M6-1 X 25	
102	P0887102	FLAT WASHER 6MM	
103	P0887103	BUTTON HD CAP SCR M6-1 X 12	
104	P0887104	SPEED INDICATOR FACEPLATE	
105	P0887105	BLADE DRIP FLAP BRACKET	
106	P0887106	BLADE DRIP FLAP	
107	P0887107	BLADE DRIP FLAP BACKING	
108	P0887108	GEABBOX PULLEY	
109	P0887109	BUTTON HD CAP SCB M6-1 X 10	
110	P0887110	BLADE BRUSH MOTOR 60W 220V 3-PH	
110-1	P0887110-1	MOTOR FAN COVER	
110-2	P0887110-2	MOTOR FAN	
110-3	P0887110-3		
110-4	P0887110-4	BALL BEARING 620077 (FRONT)	
110-5	P0887110-5	BALL BEARING 600077 (REAR)	
111	P0887111		
411			



Headstock Parts List (Cont.)

REF	PART #	DESCRIPTION
112	P0887112	BLADE BRUSH MOTOR BRACKET
113	P0887113	FLAT WASHER 8MM
114	P0887114	CAP SCREW M8-1.25 X 20
115	P0887115	FLAT WASHER 6MM
116	P0887116	LOCK WASHER 6MM
117	P0887117	HEX NUT M6-1
118	P0887118	BLADE BRUSH MOTOR BRACKET COVER
119	P0887119	FLAT WASHER 6MM
120	P0887120	BUTTON HD CAP SCR M6-1 X 10
121	P0887121	UNIVERSAL JOINT
122	P0887122	ROLL PIN 5 X 24
123	P0887123	BLADE BRUSH SHAFT (LONG)
124	P0887124	BLADE BRUSH SHAFT (SHORT)
125	P0887125	BLADE BRUSH COVER
126	P0887126	BLADE BRUSH
127	P0887127	FLAT WASHER 6MM

REF	PART #	DESCRIPTION
128	P0887128	LOCK WASHER 6MM
129	P0887129	HEX NUT M6-1
130	P0887130	BLADE BRUSH ADJUSTMENT BRACKET
131	P0887131	FLAT WASHER 8MM
132	P0887132	BUTTON HD CAP SCR M8-1.25 X 12
133	P0887133	FLAT WASHER 6MM
134	P0887134	WING BOLT M6-1 X 12
135	P0887135	BLADE BRUSH DRIP FLAP
136	P0887136	PHLP HD SCR M35 X 20
137	P0887137	BUSHING 12ID X 14OD X 20L
138	P0887138	WHEEL COVER HANDLE
139	P0887139	CAP SCREW M8-1.25 X 25
140	P0887140	HEX NUT M8-1.25
141	P0887141	FLAT WASHER 8MM
142	P0887142	CORD MOUNTING PLATE
143	P0887143	HEX NUT M35







Table & Vise Parts List

REF	PART #	DESCRIPTION
150	P0887150	TABLE PLATFORM
151	P0887151	CAP SCREW M12-1.75 X 200
152	P0887152	SET SCREW M12-1.75 X 30
153	P0887153	ROLL PIN 8 X 12
154	P0887154	TABLE BASE (LOWER)
155	P0887155	CAP SCREW M10-1.5 X 60
156	P0887156	TABLE BASE (UPPER)
157	P0887157	CAP SCREW M8-1.25 X 60
158	P0887158	U-BRACKET
159	P0887159	CAP SCREW M12-1.75 X 45
160	P0887160	FIXED VISE JAW (REAR)
161	P0887161	FIXED VISE JAW (FRONT)
162	P0887162	CAP SCREW M10-1.5 X 30
163	P0887163	VALVE BLOCK 1/4PT 2-WAY
164	P0887164	WING BOLT M6-1 X 30
165	P0887165	FLAT HD CAP SCR M6-1 X 16
166	P0887166	VISE TRACK STOP
170	P0887170	TABLE GIB
171	P0887171	CAP SCREW M12-1.75 X 35
172	P0887172	TABLE COVER (LOWER)
173	P0887173	FLAT WASHER 6MM
174	P0887174	BUTTON HD CAP SCR M6-1 X 12
179	P0887179	TABLE WORM SHAFT BASE BRACKET
180	P0887180	TABLE WORM SHAFT BASE
181	P0887181	FLAT WASHER 12MM
182	P0887182	LOCK WASHER 12MM
183	P0887183	CAP SCREW M12-1.75 X 35
184	P0887184	TABLE WORM SHAFT 6T
185	P0887185	TAPERED ROLLER BEARING 30205
186	P0887186	BEARING LOCK WASHER 25MM AW05
187	P0887187	BEARING LOCK NUT M25-1.5 AN05
188	P0887188	KEY 8 X 7 X 35
189	P0887189	BALL BEARING 6007-2RS
190	P0887190	EXT RETAINING RING 35MM
191	P0887191	TABLE WORM SHAFT BASE COVER
192	P0887192	FLAT WASHER 6MM
193	P0887193	BUTTON HD CAP SCR M6-1 X 12
195	P0887195	TABLE DRIVE SHAFT
196	P0887196	KEY 8 X 7 X 35
197	P0887197	TABLE MOTOR/GEARBOX BRACKET
198	P0887198	FLAT WASHER 10MM
199	P0887199	CAP SCREW M10-1.5 X 25
200	P0887200	TABLE GEARBOX
202	P0887202	LOCK WASHER 8MM
203	P0887203	CAP SCREW M8-1.25 X 20
204	P0887204	CAP SCREW M8-1.25 X 35
205	P0887205	TABLE MOTOR 1HP 220V 3-PH
205-1	P0887205-1	MOTOR FAN W/COVER
205-3	P0887205-3	MOTOR JUNCTION BOX
205-4	P0887205-4	BALL BEARING 6204ZZ (FRONT)
205-5	P0887205-5	BALL BEARING 6204ZZ (REAR)
206	P0887206	KEY 6 X 6 X 22
207	P0887207	LOCK WASHER 6MM

REF	PART #	DESCRIPTION
208	P0887208	HEX BOLT M6-1 X 20
210	P0887210	DRIVE SHAFT WASHER 10 X 40 X 7
211	P0887211	LOCK WASHER 10MM
212	P0887212	HEX BOLT M10-1.5 X 20
215	P0887215	TABLE MOTOR COVER
216	P0887216	FLAT WASHER 8MM
217	P0887217	HEX NUT M8-1.25
218	P0887218	TABLE WORM GEAR COVER
219	P0887219	LOCK WASHER 10MM
220	P0887220	CAP SCREW M10-1.5 X 35
221	P0887221	TABLE WORM GEAR SPACER
222	P0887222	TABLE LOCK SHAFT
223	P0887223	KEY 5 X 5 X 20
224	P0887224	SHAFT COLLAR M6-1
225	P0887225	HEX BOLT M6-1 X 12
226	P0887226	EXT RETAINING RING 17MM
227	P0887227	FLAT WASHER 10MM
228	P0887228	LOCK WASHER 10MM
229	P0887229	CAP SCREW M10-1.5 X 80
230	P0887230	VISE BASE
231	P0887231	VISE END
232	P0887232	FLAT WASHER 12MM
233	P0887233	LOCK WASHER 12MM
234	P0887234	CAP SCREW M12-1.75 X 55
235	P0887235	SLEEVE BEARING 45 X 55 X 40
236	P0887236	VISE SHAFT
237	P0887237	VISE HYDRAULIC CYLINDER
238	P0887238	MOVABLE VISE JAW
239	P0887239	VISE SLIDE BLOCK
240	P0887240	CAP SCREW M12-1.75 X 40
241	P0887241	CAP SCREW M8-1.25 X 30
242	P0887242	MOVABLE VISE JAW PLATE
243	P0887243	CAP SCREW M8-1.25 X 20
245	P0887245	TABLE COVER (UPPER)
246	P0887246	WORKSTOP SCALE SUPPORT ROD
247	P0887247	WORKSTOP ROD SCALE
248	P0887248	RIVET 2 X 5 NAMEPLATE
249	P0887249	HEX NUT M22-1.5
250	P0887250	TABLE GIB
251	P0887251	ROLL PIN 6 X 15
252	P0887252	TABLE GIB LOCK BLOCK
253	P0887253	SET SCREW M6-1 X 8
254	P0887254	CAP SCREW M8-1.25 X 30
255	P0887255	TABLE GIB RELEASE BLOCK
256	P0887256	HEX NUT M8-1.25
257	P0887257	HEX BOLT M8-1.25 X 20
258	P0887258	TABLE LOCK HANDLE HUB
259	P0887259	STUD-DE M10-1.5 X 146, 12
260	P0887260	KNOB M10-1.5, D23, TAPERED
261	P0887261	WORKSTOP BRACKET
262	P0887262	ADJUSTABLE HANDLE M8-1.25 X 20, 52L
263	P0887263	ADJUSTABLE HANDLE M8-1.25 X 50, 82L
264	P0887264	WORKSTOP DISTANCE ROD



Table & Vise Parts List (Cont.)

REF	PART #	DESCRIPTION	REF	PART #	DESCRIPTION
265	P0887265	TABLE WHEEL BRACKET	320	P0887320	EYE BOLT M12-1.75 X 40
266	P0887266	LOCK WASHER 10MM	321	P0887321	EXTENSION SPRING 9 X 55 X 550
267	P0887267	CAP SCREW M10-1.5 X 20	322	P0887322	HEX NUT M12-1.75
268	P0887268	FLAT WASHER 8MM	323	P0887323	CAP SCREW M12-1.75 X 80
269	P0887269	LOCK WASHER 8MM	324	P0887324	CUP WASHER 12 X 25 X 12
270	P0887270	CAP SCREW M8-1.25 X 20	325	P0887325	PIVOT BLOCK
271	P0887271	BALL BEARING 6204ZZ	326	P0887326	CAP SCREW M14-2 X 75
272	P0887272	CAP SCREW M12-1.75 X 40	327	P0887327	BUSHING 40ID X 45OD X 40.5L
273	P0887273	FLAT WASHER 12MM	328	P0887328	FLAT WASHER 5MM
274	P0887274	LOCK WASHER 12MM	329	P0887329	BUTTON HD CAP SCR M58 X 12
275	P0887275	HEX NUT M12-1.75	330	P0887330	HEX NUT M10-1.5
276	P0887276	AXLE SLEEVE	331	P0887331	HEX BOLT M10-1.5 X 55
277	P0887277	HEX NUT M10-1.5	332	P0887332	HEX NUT M20-2.5
278	P0887278	HEX BOLT M10-1.5 X 35	333	P0887333	HEX BOLT M20-2.5 X 50
279	P0887279	KNOB BOLT M6-1 X 10, 5-LOBE, D35	334	P0887334	LIMIT SWITCH BRACKET
300	P0887300	HEADSTOCK SWIVEL BASE	335	P0887335	SENSOR BRACKET
301	P0887301	HEADSTOCK SWIVEL SHAFT	336	P0887336	FLAT WASHER 6MM
302	P0887302	TAPERED ROLLER BEARING 30312J	337	P0887337	CAP SCREW M6-1 X 10
303	P0887303	HEADSTOCK SWIVEL COVER (TOP)	338	P0887338	FLAT WASHER 5MM
304	P0887304	BEARING LOCK NUT M60-2 AN12	339	P0887339	BUTTON HD CAP SCR M58 X 10
305	P0887305	CAP SCREW M8-1.25 X 20	340	P0887340	HEADSTOCK HYDRAULIC CYLINDER
306	P0887306	BEARING LOCK WASHER 60MM AW12	341	P0887341	HEX NUT M20-1.5
307	P0887307	O-RING 52 X 4	342	P0887342	ROD-END BEARING POS-20
308	P0887308	HEADSTOCK SWIVEL COVER (BOTTOM)	343	P0887343	CYLINDER SUPPORT BLOCK
309	P0887309	ANGLE INDICATOR PLATE	344	P0887344	CAP SCREW M8-1.25 X 20
310	P0887310	TABLE WORM GEAR 42T	345	P0887345	CLEVIS PIN 20 X 70 HEADLESS
311	P0887311	ROLL PIN 8 X 15	346	P0887346	EXT RETAINING RING 20MM
312	P0887312	LOCK WASHER 10MM	347	P0887347	O-RING 70 X 3.1 G70
313	P0887313	CAP SCREW M10-1.5 X 35	348	P0887348	FLAT WASHER 6MM
314	P0887314	SENSOR BRACKET	349	P0887349	BUTTON HD CAP SCR M6-1 X 15
315	P0887315	EXTENSION SPRING BRACKET	350	P0887350	CUTOFF CHUTE
316	P0887316	LOCK WASHER 8MM	351	P0887351	FLAT WASHER 12MM
317	P0887317	CAP SCREW M8-1.25 X 25	352	P0887352	LOCK WASHER 12MM
318	P0887318	FLAT WASHER 12MM	353	P0887353	CAP SCREW M12-1.75 X 20
319	P0887319	HEX NUT M12-1.75			



Base & Accessories





Base & Accessories Parts List

REF	PART #	DESCRIPTION	REF	PART #	DESCRIPTION
360	P0887360	MACHINE BASE	414	P0887414	CAP SCREW M8-1.25 X 15
361	P0887361	TABLE WHEEL TRACK	415	P0887415	TOOLBOX
362	P0887362	FLAT WASHER 10MM	416	P0887416	FLAT WASHER 6MM
363	P0887363	CAP SCREW M10-1.5 X 20	417	P0887417	BUTTON HD CAP SCR M6-1 X 12
364	P0887364	SET SCREW M8-1.25 X 12	418	P0887418	SCREWDRIVER PHILLIPS #1
365	P0887365	FLAT WASHER 6MM	419	P0887419	SCREWDRIVER FLAT #1
366	P0887366	BUTTON HD CAP SCR M6-1 X 12	420	P0887420	CONTROL PANEL SWIVEL BASE (BOTTOM)
367	P0887367	COOLANT PUMP BRACKET	421	P0887421	CONTROL PANEL SWIVEL BASE (TOP)
368	P0887368	FLAT WASHER 6MM	422	P0887422	HEX NUT M8-1.25
369	P0887369	BUTTON HD CAP SCR M6-1 X 15	423	P0887423	SET SCREW M8-1.25 X 15
370	P0887370	COOLANT PUMP 1/8HP 220V 3-PH	424	P0887424	ADJUSTABLE HANDLE M8-1.25 X 25, 57L
371	P0887371	LOCK WASHER 6MM	425	P0887425	FLAT WASHER 8MM
372	P0887372	HEX BOLT M6-1 X 15	426	P0887426	CAP SCREW M8-1.25 X 15
373	P0887373	ACCESS PANEL (FRONT)	427	P0887427	CONTROL PANEL SUPPORT ARM
374	P0887374	ACCESS PANEL (REAR)	428	P0887428	FLAT WASHER 6MM
375	P0887375	ACCESS PANEL (RIGHT)	429	P0887429	BUTTON HD CAP SCR M6-1 X 12
376	P0887376	CAP SCREW M6-1 X 12	435	P0887435	CONTROL PANEL BOX
377	P0887377	HEX BOLT M8-1.25 X 20	436	P0887436	FLAT WASHER 5MM
378	P0887378	GREASE GUN	437	P0887437	BUTTON HD CAP SCR M58 X 12
379	P0887379	HEX WRENCH SET 1.5-10MM 10-PC	438	P0887438	FLAT WASHER 5MM
380	P0887380	SPLASH GUARD (RIGHT)	439	P0887439	BUTTON HD CAP SCR M58 X 12
381	P0887381	FLAT WASHER 8MM	440	P0887440	CONTROL PANEL HANDLE
382	P0887382	LOCK WASHER 8MM	441	P0887441	CAP SCREW M8-1.25 X 25
383	P0887383	BUTTON HD CAP SCR M8-1.25 X 20	442	P0887442	HEX NUT M8-1.25
384	P0887384	DRIP TRAY	443	P0887443	CONTROL PANEL ACCESS PANEL
385	P0887385	CHIP COLLECTION BIN	445	P0887445	FEED-RATE CONTROL UNIT
386	P0887386	SPLASH GUARD (FRONT)	446	P0887446	PHLP HD SCR M58 X 10
387	P0887386	SPLASH GUARD (REAR)	447	P0887447	DIAL EXTENSION
388	P0887388	FLAT WASHER 8MM	448	P0887448	SET SCREW M6-1 X 10
389	P0887389	BUTTON HD CAP SCR M8-1.25 X 20	449	P0887449	FEED-RATE SPEED DIAL
390	P0887390	LOCK WASHER 8MM	450	P0887450	CONTROL PANEL FACEPLATE
391	P0887391	HEX NUT M8-1.25	451	P0887451	FLAT WASHER 5MM
392	P0887392	FLAT WASHER 8MM	452	P0887452	BUTTON HD CAP SCR M58 X 12
393	P0887393	LOCK WASHER 8MM	471	P0887471	HYDRAULIC REGULATOR LUKU BRV-02G-1
394	P0887394	BUTTON HD CAP SCR M8-1.25 X 20	472	P0887472	HYDRAULIC HOSE 1/4 D X 2200MM
395	P0887395	SUPPORT BRACKET (SHORT)	473	P0887473	HYDRAULIC HOSE 1/4 D X 5800MM
396	P0887396	SUPPORT BRACKET (LONG)	474	P0887474	HYDRAULIC HOSE 1/4 D X 4800MM
397	P0887397	SUPPORT BRACKET W/HOSE CATCH	475	P0887475	HYDRAULIC HOSE 1/4 D X 3200MM
400	P0887400	ELECTRICAL CABINET	476	P0887476	HYDRAULIC HOSE 1/4 D X 2900MM
401	P0887401	ELECTRICAL PANEL	477	P0887477	HYDRAULIC HOSE 1/4 D X 900MM, 90-DEG
402	P0887402	ELECTRICAL CABINET DOOR	478	P0887478	HYDRAULIC HOSE 1/4 D X 900MM, 90-DEG
403	P0887403	ADJUSTABLE WRENCH	479	P0887479	HYDRAULIC HOSE 1/4 D X 900MM
404	P0887404	WRENCH 21 X 23MM OPEN-ENDS	480	P0887480	HYDRAULIC HOSE 1/4 D X 2100MM
405	P0887405	WRENCH 17 X 19MM OPEN-ENDS	481	P0887481	HYDRAULIC REGULATOR BRACKET
406	P0887406	WRENCH 14 X 17MM OPEN-ENDS	482	P0887482	FLAT WASHER 6MM
407	P0887407	WRENCH 12 X 14MM OPEN-ENDS	483	P0887483	BUTTON HD CAP SCR M6-1 X 12
408	P0887408	WRENCH 10 X 12MM OPEN-ENDS	484	P0887484	HEX BOLT M16-2 X 75
409	P0887409	WRENCH 8 X 9MM OPEN-ENDS	485	P0887485	HEX NUT M16-2
410	P0887410	CONTROL PANEL SUPPORT BRACKET	486	P0887486	FOOT PAD
411	P0887411	FLAT WASHER 8MM	487	P0887487	COOLANT RESERVOIR DRAIN PLUG M16-2
412	P0887412	CAP SCREW M8-1.25 X 20	488	P0887488	COOLANT THERMOMETER UNIT
413	P0887413	FLAT WASHER 8MM	489	P0887489	WIRED 220V LABEL





470	P0887470	HYDRAULIC PUMP ASSEMBLY	470-11	P0887470
470-1	P0887470-1	MOTOR FAN COVER	470-12	P0887470
470-2	P0887470-2	MOTOR FAN	470-13	P0887470
470-3	P0887470-3	MOTOR JUNCTION BOX	470-14	P0887470
470-4	P0887470-4	BALL BEARING 6205ZZ (FRONT)	470-15	P0887470
470-5	P0887470-5	BALL BEARING 6204ZZ (REAR)	470-16	P0887470
470-6	P0887470-6	HYDRAULIC MOTOR 2HP 220V 3-PH	470-17	P0887470
470-7	P0887470-7	SUCTION FILTER ASSEMBLY	470-18	P0887470
470-8	P0887470-8	HYDRAULIC PUMP LUKU-12L-35KG	470-19	P0887470
470-9	P0887470-9	VISE SOLENOID VALVE D5-3C2-02-AC24	470-20	P0887470
470-10	P0887470-10	SAW BOW SOLENOID VALVE D5-3C4-02-AC24		

REF	PART #	DESCRIPTION
470-11	P0887470-11	FILL CAP AB-1162
470-12	P0887470-12	HYDRAULIC FLUID TANK
470-13	P0887470-13	OIL LEVEL GAUGE LS-3
470-14	P0887470-14	MANIFOLD ASSEMBLY HORIZONTAL
470-15	P0887470-15	PILOT CHECK VALVE MPC-02-W-30
470-16	P0887470-16	PRESSURE GAUGE
470-17	P0887470-17	PRESSURE CHECK VALVE 1/4"PT
470-18	P0887470-18	PRESSURE SENSOR PMM50A14K
470-19	P0887470-19	MANIFOLD ASSEMBLY VERTICAL
470-20	P0887470-20	FLOW CONTROL VALVE ASSEMBLY PT-02



Blade Guides & Support Vise



REF	PART #	DESCRIPTION
500	P0887500	BLADE GUIDE SUPPORT ARM (LEFT)
501	P0887501	BLADE GUIDE ARM GIB
502	P0887502	FLAT WASHER 12MM
503	P0887503	ADJUSTABLE HANDLE M12-1.75 X 50, 93L
504	P0887504	BLADE GUIDE SUPPORT ARM (RIGHT)
510	P0887510	BLADE GUIDE MOUNTING BLOCK (RIGHT)
511	P0887511	FLAT WASHER 10MM
512	P0887512	CAP SCREW M10-1.5 X 40
513	P0887513	SET SCREW M8-1.25 X 20
514	P0887514	CARBIDE GUIDE MOUNTING BLOCK (RIGHT)
515	P0887515	CAP SCREW M8-1.25 X 40
516	P0887516	CAP SCREW M6-1 X 22
517	P0887517	CARBIDE BLADE GUIDE (REAR)
518	P0887518	CARBIDE BLADE GUIDE (FRONT)
519	P0887519	CARBIDE BLADE GUIDE (TOP)
521	P0887521	BLADE GUIDE MOUNTING BLOCK (LEFT)
522	P0887522	BLADE GUIDE SHAFT
523	P0887523	COMPRESSION SPRING 1.2 X 10.8 X 24.2
524	P0887524	BLADE GUIDE KNOB M18-1.5 X 25 KNURLED
525	P0887525	FLAT WASHER 8MM
526	P0887526	BALL BEARING 6201ZZ
527	P0887527	BLADE GUIDE BUSHING
528	P0887528	BLADE GUIDE ECCENTRIC BUSHING
529	P0887529	LOCK WASHER 8MM
530	P0887530	CAP SCREW M8-1.25 X 40

REF	PART #	DESCRIPTION
531	P0887531	CARBIDE GUIDE MOUNTING BLOCK (LEFT)
532	P0887532	BLADE GUARD (LEFT)
533	P0887533	BLADE GUARD EXTENSION
534	P0887534	FLAT WASHER 6MM
535	P0887535	BUTTON HD CAP SCR M6-1 X 12
536	P0887536	FLAT WASHER 6MM
537	P0887537	BUTTON HD CAP SCR M6-1 X 12
538	P0887538	BLADE GUARD (RIGHT)
540	P0887540	SUPPORT VISE BASE
541	P0887541	SUPPORT VISE BASE LOCK COLLAR
542	P0887542	ADJUSTABLE HANDLE M8-1.25 X 40, 72L
543	P0887543	FLAT WASHER 12MM
544	P0887544	ADJUSTABLE HANDLE M12-1.75 X 40, 83L
545	P0887545	SET SCREW M8-1.25 X 15
546	P0887546	SUPPORT VISE JAW/GUIDE
547	P0887547	SUPPORT VISE ADJUSTMENT SHAFT
548	P0887548	SUPPORT VISE LEADSCREW SLEEVE
549	P0887549	SET SCREW M8-1.25 X 10
550	P0887550	SUPPORT VISE LEADSCREW
551	P0887551	BUSHING
552	P0887552	SUPPORT VISE HANDLE HUB
553	P0887553	ROLL PIN 5 X 25
554	P0887554	STANDOFF-ROUND FF M6-1, 150
555	P0887555	BUTTON HD CAP SCR M6-1 X 12



Coolant System



REF	PART #	DESCRIPTION
601	P0887601	CONNECTOR 3/8PT X 3/8PT STRAIGHT
602	P0887602	T- CONNECTOR 3/8PT
603	P0887603	HOSE FITTING 3/8PT X 5/16PT
604	P0887604	COOLANT HOSE 5/16" X 1800MM
605	P0887605	VALVE ASSEMBLY 1/4PT X 5/16PT BRASS
606	P0887606	FLEXIBLE COOLANT NOZZLE 1/4PT, 12", SS
607	P0887607	COOLANT HOSE 5/16" X 2800MM

REF PART # DESCRIPTION

NEF	FANI#	DESCRIPTION
608	P0887608	3-WAY HOSE CONNECTOR 5/16PT BRASS
609	P0887609	COOLANT HOSE 5/16" X 2500MM
610	P0887610	COOLANT HOSE 5/16" X 1800MM
611	P0887611	HOSE CLIP 5/16"
613	P0887612	HOSE FITTING 3/8PT X 1/2PT
614	P0887613	COOLANT HOSE 1/2" X 2800MM
615	P0887614	COOLANT SPRAY GUN


Control Panel & Electrical Components





LIMIT SWITCHES

HOME PROXIMITY SWITCH 715



BLADE SPEED SENSOR & METER



ROTARY POTENTIOMETER



SAFETY DOOR SWITCH



REF PART # DESCRIPTION

-		
701	P0887701	CIRCUIT BOARD RF500DSB 1312
702	P0887702	ELECTRONIC COUNTER GIKOKA EM 6R22
703	P0887703	HEADSTOCK JOYSTICK SCHNEIDER 2D-PA103
704	P0887704	BUTTON SWITCH NHD CB-10, PL-BA9 NLB22-F
705	P0887705	E-STOP BUTTON KEDU HY57B
706	P0887706	KEY SWITCH NHD CB-01 NSS22-K
707	P0887707	CIRCUIT BOARD RF500FU3 0904
708	P0887708	LIMIT SWITCH CANLIE AZD-1001T

REF	PART #	DESCRIPTION
709	P0887709	LIMIT SWITCH SHINOZAKI AZD-1001T
710	P0887710	BLADE SPEED SENSOR & SPEEDOMETER W/PCB
712	P0887712	POTENTIOMETER COSMOS RV24YN 20S
713	P0887713	LIMIT SWITCH CANLIE AZD-S11
714	P0887714	PHLP HD SCR M35 X 8
715	P0887715	INT TOOTH WASHER 8MM
716	P0887716	HEX NUT M8-1.25
717	P0887717	PROXIMITY SENSOR TKT TM-0801NO



Electrical Cabinet







Electrical Cabinet Parts List

REF	PART #	DESCRIPTION
801	P0887801	WIRING LOOM 1-1/4 X 1-3/4 X 14"
802	P0887802	WIRING LOOM 1-1/4 X 1-3/4 X 13"
803	P0887803	WIRING LOOM 1-3/4 X 1-3/4 X 20-1/2"
804	P0887804	WIRING LOOM 1 X 1-3/4 X 13"
805	P0887805	DIN RAIL 1-3/8 X 3/8 X 12"
806	P0887806	DIN RAIL 1-3/8 X 3/8 X 12"
807	P0887807	DIN RAIL END CAP
808	P0887808	POWER SWITCH ASSY ABB 0T25F3/YJ1/20
809	P0887809	CONTACTOR NHD C-06D10 24V
810	P0887810	OL RELAY TECO RHU-10/1K1 0.75-1A
811	P0887811	CONTACTOR TECO CU-18 24V
812	P0887812	OL RELAY TECO RHU-10/16K1 11.3-16A
813	P0887813	FUSE HOLDER
814	P0887814	FUSE 5A 250V CERAMIC 0.18"
815	P0887815	PHLP HD SCR M47 X 15
816	P0887816	PHLP HD SCR 1/4-20 X 3/8
817	P0887817	GROUND TERMINAL 16-POLE 1-PIECE

REF	PART #	DESCRIPTION
818	P0887818	TERMINAL BAR 1P
819	P0887819	TERMINAL BAR 3P
820	P0887820	TERMINAL BAR 2P
821	P0887821	TERMINAL BAR 1P
822	P0887822	TERMINAL BAR 16P
823	P0887823	FUSE HOLDER WOHNER AES 10 X 38
824	P0887824	FUSE 32A 250V CERAMIC 0.36"
825	P0887825	VFD ABB ACS150-03E-04A7-2
826	P0887826	BRAKING RESISTOR 250W
827	P0887827	PHLP HD SCR M58 X 10
828	P0887828	TRANSFORMER 250VA 0/250V-24/200V
829	P0887829	CIRCUIT BOARD RF500M 0904
830	P0887830	PHLP HD SCR M35 X 8
831	P0887831	STRAIN RELIEF TYPE-3 1
832	P0887832	POWER CORD 10G 4W 120"
833	P0887833	OL RELAY TECO RHU-10/1K1 5.5-7.5A





REF	PART #	DESCRIPTION	REF	PART #	DESCRIPTION
901	P0887901	SAFETY GLASSES LABEL	908	P0887908	GRIZZLY NAMEPLATE-LARGE
902	P0887902	ELECTRICITY LABEL	909	P0887909	GRIZZLY.COM LABEL
903	P0887903	MODEL NUMBER LABEL	910	P0887910	ELECTRICITY LABEL-LARGE
904	P0887904	MACHINE ID LABEL	911	P0887911	BANDSAW BLADE LABEL
905	P0887905	DISCONNECT 220V LABEL	912	P0887912	220V 3-PHASE ELECTRICITY LABEL
906	P0887906	READ MANUAL LABEL	913	P0887913	TOUCH-UP PAINT, GRIZZLY GREEN
907	P0887907	FLUID CAPACITY LABEL	914	P0887914	TOUCH-UP PAINT, GRIZZLY PUTTY
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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.

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WARRANTY & RETURNS

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

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

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/forms/warranty**, or you can scan the QR code below to be automatically directed to our warranty registration page. Enter all applicable information for the product.





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