

Grizzly *Industrial, Inc.*®

MODEL G0664 HEAVY DUTY METAL CUTTING BANDSAW w/ROLLERS OWNER'S MANUAL



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

#JB10466 PRINTED IN TAIWAN

 **WARNING!**

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

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

The owner of this machine/equipment 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, blade/cutter integrity, and the usage of personal protective equipment.

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

 **WARNING!**

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

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

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

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INTRODUCTION

Foreword

We are proud to offer the Model G0664 Heavy Duty Metal Cutting Bandsaw w/Rollers. This machine is part of a growing Grizzly family of fine metalworking machinery. When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

The specifications, drawings, and photographs illustrated in this manual represent the Model G0664 when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly. For your convenience, we always keep current Grizzly manuals available on our website at www.grizzly.com. Any updates to your machine will be reflected in these manuals as soon as they are complete. Visit our site often to check for the latest updates to this manual!

Contact Info

We stand behind our machines. If you have any service questions, parts requests or general questions about the machine, please call or write us at the location listed below.

Grizzly Industrial, Inc.
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
Fax: (800) 438-5901
E-Mail: techsupport@grizzly.com

If you have any comments regarding this manual, please write to us at the address below:

Grizzly Industrial, Inc.
c/o Technical Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com

Functional Overview

A horizontal metal cutting bandsaw is used to make straight cuts in metal workpieces.

The Model G0664 Heavy Duty Metal Cutting Bandsaw with Rollers features a 2½ HP motor, hydraulic upfeed and downfeed, a vise with hydraulic clamping, two blade speeds, variable speed downfeed, cutting angles from -45° to 60°, a blade coolant system, infeed and outfeed roller tables, and laser light cut alignment.

To make cuts, the operator first adjusts the blade to the desired cutting angle, then raises the blade and opens the vise. A workpiece is placed onto the table and the vise is manually closed to within ¼" of the workpiece. The vise close button is pressed to hydraulically clamp the workpiece into the vise. If needed for the operation, the blade coolant pump is started and the blade is turned on. The blade is hydraulically lowered into the workpiece by pressing the blade down button. The feed speed is adjusted with the feed speed knob on the control panel.

When the cut is complete, the blade automatically stops and returns to the top of its travel. The workpiece is released from the vise by pressing the vise open button.

Long workpieces can be supported by the infeed and outfeed roller tables.



Identification

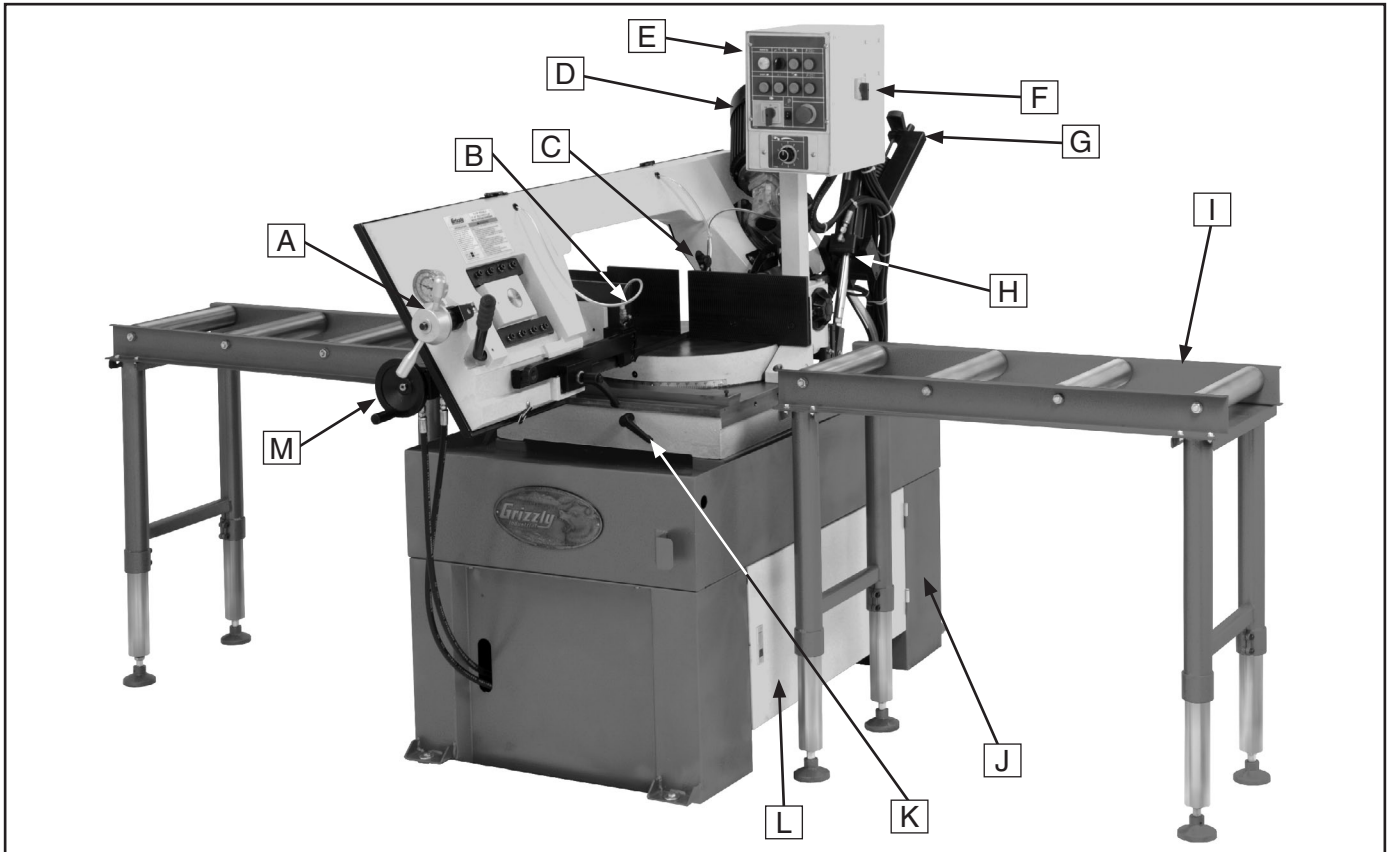


Figure 1. G0664 Machine Identification.

- A. Blade Tension Handwheel
- B. Cutting Fluid Flow Valve
- C. Cut Alignment Laser
- D. Bandsaw Motor
- E. Control Panel
- F. Machine ON/OFF Switch
- G. Feed Pressure Adjust Spring
- H. Saw Control Ram
- I. Infeed/Outfeed Tables
- J. Main Support Cabinet
- K. Headstock Swivel Lock Lever
- L. Cabinet
- M. Vise Handwheel





MACHINE DATA SHEET

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

MODEL G0664 HEAVY DUTY METAL CUTTING BANDSAW

Product Dimensions:

Net Weight 1012 lbs. + (Roller Tables: 176 lbs.)
 Length/Width/Height 106" x 74" x 62¹/₂" (w/ Roller Tables)
 Foot Print (Length/Width)..... 100" x 53¹/₂" (Stand 28¹/₂" x 53¹/₂")

Shipping Dimensions:

Type Wood Slat Crate (1 of 2), Box (2 of 2)
 Content..... Machine (1 of 2), Roller Tables (2 of 2)
 Weight..... 1078 lbs. + 185 lbs.
 Length/Width/Height.....86" x 32¹/₂" x 45" (1 of 2), 82" x 38" x 15" (2 of 2)

Electrical:

Switch.....Control Box on Swing Base
 Switch Voltage 220V
 Cord Length 6 ft.
 Cord Gauge 14 gauge
 Recommended Circuit Size 12 amp
 Included Plug No
 Recommended Plug 15-15

Motors:

Main

Type.....TEFC Induction
 Horsepower 2.5 HP
 Voltage 220V
 Prewired 220V
 Phase Three
 Amps 7.64/6.6A
 Speed 3450/1725 RPM
 Cycle..... 60 Hz
 Number Of Speeds.....2
 Power Transfer Gear Box Drive
 BearingsShielded and Lubricated

Hydraulic Motor

Type.....TEFC Induction
 Horsepower 1/2 HP
 Voltage 220V
 Prewired 220V
 Phase Three
 Amps 2A
 Speed 1725 RPM
 Cycle..... 60 Hz



Coolant Pump Motor

Type.....	TEFC Induction
Power	53W
Voltage	220V
Amps	0.3A
Speed	3450 RPM
Cycle.....	60 Hz

Main Specifications:

Operation Information

Blade Speed.....	160, 320 FPM
Standard Blade Size.....	1 1/16" x 130 1/16"
Miter Angle	Right 45°, Left 60°

Cutting Capacities

Angle Cuts.....	Right 45°, Left 60°
Vise Jaw Depth	10 3/4"
Vise Jaw Height.....	6 1/4"
90° Round Max. Capacity	11 7/8"
90° Square Max. Capacity	10" x 10"
90° Rectangular Max. Capacity.....	13" x 8"
45° Round Max. Capacity	10"
45° Square Max. Capacity	9" x 9"
45° Rectangular Max. Capacity.....	7 1/2" x 10"
30° Round Max. Capacity	7"
30° Square Max. Capacity	6 1/2" x 6 1/2"
30° Rectangular Max. Capacity.....	6 1/2" x 6 1/2"

Construction

Table Construction	Cast Iron
Wheel Construction Upper	Cast Iron
Wheel Construction Lower	Cast Iron
Body Construction	Cast Iron
Base Construction	Cast Iron
Stand Construction.....	Formed Steel
Wheel Cover Construction	Pre-Formed Steel
Paint	Powder Coating

Other

Blade Guides Upper and Lower.....	Tungsten Carbide Tipped Guide
Coolant Capacity	2 1/2 Gal.

Other Specifications:

Country Of Origin	Taiwan
Warranty.....	1 Year
Serial Number Location	Grizzly ID Label
Assembly Time	30 minutes

Features:

- Two Speeds
- Adjustable Hydraulic Downfeed and Quick Lift System
- Automatic Shut-off
- Blade Tension Indicator
- Adjusting Spring For Smooth Downfeed
- Control Panel
- 39"L x 18"W Front & Rear Roller Tables
- Laser Guide



SECTION 1: SAFETY

WARNING

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.



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

This symbol is used to alert the user to useful information about proper operation of the machine.

WARNING

Safety Instructions for Machinery

- 1. READ THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.
- 2. ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eyeglasses only have impact resistant lenses—they are NOT safety glasses.
- 3. ALWAYS WEAR A NIOSH APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Most types of dust (wood, metal, etc.) can cause severe respiratory illnesses.
- 4. ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing loss.
- 5. WEAR PROPER APPAREL. DO NOT** wear loose clothing, gloves, neckties, rings, or jewelry that can catch in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
- 6. NEVER OPERATE MACHINERY WHEN TIRED OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.



WARNING

Safety Instructions for Machinery

7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.
8. **KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.
9. **MAKE WORKSHOP CHILDPROOF.** Use padlocks, master switches, and remove start switch keys.
10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power **OFF** and allow all moving parts to come to a complete stop before leaving machine unattended.
11. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.
12. **KEEP WORK AREA CLEAN AND WELL LIGHTED.** Clutter and dark shadows may cause accidents.
13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Grounded cords minimize shock hazards. Undersized cords create excessive heat. Always replace damaged extension cords.
14. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY.** Make sure switch is in OFF position before reconnecting.
15. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**
17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make a habit of checking for keys and adjusting wrenches before turning machinery **ON**.
18. **CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding or misaligned parts, broken parts, loose bolts, and any other conditions that may impair machine operation. Repair or replace damaged parts before operation.
19. **USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. Improper accessories increase risk of injury.
20. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.
21. **SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.
22. **DO NOT OVERREACH.** Maintain stability and balance at all times.
23. **MANY MACHINES CAN EJECT WORKPIECES TOWARD OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."
24. **ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY.**
25. **CERTAIN DUST MAY BE HAZARDOUS** to the respiratory systems of people and animals, especially fine dust. Be aware of the type of dust you are exposed to and always wear a respirator designed to filter that type of dust.



WARNING

Additional Safety Instructions for Bandsaws

- 1. BLADE CONDITION.** Do not operate with dull, cracked or badly worn blade. Inspect blades for cracks and missing teeth before each use.
- 2. HAND PLACEMENT.** Never position fingers or thumbs in line with the cut. Hands could be crushed in vise or by falling machine components, or cut by the blade.
- 3. ENTANGLEMENT HAZARDS.** Do not operate this bandsaw without blade guard in place. Otherwise, loose clothing, jewelry, long hair and work gloves can be drawn into working parts.
- 4. BLADE REPLACEMENT.** When replacing blades, make sure teeth face toward the workpiece. Wear gloves to protect hands and safety glasses to protect eyes.
- 5. WORKPIECE HANDLING.** Always support the workpiece with table, vise, or other support fixture. Flag long pieces to avoid a tripping hazard. Never hold the workpiece with your hands during a cut.
- 6. LOSS OF STABILITY.** Unsupported workpieces may jeopardize machine stability and cause the machine to tip and fall, which could cause serious injury.
- 7. POWER INTERRUPTION.** Unplug machine after power interruption. Machines without magnetic switches can start up after power is restored.
- 8. FIRE HAZARD.** Use EXTREME CAUTION if cutting magnesium. Using the wrong cutting fluid will lead to chip fire and possible explosion.
- 9. CUTTING FLUID SAFETY.** Always follow manufacturer's cutting fluid safety instructions. Pay particular attention to contact, contamination, inhalation, storage and disposal warnings. Spilled cutting fluid creates a slipping and toxicity hazard.
- 10. ATTENTION TO WORK AREA.** Never leave a machine running and unattended. Pay attention to the actions of others in the area to avoid unintended accidents.
- 11. MAINTENANCE/SERVICE.** All inspections, adjustments, and maintenance are to be done with the machine **OFF** and the power disconnected to the machine. Wait for all moving parts to come to a complete stop.
- 12. HEARING PROTECTION & HAZARDS.** Noise generated by blade and workpiece vibration, material handling, and power transmission can cause permanent hearing loss over time and interfere with communication and audible signals. Always wear hearing protection.
- 13. HOT SURFACES.** Due to friction, the workpiece, chips, and some machine components can be hot enough to burn you.

WARNING

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

CAUTION

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

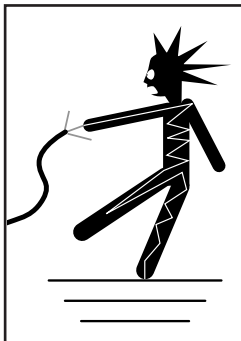


SECTION 2: CIRCUIT REQUIREMENTS

220V Operation

!WARNING

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



!WARNING

Electrocution or fire could result if machine is not grounded and installed in compliance with electrical codes. Compliance **MUST** be verified by a qualified electrician!

Full Load Amperage Draw

This machine draws the following amps under maximum load:

Amp Draw..... 10 Amps

Power Supply Circuit Requirements

You **MUST** connect your machine to a grounded circuit that is rated for the amperage given below. Never replace a circuit breaker on an existing circuit with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. **If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, consult a qualified electrician.**

Minimum Circuit Size..... 15 Amps

Power Connection Device

The type of plug required to connect your machine to power depends on the type of service you currently have or plan to install. We recommend using the plug shown in **Figure 2**.

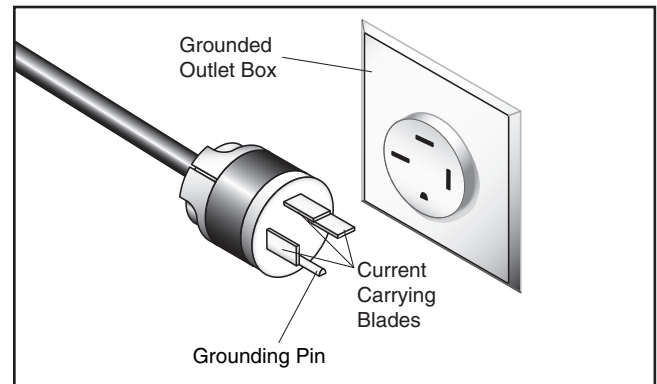


Figure 2. NEMA 15-15 plug and outlet.

Extension Cords

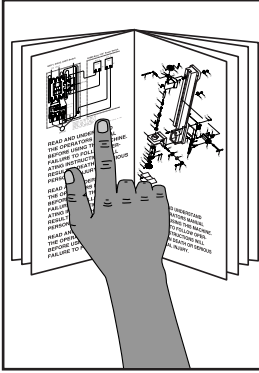
Using extension cords may reduce the life of the motor. Instead, place the machine near a power source. If you must use an extension cord:

- Use at least a 14 gauge cord that does not exceed 50 feet in length!
- The extension cord must also have a ground wire and plug pin.
- A qualified electrician **MUST** size cords over 50 feet long to prevent motor damage.



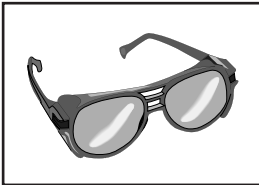
SECTION 3: SETUP

Setup Safety



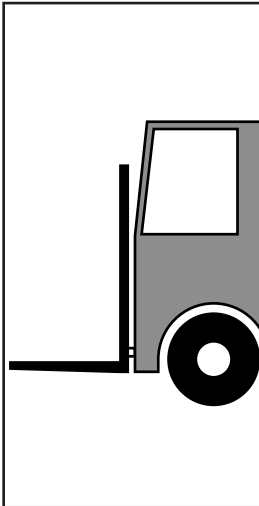
!WARNING

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



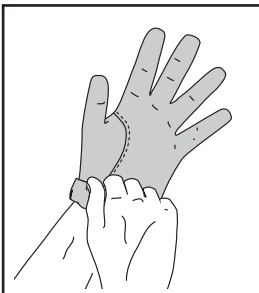
!WARNING

Wear safety glasses during the entire setup process!



!WARNING

The Model G0664 is an extremely heavy machine. Serious personal injury may occur if safe moving methods are not followed. To be safe, you will need assistance and power equipment when moving the shipping crate and removing the machine from the crate.



!CAUTION

CUTTING HAZARD!
Blades are sharp! Put on heavy leather gloves when handling a blade or making adjustments near a blade or cutter!

Items Needed for Setup

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

Description	Qty
• Assistant.....	1
• Safety Glasses (for each person).....	1 Pair
• Mounting Hardware (optional)	As Needed
• Power Lifting Equipment (Rated for at least 1200 lbs.)	1
• Lifting Straps and Hooks (Rated for at least 1200 lbs.)	As Needed

Unpacking

The Model G0664 was carefully packed when it left our warehouse. If you discover the machine is damaged after you have signed for delivery, *please immediately call Customer Service at (570) 546-9663 for advise.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, you should inventory the contents.



Inventory

The following is a description of the main components shipped with your machine. Lay the components out to inventory them.

Note: *If you can't find an item on this list, check the mounting location on the machine or examine the packaging materials carefully. Occasionally we pre-install certain components for shipping purposes.*

Machine Inventory: (Figure 3)	Qty
A. Bandsaw (not shown)	1
B. Coolant Catch Tray	1
C. Work Stop Rod	1
D. Work Stop	1
E. Hex Bolts M16-2 x 50 (leveling feet)	4
F. Hex Nuts M16-2 (leveling feet)	4

Roller Table Inventory: (Figure 4)	Qty
G. Coolant Reservoir Cover	1
H. Roller Tables	2
I. Lower Legs	8
J. Leg Assemblies	4
K. Foot Assemblies	8
L. Hex Nuts M8-1.25	16
M. Flat Washers 8mm	16
N. Hex Bolts M8-1.25 x 16	16
O. Button Head Cap Screws M6-1 x 10 (Coolant Reservoir Cover)(Not Shown)	4

If any nonproprietary 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.

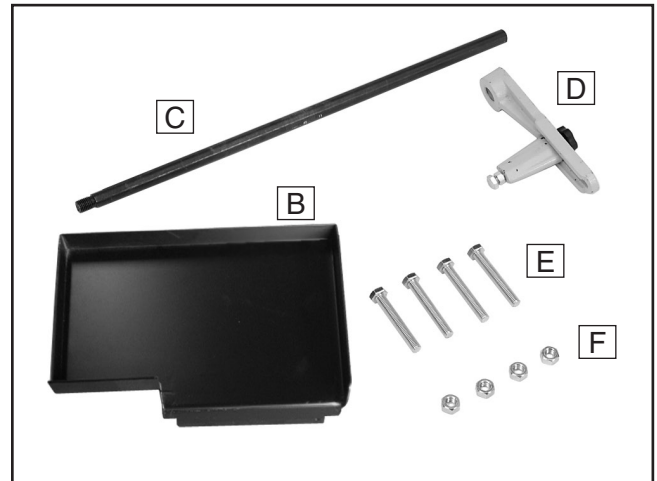


Figure 3. Inventory.

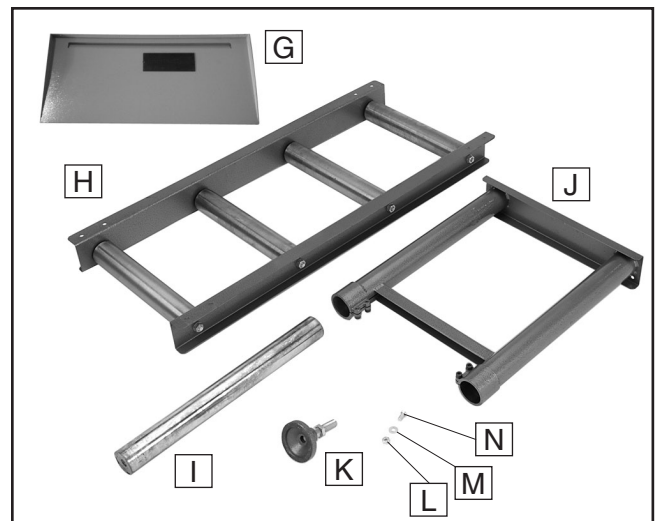



Figure 4. Roller table inventory.

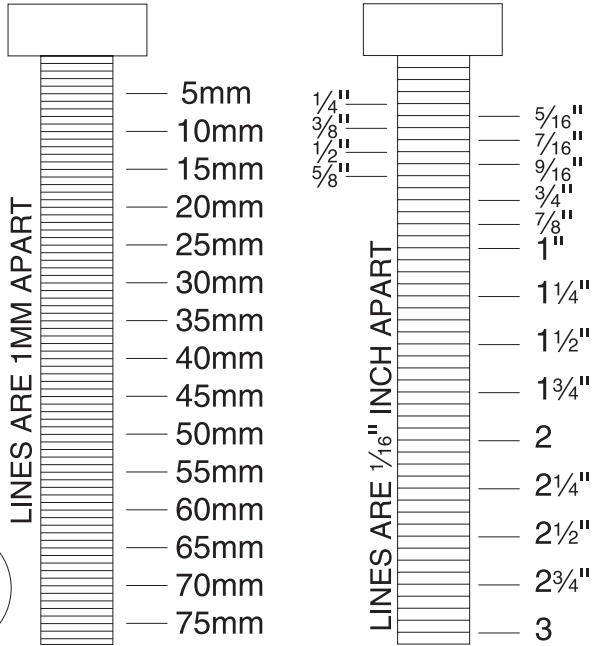
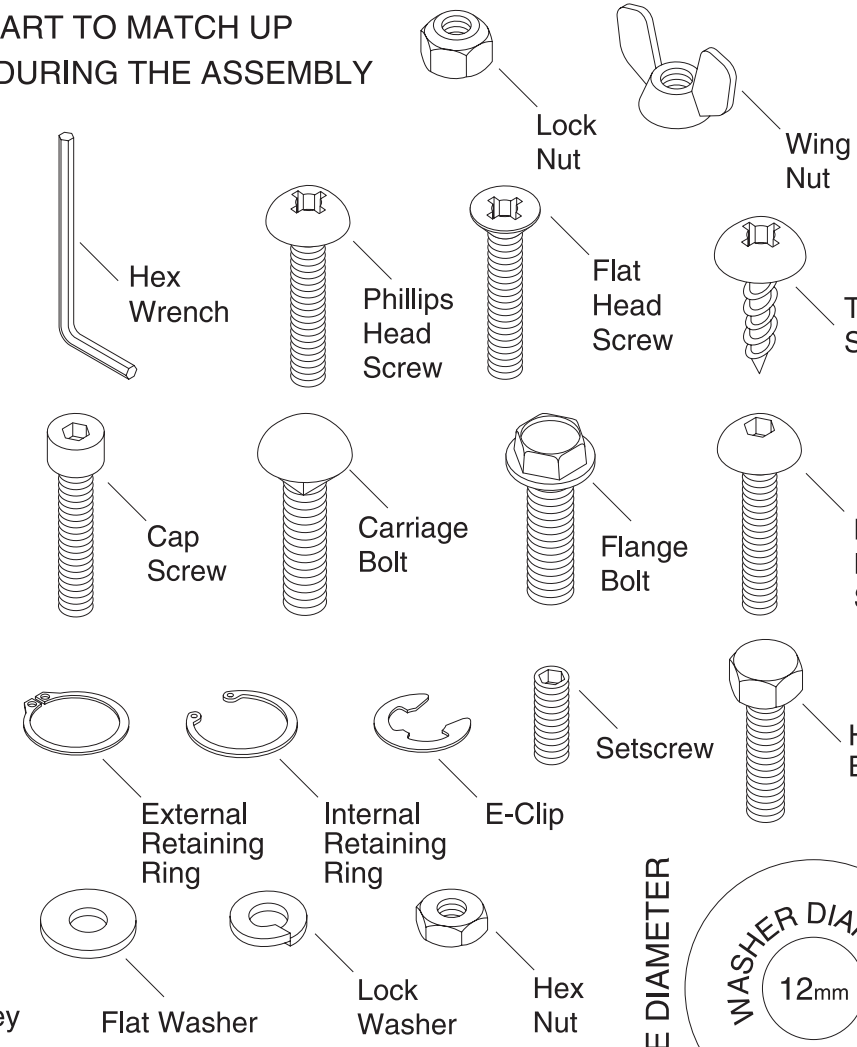
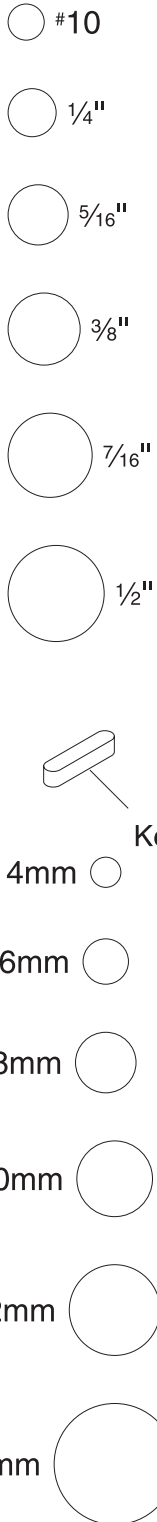
	<p>⚠WARNING SUFFOCATION HAZARD! Immediately discard all plastic bags and packing materials to eliminate choking/suffocation hazards for children and animals.</p>
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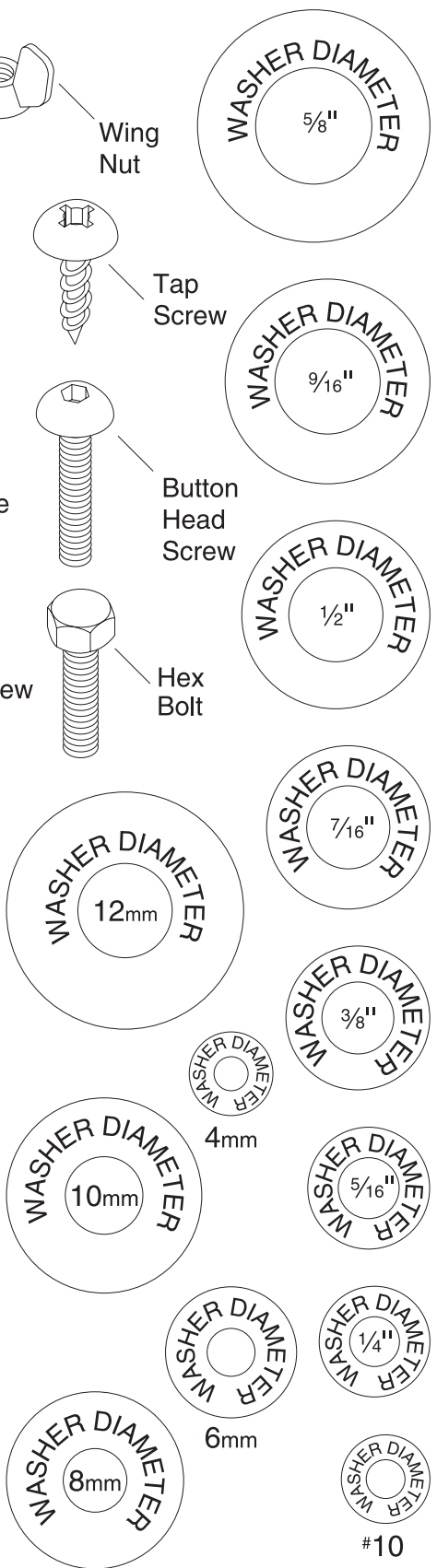
Hardware Recognition Chart

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

MEASURE BOLT DIAMETER BY PLACING INSIDE CIRCLE




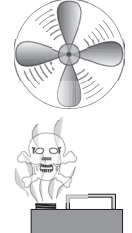
WASHERS ARE MEASURED BY THE INSIDE DIAMETER



Clean Up

The unpainted surfaces are coated with a waxy oil to prevent corrosion during shipment. Remove this protective coating with a solvent cleaner or degreaser, such as shown in **Figure 5**. For thorough cleaning, some parts must be removed. **For optimum performance, clean all moving parts or sliding contact surfaces.** Avoid chlorine-based solvents, such as acetone or brake parts cleaner that may damage painted surfaces. Always follow the manufacturer's instructions when using any type of cleaning product.

	<p>! WARNING Gasoline and petroleum products have low flash points and can explode or cause fire if used to clean machinery. DO NOT use these products to clean the machinery.</p>
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	<p>! CAUTION Many cleaning solvents are toxic if inhaled. Minimize your risk by only using these products in a well ventilated area.</p>
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G2544—Solvent Cleaner & Degreaser
A great product for removing the waxy shipping grease from your machine during clean up.

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

Figure 5. Cleaner/degreaser available from Grizzly.

Site Considerations

Floor Load

Refer to the **Machine Data Sheet** for the weight and footprint specifications of your machine. Some residential floors may require additional reinforcement to support both the machine and operator.

Placement Location

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your new machine. See **Figure 6** for the minimum working clearances.

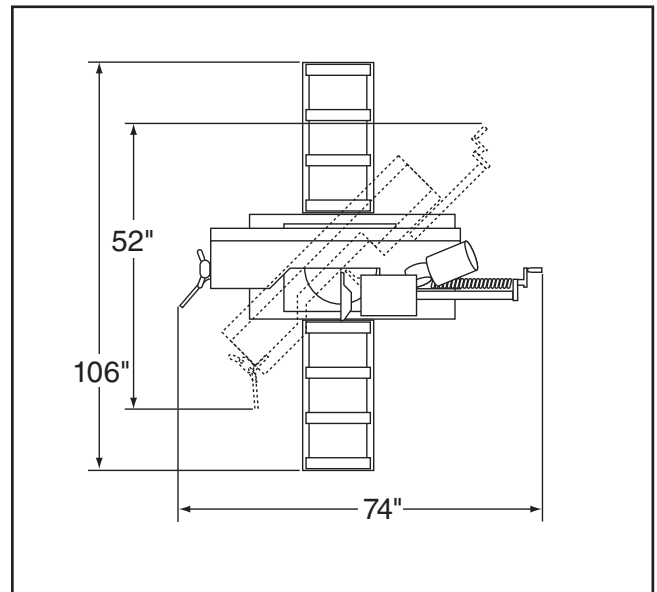
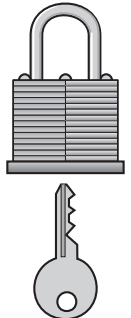


Figure 6. Minimum working clearances.

	<p>! CAUTION Children and visitors may be seriously injured if unsupervised around this machine. Lock entrances to the shop or disable start switch or power connection to prevent unsupervised use.</p>
--	---



Moving & Placing

The base of the Model G0664 contains four lifting points to allow the machine to be moved into position.

To move the machine:

1. Remove the four lag screws that mount the machine to the pallet at the base of the shipping crate.
2. Insert round steel bars through the lifting holes and attach lifting hooks and straps to the bars as shown in **Figure 7**.

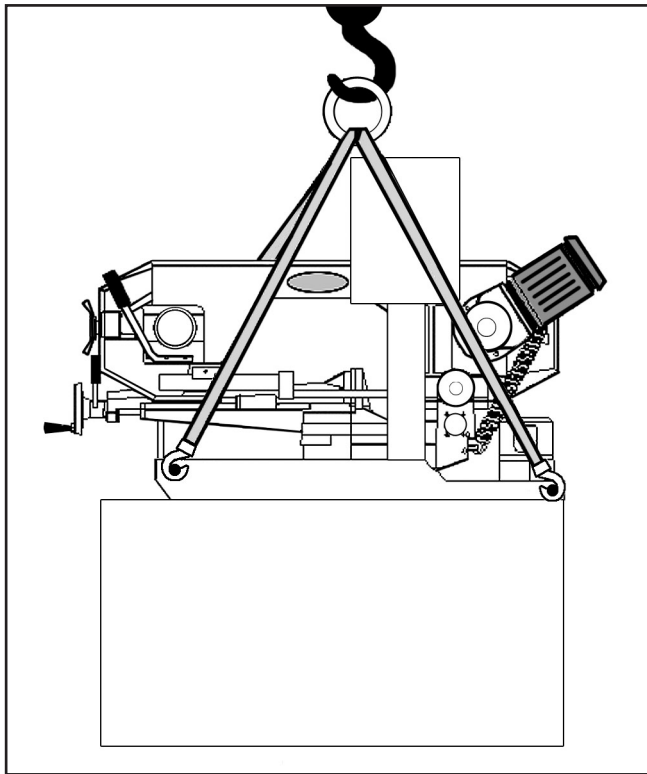
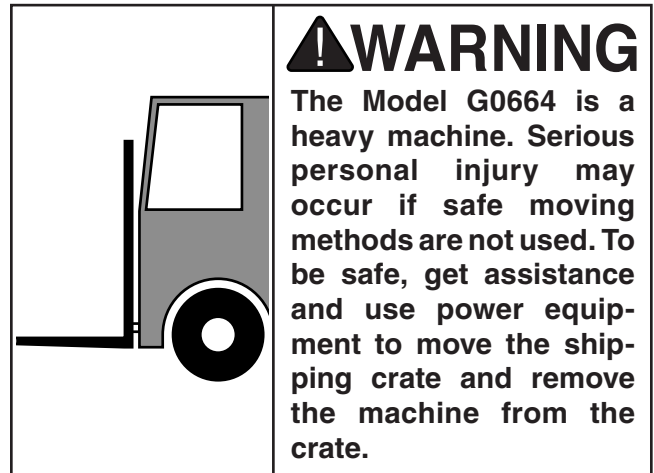


Figure 7. G0664 lifting points.



WARNING
The Model G0664 is a heavy machine. Serious personal injury may occur if safe moving methods are not used. To be safe, get assistance and use power equipment to move the shipping crate and remove the machine from the crate.

3. Lift the machine just high enough to clear the pallet, then move it to its final location. Have an assistant stabilize the machine while moving.

—If you plan to use the leveling feet rather than mounting the machine to the floor, set the machine on blocks at least 4" above the ground before putting it in the final location, then proceed to **Leveling Feet** on **Page 18**.
4. Re-install the coolant reservoir cover/catch tray.



Mounting to Shop Floor

Although not required, we recommend that you mount your new machine to the floor. Because this is an optional step and floor materials may vary, floor mounting hardware is not included. Generally, you can either bolt your machine to the floor or mount it on machine mounts. Both options are described below. Whichever option you choose, it is necessary to level your machine with a precision level.

Bolting to Concrete Floors

Lag shield anchors with lag bolts and anchor studs (**Figure 8**) are two popular methods for anchoring an object to a concrete floor. We suggest you research the many options and methods for mounting your machine and choose the best that fits your specific application.

NOTICE

Anchor studs are stronger and more permanent alternatives to lag shield anchors; however, they will stick out of the floor, which may cause a tripping hazard if you decide to move your machine.

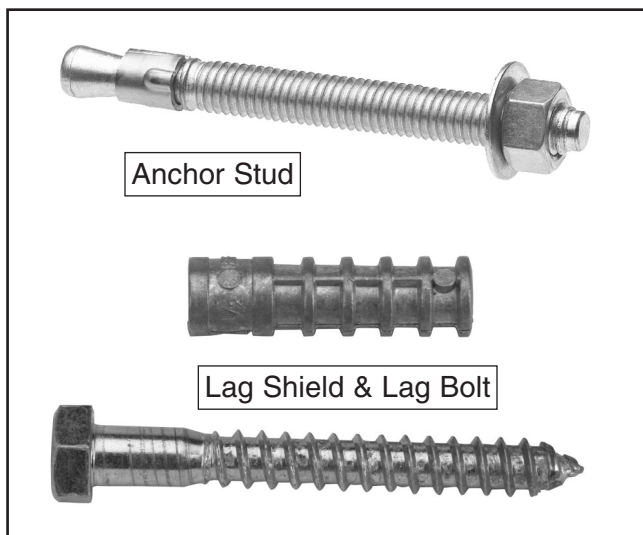


Figure 8. Typical fasteners for mounting to concrete floors.

Using Machine Mounts

Using machine mounts, shown in **Figure 9**, gives the advantage of fast leveling and vibration reduction. The large size of the foot pads distributes the weight of the machine to reduce strain on the floor.



Figure 9. Machine mount example.

NOTICE

We strongly recommend securing your machine to the floor if it is hardwired to the power source to avoid conduit damage from accidental machine movement. Consult with your electrician to ensure compliance with local codes.



Leveling Feet

Each corner of the Model G0664 base has a foot with a threaded hole that can be used to level the machine.

To install the leveling feet:

1. Place the machine on blocks at least 4" above the ground so that each threaded hole can be accessed from underneath.
2. Insert one M16-2 x 50 hex bolt with an M16-2 hex nut into each of the feet, as shown in **Figure 10**.

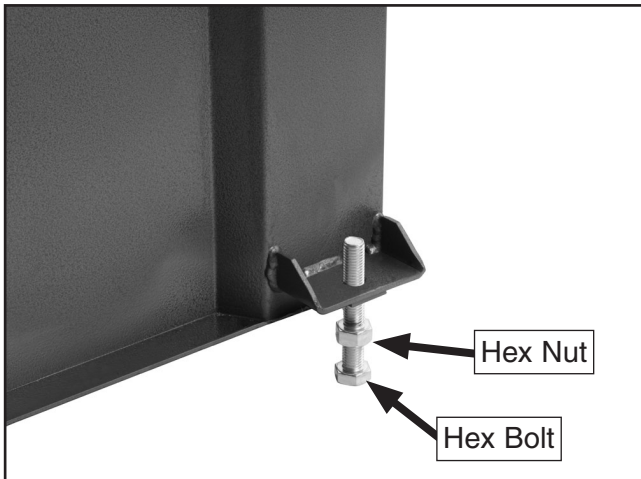


Figure 10. Leveling feet.

3. Lift the machine, remove the blocks, then place the machine into its final location.
4. Proceed to **Leveling Machine**.

Machine Leveling

Whether you mount the machine to the shop floor, use machine mounts, or use the leveling feet, the Model G0664 must be leveled before use.

To level the machine:

1. Using a level placed on the vise table as a guide, level the machine by adjusting one side up or down as needed, using shims, machine mounts, or the leveling feet. Be sure to adjust each side in small, equal increments as one adjustment also affects the other side.
2. Once the machine is level in one direction, rotate the level 90° and check again for level.
3. Again adjust the machine as needed. Be sure to use small, equal increments on each side.
4. Re-check for level in both the left-to-right and front-to-rear directions. Re-adjust if necessary.
5. Once the machine is level, secure the mounting hardware as necessary, depending on the mounting method you have chosen.



Roller Table Assembly

The Model G0664 comes with two auxiliary roller tables to support long workpieces during operation.

To assemble the roller tables:

1. Insert one lower leg into the upper leg assembly, as shown in **Figure 11**. Tighten one of the cap screws to temporarily hold the leg in place. Repeat for the other seven legs.

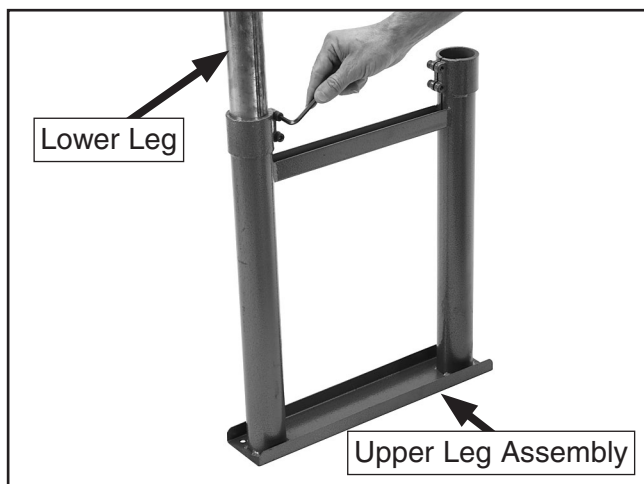


Figure 11. Lower leg attachment.

2. Thread one foot assembly into one of the lower legs, as shown in **Figure 12**. Repeat for the other seven feet.

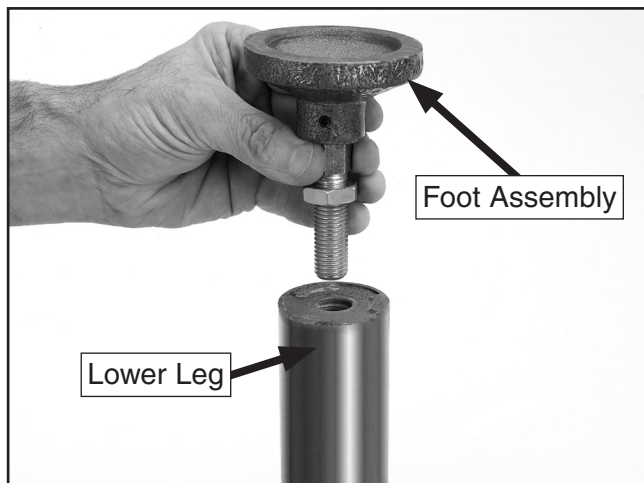


Figure 12. Foot attachment.

3. Attach a leg assembly to the under-side of each end of both roller tables with four M8-1.25 x 16 hex bolts, four 8mm flat washers, and four M8-1.25 hex nuts (**Figures 13-14**).

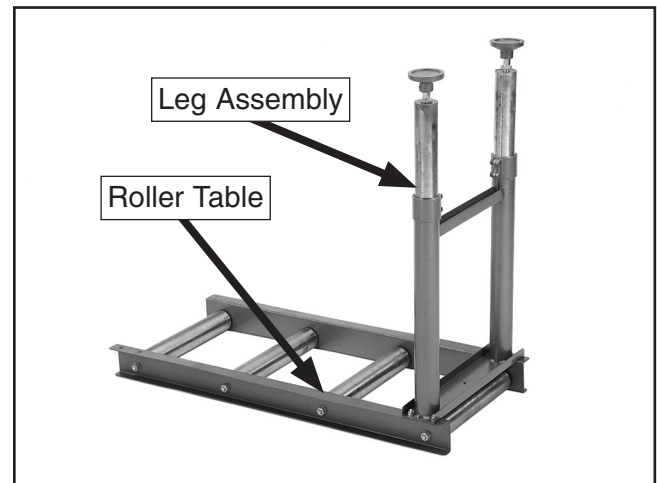


Figure 13. Placing legs on roller table.

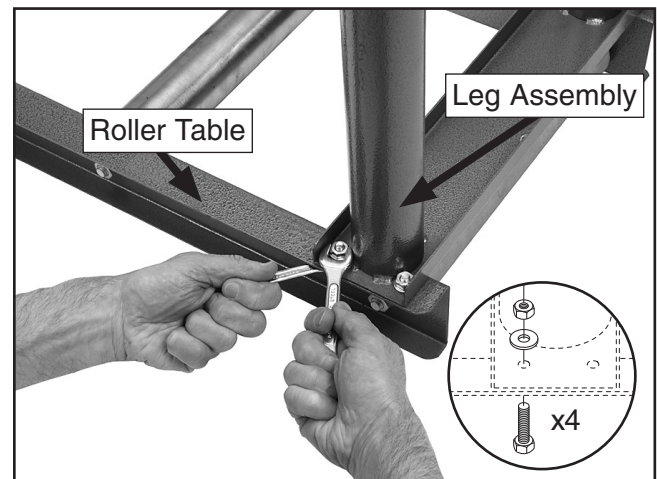


Figure 14. Attaching legs to roller table.



4. Flip the completed roller tables onto their feet and place them on either side of the saw, as shown in **Figure 15**.



Figure 15. Positioning roller tables.

5. Place a long straightedge across the saw table and roller tables and adjust the legs so that the roller tables are even with the saw table.
6. Tighten all (16) leg cap screws.

Coolant Reservoir Cover/Catch Tray

Attach the coolant reservoir cover/catch tray to the machine with the four M6-1 x 10 button head cap screws (**Figure 16**).

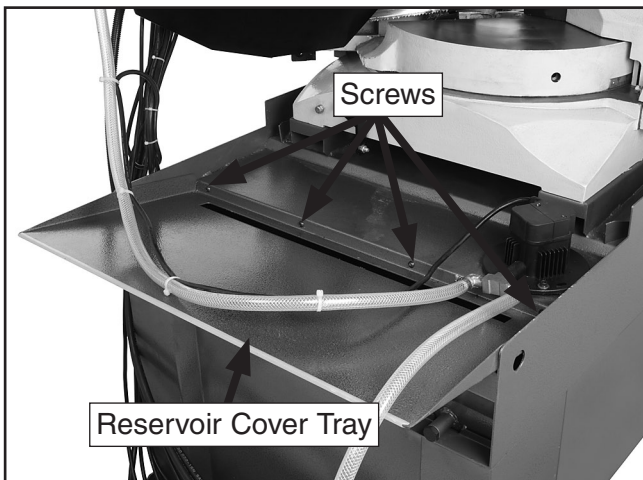


Figure 16. Coolant reservoir cover/catch tray.

Required Adjustments

To ensure your safety and to prevent damage to the machine, you must adjust the blade tension before the **Test Run**.

Blade tension (**Page 36**) is not set at the factory to prevent unnecessary stress on the blade during shipping. If the **Test Run** is performed without first properly tensioning the blade, the blade may come off, resulting in personal injury or damage to the blade or machine.

To properly tension the blade, turn the blade tension handwheel until the blade tension gauge reads between 25,000 and 28,000 PSI (**Page 36**).



Test Run

Once the assembly is complete, test run your machine to make sure it runs properly and is ready for regular operation.

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

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting on Page 43**.

If you still cannot remedy a problem, contact our Tech Support at (570) 546-9663 for assistance.

Refer to the diagram below during the test run procedure.

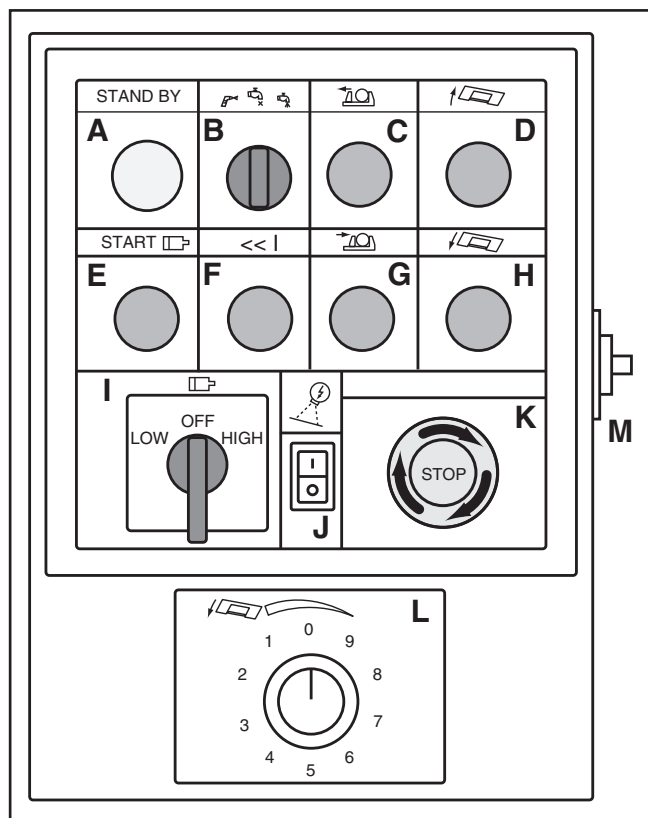


Figure 17. Control panel.

!WARNING

Before starting the saw, make sure you have performed the preceding assembly and adjustment instructions, and you have read through the rest of the manual and are familiar with the various functions and safety features on this machine. Failure to follow this warning could result in serious personal injury or even death!

To test run the machine:

1. Make sure you understand the safety instructions at the beginning of the manual and the machine is setup properly.
2. Make sure all tools and objects used during setup are cleared away from the machine.
3. Make sure that you verify the **Required Adjustments** listed on **Page PB**.
4. Fill the cutting fluid reservoir with cutting fluid (**Page 30**) if you have not already. **DO NOT** run the pump without cutting fluid or you will damage it.
5. Connect the machine to the power source.
6. Push the safety STOP button (⊕, K) in, then twist it clockwise so it pops out. When the STOP button pops out, the switch is reset and ready for operation (see **Figure 18**).

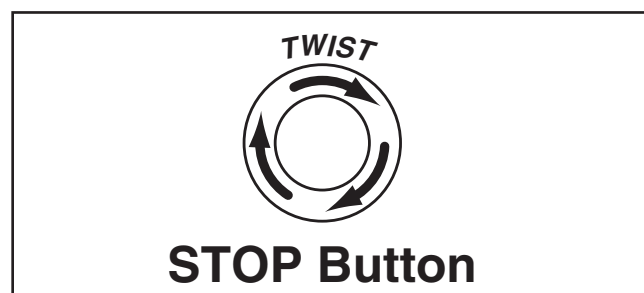
















Figure 18. Resetting the switch.



7. Turn the main **ON/OFF** switch (M) **ON**.
 8. Turn the blade speed switch (, I) to the "Low" position.
 9. Press the standby button (<< I, F). You should hear the hydraulic motor (located in the machine base) turn on.
 10. Verify that the power is not connected out of phase by checking that the hydraulic motor is turning the correct direction, using the criteria below:
 - If the raise bow button (, D) raises the bow when pressed, the machine is wired in phase.
 - If the raise bow button (, D) makes an audible click but does not move the saw bow, the machine is wired out of phase. Stop the machine, disconnect the machine from power, then swap any two of the three power wires that connect to the machine.
 11. Check the function of the saw bow hydraulics by pressing the raise bow button (, D) and the lower bow button (, H).
 12. Check the function of the vise hydraulics by pressing the vise open button (, C) and the vise close button (, G).
 13. Check the function of the cutting fluid pump by turning the cutting fluid pump switch (, B) left and right.
 14. With the blade in the upmost position, press the vise close (, G) button.

Note: As a safety precaution, the saw motor will not start unless the vise close button is pressed first.
 15. Start the blade movement by pressing the start button (START , E) while keeping your finger near the safety STOP button (, K).
- When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.

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

16. Press the STOP (, K) button to stop the machine.
17. WITHOUT resetting the switch, press the standby button (<< I, F), the vise close button (, G), then the start button (START , E). The machine should not start.
 - If the machine does not start, the safety STOP button safety feature is working correctly.
 - If the machine does start (with the stop button pushed in), immediately disconnect power to the machine. The safety STOP button safety feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

Recommended Adjustments

For your convenience, the adjustments listed below have been performed at the factory.

Because of the many variables involved with shipping, however, we recommend that you at least verify the following adjustments to ensure the best possible results from your new machine before putting it into use.

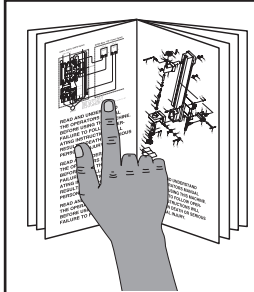
Factory adjustments that should be verified:

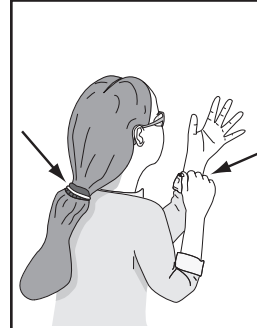
- Blade Tension (not set at factory. Refer to **Page 36**).
- Feed Stop (refer to **Page 51**).
- Limit Switches (refer to **Page 51**).

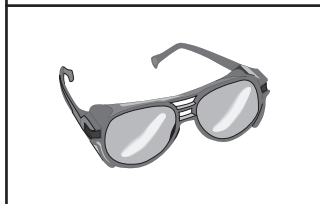
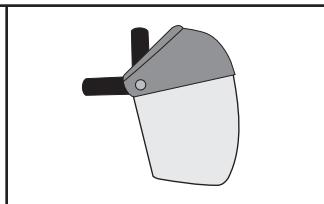


SECTION 4: OPERATIONS

Operation Safety

	<p>!WARNING</p> <p>To reduce the risk of serious injury when using this machine, read and understand this entire manual before beginning any operations.</p>
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	<p>!WARNING</p> <p>Loose hair, clothing, or jewelry could get caught in machinery and cause serious personal injury. Keep these items away from moving parts at all times to reduce this risk.</p>
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<p>!WARNING</p> <p>Damage to your eyes could result from using this machine without proper protective gear. Always wear safety glasses or a face shield when operating this machine.</p>	
	

<p>NOTICE</p> <p>If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, trade 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.</p>
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Basic Controls

Use the descriptions and figures below to become familiar with the basic controls of your machine.

Blade Tension Gauge: Displays the current blade tension.

Blade Tension Handwheel: Tensions the blade during use and releases tension for storage or replacement.

Blade Guide Lock Handle: Locks/Releases the upper blade guide.

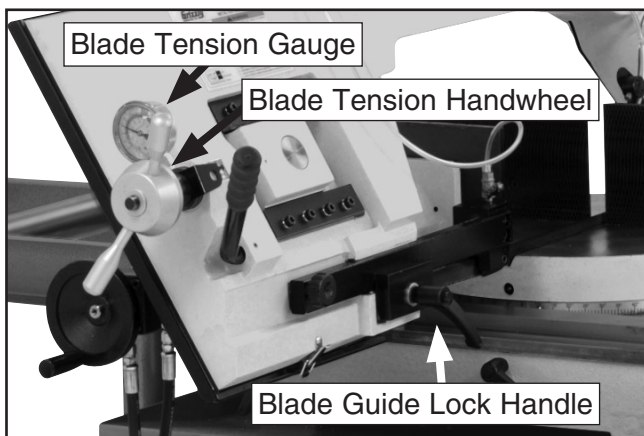


Figure 19. Blade controls.

Saw Angle Scale: Indicates the current angle of cut.

Saw Angle Lock: Locks the saw angle in position to prevent movement during use.

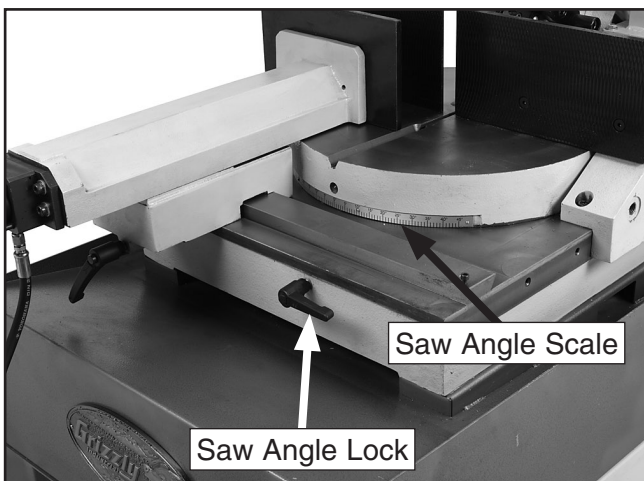


Figure 20. Saw angle controls.

Vise Handwheel: Opens/closes the vise.

Vise Quick Release: Releases the vise to allow rapid opening/closing without using the handwheel.

Vise Position Lock: Locks the vise in position to prevent lateral movement during use.

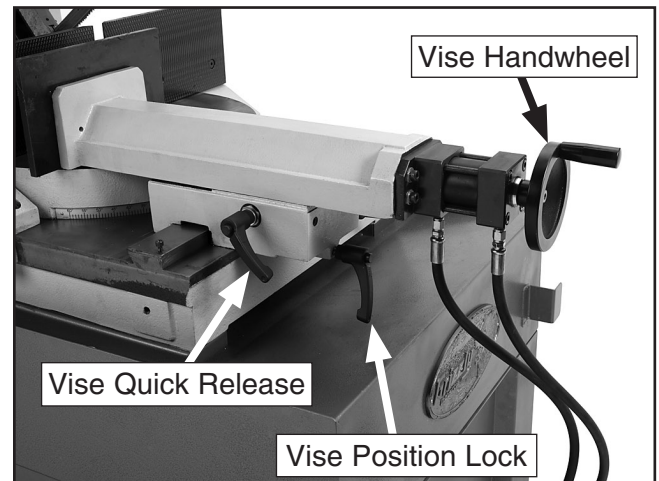


Figure 21. Vise controls.



Control Panel

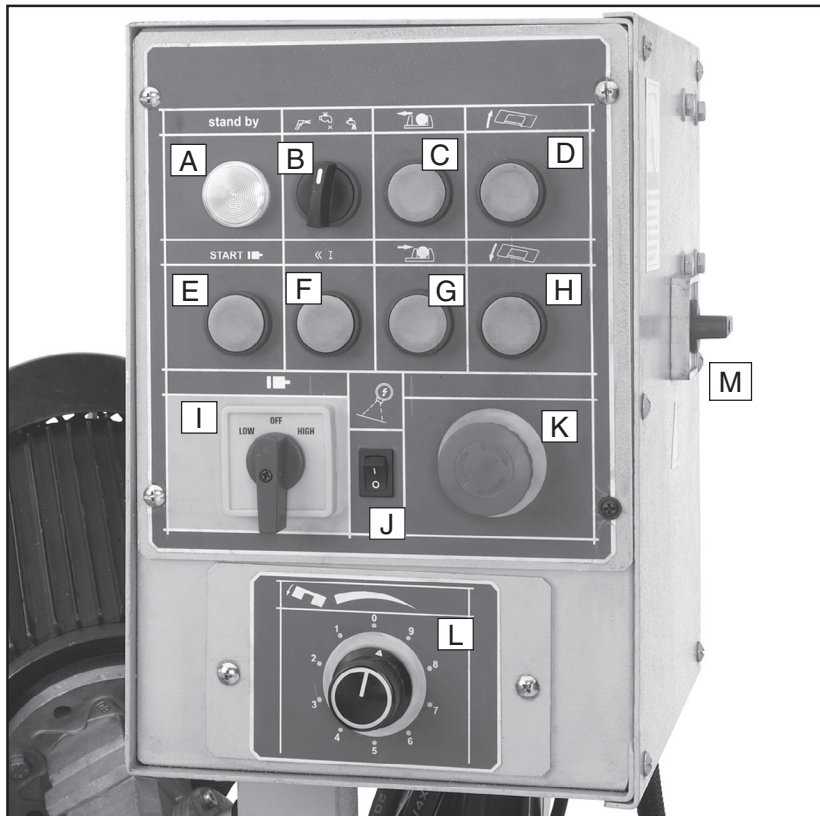


Figure 22. G0664 control panel.

- A. **Power Indicator Light:** Indicates the main power to the machine is turned **ON**.
- B. **Cutting Fluid Switch** (☞ ☜ ☛): Turns the cutting fluid pump to **Manual/OFF/Auto**.
- C. **Vise Open Button** (☞): Hydraulically opens the vise approximately $\frac{3}{8}$ " to release workpieces between cuts.
- D. **Raise Bow Button** (☞): Hydraulically raises the saw blade. Will continue raising the blade until the upper limit switch is reached or the button is released.
- E. **Saw Motor Start Button** (START ☞): Turns the saw motor **ON/OFF**.
- F. **Standby Button** (<< I): Powers control panel and readies all functions for use. Must be pressed after safety stop button is reset.
- G. **Vise Close Button** (☞): Hydraulically closes the vise approximately $\frac{3}{8}$ ". Must be activated before saw motor will turn **ON**.
- H. **Lower Bow Button** (☞): Hydraulically lowers the saw blade at the rate determined by the downfeed knob (L).
- I. **Blade Speed Switch** (☞): Controls the speed of the blade (**LOW/OFF/HIGH**).
- J. **Laser Light ON/OFF Switch** (☞): Turns the laser alignment function **ON/OFF**.
- K. **Safety STOP Button** (☞): When pressed, turns **OFF** saw motor, hydraulic motor, and cutting fluid motor. **DOES NOT CUT POWER TO MACHINE!** To reset, turn the button clockwise until it pops back out.
- L. **Blade Downfeed Knob** (☞): Controls the rate at which the blade feeds into the workpiece.
- M. **ON/OFF Switch:** Turns machine **ON/OFF**.



Cutting Angle

Your bandsaw has a locking turret with a range of -45° to 60° .

To set the cutting angle between 0° and 60° :

1. Raise the bow high enough to clear the vise and press the emergency stop button to prevent accidental startup.
2. Loosen the saw angle lock lever, rotate the saw bow to the desired angle, as indicated by the scale, then re-tighten the swivel lock lever (Figure 23).

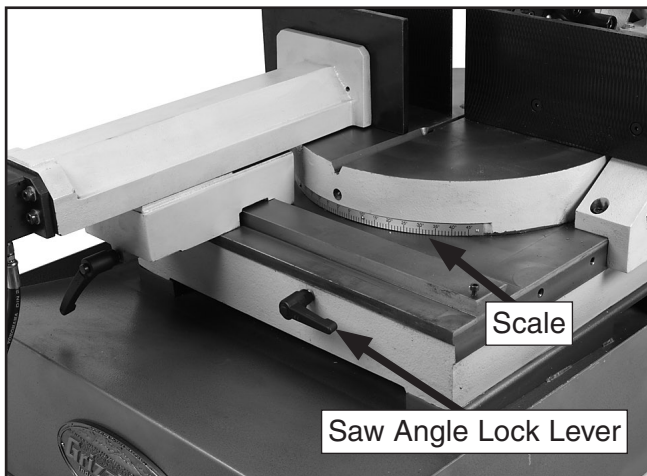


Figure 23. Saw angle lock lever.

To set the cutting angle between 0° and -45° :

1. Raise the bow high enough to clear the vise and press the emergency stop button to prevent accidental startup.
2. Loosen the saw angle lock lever, and rotate the bow to approximately 45° .

3. Locate the 0° stop bracket and swivel it out of the way, as shown in Figure 24. This will allow the bow to rotate past 0° .

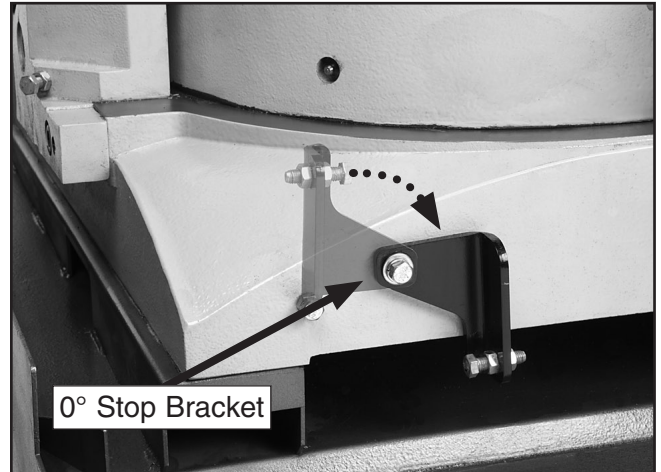


Figure 24. 0° stop bracket.

4. Loosen the vise position lock lever and slide the vise assembly to the right side of the saw table (Figure 25).

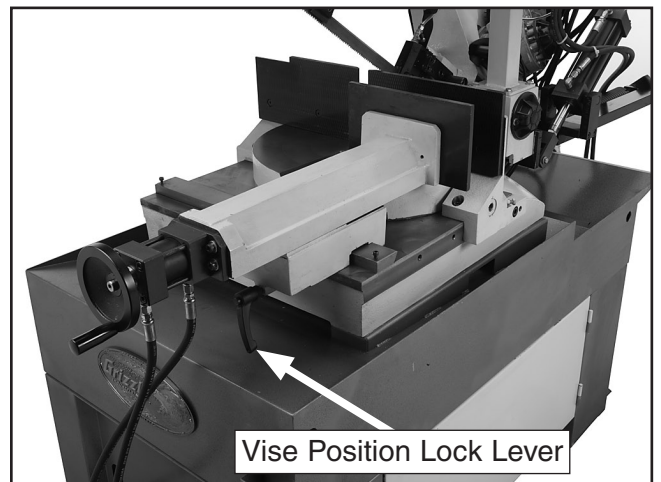


Figure 25. Positioning Vise.

5. Rotate the saw bow to the desired angle, as indicated by the scale, then re-tighten the swivel lock lever. Make sure the vise is clear of the path of the saw before proceeding.



Coolant Catch Tray

Use the coolant catch tray to reduce cutting fluid lost at the end of a workpiece or when cutting at steep angles. The catch tray fits over the lip of the base as illustrated in **Figure 26**.

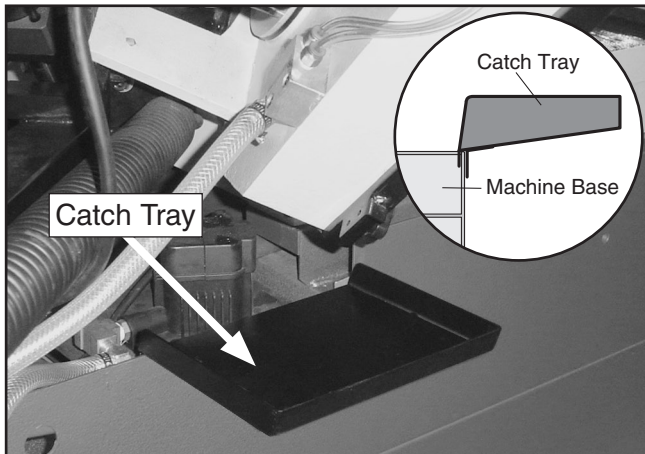


Figure 26. Catch tray installation.

Blade Guide Position

The blade guide supports the blade during operation and the attached blade guard protects the operator from the exposed portion of the blade. Therefore, proper positioning is important for accurate and safe operations.

To position the blade guide:

1. Place the workpiece in the vise and clamp it in position.
2. Lower the saw bow until the blade is just above the workpiece.
3. **DISCONNECT BANDSAW FROM POWER!**

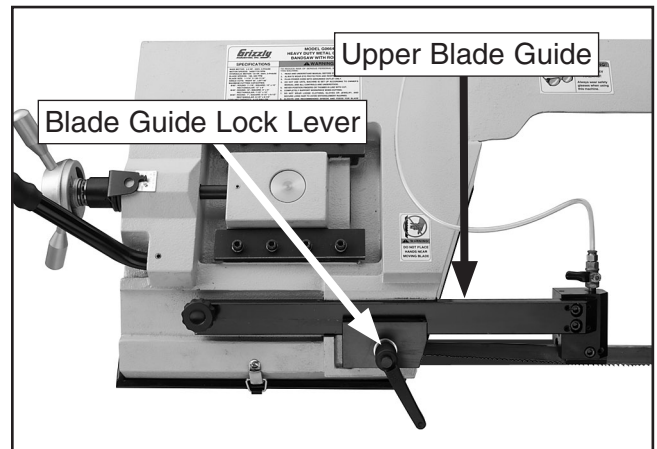


Figure 27. Blade guide and lock lever.

4. Loosen the blade guide lock lever,
5. Slide the blade guide as close to the workpiece as possible, making sure the blade guide will not contact the workpiece during operation.
6. Tighten the blade guide lock lever.



Workstop

The Model G0664 has an adjustable workstop that is easy to install and use.

To install the workstop:

1. Thread the workstop rod into the base and tighten.
2. Slide the workstop onto the rod.

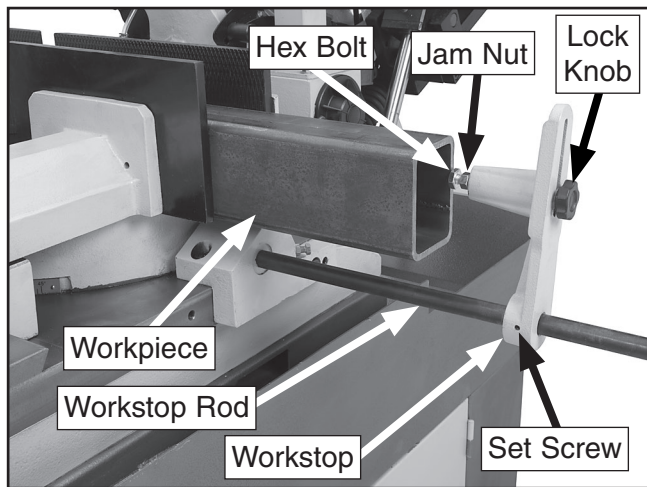


Figure 28. Workstop assembly.



3. Measure the distance from the blade to the workstop, slide the workstop to the needed position, then tighten the set screw.

Note: *Fine adjustments can be made by loosening the jam nut, adjusting the hex bolt as needed, then re-tightening the jam nut.*

Vise

The Model G0664 vise is hydraulically assisted. Once the vise jaws are manually positioned close to the workpiece, the vise open/close buttons can be used to quickly and easily release and re-clamp the workpiece hydraulically during repetitive operations.

To use the vise:

1. Raise the bow ().
2. Press the vise open button ().
3. Insert the workpiece between the jaws.
4. Use the handwheel (**Figure 29**) to move the jaws to within 1/4" of the workpiece.

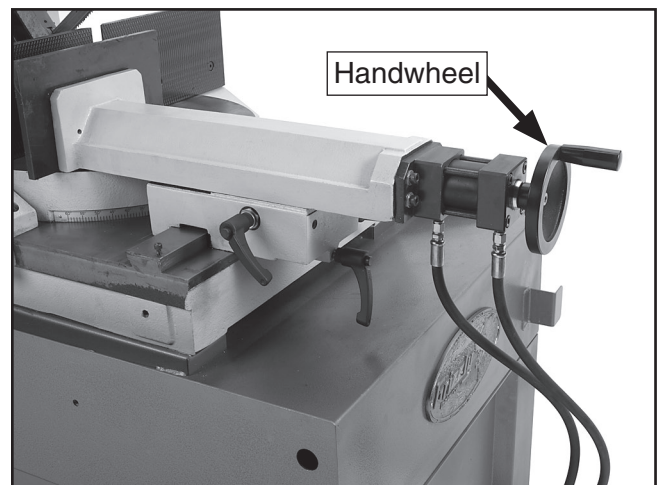





Figure 29. Vise options and controls.

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

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



6. Use the chart shown in **Figure 30** as a guide to quickly position the workpiece between the vise jaws correctly and to avoid slipping during a cut. **DO NOT CUT STEEL THAT IS STACKED OR BUNDLED.** One or more workpieces will slip and damage the saw blade.

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

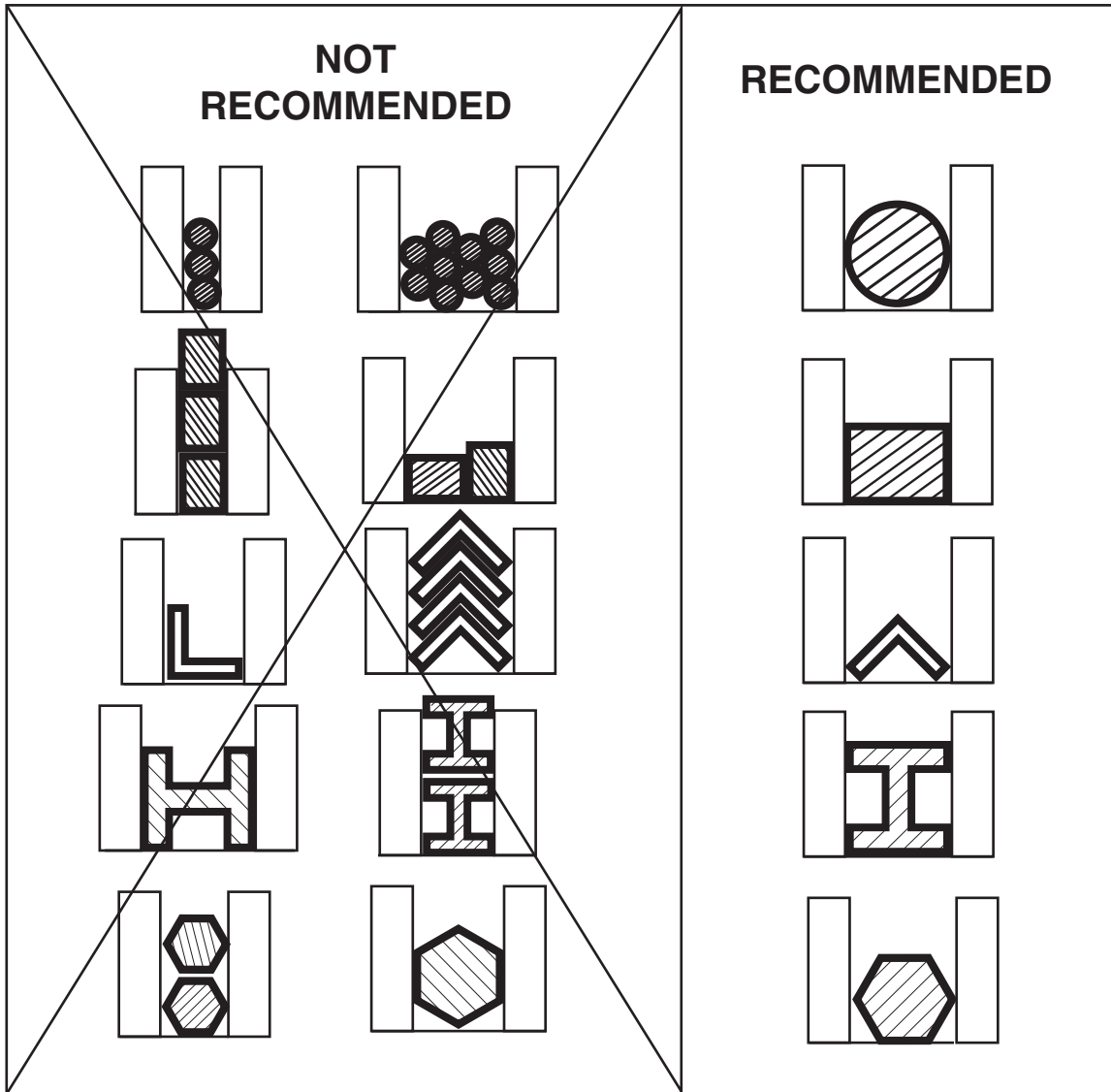




Figure 30. Vise clamping options.



Cutting Fluid System



This bandsaw has a built-in cutting fluid system that extends the life of your bandsaw blades by lowering the temperature of the blade and workpiece.

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

See **Cutting Fluid Tips** on **Page 31** for additional information regarding selection and use.

To use the cutting fluid system:

1. DISCONNECT BANDSAW FROM POWER!
2. Remove the screws and the reservoir cover tray (Figure 31).

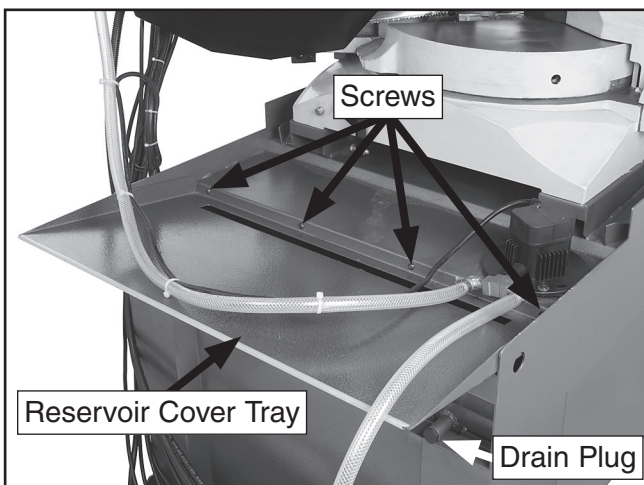





Figure 31. Cutting fluid system reservoir and cover.

3. Wearing gloves, use a rag to remove any chips and foreign material that may have fallen inside the reservoir during shipping and machine use.
4. Fill the reservoir with your chosen cutting fluid solution and replace the reservoir cover.
5. Turn the cutting fluid pump switch ( ) to the low pressure position (), and adjust the valves on the cutting fluid hoses to control the flow of cutting fluid (see **Figure 32**).

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

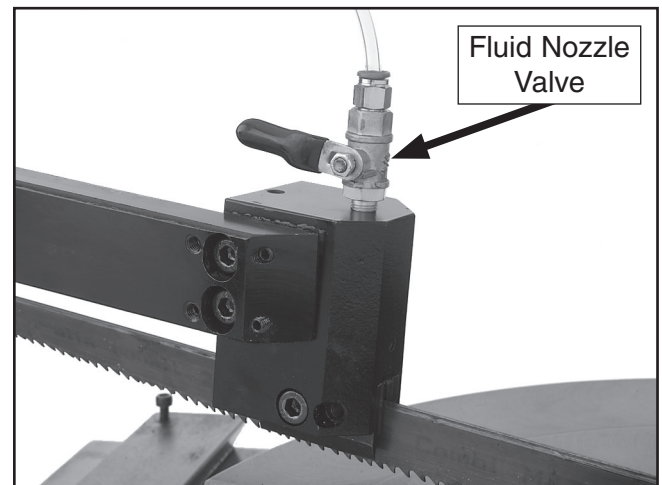


Figure 32. Cutting fluid control valve.

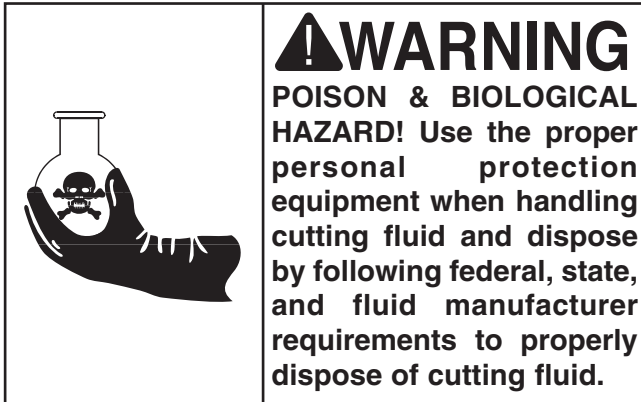
NOTICE

NEVER operate the pump with the reservoir below the low mark or you will over-heat the pump and void your warranty!

6. Monitor the cutting fluid level frequently to keep the system working properly. DO NOT let the cutting fluid pump run dry.



Cutting Fluid Tips



While simple in concept and function, many issues must be taken into account to find and use the correct cutting fluid. For example, you must consider the workpiece type and hardness, its shape, the blade feed rate, blade TPI, the tooth type, and blade type, and cutting speed. Always follow all product warnings and contact the fluid manufacturer for unanswered questions.

Use the selections below to choose the appropriate cutting fluids:

- 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, cutting fluid is not recommended.

Remember: Too much flow at the cutting 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.



Blade Selection

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

Blade Terminology

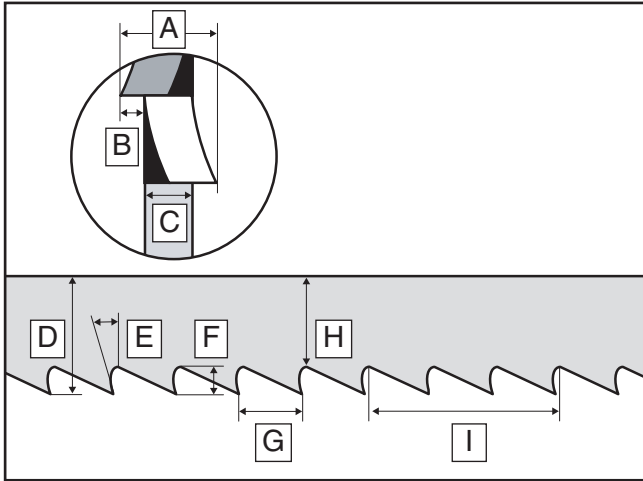


Figure 33. Bandsaw blade terminology.

- A. Kerf:** The width of cut made by the blade during cutting.
- B. Tooth Set:** The distance each tooth is bent left or right from the blade edge.
- C. Gauge:** The thickness of the blade (not including the tooth set).
- D. Blade Width:** The widest point of the blade measured from the tip of the tooth to the back edge of the blade.
- E. Tooth Rake:** The angle of the tooth face from a line perpendicular to the length of the blade.
- F. Gullet Depth:** The distance from the tooth tip to the bottom of the curved area (gullet).
- G. Tooth Pitch:** The distance between tooth tips.
- H. Blade Back:** The distance between the bottom of the gullet and the back edge of the blade.
- I. TPI:** The number of teeth per inch measured from gullet to gullet.

Blade Pitch (TPI)

The chart below is a basic starting point for choosing teeth per inch (TPI) for variable tooth 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 the correct blade pitch:

1. Measure the material thickness. This measurement is the length of cut taken from where the tooth enters the workpiece, sweeps through, and exits the workpiece.
2. Refer to the "Material Width/Diameter" row of the blade selection chart in **Figure 34**, and read across to find the workpiece thickness you need to cut.

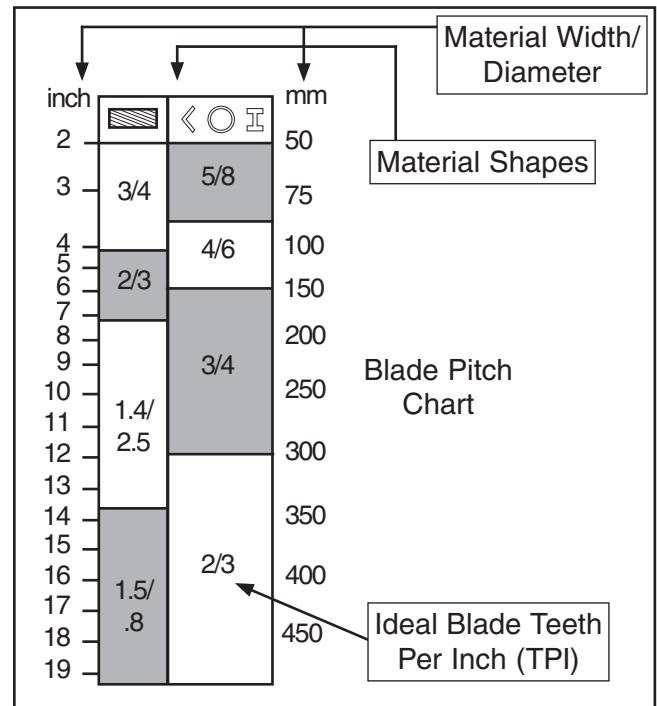


Figure 34. General guidelines for blade selection and speed chart.

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



Blade Length

Measured by the blade circumference, blade lengths are usually unique to the brand of your bandsaw and the distance between the wheels. The Model G0664 uses a 129"–131" blade.



Blade Width

Measured from the back of the blade to the tip of the blade tooth (the widest point), blade width is often the first consideration given to blade selection. Blade width dictates the largest and smallest curve that can be cut, as well as how accurately it can cut a straight line—generally the wider the blade, the straighter it will cut. The Model G0664 uses a 1¹/₁₆" wide blade.

Setting Feed Rate

Feed rate is the speed at which the bow lowers and the saw blade cuts through a workpiece. The feed rate dial adjusts the feed rate. If a lubricant is used while cutting, the feed rate can be increased by approximately 15%.

To set the feed rate:

1. Raise the bow to the upmost position by pressing the raise bow button ().
2. Set the feed rate dial () to the desired feed rate; 0 (fully clockwise) is the slowest and 9 (fully counterclockwise) is the fastest (**Figure 35**).

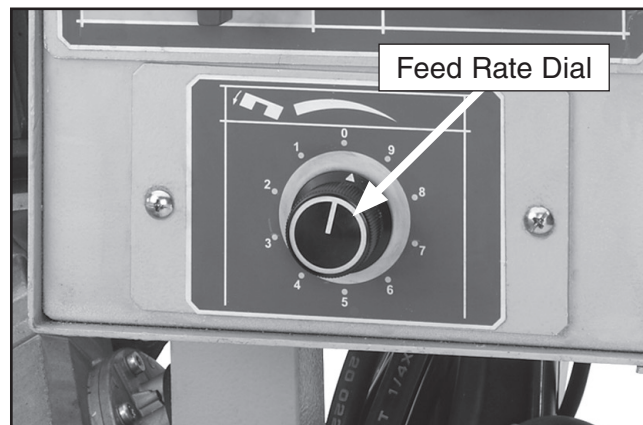


Figure 35. Feed rate dial.

3. Proceed with cutting operations.
4. Observe the metal chips produced by the cut and refer to **Chip Inspection Chart** on **Page 35** for information on how to adjust your feed rate for optimum cutting performance.



Blade Speed

The Model G0664 has a two-speed control with settings of 160 and 320 feet per minute (FPM). The speed is controlled by a rotary switch and can be switched while the motor is operating. The speed should not be switched during a cut.

The table shown in **Figure 36** is a sampling of speed rates for various materials. Use these as a guideline, and use the cutting fluid system on your bandsaw to get the most life from your blades.

NOTICE

DO NOT change motor speed during a cut as this may overload a series of engaged blade teeth, resulting in damage to the blade and possible blade breakage.

Material	Alloy ASTM Number	Blade Speed	Material	Alloy ASTM Number	Blade Speed
Copper Alloys	173,932	Hi	Nickle	8615, 8620, 8622	Hi
	330,365	Hi	Chrome	4340, E4340, 8630	Lo
	623,624	Hi	Molybdenum	8640	Lo
	230,260,272	Lo	Alloys	E9310	Lo
	280,264,632,655	Lo	Tool Steels	A-6	Lo
	101,102,110,122,172	Lo		A-2	Lo
	1751,182,220,510	Lo		A-10	Lo
	625, 706, 715, 934	Lo		D-2	Lo
	630	Lo		H-11,H-12,H-13	Lo
	811	Lo	Stainless Steels	420	Lo
Carbon Steels	1117	Hi		430	Lo
	1137	Hi		410,502	Lo
	1141,1144	Hi		414	Lo
	1141 High Stress	Hi		431	Lo
	1030	Hi		440C	Lo
	1008,1015,1020,1025	Hi		304, 324	Lo
	1035	Hi		304L	Lo
	1018,1021,1022	Hi		347	Lo
	1026,1513	Hi		316, 316L	Lo
	A36 (SHAPES),1040	Hi	416	Lo	
1042,1541	Lo				
1044,1045	Lo				
1060	Lo				
1095	Lo				

Figure 36. Material speed table.



Chip Inspection Chart

The best method of evaluating the performance of your cutting operation is to inspect the chips that are formed. Refer to the chart below for chip inspection guidelines.









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

Figure 37. Chip inspection chart.



Blade Tensioning

NOTICE

To prolong blade life, release the tension on the blade if the machine will be idle for an extended period of time.

Proper blade tension reduces the risk of blade breakage and improves cutting performance.

Note: *The most accurate way to check blade tension is to use the Model H5408 Blade Tensioning Gauge (see **Accessories** on **Page 39**).*

To tension the blade, turn the blade tension handwheel until the blade tension gauge reads between 25,000 and 28,000 PSI.

Blade Care & Break-In

Blade Care

A bandsaw blade is a delicate piece of steel that is subjected to tremendous strain. You can obtain longer use from a bandsaw blade if you give it fair treatment and always use the appropriate feed rate for your operation.

Be sure to select blades with the proper width, set, type, and pitch for each application. The wrong choice of blades will often produce unnecessary heat and will shorten the life of your blade.

A clean blade will perform much better than a dirty blade. Dirty or gummed up blades pass through the cutting material with much more resistance than clean blades. This extra resistance also causes unnecessary heat.

Blade Break-In

The sharp teeth tips and edges of a new blade are extremely sharp, and cutting at full feed rate may cause fracturing of the beveled edges of the teeth and premature blade wear.

To properly break-in a new Grizzly blade:

1. Choose the correct speed for the blade and material of the operation.
2. Reduce the feed pressure by half for the first 50–100 in² of material cut.
3. To avoid twisting the blade when cutting, adjust the feed pressure when the total width of the blade is in the cut.
4. Use the **Chip Inspection Chart** on **Page 35** to check the blade efficiency.



Blade Breakage

Many conditions may cause a bandsaw blade to break. Blade breakage is unavoidable, in some cases, since it is the natural result of the peculiar stresses that bandsaw blades must endure. Blade breakage is also due to avoidable circumstances. Avoidable blade breakage is most often the result of poor care or judgement on the part of the operator when mounting or adjusting the blade or support guides.

The most common causes of blade breakage are:

- Faulty alignment or adjustment of the blade guides.
- Feeding the blade too fast.
- Dull or damaged teeth.
- Over-tensioned blade.
- Top blade guide assembly set too high above the workpiece. Adjust the top blade guide assembly so that there is approximately ½" between the bottom of the assembly and the workpiece.
- Using a blade with a lumpy or improperly finished braze or weld.
- Continuously running the bandsaw when not in use.
- Leaving the blade tensioned when not in use.
- Using the wrong pitch (TPI) for the workpiece thickness. The general rule of thumb is to have at least two teeth in contact with the workpiece at all times during cutting.

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.



Operation Tips

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

NOTICE

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

Tips for horizontal cutting:

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



SECTION 5: ACCESSORIES

T20534—3-4 TPI Variable Pitch Blade
T20535—4-6 TPI Variable Pitch Blade
T20536—5-8 TPI Variable Pitch Blade
T20537—6-10 TPI Variable Pitch Blade
T20538—8-12 TPI Variable Pitch Blade
Replacement blades for the Model G0664 Heavy-Duty Metal Cutting Bandsaw. 129³/₈" length.

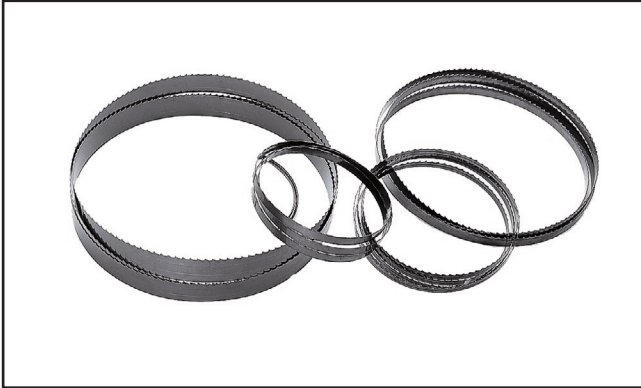


Figure 38. Blades.

H5408—Blade Tensioning Gauge

The Blade Tensioning Gauge ensures long blade life, reduced blade breakage, and straight cutting by indicating correct tension. A precision dial indicator provides you with a direct readout in PSI.



Figure 39. H5408 Blade Tensioning Gauge.

H5405—Lenox® Lube Tube™

Lenox® Lube Tube™ is a stick lubricant designed to prevent heat buildup. Apply it directly to the blade to improve overall blade life and productivity. Can be used on ferrous and non-ferrous metals. Biodegradable, non-toxic, and non-staining 14.5 oz tube.



Figure 40. Lenox® Lube Tube™.

T20677—Acculube Metalworking Lubricant (for Medium to Heavy-Duty Machining)

This environmentally safe, non-toxic, all natural cutting fluid is ideal for drilling and tapping, machining, and sawing. It is recommended for all ferrous metals. Made from renewable resources!

Call 1-800-523-4777 To Order



G5618—Deburring Tool with Two Blades

G5619—Extra Aluminum Blades

G5620—Extra Brass and Cast Iron Blade

The quickest tool for smoothing freshly machined metal edges. Comes with two blades—one for steel/aluminum and one for brass/cast iron.



Figure 41. G5618 Deburring tool.

T20501—Face Shield, 4" Crown, Clear

T20502—Face Shield, 7" Crown, Clear

T20448—Economy Clear Safety Glasses

T20452—"Kirova" Anti-Reflective Glasses

T20456—"Dakura" Clear Safety Glasses

H0736—Shop Fox® Safety Glasses

These glasses meet ANSI Z87.1-2003 specifications. Buy extras for visitors or employees. You can't be too careful with shop safety!

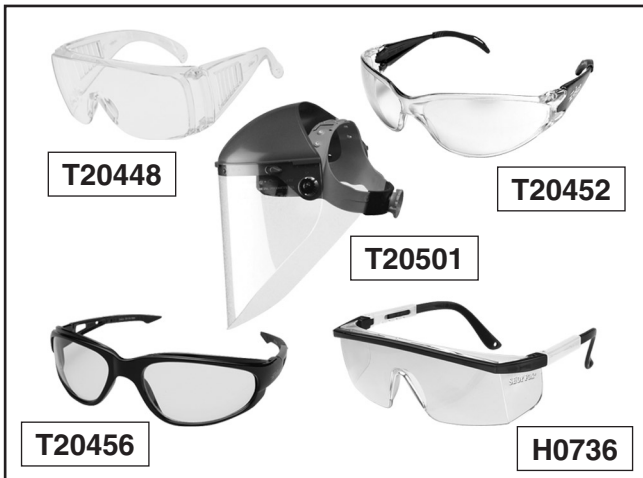


Figure 42. Our most popular eye protection.

G9256—6" Dial Caliper

G9257—8" Dial Caliper

G9258—12" Dial Caliper

These traditional dial calipers are accurate to 0.001" and can measure outside surfaces, inside surfaces, and heights/depths. Features stainless steel, shock resistant construction and a dust proof display.

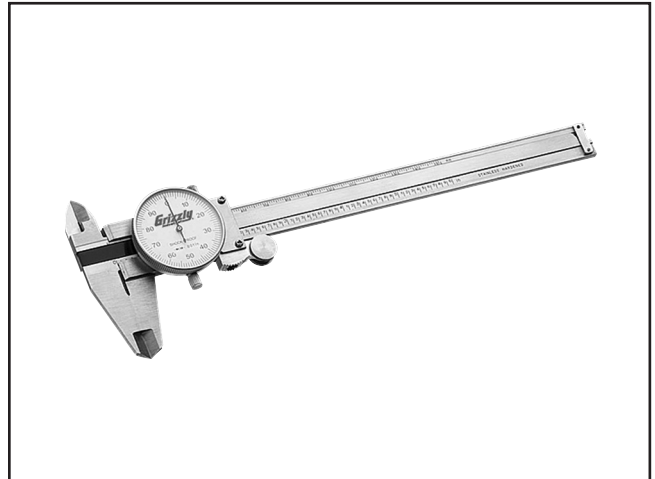


Figure 43. Grizzly® Dial Calipers.

G5562—SLIPIT® 1 Qt. Gel

G5563—SLIPIT® 12 oz Spray

Used on cast iron table surfaces and other unpainted metal surfaces to reduce sliding friction and hangups. This product also reduces rust and prevents resin build-up.

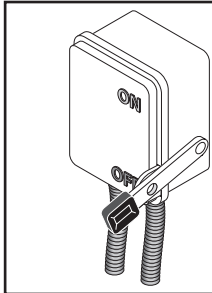


Figure 44. SLIPIT® gel and spray.

Call 1-800-523-4777 To Order



SECTION 6: MAINTENANCE



!WARNING

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

Schedule

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

After first 50 hours:

- Change hydraulic fluid.

Daily Check:

- Loose mounting bolts.
- Damaged or worn saw blade.
- Worn or damaged wires.
- Proper blade tension.
- Hydraulic/cutting fluid level.
- Clean and wipe down machine.

Monthly Check:

- Lubricate vise and blade tensioner leadscrew.

Six-Month Check:

- Change hydraulic fluid.

Annual Check:

- Replace cutting fluid and clean out tank. If the saw is used heavily, clean the tank and replace the cutting fluid at shorter intervals.

Cleaning

Cleaning the Model G0664 is relatively easy. After using your bandsaw, clean excess chips by vacuuming or sweeping them up.

If using water based cutting fluid, wipe down and lubricate areas where the liquid may collect and cause corrosion.

Lubrication

All bearings and the gearbox on the Model G0664 are lubricated and sealed for life. No further attention is needed unless damage occurs.

To lubricate the bandsaw:

1. Lubricate the blade tensioner leadscrew (**Figure 45**) with multi-purpose grease, and apply a coat of high-quality metal protectant such as SLIPIT® on **Page 40** to all unprotected cast iron surfaces.

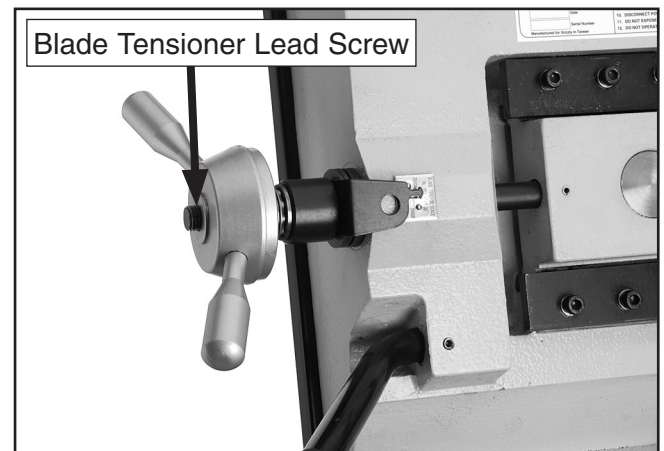


Figure 45. Lubrication point.

2. Lubricate the leadscrew as needed with multi-purpose grease by applying a thin layer along the leadscrew surface (see **Figure 46**).

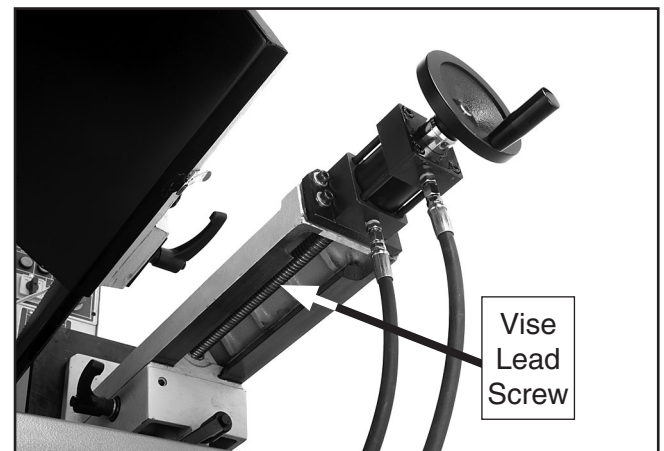


Figure 46. Vise leadscrew lubrication area.



Hydraulic System

Checking Hydraulic Fluid

1. Check the fluid level gauge located on the side of the tank. (**Figure 47**). The fluid level indicator should be above half.

—If the fluid level is low, add until it is full.

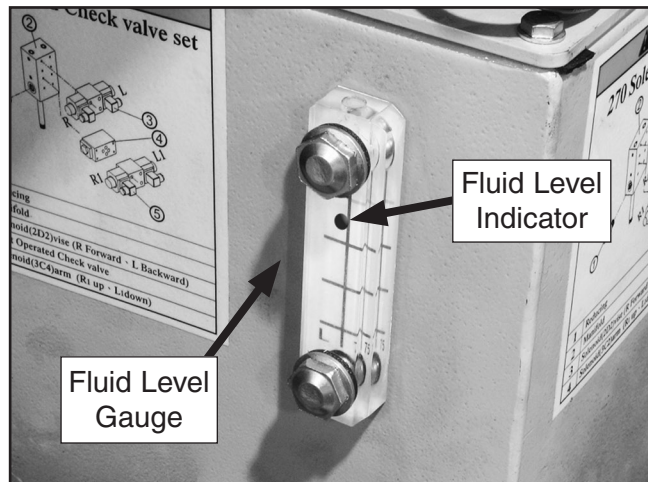
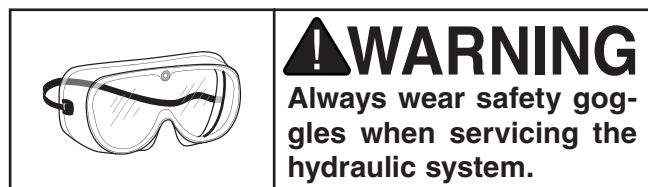


Figure 47. Hydraulic fluid tank gauge.

2. Inspect for burnt-smelling or tan-colored, water-contaminated hydraulic fluid. If the fluid is contaminated, clean the tank filter/strainer, flush the system, and replace the fluid.

Changing Hydraulic Fluid (Figure 48)



4. Remove the tank vent cap.
5. Clean the tank vent with mineral spirits and let air dry.
6. Clean the tank screen with mineral spirits and blow dry with compressed air.
7. Inspect the screen and tank vent for any holes and replace if any damage exists.
8. Open the tank by removing the hex bolts that secure the lid.
9. Wipe out as much residual fluid and contaminants from the tank as possible. We highly recommend that the tank be cleaned out with a pressure washer or steam cleaner and fully dried with compressed air for best results.
10. Reinstall the tank lid and screen.
11. Replace the drain plug, then fill the tank with 15 liters of ISO 15 or equivalent fluid, then reinstall the tank vent cap.

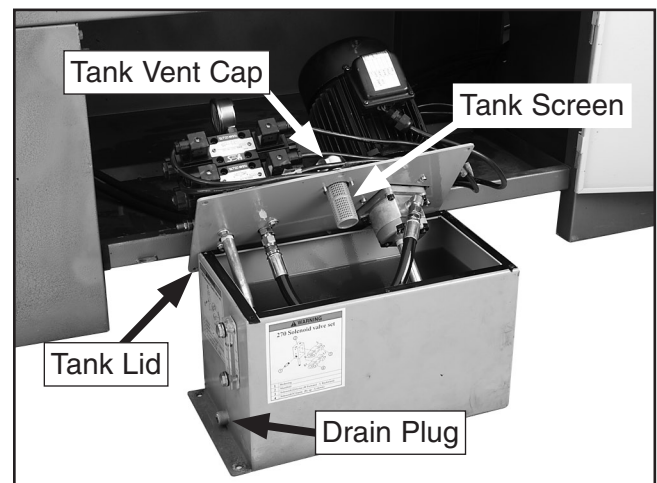


Figure 48. Hydraulic fluid tank.

Hydraulic Fluid Type	Qty
ISO 15 or equivalent.....	15L

1. DISCONNECT BANDSAW FROM POWER!
2. Unbolt and remove the tank, then place it on blocks high enough to get a 3 gallon drain pan under it.
3. Remove the drain plug and allow the tank to empty into the drain pan.



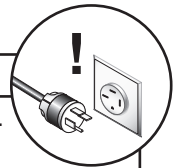
SECTION 7: SERVICE

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

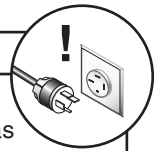
Troubleshooting

Motor & Electrical

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> 1. Safety Stop button pressed. 2. Machine is wired out of phase (only if this is the first time the machine is run). 3. Wall fuse/circuit breaker is blown/tripped. 4. Wiring is open/has high resistance. 5. Plug/receptacle is at fault or wired incorrectly. 6. Motor connection wired incorrectly. 7. Power supply is at fault/switched OFF. 8. Motor ON/OFF switch is at fault. 9. Motor is at fault. 	<ol style="list-style-type: none"> 1. Twist Safety Stop button until it pops out. 2. Ensure correct size for machine load; replace weak breaker. 3. Check for broken wires or disconnected/corroded connections, and repair/replace as necessary. 4. Test for good contacts; correct the wiring. 5. Correct wiring. 6. Correct motor wiring connections. 7. Ensure hot lines have correct voltage on all legs and main power supply is switched ON. 8. Replace faulty ON/OFF switch. 9. Test/repair/replace.
Machine stalls or is overloaded	<ol style="list-style-type: none"> 1. Wrong blade for the workpiece material. 2. Wrong workpiece material. 3. Feed rate/cutting speed too fast for task. 4. Blade is slipping on wheels. 5. Incorrect power supply voltage. 6. Motor bearings are at fault. 7. Plug/receptacle is at fault. 8. Motor connection is wired incorrectly. 9. Motor has overheated. 10. Motor is at fault. 	<ol style="list-style-type: none"> 1. Use blade with correct properties for your type of cutting. 2. Use metal with correct properties for your type of cutting. 3. Decrease feed rate/cutting speed. 4. Adjust blade guides and tension. 5. Ensure hot lines have correct voltage on all legs. 6. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. 7. Test for good contacts; correct the wiring. 8. Correct motor wiring connections. 9. Clean off motor, let cool, and reduce workload. 10. Test/repair/replace.
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> 1. Motor fan is rubbing on fan cover. 2. Blade is at fault. 3. Worm gear is at fault. 4. Wrong blade for material. 5. Speed is set too slow. 	<ol style="list-style-type: none"> 1. Replace dented fan cover; replace loose/damaged fan. 2. Replace/resharpen blade. 3. Rebuild gearbox for bad gear(s)/bearing(s). 4. Change blade. 5. Adjust speed as required.



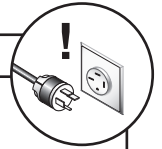
Bandsaw Operations



SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
Machine is loud when cutting or bogs down in the cut.	<ol style="list-style-type: none"> Excessive feed rate or blade speed. The blade TPI is too great, or the material is too coarse. 	<ol style="list-style-type: none"> Refer to Setting Feed Rate on Page 33, or Blade Speed on Page 34 and adjust as required. Refer to Blade Selection on Page 32 and adjust as required.
Blades break often.	<ol style="list-style-type: none"> Blade is not tensioned correctly. The workpiece is loose in the vise. The feed or cut speed is wrong. The blade TPI is too great, or the material is too coarse. The blade is rubbing on the wheel flange. The bandsaw started with the blade resting on the workpiece. The guide bearings are misaligned, or the blade is rubbing on the wheel flange. The blade is too thick, or the blades are of low quality. 	<ol style="list-style-type: none"> Check to see that blade is not excessively tight or too loose. Clamp the workpiece tighter, or use a jig to hold the workpiece. Refer to Setting Feed Rate on Page 33, or Blade Speed on Page 34, and adjust as required. Refer to Blade Selection on Page 32, and adjust as required. Refer to Squaring Blade on Page 49, and adjust as required. Start bandsaw and then slowly lower the headstock by Setting Feed Rate on Page 33. Refer to Squaring Blade on Page 49, or Blade Guides on Page 47, and adjust as required. Use a higher quality blade.
Blade dulls prematurely.	<ol style="list-style-type: none"> The cutting speed is too fast. The blade TPI is too coarse. The blade feed pressure is too light. The workpiece has hard spots, welds, or scale. The blade is twisted. The blade is slipping on the wheels. 	<ol style="list-style-type: none"> Refer to Blade Speed on Page 34, and adjust as required. Refer to Blade Selection on Page 34, and adjust as required. Refer to Setting Feed Rate on Page 33, and adjust as required. Increase the feed pressure, and reduce the cutting speed. Replace the blade. Refer to Blade Tension on Page 36, and adjust as required.
Blade wears on one side.	<ol style="list-style-type: none"> The blade guides are worn. The blade guide slide bracket is loose. The wheels are out of alignment. 	<ol style="list-style-type: none"> Refer to Blade Guides on Page 47 and replace or adjust. Tighten the blade guide bracket. Refer to Squaring Blade on Page 49, and adjust as required.
Teeth are ripping from the blade.	<ol style="list-style-type: none"> The feed pressure is too heavy and the blade speed is too slow; or the blade TPI is too coarse for the workpiece. The workpiece is vibrating in the vise. The blade gullets are loading up with chips. 	<ol style="list-style-type: none"> Refer to Blade Selection on Page 34 and decrease the feed pressure. Refer to Setting Feed Rate on Page 33, and adjust as required. Re-clamp the workpiece in the vise, and use a jig if required. Use a coarser-tooth blade.
The cuts are crooked.	<ol style="list-style-type: none"> The feed pressure is too high. The guide bearings are out of adjustment, or too far away from the workpiece. The blade tension is low. The blade is dull. The blade speed is wrong. 	<ol style="list-style-type: none"> Refer to Setting Feed Rate on Page 33, and adjust as required. Refer to Blade Guides on Page 47 and replace or adjust. Refer to Blade Tension on Page 36, and adjust as required. Refer to Blade Change on Page 46 and replace the blade. Refer to Blade Speed on Page 34, and adjust as required.



Hydraulic System Troubleshooting

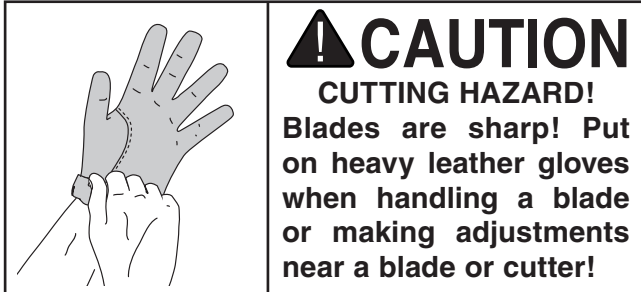


SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
Hydraulics aren't functioning.	<ol style="list-style-type: none"> 1. Machine is not in "Standby Mode". 2. Hydraulic fluid level is low. 3. Machine is wired out of phase. 4. Hydraulic pump motor wiring connection is incorrect. 5. Hydraulic system is leaking. 6. Hydraulic pump is faulty. 7. Control panel wiring is faulty. 	<ol style="list-style-type: none"> 1. Press the standby (<< I) button. 2. Check/fill hydraulic fluid level. 3. Wire machine in phase. 4. Check/correct pump motor wiring. 5. Test for leaks/repair. 6. Test/repair/replace. 7. Check that hydraulic pump motor is running and that solenoids are activating (indicated by red LED in solenoid plug).
Vise doesn't open/close.	<ol style="list-style-type: none"> 1. Vise valve solenoids are faulty. 2. Vise valve solenoids connections are bad. 3. Vise hydraulic system is leaking. 4. Vise ram is faulty. 5. Control panel wiring is faulty. 	<ol style="list-style-type: none"> 1. Test/repair/replace. 2. Check solenoid plugs. 3. Test for leaks/repair. 4. Test/repair/replace. 5. Check that hydraulic pump motor is running and that solenoids are activating (indicated by red LED in solenoid plug).
Saw bow doesn't raise/lower.	<ol style="list-style-type: none"> 1. Saw bow valve solenoids are faulty. 2. Saw bow valve solenoids connections are bad. 3. Saw bow hydraulic system is leaking. 4. Saw bow ram is faulty. 5. Control panel wiring is faulty. 	<ol style="list-style-type: none"> 1. Test/repair/replace. 2. Check solenoid plugs. 3. Test for leaks/repair. 4. Test/repair/replace. 5. Check that hydraulic pump motor is running and that solenoids are activating (indicated by red LED in solenoid plug).



Blade Change

Change the blade when it becomes dull, damaged, or when you are using materials that require a blade of a certain type or tooth count.



To change the blade on the bandsaw:

1. Raise the bow enough so that the wheel access cover can be opened.
2. DISCONNECT BANDSAW FROM POWER!
3. Open the wheel access cover to expose the blade and wheels (**Figure 49**).

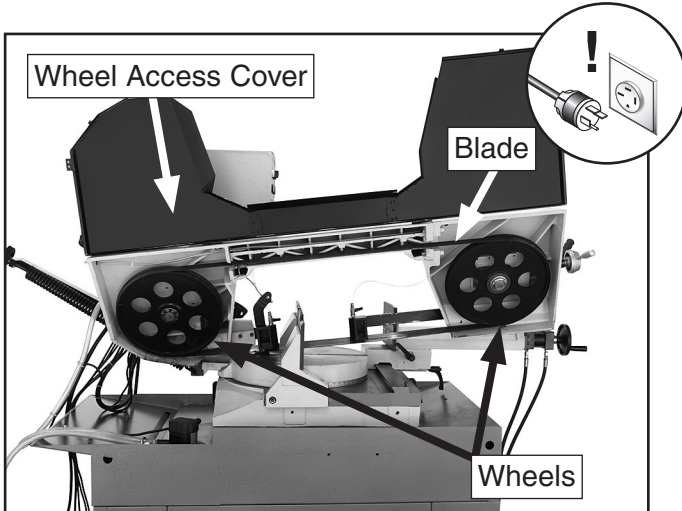


Figure 49. Wheel access cover.

4. Fully extend the blade guide to reduce the twisting force on the blade.
5. Remove both of the blade guide guards and the wheel brush from the bandsaw (**Figure 50**).

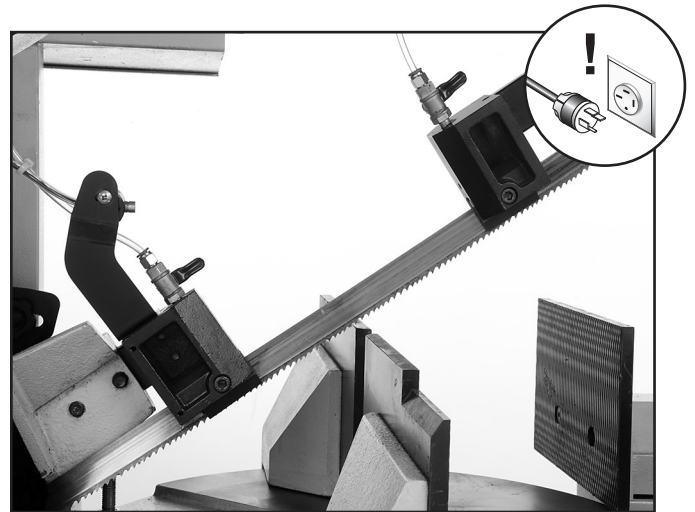


Figure 50. Guards and wire brush wheel removed.

6. Loosen the blade tension handwheel and slip the blade off of the wheels.
7. Install the new blade through both blade guide assemblies and around the bottom wheel.
8. Have an assistant hold the blade on the bottom wheel while you position it on the top wheel.
9. Adjust the blade so the back of the blade is against the shoulder of the wheels. Slightly tighten the blade tension handwheel if necessary to hold the blade in place (**Figure 51**).

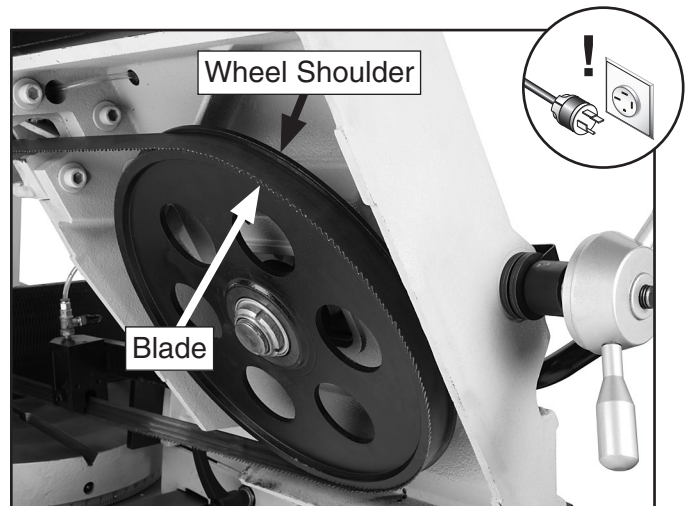


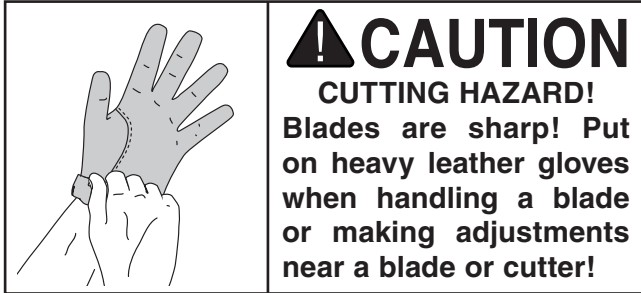
Figure 51. Blade installed on wheels.

10. Reinstall the wheel brush, the blade guide guards, and close the wheel access cover.
11. Adjust the blade tension to 25,000 to 28,000 PSI (**Page 36**).



Blade Guides

The blade guides have a basic factory adjustment, but due to shipping, storage, and wear, we recommend that you re-adjust the blade guides yourself to ensure the cuts will be to your standards.



To adjust the blade guides:

1. Make sure the blade is oiled, tensioned, and tracking correctly.
2. Raise the bow to the upmost position.
3. DISCONNECT BANDSAW FROM POWER!
4. Extend the blade guide as far as possible and lock it in place (**Figure 52**).

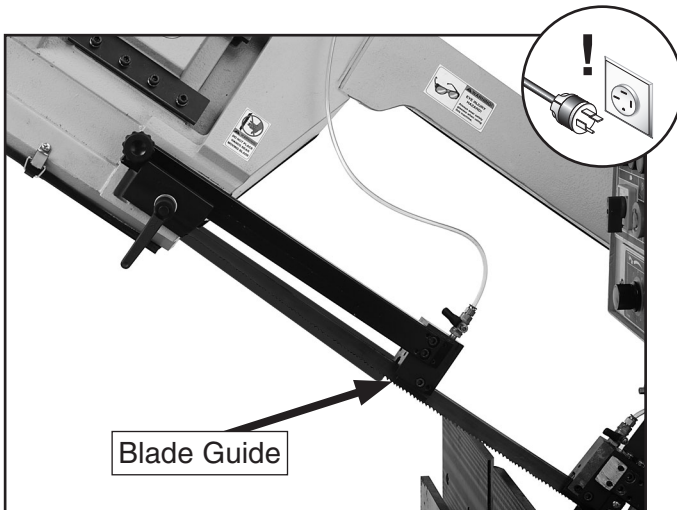


Figure 52. Blade guide extended.

5. Loosen the blade guide cap screw that holds the blade guide in position (**Figure 53**).

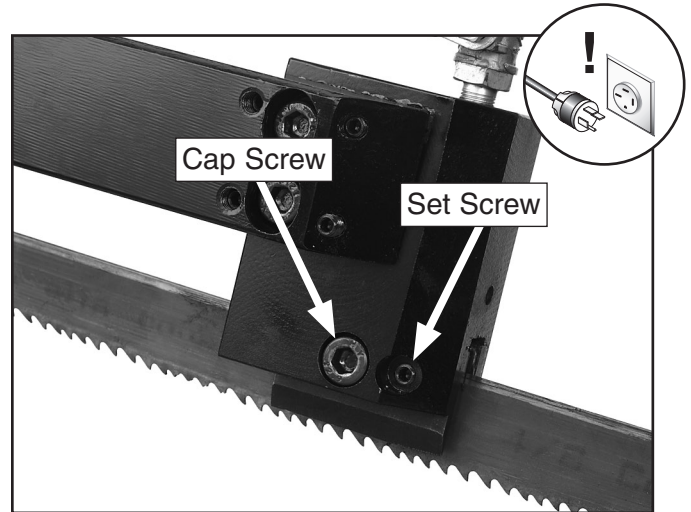


Figure 53. Blade guide.

6. Loosen the set screw. This set screw controls the inward and outward positioning of the blade guide.

Note: Because the blade guides must hold the blade perpendicular to the table and at an angle to the wheel surface, there will be constant pressure between the blade and the guides. The goal is to get the guides close enough together to hold the blade straight but not so tight so that they create excessive friction.

7. Gently tighten the set screw until the blade is just pressed flat between the blade guides. Do not force the set screw into the blade guide.
8. Back the set screw out $\frac{1}{4}$ turn to prevent pinching the blade.
9. Tighten the blade guide cap screw.
10. Loosen the blade guide assembly cap screws.
11. Adjust the blade guide assembly vertically so that the back of the blade is just next to, but not touching the rear blade guide, then tighten the blade guide assembly cap screws.
12. Repeat this process for the lower blade guide assembly.



Wheel Brush

The Model G0664 is equipped with a wire wheel brush to clean metal chips from the blade, reducing wear to the blade and machine. With use, the wheel will wear requiring adjustment and eventual replacement.

To adjust/replace the wheel brush:

1. Raise the bow to the upmost position to allow the best access to the wheel brush.
2. DISCONNECT BANDSAW FROM POWER!
3. Support the wheel brush so it doesn't fall, then loosen the two Phillip head screws that secure the wheel brush (**Figure 54**).

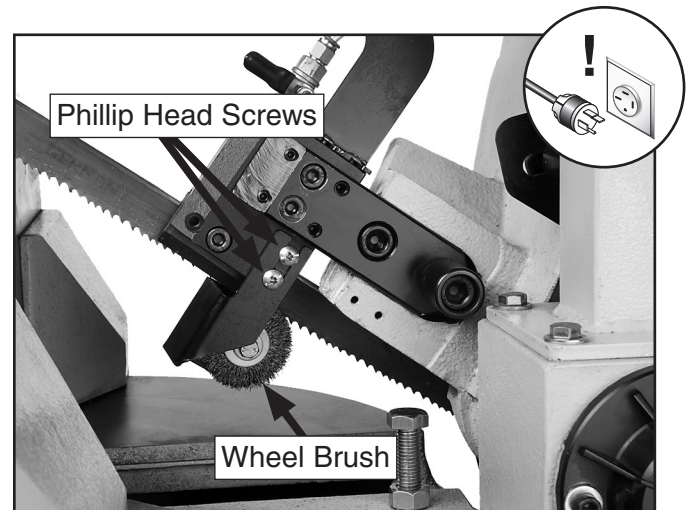


Figure 54. Wheel brush.

4. Adjust the brush so that the blade extends approximately $\frac{1}{8}$ " into the brush bristles.
—If the brush cannot be adjusted to this specification due to wear, it must be replaced. Remove the old wheel brush and position a new one as outlined in **Step 4**.
5. Tighten the Phillip head screws to secure the wheel brush.



Squaring Blade

The blade-to-table squareness is factory set. However, due to shipping and storage we recommend that you check the blade alignment yourself to ensure the cuts will be to your standards.

To square the blade:

1. DISCONNECT BANDSAW FROM POWER!
2. Make sure the blade is oiled, tensioned, and tracking correctly, and that the guides and stops are set.
3. Adjust the cutting angle to 0° as indicated by the scale.

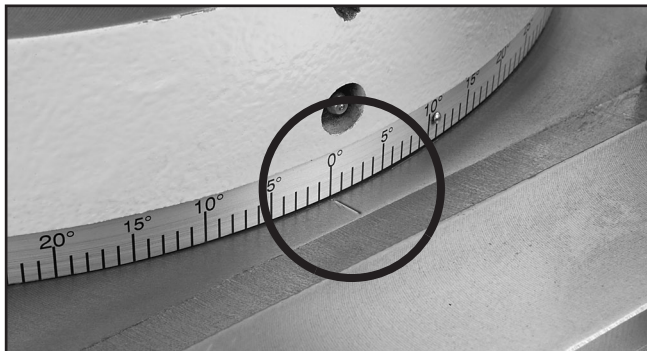


Figure 55. Bow and headstock moved to zero.

4. Place a quality square on the table and the side of the blade (Figure 56) to verify the blade is square with the table.

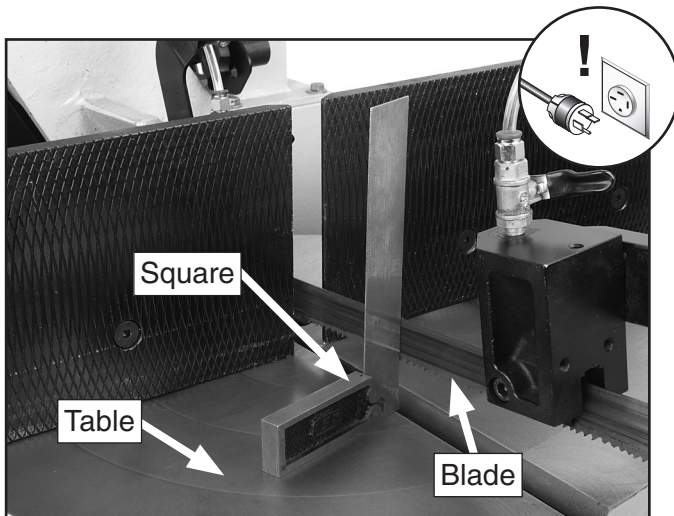


Figure 56. Checking blade squareness to vise.

—If the blade is square, no further adjustments are necessary.

—If the blade is not square, continue with **Step 5** below.

5. Extend the blade guide as far as possible.

Note: Perform the following step on both the upper and lower blade guides at the same time to maintain even force on the blade with each blade guide.

6. Loosen the two cap screws on each blade guide assembly, then alternately adjust the four 4mm set screws to tilt the blade guide assembly and the blade square to the table.

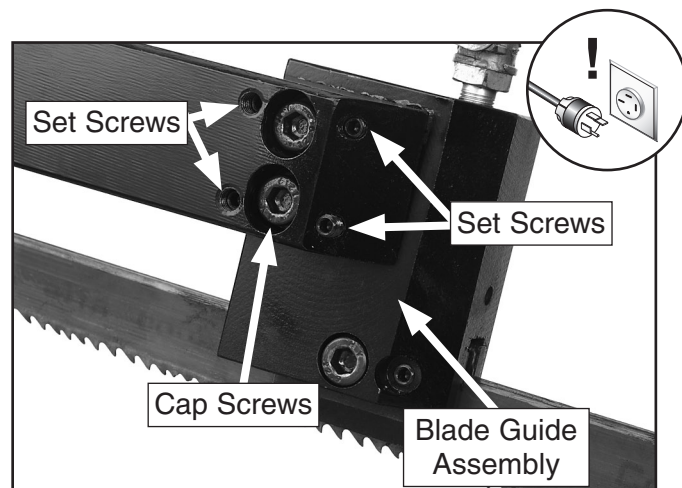


Figure 57. Upper blade guide adjustment.

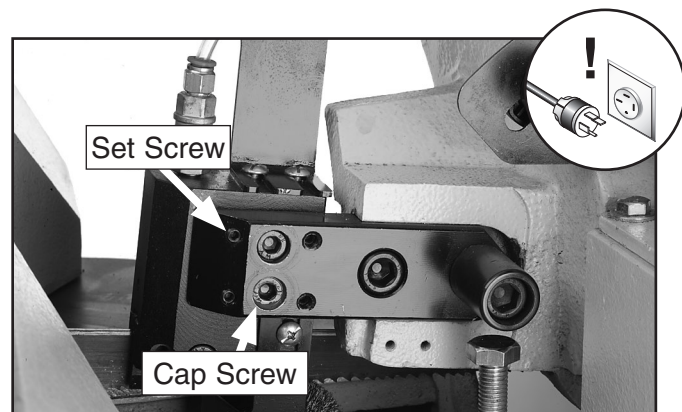


Figure 58. Lower blade guide adjustment.

7. Snug the cap screws to hold the new blade guide setting.



Swivel Stops

The blade swivel stops are factory set. However, due to shipping and storage we recommend that you check the 0°, -45° and the 60° stops yourself to ensure the cuts will be your standards. **Note:** *The accuracy range for the scale is $\pm 1/2^\circ$ degree.*

To adjust the swivel stops:

1. Make sure the blade is oiled, tensioned, and tracking correctly, and that the guides are set.
2. DISCONNECT BANDSAW FROM POWER!
3. Raise the bow, move and lock the headstock to 0° (**Figure 59**), then lower the bow.

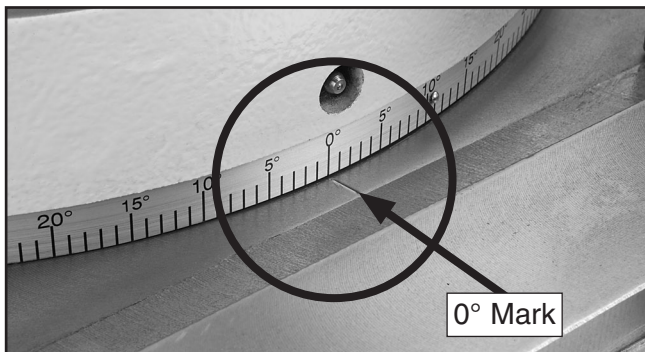


Figure 59. Bow and headstock moved to zero.

4. Observe the scale, and if the headstock is not at 0°, adjust the zero stop (**Figure 60**) so it will line up with the mark.

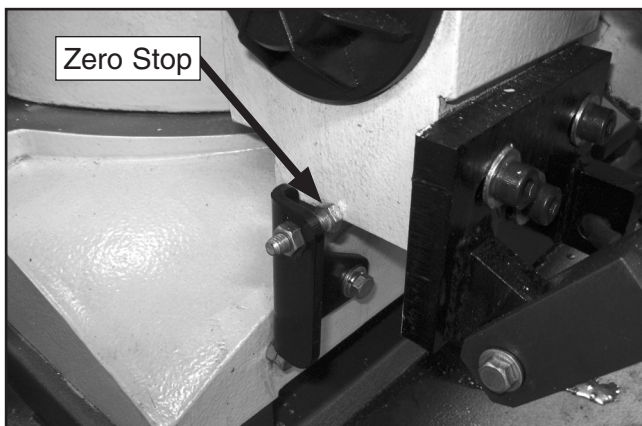


Figure 60. Zero degree swivel stop.

5. Move the headstock to 60°.
6. Read the scale. The bandsaw blade should be at 60°.

—If the headstock is not at 60°, adjust the stop (**Figure 61**) so it will line up with the 60° mark.

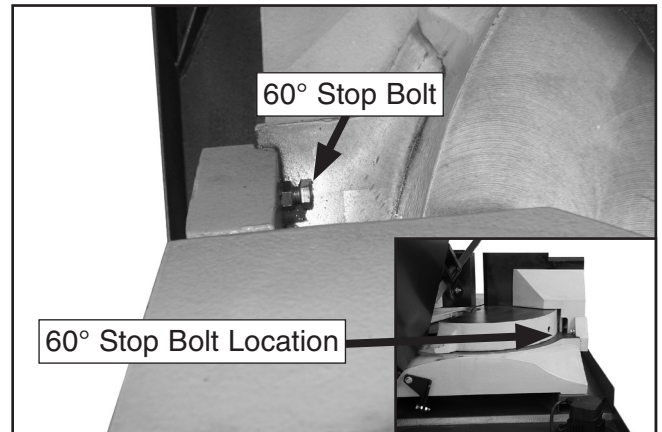


Figure 61. 60° swivel stop.

7. Move and the headstock to -45°.
8. Read the scale. The bandsaw blade should be at -45°.

—If the headstock is not at -45°, adjust the stop (**Figure 62**) so it will line up with the -45° mark.

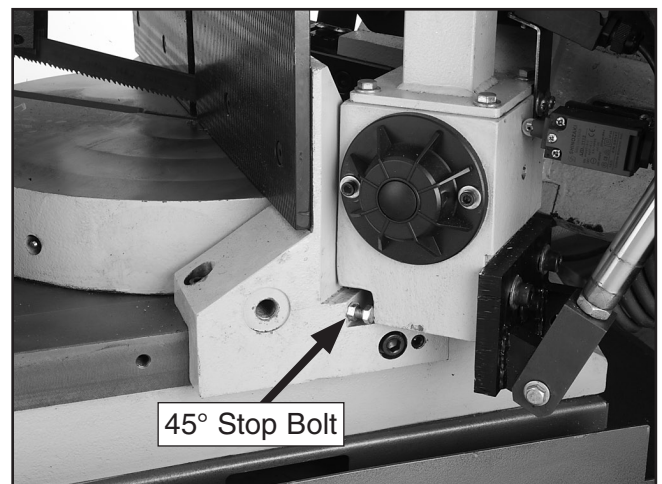


Figure 62. 45° swivel stop.

9. Go to **Squaring Blade** on **Page 49** to make sure the cuts will be perpendicular to the table.



Feed Stop

It may be necessary to adjust the feed stop before making blade adjustments. The blade should never rest on or rub on any part of the vise assembly or table.

To adjust the feed stop bolt:

Adjust the feed stop bolt and jam nut (**Figure 63**), so the bandsaw blade teeth are just below the vise table surface when the cut is complete.

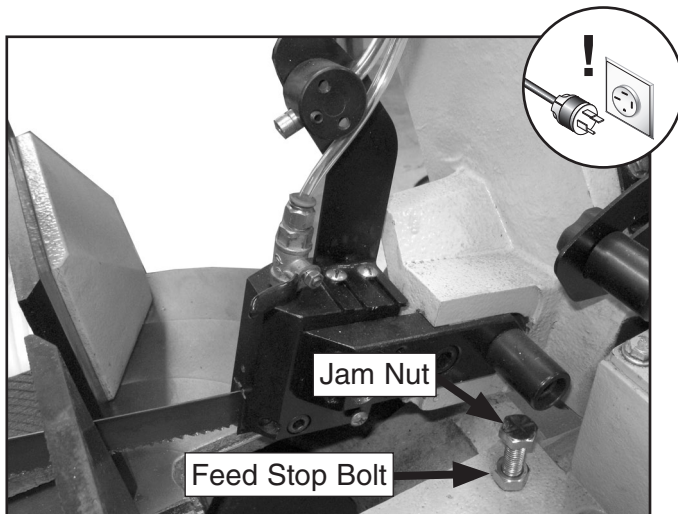


Figure 63. Feed stop bolt.

Limit Switches

The upper travel auto stop can be adjusted to limit saw bow travel to match the height of the workpiece. This speeds up repetitive cuts by eliminating unnecessary saw bow travel.

The lower limit switch should only be adjusted if the blade is not passing entirely through the workpiece or is cutting into the vise table.

To set the upper travel auto stop and lower limit switch:

1. Raise the saw bow to the highest level required to provide adequate clearance for your workpiece.
2. DISCONNECT BANDSAW FROM POWER!

3. Loosen the auto stop knob, adjust the position of the auto stop so it depresses the upper limit switch button, then re-tighten the auto stop knob. The saw bow will now automatically stop when raised to this level (**Figure 64**).

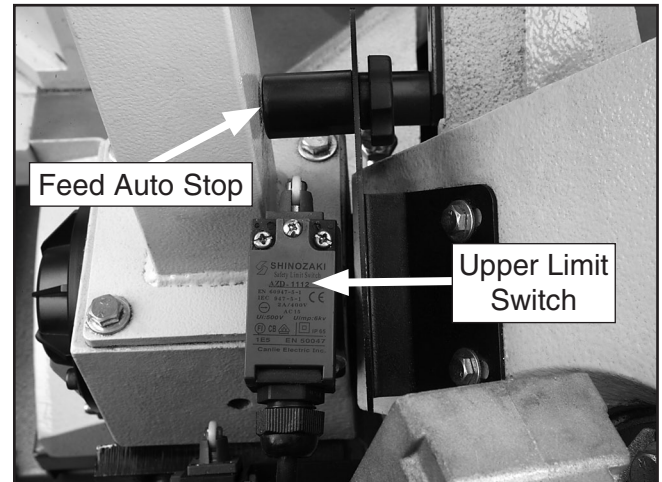


Figure 64. Feed auto stop.

4. Connect the machine to power and lower the saw bow until it contacts the feed stop bolt (**Figure 63**).
5. DISCONNECT BANDSAW FROM POWER!
6. Adjust the lower limit switch so that the button is depressed against the saw bow pivot base (**Figure 65**).

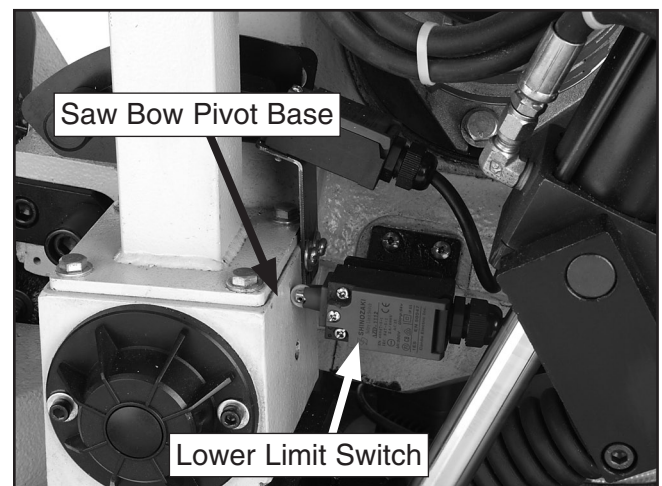


Figure 65. Limit switch.

7. Connect the machine to power and test the limit stops. If they do not stop the motion of the saw bow at the positions desired, repeat **Steps 1–6**, fine tuning as necessary.



SECTION 8: WIRING

WARNING

Electrical Safety Instructions

- 1. PRINTED INFORMATION.** The electrical information included in this section is current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical system of future machines. Study the photos and diagrams in this section carefully. If you notice differences between your machine and these diagrams, call Technical Support at (570) 546-9663 for assistance.
- 2. SHOCK HAZARD.** Disconnect power from the machine before servicing electrical components. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death.
- 3. GROUNDED CIRCUIT.** Electrocution or fire could result if the machine is not grounded and installed in compliance with electrical codes. Compliance **MUST** be verified by a qualified electrician.
- 4. CIRCUIT REQUIREMENTS.** You **MUST** follow the **CIRCUIT REQUIREMENTS** section on **Page 11**. **If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, consult a qualified electrician.**
- 5. MOTOR WIRING.** The motor wiring shown in these diagrams are current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.
- 6. EXPERIENCING DIFFICULTIES.** If at any time you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

NOTICE

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

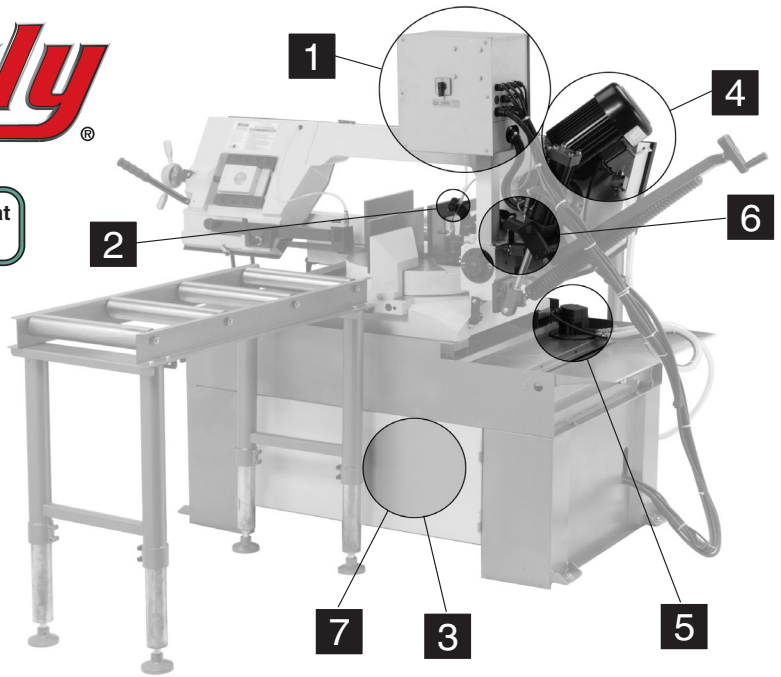


Wiring Overview

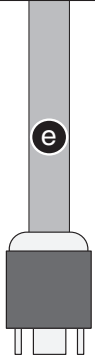


View this page in color at www.grizzly.com.

COLOR KEY	
BLACK	
WHITE	
GREEN	
RED	

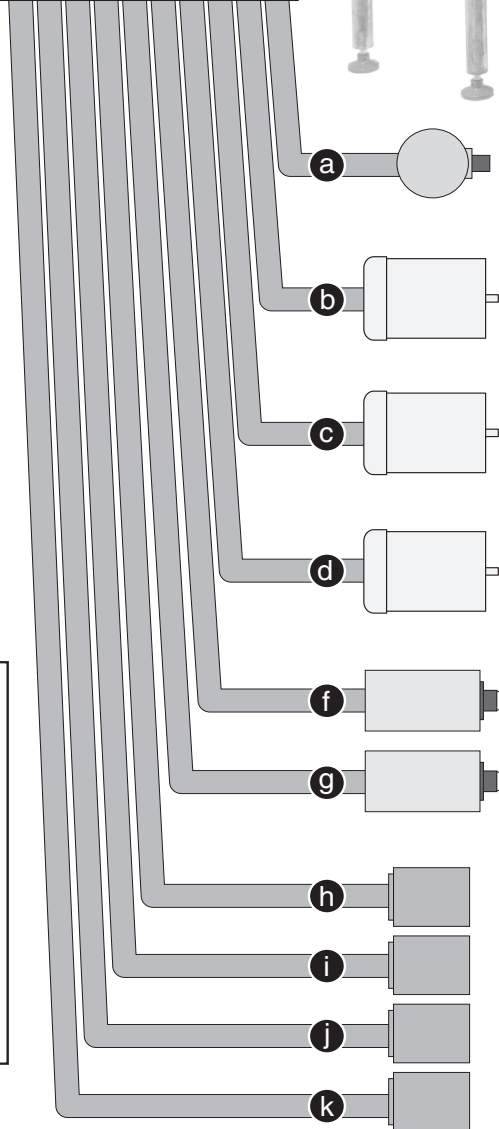


1 Control Box
See Diagrams on **Page 54** and Images in **Figures 72–75** on **Page 56**.



220 VAC
15-15 PLUG
Recommended

WIRING HARNESS KEY	
a	Laser Light Harness
b	Hydraulic Pump Harness
c	Saw Motor Harness
d	Coolant Pump Harness
e	Power Cord
f	Upper Limit Switch Harness
g	Lower Limit Switch Harness
h	Vise Open Solenoid Cord
i	Vise Close Solenoid Cord
j	Saw Up Solenoid Cord
k	Saw Down Solenoid Cord



2 Laser Light
See Diagram on **Page 55** and Image in **Figure 67**.

3 Hydraulic Pump (Inside Stand)
See Diagram on **Page 55** and Image in **Figure 66**.

4 Saw Motor
See Diagram on **Page 55** and Image in **Figure 68**.

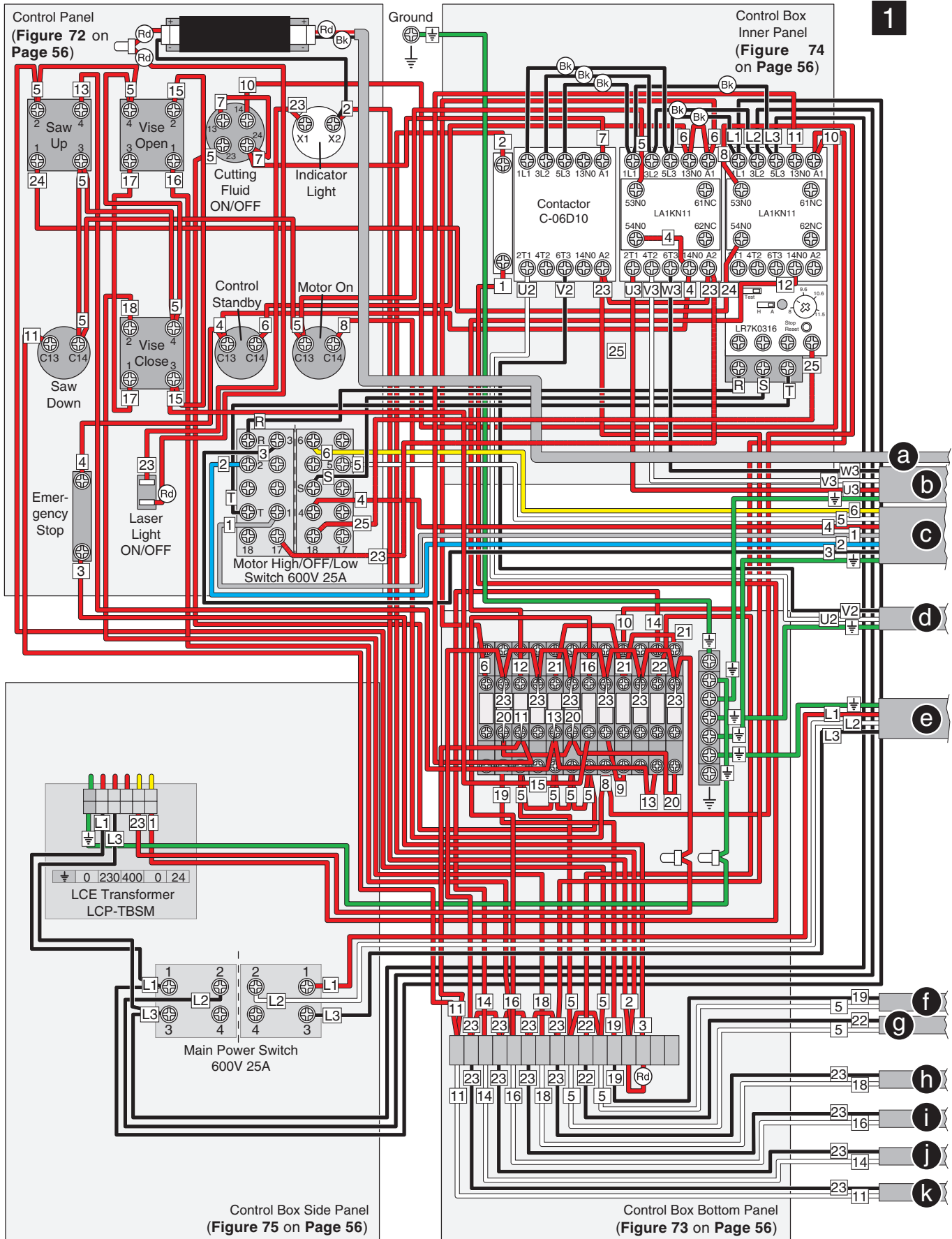
5 Coolant Pump
See Diagram on **Page 55** and Image in **Figure 70**.

6 Limit Switches
See Diagram on **Page 55** and Image in **Figure 69**.

7 Solenoid Valves (Inside Stand)
See Diagram on **Page 55** and Image in **Figure 71**.



Control Box Wiring Diagram



Components Wiring Diagram



Figure 66. Hydraulic pump motor.

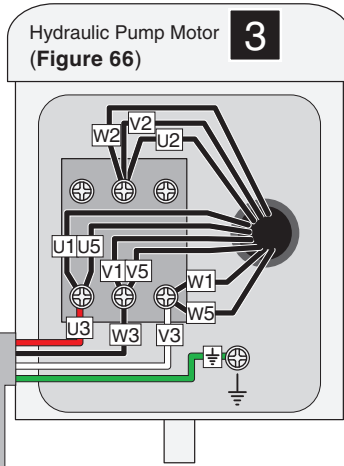


Figure 68. 220V saw motor.

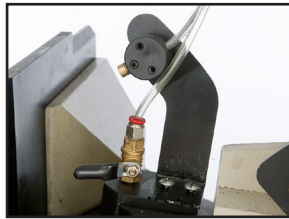
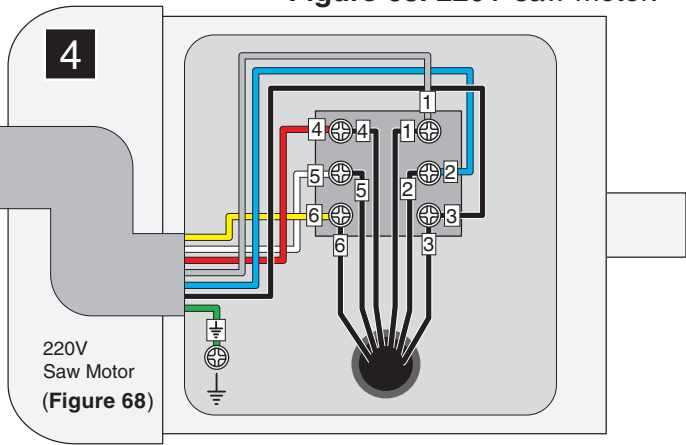


Figure 67. Laser light.

Laser Light (Figure 67)

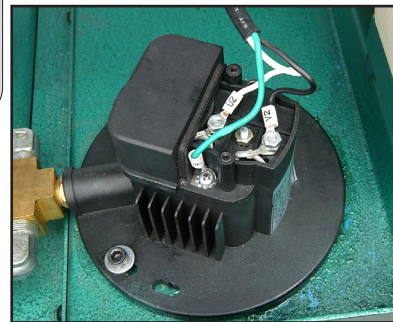
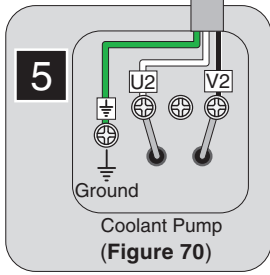
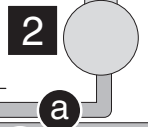


Figure 70. Coolant pump motor.

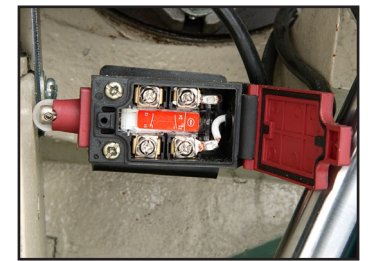


Figure 69. Limit switch.

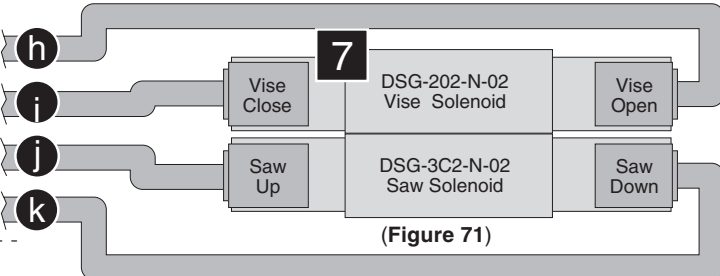
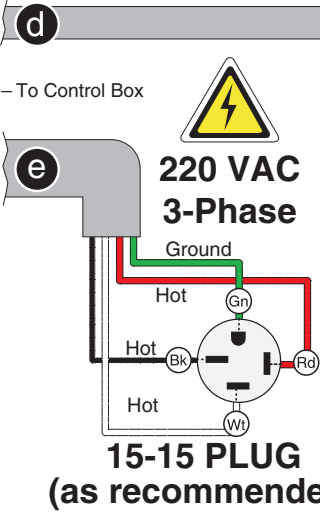
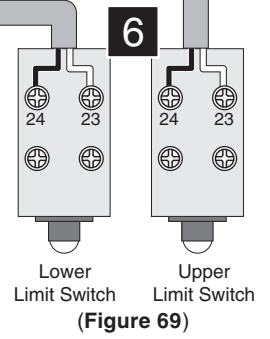


Figure 71.



Control Box Electrical Components

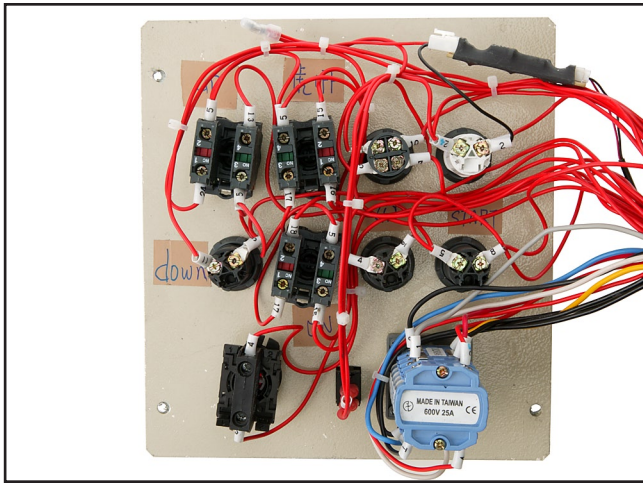


Figure 72. Control panel wiring.

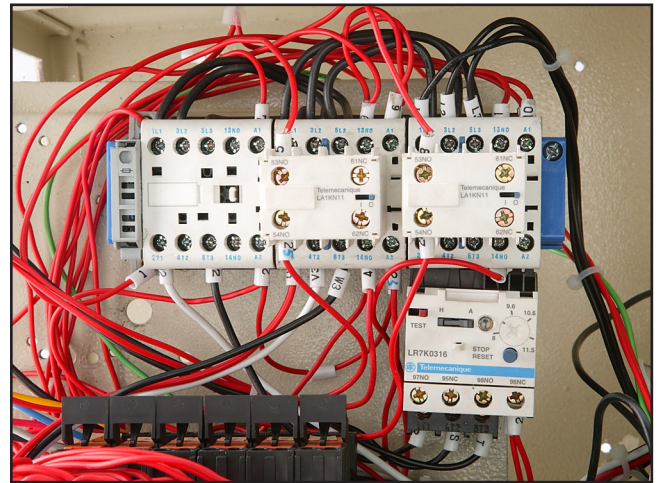


Figure 74. Inner panel wiring.

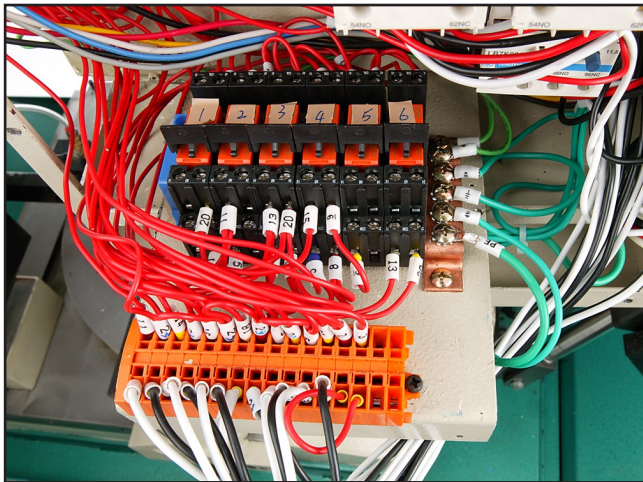


Figure 73. Bottom panel wiring.

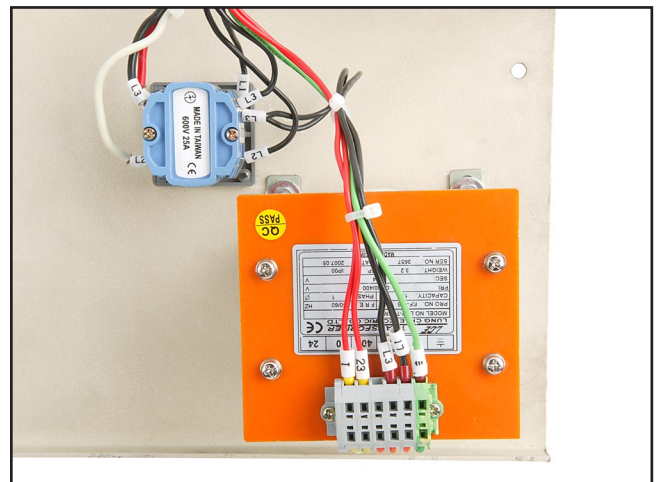
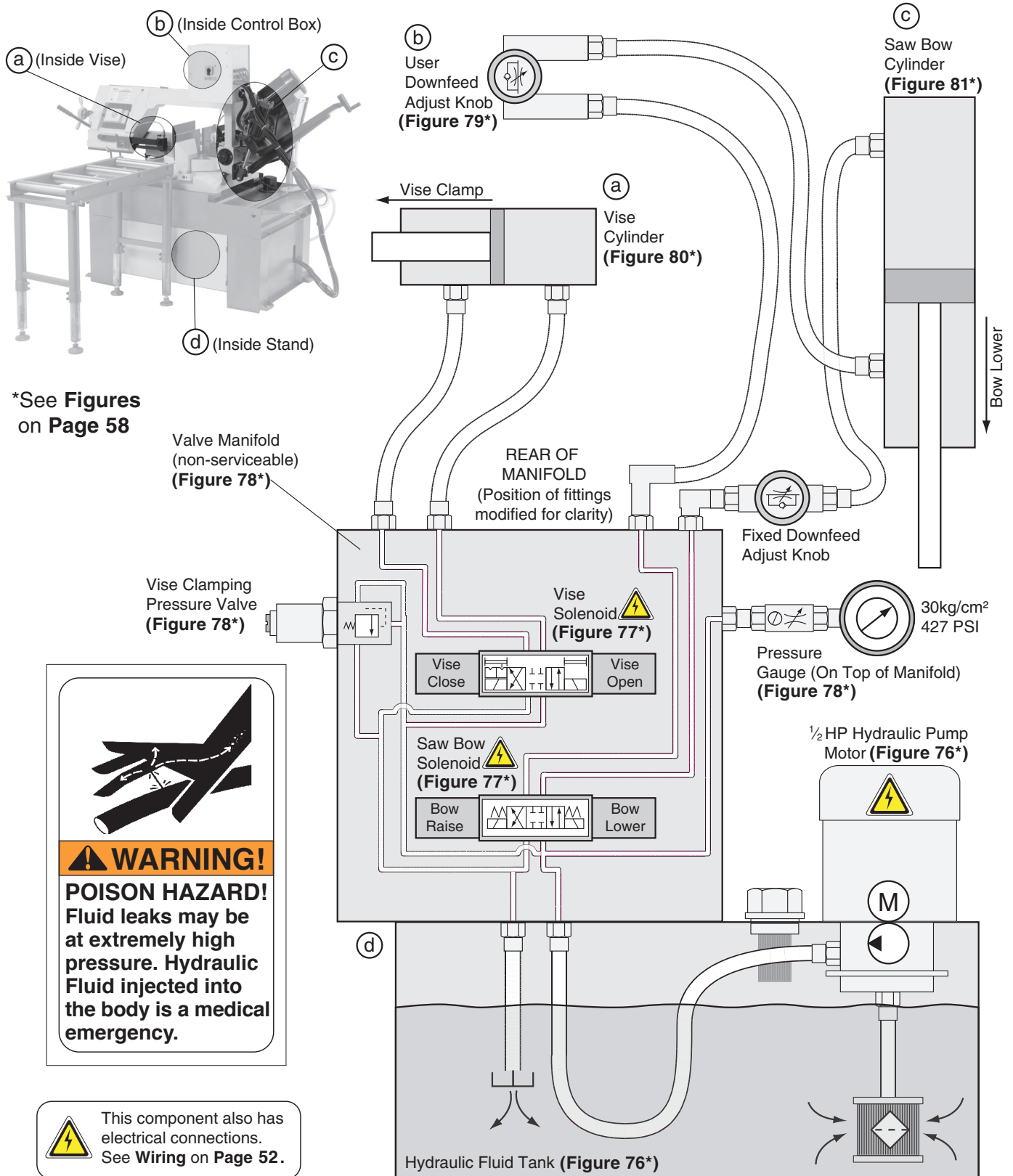


Figure 75. Side panel wiring.



SECTION 9: Hydraulics

Hydraulic System Diagram



Hydraulic Components

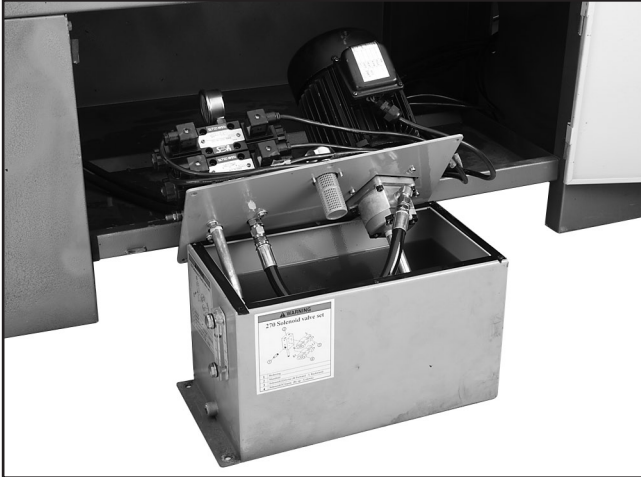


Figure 76. Hydraulic fluid tank.

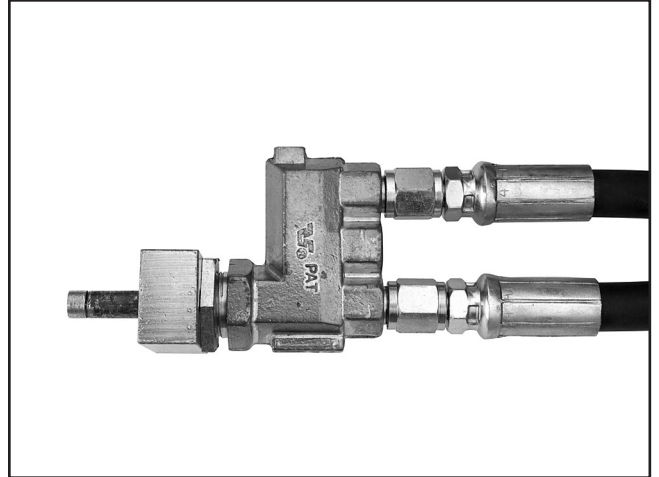


Figure 79. Downfeed adjust knob.

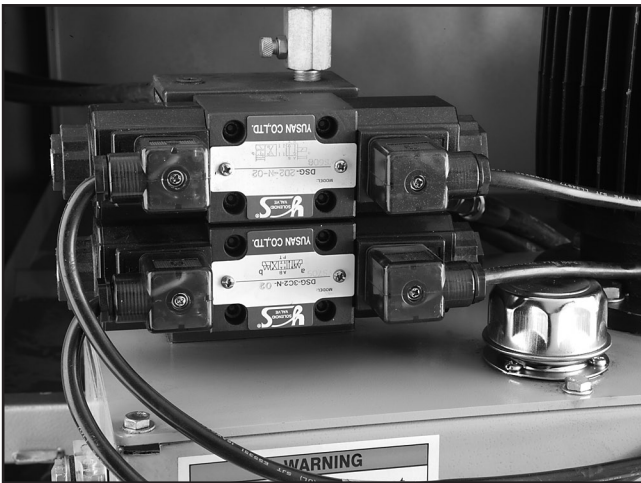


Figure 77. Solenoids.



Figure 80. Vise cylinder.

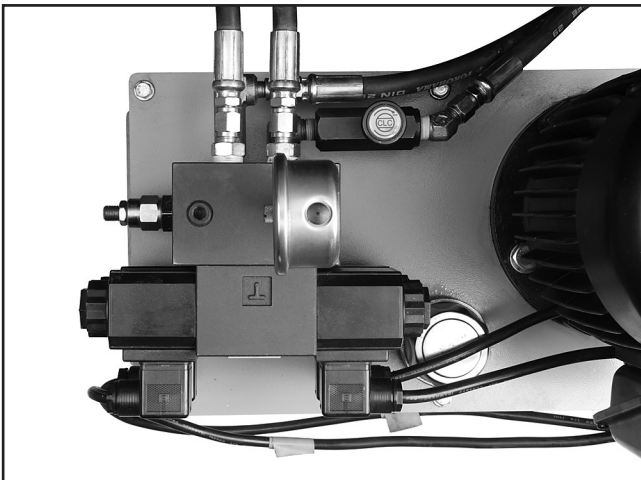


Figure 78. Manifold overhead view.

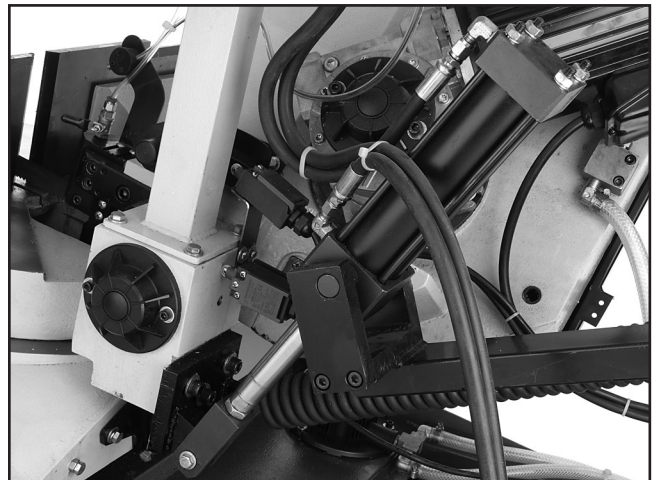


Figure 81. Saw bow cylinder.



Main Parts List

REF	PART #	DESCRIPTION
60	P0664060	DRIVE WHEEL FRAME
61	P0664061	IDLER WHEEL FRAME
62	P0664062	ANCHOR BLOCK
63	P0664063	GIB
64	PLW04M	LOCK WASHER 8MM
65	PSB31M	CAP SCREW M8-1.25 X 25
66	P0664066	BLADE TENSION BAR
67	PRP58M	ROLL PIN 6 X 45
68	PSS09M	SET SCREW M8-1.25 X 20
69	P0664069	LIMIT SWITCH
69-1	P0664069-1	SWITCH BRACKET
69-2	PW02M	FLAT WASHER 5MM
69-3	PS05M	PHLP HD SCR M5-.8 X 8
69-4	PS51M	PHLP HD SCR M4-.7 X 30
70	P0664070	MAIN PIVOT SHAFT
71	PR56M	EXT RETAINING RING 45MM
72	P0664072	BEARING SPACER
73	PORG070	O-RING 69.4 X 3.1 G70
74	P0664074	BALL BEARING 32009J
75	P0664075	MAIN PIVOT SPACER
76	P0664076	DUST SHIELD
77	P0664077	SPECIAL NUT M45-1.5
80	P0664080	BLADE GUIDE BLOCK
81	PSB36M	CAP SCREW M12-1.75 X 25
82	PSB13M	CAP SCREW M8-1.25 X 30
83	PSS64M	SET SCREW M6-1 X 15
84	P0664084	RELEASE BLOCK
85	PSB63M	CAP SCREW M12-1.75 X 60
86	P0664086	BLADE GUARD REAR
86-1	P0664086-1	BUTTON HD CAP SCR M5-.8 X 12
87	PW03M	FLAT WASHER 6MM
87-1	PSB28M	CAP SCREW M6-1 X 15
89	P0664089	UPPER STOP BRACKET
89-1	P0664089-1	STOP KNOB
89-2	P0664089-2	STOP BLOCK
89-3	PB29M	HEX BOLT M6-1 X 30
89-4	PW03M	FLAT WASHER 6MM
90	P0664090	BLADE GUIDE UPPER
91	P0664091	BLADE GUIDE LOWER
92	P0664092	HOSE VALVE
93	P0664093	BLADE GUIDE BACK
94	P0664094	BLADE GUIDE LEFT
95	P0664095	BLADE GUIDE RIGHT
96	PSB11M	CAP SCREW M8-1.25 X 16
97	PSB28M	CAP SCREW M6-1 X 15
98	PW03M	FLAT WASHER 6MM
99	PSB28M	CAP SCREW M6-1 X 15
100	P0664100	BLADE GUARD
102-1	P0664102-1	BRACKET
102-2	P0664102-2	LASER LIGHT
102-3	PW02M	FLAT WASHER 5MM
102-4	PS05M	PHLP HD SCR M5-.8 X 8
102-5	PS05M	PHLP HD SCR M5-.8 X 8

REF	PART #	DESCRIPTION
104-1	P0664104-1	BRUSH SUPPORT
104-2	P0664104-2	BRUSH
104-3	PB29M	HEX BOLT M6-1 X 30
104-4	PW03M	FLAT WASHER 6MM
104-5	PN01M	HEX NUT M6-1
104-6	PW02M	FLAT WASHER 5MM
104-7	PS05M	PHLP HD SCR M5-.8 X 8
105	P0664105	BLADE ADJUST STICK
106	P0664106	KNOB M6-1 X 15
107	P0664107	FIX BLOCK
108	PW06M	FLAT WASHER 12MM
109	P0664109	HANDLE
110	PSB13M	CAP SCREW M8-1.25 X 30
114	P0664114	BALL BEARING 51203
115	P0664115	SPECIAL WASHER
116	P0664116	BLADE TENSION WHEEL
117	P0664117	BLADE TENSION HANDLE
118	P0664118	BLADE TENSION SCALE
120	P0664120	CONNECTING TUBE
121	P0664121	HANDLE CAP
125	P0664125	IDLER WHEEL
126	P0664126	IDLER WHEEL SHAFT
127	P0664127	DUST COVER
128	P0664128	BALL BEARING 32007J
129	P0664129	SPECIAL NUT M35-1.5
130	P0664130	DRIVE WHEEL
131	P0664131	DRIVE GEAR SHAFT
132	P0664132	DRIVE GEAR KEY
133	P0664133	SHAFT BUSHING
134	P0664134	BALL BEARING 6307ZZ
135	P0664135	BLADE 4/6T VP HSS
137	PRP08M	ROLL PIN 6 X 30
138	PLW05M	LOCK WASHER 12MM
139	PSB131M	CAP SCREW M12-1.75 X 45
140	P0664140	BLADE COVER
141	PS11M	PHLP HD SCR M6-1 X 16
142	P0664142	BLADE COVER LATCH
142-1	P0664142-1	HOOK
143	PS19M	PHLP HD SCR M5-.8 X 6
160	P0664160	SPRING BRACKET
161	PSB84M	CAP SCREW M10-1.5 X 35
162	P0664162	SPRING BRACKET
163	PSB31M	CAP SCREW M8-1.25 X 25
164	P0664164	RAM ASSEMBLY
165	P0664165	EXTENSION SPRING
165-1	P0664165-1	BUSHING
166	P0664166	BEARING
167	P0664167	SPRING TENSION LEADSCREW
168	P0664168	SPRING TENSION KNOB
170	P0664170	RAM PIN
171	PW01M	FLAT WASHER 8MM
172	PSB100M	CAP SCREW M8-1.25 X 15
200	P0664200	GEAR BOX

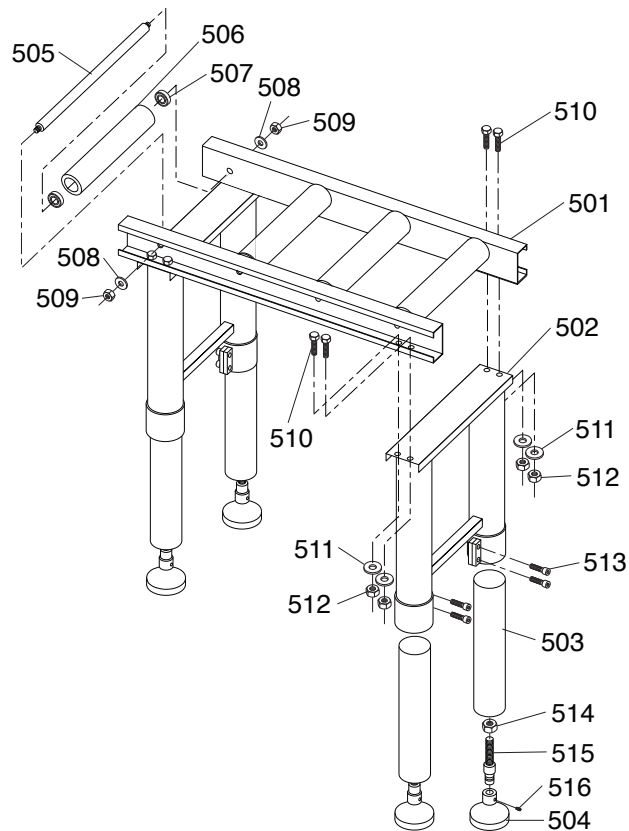


Main Parts List (Continued)

REF	PART #	DESCRIPTION
201	P0664201	MOTOR 2.5 HP 220V 3-PH
201-1	P0664201-1	SAW MOTOR FAN
201-2	P0664201-2	SAW MOTOR FAN COVER
201-3	P0664201-3	SAW MOTOR JUNCTION BOX
202	P0664202	KEY 8 X 7 X 40
204	PLW04M	LOCK WASHER 8MM
205	PSB31M	CAP SCREW M8-1.25 X 25
206	PW04M	FLAT WASHER 10MM
207	PSB64M	CAP SCREW M10-1.5 X 25
208	P0664208	DRIVE SHAFT WASHER
209	PSB61M	CAP SCREW M10-1.5 X 20
210	P0664210	REDUCER COVER
211	PSB100M	CAP SCREW M8-1.25 X 15

REF	PART #	DESCRIPTION
248-3	P0664248-3	MICRO CONTROL BLOCK
248-4	P0664248-4	HOSE CLAMP
248-5	P0664248-5	NET TUBE
248-6	P0664248-6	3 WAY VALVE
248-7	P0664248-7	HOSE FITTING
248-8	PSB07M	CAP SCREW M6-1 X 30
248-9	P0664248-9	PU TUBE SHORT
248-10	P0664248-10	PU TUBE LONG
250-1	P0664250-1	POWER CUTTING BRACKET
250-2	PLW03M	LOCK WASHER 6MM
250-3	PSB28M	CAP SCREW M6-1 X 15
250-4	PS51M	PHLP HD SCR M4-.7 X 30

Roller Stand Parts Breakdown & List



REF	PART #	DESCRIPTION
501	G0664501	TABLE RAIL
502	G0664502	LEG ASSEMBLY
503	G0664503	LOWER LEG
504	G0664504	ADJUSTABLE FOOT
505	G0664505	ROLLER SHAFT
506	G0664506	ROLLER
507	P6003	BALL BEARING 6003ZZ
508	PW06M	FLAT WASHER 12MM

REF	PART #	DESCRIPTION
509	PN09M	HEX NUT M12-1.75
510	PB03M	HEX BOLT M8-1.25 X 16
511	PW01M	FLAT WASHER 8MM
512	PN03M	HEX NUT M8-1.25
513	PSB11M	CAP SCREW M8-1.25 X 16
514	PN13M	HEX NUT M16-2
515	G0664515	FOOT STUD
516	PSS03M	SET SCREW M6-1 X 8



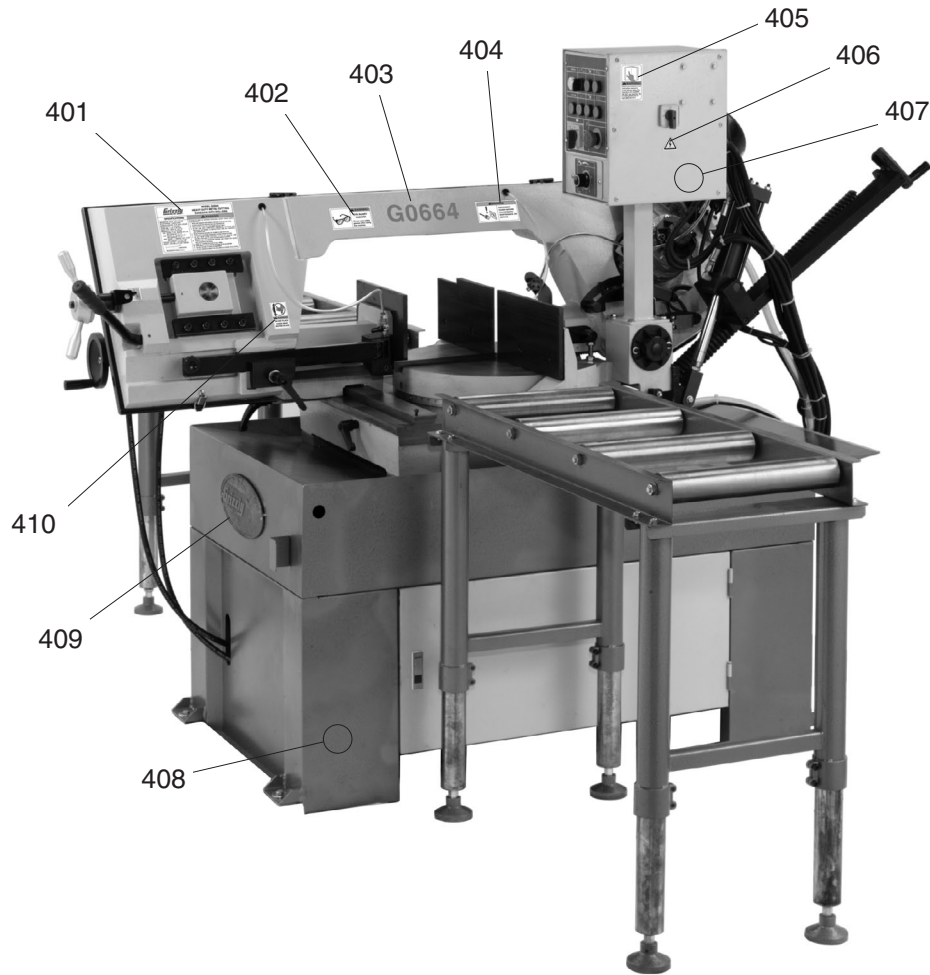
Base Breakdown

REF	PART #	DESCRIPTION
1	P0664001	SAW SWIVEL BASE
2	P0664002	WISE BACK PLATE RIGHT
3	P0664003	WISE BACK PLATE LEFT
4	P0664004	WISE JAW RIGHT
5	P0664005	WISE JAW LEFT
6	P0664006	SAW SWIVEL
7	P0664007	SPECIAL NUT M30-1.5
8	P0664008	SHAFT
9	P0664009	BALL BEARING 35 X 52 X 4
10	P0664010	SPECIAL NUT M35-1.5
11	PSB36M	CAP SCREW M12-1.75 X 25
12	PSS77M	SET SCREW M12-1.75 X 20
13-2	PSS01M	SET SCREW M6-1 X 10
13-3	P0664013-3	WORK STOP ROD
13-4	P0664013-4	LOCK KNOB
13-5	PLW03M	LOCK WASHER 6MM
13-6	P0664013-6	WORK STOP BRACKET
13-7	P0664013-7	WORK STOP
13-8	PN02M	HEX NUT M10-1.5
13-9	PB32M	HEX BOLT M10-1.5 X 25
14	P0664014	PIVOT BEARING COVER
14-1	PSB28M	CAP SCREW M6-1 X 15
15-1	P0664015-1	STAND
15-2	P0664015-2	FLUID COLLECT PLATE
15-3	P0664015-3	COOLANT CATCH TRAY
16-1	P0664016-1	STAND LEG RIGHT
16-2	P0664016-2	STAND LEG LEFT
16-3	P0664016-3	STAND MIDDLE PANEL
16-4	P0664016-4	STAND FRONT PANEL
17-1	PB09M	HEX BOLT M8-1.25 X 20
17-2	PW01M	FLAT WASHER 8MM
17-3	PN03M	HEX NUT M8-1.25
17-4	PN13M	HEX NUT M16-2
17-5	PSB122M	CAP SCREW M16-2 X 50
18-1	PSB14M	CAP SCREW M8-1.25 X 20
18-2	PW01M	FLAT WASHER 8MM
18-3	PN03M	HEX NUT M8-1.25
19-1	PW03M	FLAT WASHER 6MM
19-2	PSB28M	CAP SCREW M6-1 X 15
19-3	P0664019-3	SET SCREW M10-1.5 X 40
19-4	PW04M	FLAT WASHER 10MM
19-5	PN02M	HEX NUT M10-1.5
21	P0664021	PIVOT LOCK SHAFT
22	P0664022	PIVOT LOCK HANDLE
30	P0664030	WISE TABLE
31	P0664031	COMPRESSION SPRING
32	P0664032	RACK SHAFT
33	P0664033	GEAR SHAFT
34	P0664034	SHAFT BUSHING
35	P0664035	HANDLE

REF	PART #	DESCRIPTION
36	P0664036	HANDLE SHAFT
37	P0664037	HANDLE
38	PSS06M	SET SCREW M8-1.25 X 16
40	P0664040	WISE JAW BRACKET FRONT
41	P0664041	WISE PLATE
42	PFH11M	FLAT HD SCR M8-1.25 X 15
43	PSS25M	SET SCREW M6-1 X 20
44	P0664044	LEADSCREW
45	PW08M	FLAT WASHER 16MM
46	P0664046	HANDWHEEL
47	PRP05M	ROLL PIN 5 X 30
48	P0664048	CYLINDER
49	PW01M	FLAT WASHER 8MM
50	PSB13M	CAP SCREW M8-1.25 X 30
51	PSS06M	SET SCREW M8-1.25 X 16
52	P0664052	ACCESSORY BRACKET
53	PW04M	FLAT WASHER 10MM
54	PSB72M	CAP SCREW M10-1.5 X 30
55	PN09M	HEX NUT M12-1.75
56	PSB73M	CAP SCREW M12-1.75 X 50
57	P0664057	CONTROL BOX ASSEMBLY
57-1	P0664057-1	CONTROL PANEL LABEL
57-2	P0664057-2	FEED SPEED LABEL
58	PW01M	FLAT WASHER 8MM
59	PSB31M	CAP SCREW M8-1.25 X 25
78	P0664078	BRACKET
78-1	PSB28M	CAP SCREW M6-1 X 15
78-2	PS51M	PHLP HD SCR M4-.7 X 30
78-3	PW03M	FLAT WASHER 6MM
240	P0664240	COOLING PUMP ASSEMBLY
241	PLW03M	LOCK WASHER 6MM
242	PSB28M	CAP SCREW M6-1 X 15
245-1	P0664245-1	MACHINE FLUID HOSE
245-2	P0664245-2	HOSE CLAMP
245-3	P0664245-3	SPRAYER FLUID HOSE
245-4	P0664245-4	SPRAYER
245-5	P0664245-5	ELBOW
245-6	P0664245-6	MANIFOLD
245-7	P0664245-7	CONNECTOR
245-8	P0664245-8	HOSE CLAMP
246	P0664246	GREASE FITTING
350	P0664350	HYDRAULIC UNIT
350-1	P0664350-1	HYDRAULIC VALVE SET
350-2	P0664350-2	MOTOR 1/2 HP 220V 3-PH
350-3	P0664350-3	PUMP MOTOR FAN
350-4	P0664350-4	PUMP MOTOR FAN COVER
350-5	P0664350-5	PUMP MOTOR JUNCTION BOX
351	P0664351	HOSE W/TUBE FITTING
352	P0664352	HOSE W/TUBE FITTING
353	P0664353	HEX BOLT M6-1 X 20



Labels Breakdown and List



REF	PART #	DESCRIPTION
401	P0664401	MACHINE ID LABEL
402	P0664402	WEAR SAFETY GLASSES LABEL
403	P0664403	MODEL NUMBER LABEL
404	P0664404	DISCONNECT LABEL
405	PLABEL-12A	READ MANUAL LABEL

REF	PART #	DESCRIPTION
406	PLABEL-14	ELECTRICITY LABEL
407	PPAINT-11	GRIZZLY PUTTY TOUCH UP PAINT
408	PPAINT-1	GRIZZLY GREEN TOUCH UP PAINT
409	G8589	GRIZZLY NAMEPLATE-LARGE
410	P0664410	BLADE DANGER LABEL

WARNING

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





WARRANTY CARD

Name _____

Street _____

City _____ State _____ Zip _____

Phone # _____ Email _____ Invoice # _____

Model # _____ Order # _____ Serial # _____

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

1. How did you learn about us?

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

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

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

3. What is your annual household income?

- \$20,000-\$29,000
- \$30,000-\$39,000
- \$40,000-\$49,000
- \$50,000-\$59,000
- \$60,000-\$69,000
- \$70,000+

4. What is your age group?

- 20-29
- 30-39
- 40-49
- 50-59
- 60-69
- 70+

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

- 0-2 Years
- 2-8 Years
- 8-20 Years
- 20+ Years

6. How many of your machines or tools are Grizzly?

- 0-2
- 3-5
- 6-9
- 10+

7. Do you think your machine represents a good value? Yes No

8. Would you recommend Grizzly Industrial to a friend? Yes No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?
Note: We never use names more than 3 times. Yes No

10. Comments: _____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE



Place
Stamp
Here



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



FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name _____
Street _____
City _____ State _____ Zip _____

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY AND RETURNS

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

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

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

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

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

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

grizzly.com

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