

# MODEL G0681 9" COLD CUT SAW OWNER'S MANUAL



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#JB11327 PRINTED IN TAIWAN



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

#### **Manual Accuracy**

We are proud to offer this manual with your new machine! We've made every effort to be exact with the instructions, specifications, drawings, and photographs of the machine we used when writing this manual. However, sometimes errors do happen and we apologize for them.

Also, owing to our policy of continuous improvement, your machine may not exactly match the manual. If you find this to be the case, and the difference between the manual and machine leaves you in doubt, immediately call our technical support for updates or clarification.

For your convenience, we always keep current Grizzly manuals and most updates available on our website at **www.grizzly.com**. Any updates to your machine will be reflected in these documents as soon as they are complete. Visit our site often to check for the latest updates!

#### **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**

This 9" cold cut saw is used to cut thin-walled metal workpieces accurately, efficiently, and safely. A cold cut saw is advantageous over a typical metal-cutting band saw in that the cuts produced are cleaner, more accurate, and can be made much faster.

An auto-centering vise holds the workpiece securely and ensures proper positioning of the workpiece relative to the blade. For repetitive cuts, the Model G0681 is equipped with an adjustable work stop.

A blade coolant system cools and lubricates the blade during use. The integrated cutting fluid pump draws cutting fluid from the reservoir in the base and feeds the fluid to nozzles that apply the fluid directly to the blade.

The cutting angle is adjustable from 0° to 45° and is measured by a scale located on the saw base.



# **Identification**

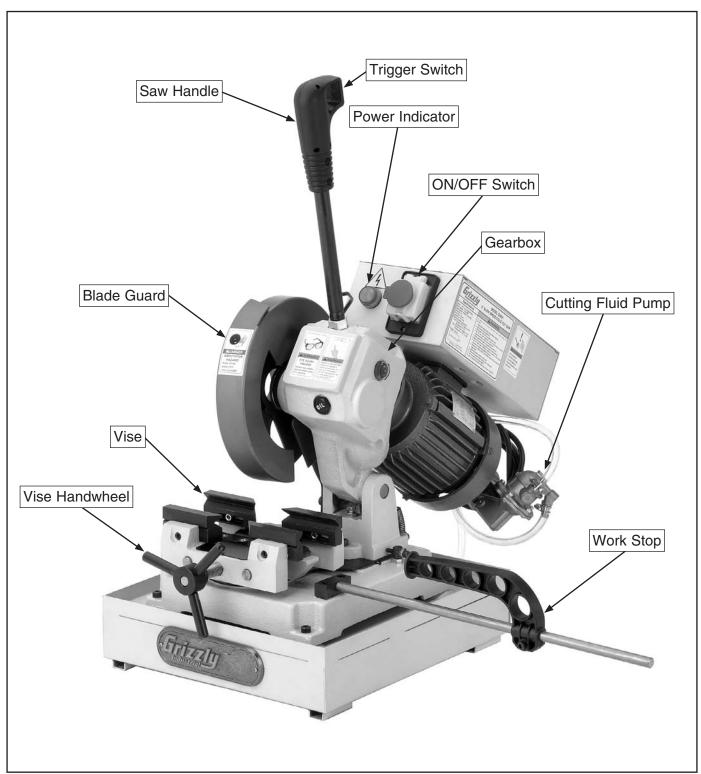


Figure 1. Identification.



### MACHINE DATA SHEET

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

#### MODEL G0681 9" COLD CUT SAW

Weight
hipping Dimensions:
Type         Wood Crate           Content         Machine           Weight         154 lbs.           Length/Width/Height         27" x 19" x 25"
lectrical:
Switch
otor:
Type         TEFC           Horsepower         1 HP           Voltage         110V           Phase         Single           Amps         7.2A           Speed         1725 RPM           Cycle         60 Hz           Number Of Speeds         1           Power Transfer         Gearboy Reduction Drive
Power Transfer



#### **Main Specifications:**

#### **Operation Information**

Blade Speed	
Blade Size	9"
Arbor Size	32mm
Cutting Capacities	
Angle Cuts	0° – 45°
Vise Jaw Depth	3"
Vise Jaw Width	
Vise Jaw Height	
Maximum Capacity Square @ 90°	
Maximum Capacity Rectangular @ 90°	
Maximum Capacity Round @ 90°	
Maximum Capacity Square @45°	
Maximum Capacity Rectangular @ 45°	
Maximum Capacity Round @ 45°	
Construction	
Table	Cast Iron
Saw Wheel Cover	
Saw Wheel Guard	Plastic
Body	
Base	
Paint	
Other Specifications:	
Country Of Origin	
Serial Number Location	

#### Features:

Auto-Retract Blade Guard Spring Assisted Return Built In Blade Coolant System Adjustable Angle from 0° to 45° Blade Included

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#### **SECTION 1: SAFETY**

#### **AWARNING**

# 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.

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

**A**CAUTION

Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE

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

# 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.



# **A**WARNING Safety Instructions for Machinery

- ONLY ALLOW TRAINED AND PROP-ERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY. Make sure operation instructions are safe and clearly understood.
- 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.

#### **AWARNING**

# **Safety Instructions for Metal Cutting Saws**

- BLADE CONDITION. Do not operate with a dull, cracked or badly worn blade. Inspect blades for cracks and missing teeth before each use.
- HAND PLACEMENT. Never position fingers or thumbs in line with the cut. Hands could be crushed in vise or from falling machine components.
- ENTANGLEMENT HAZARDS. Do not operate this saw without blade guard in place. Loose clothing, jewelry, long hair and work gloves can be drawn into working parts.
- 4. BLADE REPLACEMENT. When replacing blades, disconnect the machine from power, wear gloves to protect hands and safety glasses to protect eyes.
- 5. WORKPIECE HANDLING. Always support the workpiece with table, vise, or some type of support fixture. Flag long pieces to avoid a tripping hazard. Never hold the workpiece with your hands during a cut.
- 6. 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 invites slipping hazards.

- LOSS OF STABILITY. Unsupported workpieces may jeopardize machine stability and cause the machine to tip and fall which could cause serious injury.
- 8. FIRE HAZARD. Use EXTREME CAUTION if cutting magnesium. Using the wrong cutting fluid will lead to chip fire and possible explosion.
- 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.
- 10. MAINTENANCE/SERVICE. All inspections, adjustments, and maintenance are to be done with the power *OFF* and the plug pulled from the outlet. Wait for all moving parts to come to a complete stop.
- 11. 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.
- **12. HOT SURFACES.** Contact with hot surfaces from machine components, ejections of hot chips, swarf, and the workpiece itself can cause burns.

# **AWARNING**

No list of safety guidelines can be complete. Every shop environment is different. Like all machines there is danger associated with the Model G0681. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.



# **SECTION 2: CIRCUIT REQUIREMENTS**

### 110V Operation

#### **AWARNING**

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.



#### **AWARNING**

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:

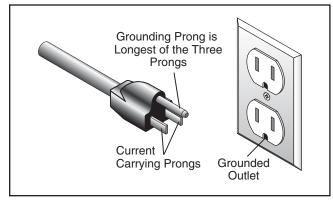
#### **Power Supply Circuit Requirements**

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.

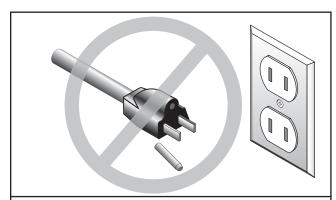
Minimum Circuit Size...... 15 Amps

#### **Power Connection Device**

The Model G0681 comes with a 5-15 plug, similar to **Figure 2**, to connect the machine to power.



**Figure 2.** Typical 5-15 plug and receptacle.



# CAUTION

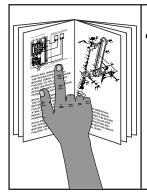
This machine MUST have a ground prong in the plug to help ensure that it is grounded. DO NOT remove ground prong from plug to fit into a two-pronged outlet! If the plug will not fit the outlet, have the proper outlet installed by a qualified electrician.

#### **Extension Cords**

We do not recommend using extension cords, but if you find it absolutely necessary:

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

# **SECTION 3: SETUP**



#### WARNING

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



#### AWARNING

Wear safety glasses during the entire setup process!



#### **AWARNING**

This machine and its components are very heavy. Get lifting help or use power lifting equipment such as a forklift to move heavy items.

# Items Needed for Setup

De	scription	Qty
•	Assistant	1
•	Safety Glasses (For Each Person	on)1 Pr.
•	Wrenches 12, 25mm	1 Ea.
•	Hex Wrench 5mm	1
•	Shop Bags & Solvent Cleaner	As needed

# Unpacking

Your machine was carefully packaged for safe transportation. Remove the packaging materials from around your machine and inspect it. If you discover the machine is damaged, *please immediately call Customer Service at (570) 546-9663 for advice.* 

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, 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.

Cor	Container 1: (Figure 3)			
Α.	Saw Unit	1		
B.	Work Stop Rod	1		
C.	Work Stop	1		
D.	Handle	1		

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.

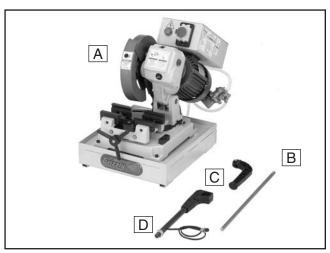


Figure 3. Machine inventory.

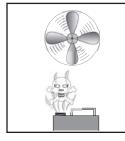
#### Clean Up

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 4**. 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.



#### 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.



#### **▲**CAUTION

Many cleaning solvents are toxic if inhaled. Minimize your risk by only using these products in a well ventilated area.

G2544—Solvent Cleaner & Degreaser H9692—Orange Power Degreaser

Great products for removing shipping grease.



**Figure 4.** Cleaner/degreasers available from Grizzly.

#### **Site Considerations**

#### Workbench Load

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

#### **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 5** for the minimum working clearances.

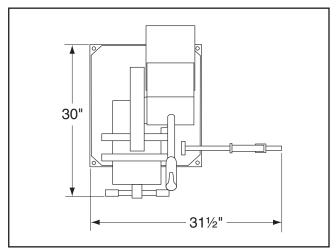
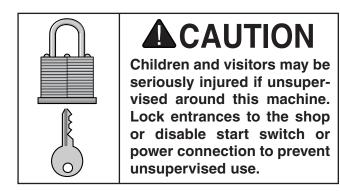


Figure 5. Minimum working clearances.



#### **Assembly**

#### To assemble the machine:

 Remove the tape that covers the hole on the gearbox head, then attach the saw handle by threading it into the gearbox head and tightening the jam nut, as shown in Figure 1.

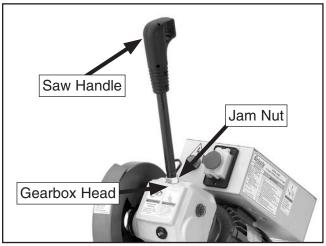


Figure 1. Attaching the handle.

2. Connect the handle switch plug to the control box by aligning the plug with the socket, then threading the lock collar (**Figure 2**).

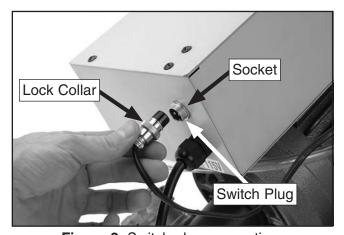


Figure 2. Switch plug connection.



**3.** Attach the work stop rod by threading it into the hole in the side of the base block, as shown in **Figure 6**.

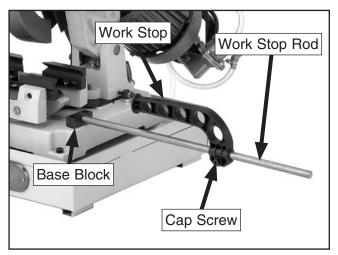


Figure 6. Work stop rod.

**4.** Slide the work stop onto the work stop rod and secure it by tightening the cap screw.

#### **Test Run**

Once the assembly is complete, test run your machine to make sure it runs properly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review the **Troubleshooting** on **Page 27**.

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

#### To test run the machine:

- 1. Make sure you have read the safety instructions at the beginning of the manual and that the machine is set up properly.
- 2. Verify that there is oil in the gearbox by checking the sightglass.
  - —If no oil is seen in the sightglass, refer to **Gearbox Oil** on **Page 26**.
  - —If oil is seen in the sightglass, no further action is required. Continue to **Step 3**.
- **3.** Make sure all tools and objects used during setup are cleared away from the machine.
- **4.** Connect the machine to the power source.
- Lift the red stop switch and press the green button to enable power, then pull the trigger switch to start the motor.
- **6.** Listen and watch for abnormal noises or actions. The machine should run smoothly with little or no vibration or rubbing noises.
  - —Strange or unusual noises must be investigated and corrected before operating the machine further. Always disconnect the machine from power when investigating or correcting problems.
- **7.** Release the trigger switch, then turn the machine *OFF*.

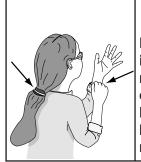
# **SECTION 4: OPERATIONS**

#### WARNING

Damage to your eyes and lungs could result from using this machine without proper protective gear. Always wear safety glasses and a respirator when operating this machine.







#### **AWARNING**

Loose hair and clothing could get caught in machinery and cause serious personal injury. Keep loose clothing and long hair away from moving machinery.

#### **NOTICE**

If you have never used this type of machine or equipment before, WE STRONGLY REC-OMMEND 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.

#### **Basic Controls**

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

**ON/OFF** Switch: Turns main power to the machine *ON/OFF*.

**Power Indicator Light:** Glows green when machine is turned **ON**.

**Trigger Switch:** Turns the motor *ON*, spinning the blade and activating the cutting fluid pump.

**Saw Handle:** Lowers the saw into the workpiece.

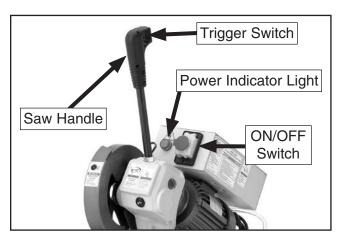


Figure 7. Control box.

**Vise Handwheel:** Opens and closes the vise jaws to clamp the workpiece.

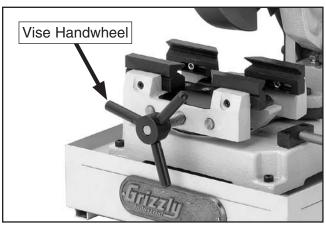


Figure 8. Vise controls.



**Work Stop:** Can be set at a particular distance from the blade to produce multiple same-length cuts.

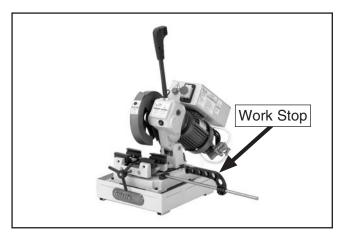


Figure 9. Saw controls.

**Cutting Fluid Reservoir:** Holds cutting fluid and can be removed for disposal and cleaning.

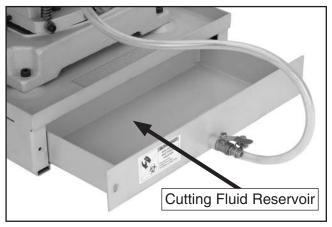


Figure 10. Cutting fluid reservoir.

**Tip:** Place a magnet in the cutting fluid reservoir to collect metal chips and prevent them from being drawn into the pump. Periodically remove and clean the magnet.

# **Cutting Angles**

#### To set the cutting angle:

- DISCONNECT SAW FROM POWER!
- 2. Loosen the two cap screws that lock the saw in position (Figure 11).

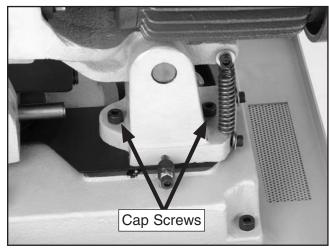


Figure 11. Miter lock lever.

Rotate the saw to the desired angle using the scale as a guide. When the desired angle is reached, lock the saw in position by tightening both cap screws.

# **Work Stop**

Use the work stop to perform consistent length cuts.

Tools Needed:	Qty
Hex Wrench 5mm	1

#### To use the work stop:

- 1. DISCONNECT SAW FROM POWER!
- 2. Loosen the work stop cap screw (Figure 12).

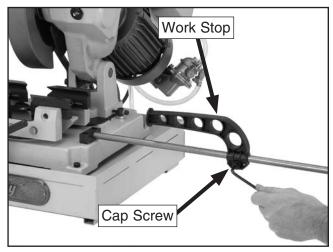


Figure 12. Work stop adjustment.

- **3.** Lower the blade as far as it will go.
- 4. Measure from the side of the blade to the work stop. Slide the work stop until the distance between the blade and the work stop is equal to the desired length of the piece being cut, then tighten the cap screw (**Figure 13**).

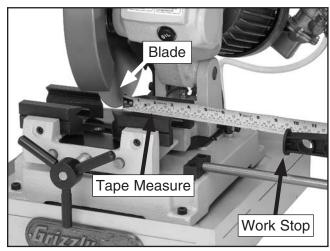


Figure 13. Measuring length of cut.

**5.** Before making a cut, slide the stock until it is against the work stop. Clamp the workpiece in the vise, then proceed with the cut. Repeat this process before each new cut for consistent length cuts.



## **Cutting Fluid**

Tools Needed:	Qty
Hex Wrench 5mm	1
Cutting Fluid	2 Qts

#### Filling Cutting Fluid Reservoir

- DISCONNECT SAW FROM POWER!
- 2. Remove the cap screws and washers from the cutting fluid reservoir (Figure 14).

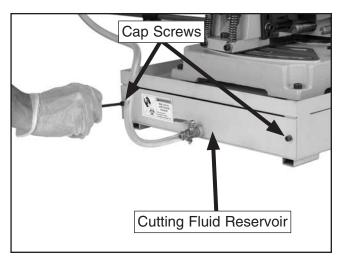


Figure 14. Opening cutting fluid reservoir.

- **3.** Slide the tray out from the machine base.
- 4. Wearing protective equipment, fill the reservoir with a suitable, water-based cutting fluid. Refer to the manufacturer's specifications for the proper water/oil mix.
- **5.** Slide the tray back into the base and replace the cap screws and washers.



#### WARNING

Used cutting fluid is a poison hazard. Use personal protection when handling this material. Failure to do so may result in illness or death.

# Draining/Cleaning Cutting Fluid Reservoir

- DISCONNECT SAW FROM POWER!
- Wearing protective equipment, drain and dispose the cutting fluid following governmentapproved disposal regulations for your area.
- 3. Use a rag to wipe out residual fluid and sludge.
- **4.** Clean the cutting fluid screens in the machine base and the tank (**Figure 15**).

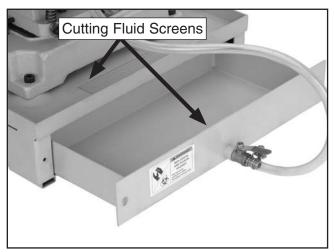


Figure 15. Cutting fluid screens.

#### **Blade Terminology**

Selecting the right blade for the cut requires an understanding of various blade characteristics.

#### **Blade Terminology**

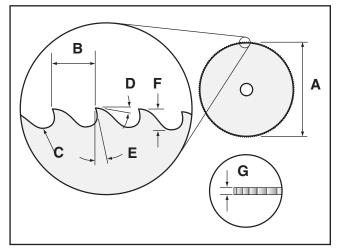


Figure 16. Blade terminology.

- A. Blade Size (Diameter): The overall diameter of the blade. The Model G0681 uses 9" blades.
- **B.** Pitch: The distance from the tip of one tooth to the tip of the next. Typically given in Teeth Per Inch (TPI)
- **C. Gullet:** The shallow area between the tips of the teeth.
- D. Front Rake Angle: The measurement of the angle formed between the tip of the blade tooth and a line tangent to the perimeter of the blade.
- **E.** Rear Rake Angle: The measurement of the angle formed between the face of the tooth and the diameter.
- **F.** Tooth Depth: The distance from the tip of the tooth to the bottom of the corresponding gullet.
- **G. Kerf:** The width of the cut created by the blade.

#### **Blade Pitch**

The most important consideration when selecting a blade for the Model G0681 is blade pitch, which is typically measured in "teeth per inch" (TPI). Proper TPI for any cut depends on the cross-section size and wall thickness of the workpiece.

If the blade pitch is too coarse for the cut, there will be too few teeth making the cut at any given time. This results in broken blade teeth and rough cuts due to excessive strain applied to both the blade and the workpiece (**Figure 17**). Use a blade pitch that keeps at least three teeth in the workpiece at any time.

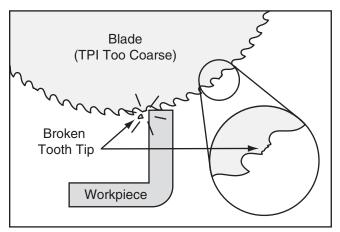


Figure 17. TPI too coarse for workpiece.

Conversely, if the blade pitch is too fine for the cut, teeth will remain in the workpiece and remove more material than the blade gullet can hold. This buildup of chips prevents the teeth from cutting effectively and results in poor cutting efficiency, overheating, and rapidly rounded-off teeth (**Figure 18**).

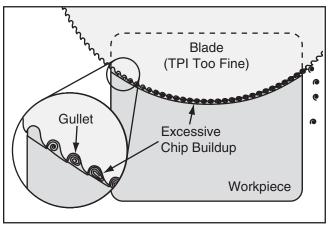


Figure 18. TPI too fine for workpiece.



Similarly, if the workpiece is a soft metal such as aluminum, each tooth will remove more material and rapidly fill the blade gullet. For this reason, use a blade with fewer TPI on soft metals.

An additional problem with an overly fine-pitched blade is that the pressure each tooth exerts on the workpiece is reduced. This limits the cutting ability of the teeth and also results in a buildup of heat and inefficient cuts.

The ideal blade pitch is one that doesn't overload individual teeth (too coarse) and avoids excessive chip buildup in the gullet (too fine) (**Figure 19**).

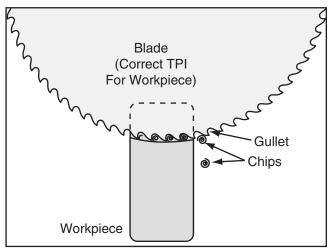


Figure 19. Correct TPI.

Damage to the blade, rough cuts, poor cutting performance, and overheating are all possible signs of improper blade pitch.

If you feel your machine is not functioning properly or performing to your standards, check that the blade pitch is correct for the cut. The procedure that follows is a basic starting point for choosing blade pitch (TPI) for standard HSS blades.

#### To select the correct blade pitch:

- **1.** Measure the thickness of your workpiece.
  - —For solid workpieces, this measurement is the length of cut taken from where the tooth enters the workpiece, sweeps through, and exits the workpiece. See (D) on the chart in **Figure 20**.
  - —For hollow or profiled workpieces, this measurement is the wall thickness at its thickest point (Th).

2. Refer to the "D or Th" column of the blade selection chart in **Figure 20**, and read down to find the workpiece thickness you need to cut. Read across to find the appropriate Pitch (TPI) for the cut. For blade alternatives, see **Replacement Blades** on **Page 24**.

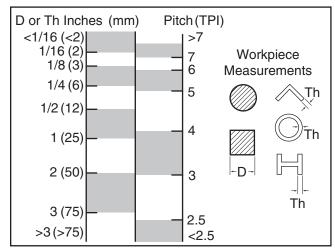


Figure 20. Blade selection chart.

#### **Blade Feed Rate**

Blade feed rate refers to the period of time it takes to cut through a workpiece. On the Model G0681, feed rate is controlled by the amount of pressure exerted on the handle by the user. Pulling hard on the lever will result in a greater feed rate, whereas only pulling lightly will result in a very slow feed rate.

Cutting with a feed rate that is too slow can result in lengthy, inefficient cuts and in some cases, tooth dulling and overheating. The chips produced by the cut will generally be thin or powdery.

Cutting with a feed rate that is too fast may cause the blade to wander, resulting in cuts that are not straight, and will generate excess heat and dull the blade. The chips produced by the cut will generally be thick and hard. When cutting small or thin-walled workpieces, the edges of the cut may become rough or torn.

The best method for evaluating the feed rate is to inspect the chips formed by the cut. Refer to the **Chip Inspection Chart** on **Page 22**.

#### **Blade Break-in**

Proper break-in is important for the cutting performance and longevity of the blade. During the break-in period, only mild pressure should be exerted on the blade (about half of the normal feed pressure for a properly broken-in blade). The duration of the break-in period is determined by the hardness of the material cut. The break-in period is defined in terms of square inches of material cut.

- —For hard materials, such as steel, the break-in period is the first 50 square inches of material cut.
- —For soft materials, such as aluminum, the break-in period is the first 150 square inches of material cut.

To determine the square inches of a cut, calculate the area of the cross-section of the workpiece. Keep in mind when cutting hollow-section pieces that the area only includes the solid walls of the workpiece. Refer to **Figure 21** to calculate approximate square inches for many typical cuts.

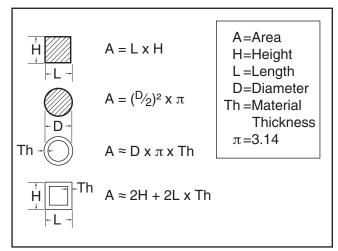


Figure 21. Calculating cut area for break-in.

#### **Blade Changes**



# **A**CAUTION

The teeth of saw blades are sharp and can easily cut fingers and hands. Always wear heavy leather gloves when handling saw blades.

Tools Needed:	Qty
Hex Wrenches 6, 10mm1	Ea.

#### To replace the blade:

- 1. DISCONNECT SAW FROM POWER!
- 2. Disconnect the blade guard linkage by removing the cap screw that connects it to the saw guard (**Figure 22**).

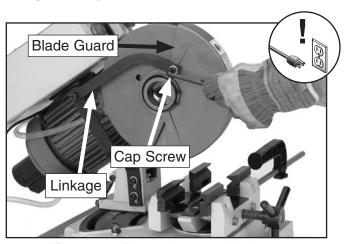


Figure 22. Removing guard linkage.

**3.** Rotate the blade guard and linkage out of the way, as shown in **Figure 23**.

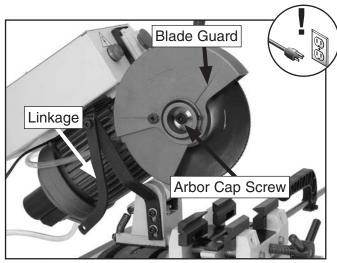


Figure 23. Exposing blade.

- **4.** Remove the arbor cap screw. It has left-hand threads and loosens when turned clockwise (**Figure 23**).
- Remove the blade and blade flange (Figure 22).

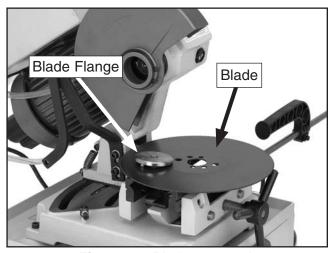


Figure 24. Blade removed.

**6.** Place the blade flange on the new blade, as shown in **Figure 25**.

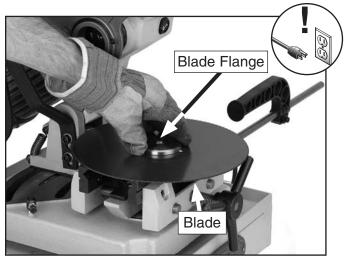


Figure 25. Installing new blade.

7. Place the blade and flange over the arbor, then thread-in and tighten the left-hand thread arbor cap screw (**Figure 26**).

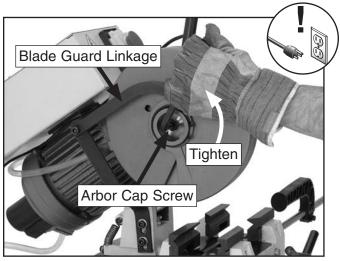


Figure 26. Tightening blade.

**8.** Lower the blade guide and reconnect the blade guard linkage with the cap screw.

# **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	Feed Rate	Additional Actions
0	Thin & Curled	Silver	Good	
~/~	Hard, Thick & Short	Brown or Blue	Decrease	
	Hard, Strong & Thick	Brown or Blue	Decrease	
0	Hard, Strong & Thick	Silver or Light Brown	Decrease Slightly	Check Blade Pitch
(a)	Hard & Thin	Silver	Decrease	Check Blade Pitch
	Straight & Thin	Silver	Increase	
	Powdery	Silver	Increase	
	Curled Tight & Thin	Silver	Decrease	Check Blade Pitch

Figure 27. Chip inspection chart.

#### **Cutting Procedures**

After familiarizing yourself with the controls of the Model G0681, follow the basic outline below to perform safe and efficient cuts.

#### To make a cut:

- 1. DISCONNECT SAW FROM POWER!
- 2. Set the cutting angle (Page 15).
- **3.** Set the work stop if required for the task being performed (**Page 16**).
- 4. Clamp the workpiece in the vise.
- 5. Check the cutting fluid reservoir level.
- Make sure the saw is in the fully upright position.
- 7. Connect the saw to power.
- 8. Press the trigger switch to start the blade and cutting fluid pump. Once the cutting fluid is observed on the blade, lower the saw into the workpiece. Use a controlled, steady force to complete the cut. When the cut is completed, raise the saw, release the trigger, and allow the blade to come to a complete stop before proceeding.

#### **Cutting Tips**

- Replace, sharpen, and clean blades as necessary to maintain optimum cutting performance.
- Use even pressure while cutting. Heavy or irregular pressure can lead to poor cuts and damage the blade.
- Misusing the saw or using incorrect techniques is unsafe and results in poor cuts.
   Remember—the blade does the cutting with the operator's guidance.

# General Machine Tips

- When the machine is not in use, raise the saw to reduce strain on the return spring.
- Inspect the machine regularly to keep it running in top condition.
- Clean, lubricate, and cover the machine before putting it into storage for extended periods of time.

# **SECTION 5: ACCESSORIES**

#### T20897—Replacement blade for G0681

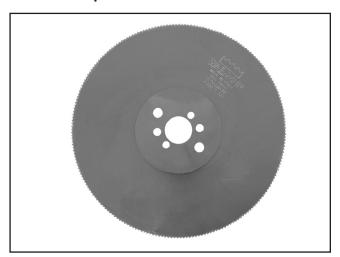


Figure 28. Replacement blade for G0681.

G8983—Tilting Roller Stand

Adjusts from 26" to 44", 0°-45°. 150 lb. capacity.

G8984—Single Roller Stand

Adjusts from 26 %" to 45". 250 lb. capacity.

G8985—5 Roller Stand

Adjusts from 26" to 445%". 250 lb. capacity. These super heavy-duty roller stands feature convenient hand knobs for fast height adjustment.



Figure 29. SHOP FOX® Roller Stands.

T20501—Face Shield Crown Protector 4"

T20502—Face Shield Crown Protector 7"

T20503—Face Shield Window

T20452—"Kirova" Anti-Reflective S. Glasses

T20451—"Kirova" Clear Safety Glasses

H0736—Shop Fox® Safety Glasses

H7194—Bifocal Safety Glasses 1.5

H7195—Bifocal Safety Glasses 2.0

H7196—Bifocal Safety Glasses 2.5



Figure 30. Eve protection assortment.

# H9240 Rustlick WS5050 Heavy-Duty Soluble Oil, 1 Gallon

Effective chlorinated E.P. additive provides excellent tool life. Protects neoprene seals. For general purpose and heavy-duty applications. Can be used on all metals except titanium. Compatible with CNC machining.

Gall 1-300-523-4777 To Order



#### G5618—Deburring Tool w/2 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 and aluminum and one for brass and cast iron.



Figure 31. G5618 Deburring tool.

#### H3153—Pigskin Palm Gloves H3154—Lined Pigskin Palm Gloves

Durable pigskin leather is combined with cloth backs for true comfort. One size fits many.

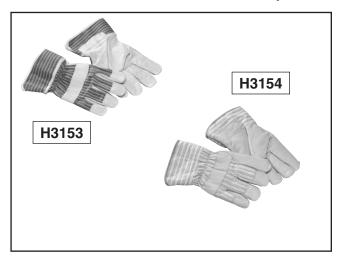


Figure 32. Work gloves.

#### Gall 1-300-523-4777 To Order

#### H8003—Hydraulic Lifting Table - 450 lbs.

This rugged and affordable lifting table allows you to lift stacks of sheet goods right up to the table saw table with minimal effort. Features 393/8" x 193/4" table, 391/2" maximum table height, 8" fixed and swivel casters with brakes.



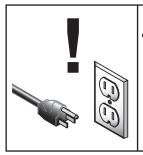
Figure 33. Model H8003 Hydraulic Lifting Table.

G5562—SLIPIT® 1 Qt. Gel G5563—SLIPIT® 12 oz Spray G2871—Boeshield® T-9 12 oz Spray G2870—Boeshield® T-9 4 oz Spray H3788—G96® Gun Treatment 12 oz Spray H3789—G96® Gun Treatment 4.5 oz Spray



**Figure 34.** Recommended products for protecting unpainted cast iron/steel part on machinery.

# **SECTION 6: MAINTENANCE**



#### **A**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.

#### Daily Check:

- Loose mounting bolts/screws/nuts.
- Damaged or worn saw blade.
- Proper function of blade guard.
- Any other unsafe condition.
- General cleanup to prevent buildup of metal shavings.

#### **Weekly Maintenance:**

- Clean the machine thoroughly, including the cutting fluid tank to remove shavings.
- Clean the cutting fluid screens in the machine base and the tank.
- Check/adjust gearbox oil level.
- Clean/grease the vise leadscrew.
- Cutting fluid level.

#### **Monthly Check:**

- Check/tighten all machine bolts.
- Oil the main saw hinge pin.

#### **Every Six Months:**

Change gearbox oil.

#### **Cleaning**

Cleaning the Model G0681 is relatively easy. Vacuum excess metal chips and wipe off the remaining debris and cutting fluid residue with a dry cloth.

#### **Unpainted Cast Iron**

Keep unpainted cast iron surfaces rust-free with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9, all available through the Grizzly catalog or website.

#### Lubrication

#### Vise Leadscrew

- 1. DISCONNECT SAW FROM POWER!
- 2. Use a rag to clean any debris from the vise leadscrew (located on the underside of the vise assembly).
- **3.** Apply multipurpose grease to the leadscrew and completely open and close the vise several times to distribute the grease.

**Note:** Periodically clean the leadscrew thoroughly with minerals spirits or other degreaser and relubricate with multipurpose grease.



#### **Gearbox Oil**

With regular use, the oil in the gearbox must be drained and replaced every six months.

Tools Needed	Qty
Wrenches 22, 25mm	1 Ea.
Drain Pan	1
Funnel	1

#### To change the gearbox oil:

- 1. DISCONNECT SAW FROM POWER!
- 2. Raise the saw to the up-most position.
- **3.** Hold the drain pan under the oil fill/drain plug, then remove the oil drain plug (**Figure 35**).

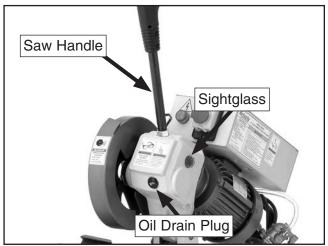


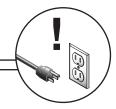
Figure 35. Oil plug locations.

- **4.** Tilt the saw forward and allow all of the oil to drain out.
- **5.** Raise the saw back to the up-most position and replace the drain plug.
- 6. Remove the saw handle by unplugging the switch plug from the rear of the control box, loosening the jam nut, and unthreading the handle shaft.
- 7. Refill the gearbox through the saw handle hole with standard automotive 85w-140 gear oil until only a small air bubble remains in the sightglass.
- 8. Re-install the saw handle as described in Steps 1–2 of Assembly on Page 12.

# **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**

Machine does not start/indicator light does not come on or a breaker trips.  1. Switch cover not open. 2. Plug/receptacle is at fault or wired incorrectly. 3. Wall fuse/circuit breaker is blown/tripped. 4. Indicator light has failed. 5. Control box fuse/s blown. 5. Control box fuse/s blown. 6. Power supply switched <i>OFF</i> or is at fault. 7. Wiring is open/has high resistance. 7. Wiring is open/has high resistance. 7. Wiring is open/has high resistance. 8. Motor ON/OFF switch is at fault. 9. Motor is at fault. 9. Motor is at fault. 1. Peed pressure too great for task. 1. Peed pressure too great for task. 2. Motor connection is wired incorrectly. 3. Plug/receptacle is at fault. 4. Motor is at fault. 5. Control box fuse/s blown. 6. Power supply switched <i>OFF</i> or is at fault. 9. Motor on one-to-motor one-	Symptom	Possible Cause	Corrective Action
not start/indicator light does not come on or a breaker trips.  4. Indicator light has failed. 5. Control box fuse/s blown.  5. Control box fuse/s blown.  6. Power supply switched <i>OFF</i> or is at fault.  7. Wiring is open/has high resistance.  8. Motor ON/OFF switch is at fault.  9. Motor is at fault.  10. Peed pressure too great for task. 11. Service feed pressure.  12. Motor is at fault.  13. Ensure circuit size is suitable for this machine; replace weak breaker.  14. Replace light.  15. Check L1 & L2 fuses in control box (illuminated fuse lamp indicates a blown fuse).  16. Power supply switched <i>OFF</i> or is at fault.  17. Wiring is open/has high resistance.  18. Motor ON/OFF switch is at fault.  19. Motor is at fault.  10. Peed pressure too great for task. 11. Peed pressure too great for task. 12. Motor connection is wired incorrectly. 13. Plug/receptacle is at fault.  14. Motor is at fault.  15. Motor or component is loose.  16. Power supply switched <i>ON</i> ; ensure power supply has the correct voltage.  17. Check for broken wires or disconnected/corroded connections, and repair/replace as necessary.  18. Replace faulty ON/OFF switch.  19. Decrease feed pressure.  20. Correct motor wiring connections.  21. Test for good contacts; correct the wiring.  22. Test for good contacts; correct the wiring have been supply is switched <i>ON</i> ; ensure power supply is switched <i>ON</i> ; ensure power supply has the correct voltage.  21. Decrease feed pressure.  22. Correct motor wiring connections.  23. Test for good contacts; correct the wiring.  24. Test/repair/replace.  25. Test for good contacts; correct the wiring.  26. Check L1 & L2 fuses in control box is unply leading.  27. Check for broken wires or disconnected/corroded connections, and repair/replace.  28. Replace faulty ON/OFF switch.  29. Test/repair/replace.  20. Correct motor wiring connections.  21. Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid.  28. Relocate/shim machine.  29. Relocate/shim machine.  20. Test/repair/replace	-		
light does not come on or a breaker trips.  3. Wall fuse/circuit breaker is blown/tripped.  4. Indicator light has failed.  5. Control box fuse/s blown.  6. Power supply switched <i>OFF</i> or is at fault.  7. Wiring is open/has high resistance.  8. Motor ON/OFF switch is at fault.  9. Motor is at fault.  9. Motor connection is wired incorrectly.  3. Ensure circuit size is suitable for this machine; replace weak breaker.  4. Replace light.  5. Check L1 & L2 fuses in control box (illuminated fuse lamp indicates a blown fuse).  6. Ensure power supply is switched <i>ON</i> ; ensure power supply has the correct voltage.  7. Check for broken wires or disconnected/corroded connections, and repair/replace as necessary.  8. Replace faulty ON/OFF switch.  9. Test/repair/replace.  Machine stalls or is overloaded.  4. Motor connection is wired incorrectly.  3. Plug/receptacle is at fault.  4. Motor is at fault.  4. Motor or component is loose.  5. Motor mount loose/broken.  6. Power supply switched <i>OFF</i> or is at fault.  9. Test/repair/replace.  7. Check for broken wires or disconnected/corroded connections, and repair/replace.  8. Replace faulty ON/OFF switch.  9. Test/repair/replace.  9. Test for good contacts; correct the wiring.  1. Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid.  9. Tighten/replace.  9. Motor bearings are at fault.  1. Inspect/replace dented fan cover; replace loose/damaged fan.  9. Motor bearings are at fault.  1. Plug connecting trigger switch to control box is unplugged.  2. Trigger switch at fault.  2. Test/repair/replace.  1. Correctly insert plug.  1. Correctly insert plug.  1. Test/repair/replace.		-	
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lamp indicates a blown fuse).  6. Power supply switched <i>OFF</i> or is at fault.  7. Wiring is open/has high resistance.  7. Wiring is open/has high resistance.  7. Check for broken wires or disconnected/corroded connections, and repair/replace as necessary.  8. Motor ON/OFF switch is at fault.  9. Motor is at fault.  9. Motor is at fault.  1. Feed pressure too great for task. 1. Decrease feed pressure. 2. Motor connection is wired incorrectly. 3. Plug/receptacle is at fault. 4. Motor is at fault.  Machine has vibration or noisy operation.  Machine has vibration or noisy operation.  Machine has vibration or noisy operation.  Motor fan is rubbing on fan cover.  5. Motor bearings are at fault.  Indicator light is on and trigger switch alis to a citivate motor and trigger switch fails to a citivate motor are supply as witched <i>ON</i> ; ensure power supply is switched <i>ON</i> ; ensure power supply is switched <i>ON</i> ; ensure power supply has the correct voltage.  7. Check for broken wires or disconnected/corroded connections, and repair/replace as necessary.  8. Replace faulty ON/OFF switch.  9. Motor onetion is at fault.  1. Decrease feed pressure.  2. Correct motor wiring connections.  3. Test for good contacts; correct the wiring.  4. Test/repair/replace.  1. Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid.  2. Tighten/replace.  3. Relocate/shim machine.  4. Replace dented fan cover; replace loose/damaged fan.  5. Motor bearings are at fault.  5. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.  Indicator light is on and trigger switch to control box is unplugged.  2. Trigger switch at fault.  2. Test/repair/replace.		•	
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5. Motor bearings are at fault.  5. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.  1. Plug connecting trigger switch to control box is on and trigger switch fails to activate motor.  2. Trigger switch at fault.  2. Test/repair/replace.		4 Motor fan is rubbing on fan cover.	4. Replace dented fan cover; replace loose/damaged
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activate motor I		2. Trigger switch at fault.	2. Test/repair/replace.
	activate motor.	3. Motor is at fault.	3. Test/repair/replace.



#### **Operations**

Symptom	Possible Cause	Corrective Action
Premature blade	1. Feed pressure is too high.	Reduce feed pressure.
wear.	2. Incorrect blade for material type.	2. Choose the correct blade for the material type.
	3. Inadequate blade lubrication.	3. Check the level of the cutting fluid, valve positions,
		functionality of the pump, and flow of the hoses.
Chipped teeth on	1. Material type is too hard, incorrectly shaped, or	Decrease feed pressure.
blade.	has flaws.	
	2. Wrong tooth pitch.	2. Use correct blade.
	3. Vibrations in machine causing blade to	3. Find/correct source of machine vibration.
	"bounce" on workpiece.	
	4. Blade lowered too rapidly into workpiece.	4. Lower blade in a slow and controlled manner.
Vibration when	Wrong tooth pitch/profile.	Use correct blade.
cutting.	2. Workpiece is not secured in vise.	2. Secure workpiece.
	3. Cross section of workpiece is too large.	3. Adhere to maximum cutting capacities for this
		machine.
Cut is not	Cutting pressure is too high.	Reduce feed pressure.
straight.	2. Workpiece is not secured in vise.	2. Secure workpiece.
	3. Cutting angle is not properly set.	3. Set cutting angle according to the scale.
	4. Debris on vise.	4. Clean vise.
Blade sticks in	Cutting pressure is too high.	Reduce feed pressure.
cut.	2. Waste material/cutting fluid buildup on blade.	2. Clean blade.
	3. Inadequate blade lubrication.	3. Check the level of the cutting fluid, valve positions,
		functionality of the pump, and flow of the hoses.

#### **Blade Troubleshooting**

Symptom	Possible Cause	Corrective Action
Blade does not cut straight.	<ol> <li>Feed speed/pressure too high.</li> <li>Blade is not square to table.</li> <li>Blade has broken teeth.</li> </ol>	<ol> <li>Reduce feed pressure by relieving pressure on the feed lever during operation.</li> <li>Adjust cutting angle.</li> <li>Inspect/repair blade.</li> </ol>
Blade teeth dull prematurely.	<ol> <li>Feed speed/pressure too low.</li> <li>Blade pitch too fine for cut.</li> <li>Insufficient blade cooling.</li> <li>Impurities in workpiece.</li> <li>Blade not broken-in properly.</li> </ol>	<ol> <li>Increase feed speed/pressure.</li> <li>Check blade pitch, use a coarser-pitch blade.</li> <li>Check coolant level/type, clean hoses, valves, and nozzles.</li> <li>Inspect/clean/discard workpiece.</li> <li>Replace blade and follow Blade Break-in on Page 20.</li> </ol>
Blade teeth are broken/ missing.	Feed speed/pressure too high.     Blade was in contact with the workpiece when machine was turned <i>ON</i> .	Reduce feed pressure by relieving pressure on the feed lever during operation.     Never start the blade in contact with the workpiece.
	<ul><li>3. Blade tooth pitch incorrect for cut.</li><li>4. Blade not broken-in correctly.</li><li>5. Insufficient blade cooling.</li></ul>	<ol> <li>Check blade tooth pitch.</li> <li>Replace blade and follow Blade Break-in on Page 20.</li> <li>Check coolant level/type, clean hoses, valves, and nozzles.</li> </ol>
Broken Blade.	Feed speed/pressure too high.     Blade was in contact with the workpiece when machine was turned <i>ON</i> .	Reduce feed speed/pressure.     Never start the blade in contact with the workpiece.
	<ul><li>3. Insufficient blade cooling.</li><li>4. Workpiece shifted in vise.</li></ul>	<ul><li>3. Check coolant level/type, clean hoses, valves, and nozzles.</li><li>4. Be sure workpiece is properly clamped before starting cut.</li></ul>



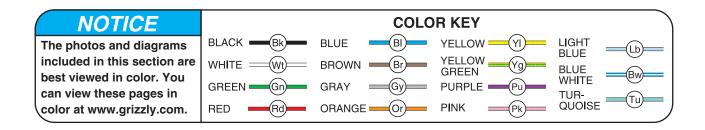
## **SECTION 8: WIRING**

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Study this section carefully. If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine.

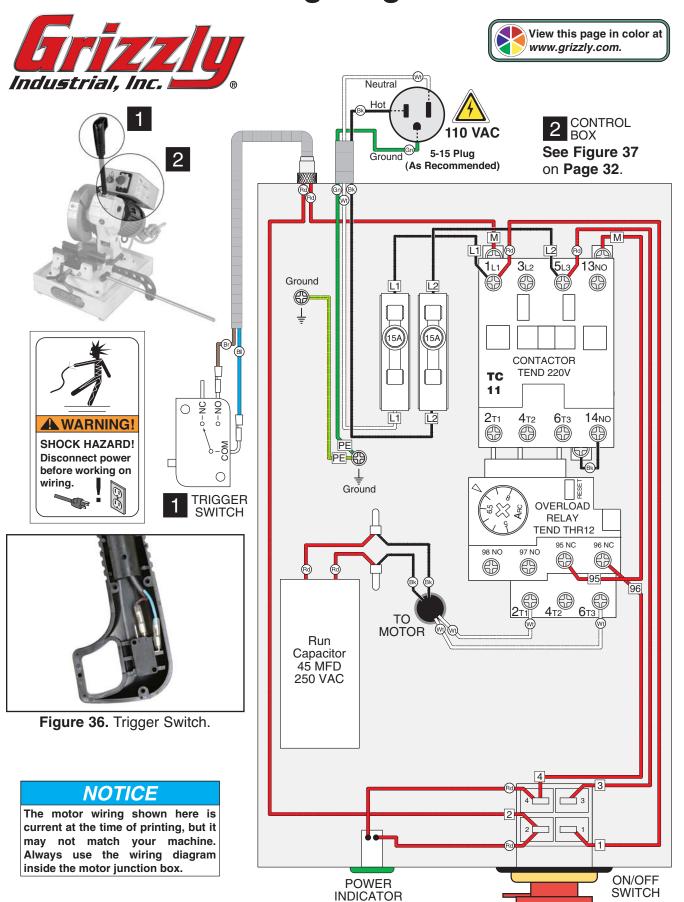
# **A**WARNING Wiring Safety Instructions

- 1. SHOCK HAZARD. Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!
- 2. QUALIFIED ELECTRICIAN. Due to the inherent hazards of electricity, only a qualified electrician should perform wiring tasks on this machine. If you are not a qualified electrician, get help from one before attempting any kind of wiring job.
- 3. WIRE CONNECTIONS. All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.
- 4. WIRE/COMPONENT DAMAGE. Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components before completing the task.

- 5. MODIFICATIONS. Using aftermarket parts or modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire.
- 6. MOTOR WIRING. The motor wiring shown in these diagrams is current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.
- 7. CAPACITORS. Some capacitors store an electrical charge for up to five minutes after being disconnected from the power source. To avoid being shocked, wait at least this long before working on capacitors.
- **8. CIRCUIT REQUIREMENTS.** You MUST follow the requirements on **Page 9** when connecting your machine to a power source.
- EXPERIENCING DIFFICULTIES. If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.



# **Wiring Diagram**



# **Electrical Components**

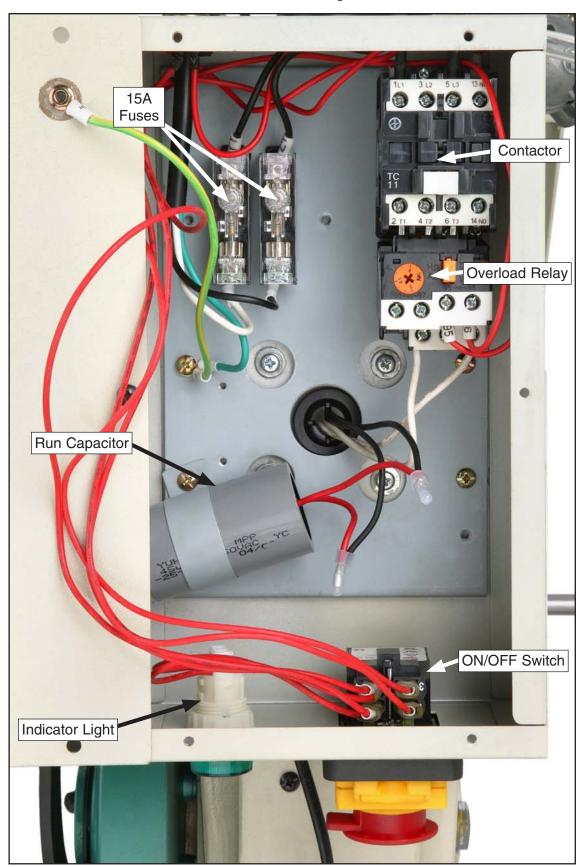
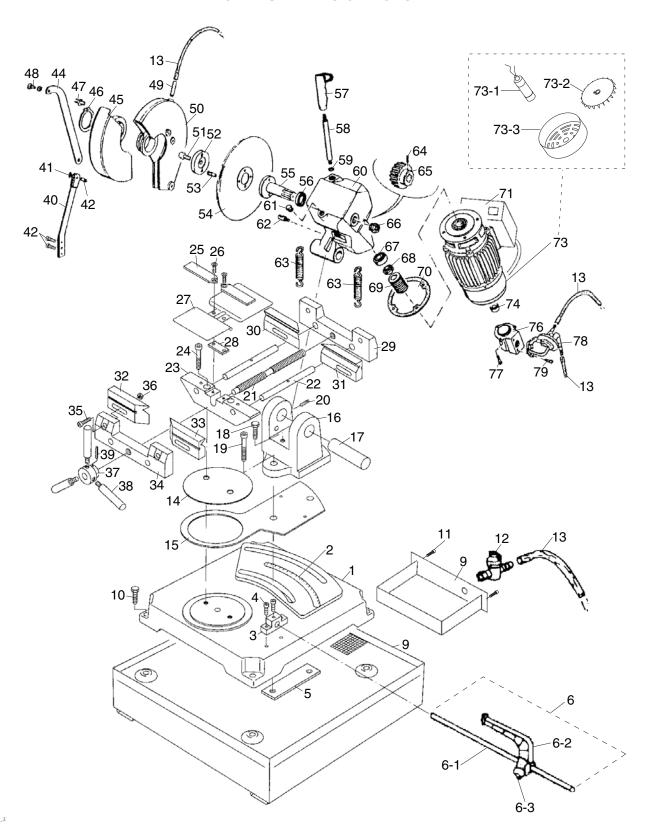


Figure 37. G0681 control box.

# **SECTION 9: PARTS**

# **Parts Breakdown**

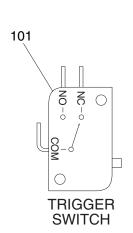


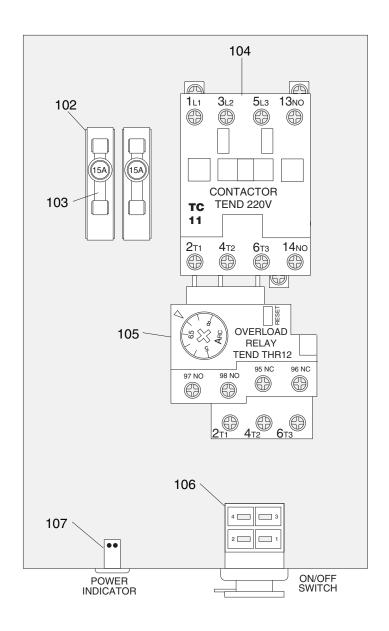
# **Parts List**

REF	PART#	DESCRIPTION
1	P0681001	BASE
2	P0681002	SCALE
3	P0681003	WORK STOP SUPPORT
4	PSB26M	CAP SCREW M6-1 X 12
5	P0681005	PLATE
6	P0681006	WORK STOP ASSEMBLY
6-1	P0681006-1	WORK STOP ROD
6-2	P0681006-2	WORK STOP
6-3	PSB06M	CAP SCREW M6-1 X 25
9	P0681009	COOLANT TANK
10	PB26M	HEX BOLT M8-1.25 X 30
11	PSB110M	CAP SCREW M47 X 6
12	P0681012	COOLANT TAP
13	P0681013	COOLANT TUBE
14	P0681014	STATIONARY PLATE
15	P0681015	ROTATING PLATE
16	P0681016	PIVOT BLOCK
17	P0681017	PIVOT PIN
18	PB07M	HEX BOLT M8-1.25 X 25
19	PSB60M	CAP SCREW M8-1.25 X 55
20	PSS06M	SET SCREW M8-1.25 X 16
21	P0681021	LEADSCREW
22	P0681022	VISE PIN
23	P0681023	VISE SUPPORT
24	PSB13M	CAP SCREW M8-1.25 X 30
25	P0681025	VISE BASE PLATE
26	PFH48M	FLAT HD SCR M8-1.25 X 18
27	P0681027	VISE COVER
28	P0681028	SPACER
29	P0681029	VISE CLAMP REAR
30	P0681030	VISE JAW LR
31	P0681031	VISE JAW RR
32	P0681032	VISE JAW LF
33	P0681033	VISE JAW RF
34	P0681034	VISE CLAMP FRONT
35	PSB02M	CAP SCREW M6-1 X 20
36	PN01M	HEX NUT M6-1
37	P0681037	HANDLE BODY
38	P0681038	HANDLE
39	PRP49M	ROLL PIN 5 X 25

REF	PART #	DESCRIPTION
40	P0681040	TIE ROD SUPPORT
41	PLN04M	LOCK NUT M8-1.25
42	PSB14M	CAP SCREW M8-1.25 X 20
44	P0681044	GUARD ROD
45	P0681045	GUARD
46	PR71M	EXT RETAINING RING 60MM
47	PSB01M	CAP SCREW M6-1 X 16
48	PSB11M	CAP SCREW M8-1.25 X 16
49	P0681049	COOLANT NOZZLE
50	P0681050	FIXED GUARD
51	P0681051	CAP SCREW M12-1.5 X 25 LH
52	P0681052	ARBOR FLANGE
53	P0681053	SPECIAL PIN 7 X 12
54	P0681054	SAW BLADE
55	P0681055	ARBOR
56	P0681056	ARBOR BEARING
57	P0681057	HEAD LEVER HANDGRIP
58	P0681058	HEAD LEVER
59	PN13M	HEX NUT M16-2
60	P0681060	SAW HEAD
61	P0681061	OIL PLUG
62	P0681062	SPRING HOOK SCREW
63	P0681063	TENSION SPRING
64	PSS03M	SET SCREW M6-1 X 8
65	P0681065	WORM GEAR
66	P0681066	SIGHT GLASS
67	P6001	BALL BEARING 6001ZZ
68	P0681068	SPECIAL NUT
69	P0681069	WORK SHAFT
70	P0681070	HEAD GASKET
71	P0681071	SWITCH BOX
73	P0681073	MOTOR 1 HP 110V 1-PH
73-1	P0681073-1	R CAPACITOR 45M 250V 2-3/4 X 1-5/8
73-2	P0681073-2	MOTOR FAN
73-3	P0681073-3	MOTOR FAN COVER
74	P609A	BALL BEARING 609ZZ
76	P0681076	PUMP CONNECTION BOX
77	PSB16M	CAP SCREW M47 X 16
78	P0681078	COOLANT PUMP
79	PSB02M	CAP SCREW M6-1 X 20

#### **Control Panel Parts Breakdown**



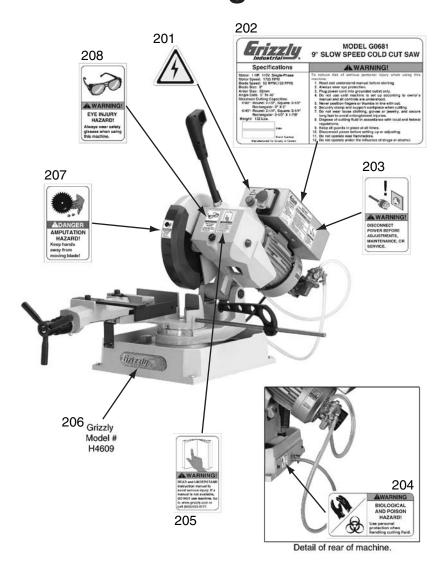


REF	PART#	DESCRIPTION
101	P0681101	TRIGGER SWITCH
102	P0681102	FUSE HOLDER
103	P0681103	FUSE 15A
104	P0681104	CONTACTOR TEND TC11

REF	PART #	DESCRIPTION
105	P0681105	OVERLOAD RELAY TEND THR12
106	P0681106	ON/OFF SWITCH
107	P0681107	INDICATOR LAMP



# **Warning Labels**



DEE	DADT#	DESCRIPTION
KEL	PART #	DESCRIPTION

201	PLABEL-14	ELECTRICITY LABEL
202	P0681202	MACHINE ID LABEL
203	PLABEL-63A	DISCONNECT POWER LABEL
204	P0681204	BIOLOGICAL WARNING LABEL

REF	PART#	DESCRIPTION
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205	PLABEL-12C	READ MANUAL LABEL
206	H4609	GRIZZLY NAMEPLATE
207	P0681207	BLADE DANGER LABEL
208	PLABEL-11B	SAFETY GLASSES LABEL

# **AWARNING**

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.



# CUT ALONG DOTTED LINE

#### Grizzly WARRANTY CARD

		_ State		
		_ Email		
Mo	del #	_ Order #	Serial #	
		n a voluntary basis. It will be used for r urse, all information is strictly confid ?		develop
	Advertisement Card Deck	Friend Website	Catalog Other:	
2.	Which of the following maga	zines do you subscribe to?		
	Cabinet Maker Family Handyman Hand Loader Handy Home Shop Machinist Journal of Light Cont. Live Steam Model Airplane News Modeltec Old House Journal	Popular Mechanics Popular Science Popular Woodworking Practical Homeowner Precision Shooter Projects in Metal RC Modeler Rifle Shop Notes Shotgun News	Today's Homeowr Wood Wooden Boat Woodshop News Woodsmith Woodwork Woodworker West Woodworker's Jou	t
3.	What is your annual househ \$20,000-\$29,000 \$50,000-\$59,000	old income? \$30,000-\$39,000 \$60,000-\$69,000	\$40,000-\$49,000 \$70,000+	
4.	What is your age group? 20-29 50-59	30-39 60-69	40-49 70+	
5.	How long have you been a v		ears20+ Years	
6.	How many of your machines	or tools are Grizzly?6-9	10+	
7.	Do you think your machine r	epresents a good value?	_YesNo	)
8.	Would you recommend Griz	zly Industrial to a friend?	_YesNo	)
9.	Would you allow us to use y <b>Note:</b> We never use names	our name as a reference for Grizzly more than 3 times.	•	)
10.	Comments:			

Place Stamp Here



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

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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.



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