

Grizzly *Industrial, Inc.*®

MODEL G0682 12" COLD CUT SAW OWNER'S MANUAL



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#JB11328 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.

Table of Contents

INTRODUCTION	2	SECTION 5: ACCESSORIES	29
Manual Accuracy	2	SECTION 6: MAINTENANCE	30
Contact Info.....	2	Schedule	30
Functional Overview	2	Cleaning.....	30
Identification.....	3	Unpainted Cast Iron.....	30
Machine Data Sheet	4	Lubrication	30
SECTION 1: SAFETY	6	SECTION 7: SERVICE	32
Safety Instructions for Machinery	6	Troubleshooting	32
Safety Instructions for Metal Cutting Saws....	8	SECTION 8: WIRING	35
SECTION 2: CIRCUIT REQUIREMENTS	9	Wiring Safety Instructions	35
220V Operation.....	9	Wiring Diagram	36
SECTION 3: SETUP	10	Electrical Components.....	37
Setup Safety	10	SECTION 9: PARTS	38
Items Needed for Setup.....	10	Parts Breakdown.....	38
Unpacking	10	Parts List.....	39
Inventory	11	Control Box Breakdown	40
Clean Up.....	12	Stand Breakdown.....	41
Site Considerations.....	12	Warning Labels.....	42
Mounting to Shop Floor	13	WARRANTY AND RETURNS	45
Assembly	14		
Test Run	16		
SECTION 4: OPERATIONS	17		
Operation Safety	17		
Basic Controls.....	17		
Cutting Angle	18		
Vise	19		
Work Stop	21		
Cutting Fluid.....	22		
Blade Terminology.....	23		
Blade Pitch.....	23		
Blade Feed Rate.....	24		
Blade Break-in	25		
Blade Changes	25		
Chip Inspection Chart	27		
Cutting Procedures	28		
Cutting Tips.....	28		
General Machine Tips.....	28		

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 12" cold cut saw is used to cut 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.

A quick-release vise holds the workpiece securely and allows efficient repositioning of workpieces. 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 -45° to 45° and is measured by a scale located on the saw base.



Identification

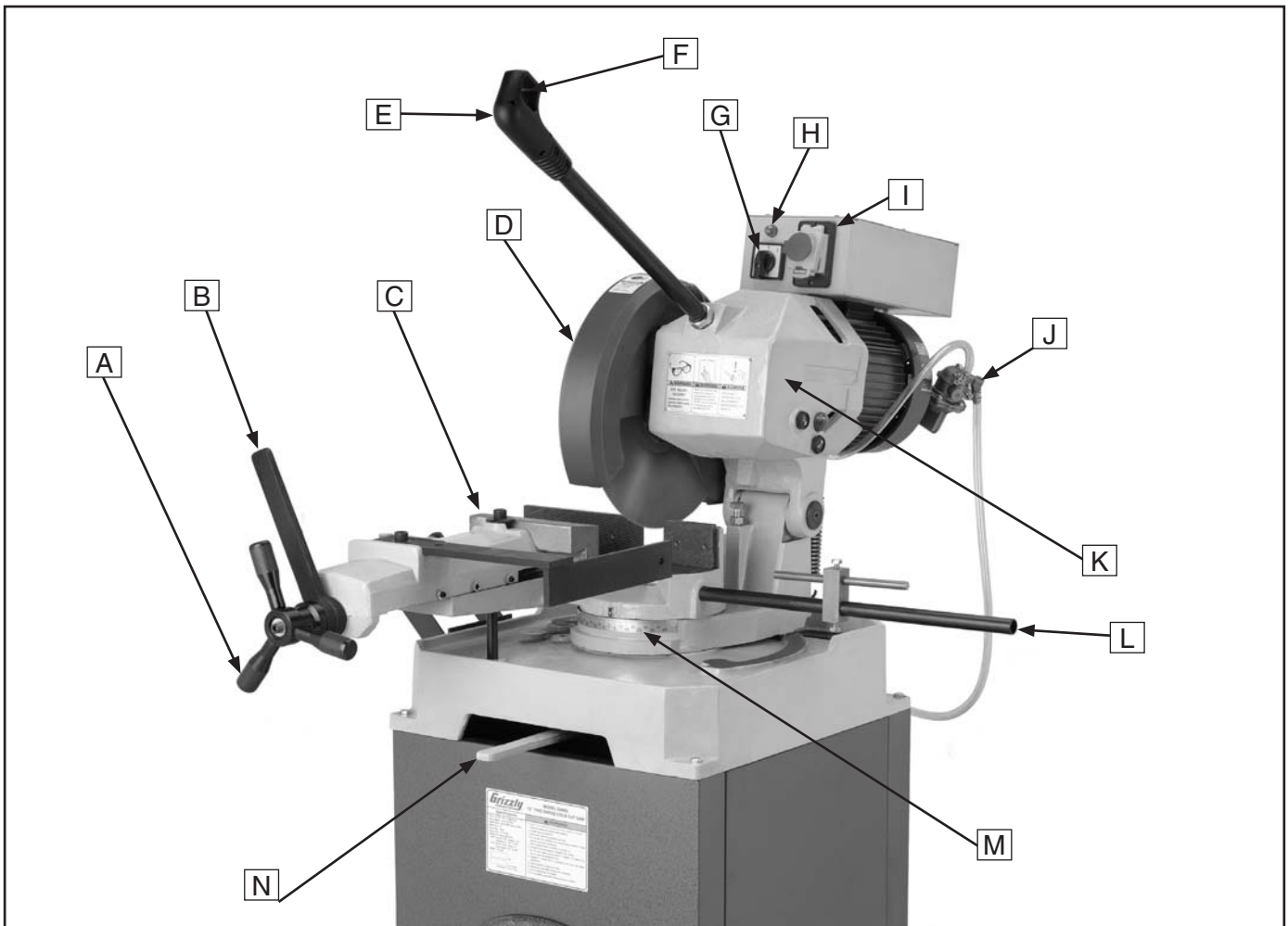


Figure 1. Identification.

- A. Vise Handwheel
- B. Vise Quick Release Lever
- C. Vise
- D. Blade Guard
- E. Saw Lever
- F. Trigger Switch
- G. High/Low Speed Switch
- H. Power Indicator
- I. ON/OFF Switch
- J. Cutting Fluid Pump
- K. Gearbox
- L. Work Stop
- M. Angle Indicator Scale
- N. Miter Lock Lever



MACHINE DATA SHEET

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

MODEL G0682 12" COLD CUT SAW

Product Dimensions:

Weight 387 lbs.
 Length/Width/Height 41" x 33" x 58"
 Foot Print (Length/Width)..... 21" x 20"

Shipping Dimensions:

Box 1
 Type..... Wood Crate
 Content..... Machine
 Weight 363 lbs.
 Length/Width/Height..... 42" x 24" x 30"

Box 2
 Type..... Cardboard
 Content..... Stand
 Weight 59 lbs.
 Length/Width/Height..... 33" x 22" x 6"

Electrical:

Switch..... Safety Switch on Handle
 Switch Voltage 220V
 Cord Length 5 ft.
 Cord Gauge 16 gauge
 Minimum Circuit Size 15 amp
 Plug Included No
 Recommended Plug L15-15

Motor:

Type TEFC
 Horsepower 2.2 HP
 Voltage 220V
 Phase Three
 Amps 7/6.2A
 Speed..... 3450/1725 RPM
 Cycle 60 Hz
 Number Of Speeds 2
 Power Transfer Gearbox Reduction Drive
 Bearings Shielded and Permanently Sealed



Main Specifications:

Operation Information

Blade Speeds42/84 RPM (131/262FPM)
Blade Size 12"
Arbor Size.....32mm

Cutting Capacities

Angle Cuts..... -45° – +45°
Vise Jaw Depth 12"
Vise Jaw Width..... 8"
Vise Jaw Height..... 2³/₈"
Maximum Capacity Square @ 90° 3¹/₂"
Maximum Capacity Rectangular @ 90° 4¹/₂"W x 2⁵/₈"H
Maximum Capacity Round @ 90° 3⁷/₈"
Maximum Capacity Square @45° 3"
Maximum Capacity Rectangular @ 45° 3¹/₄"W x 2⁵/₈"H
Maximum Capacity Round @ 45° 2⁵/₈"

Construction

Table..... Cast Iron
Saw Wheel Cover..... Cast Iron
Saw Wheel Guard Plastic
Body Cast Iron
Base Cast Iron
Paint Urethane

Other Specifications:

Country Of Origin Taiwan
Warranty..... 1 Year
Serial Number Location Machine ID Label on Stand

Features:

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



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

Safety Instructions for Metal Cutting Saws

- 1. BLADE CONDITION.** Do not operate with a 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 cut or crushed in the vise.
- 3. 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.
- 7. 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.
- 9. 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.

WARNING

No list of safety guidelines can be complete. Every shop environment is different. Like all machines there is danger associated with the Model G0682. 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.

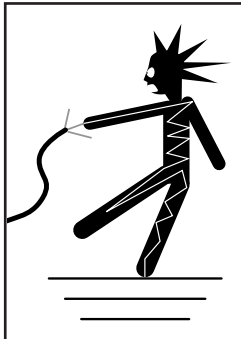


SECTION 2: CIRCUIT REQUIREMENTS

220V 3-Phase 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..... 7 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**.

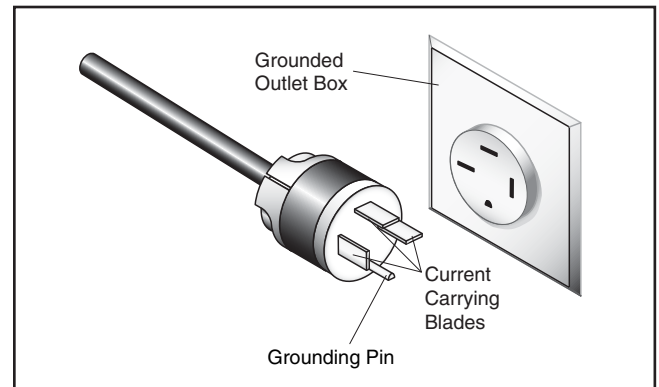


Figure 2. NEMA 15-15 plug and receptacle.

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:

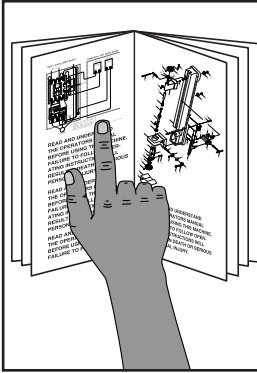
- Use at least a 14 gauge cord that does not exceed 50 feet in length!
- The extension cord must also have a ground wire and plug pin.
- A qualified electrician **MUST** size cords over 50 feet long to prevent motor damage.

Phase Converter

Using a phase converter is not recommended for this machine.

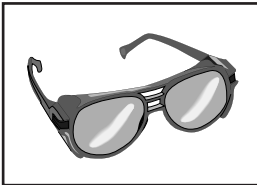


SECTION 3: SETUP



!WARNING

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



!WARNING

Wear safety glasses during the entire setup process!



!WARNING

This 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

Description	Qty
• Assistants	As Needed
• Safety Glasses (For Each Person)	1 Pr.
• Lifting Straps (Rated for at least 400 lbs.) (optional)	2
• Power Lifting Equipment (Rated for at least 400 lbs.)(Optional)	1
• Hex Wrench 4mm	1
• Wrenches 13, 30mm	1 Ea.
• Ratchet & Socket Set 13mm	1

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.*

Container 1: (Figure 3)	Qty
A. Saw (not shown).....	1
B. Work Stop Assembly.....	1
C. Roller Assembly.....	1
D. Handle Assembly.....	1

Container 2: (Figure 4)	
E. Stand Rear Panel.....	1
F. Stand Side Panels.....	2
G. Stand Front Panel.....	1

Hardware: (Not Shown)	
Hex Bolts M8-1.25 x 20 (Stand)	12
Hex Nuts M8-1.25 (Stand).....	12
Hex Bolts M8-1.25 x 35 (Saw Mounting)	4
Flat Washers 8mm (Stand, Saw Mounting).....	28

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.

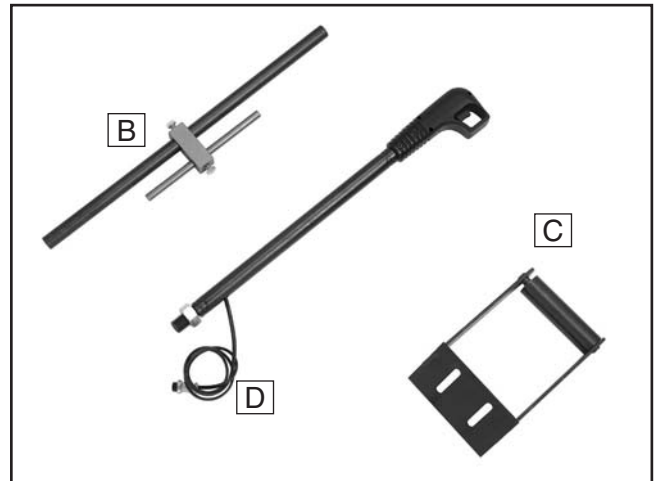


Figure 3. Machine inventory.

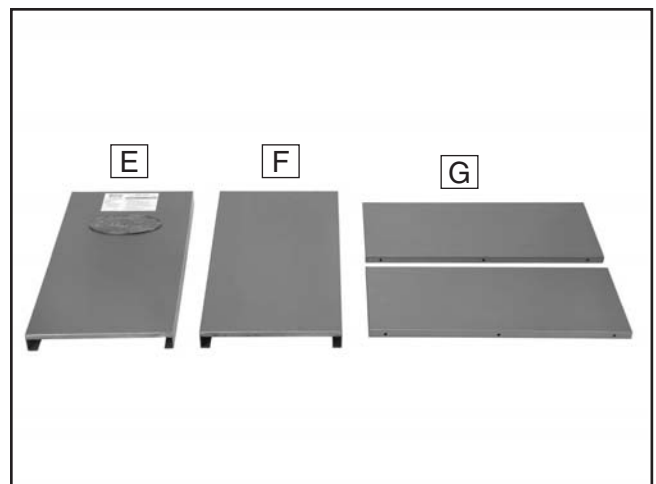
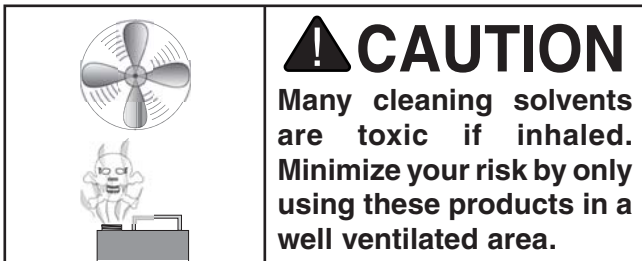
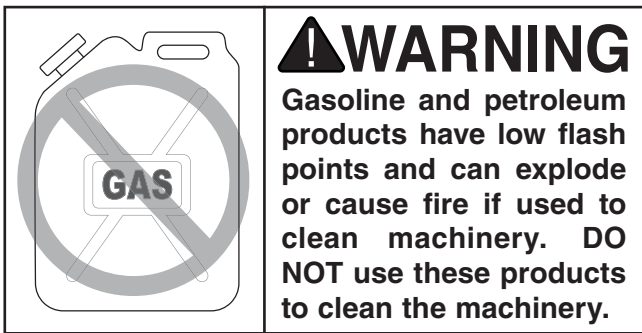


Figure 4. Stand inventory.

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 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.



G2544—Solvent Cleaner & Degreaser
H9692—Orange Power Degreaser
Great products for removing shipping grease.



Figure 5. Cleaner/degreasers 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.

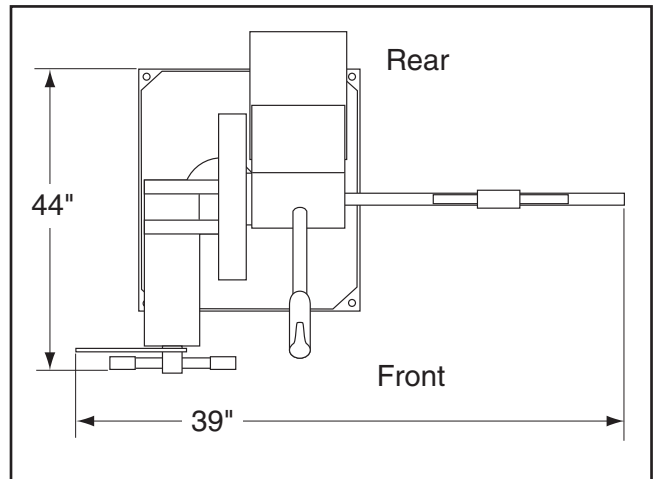
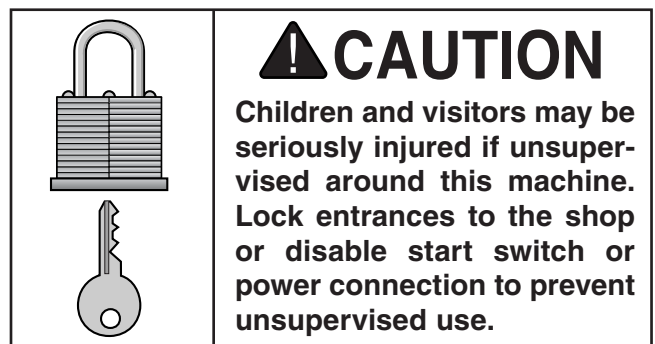


Figure 6. Minimum working clearances.



Mounting

Workbench Mounting

The Model G0682 can be used without the included stand. If you choose to mount the machine to a workbench, use one of the methods described below.

The strongest mounting option is a "Through Mount" where holes are drilled all the way through the workbench, and hex bolts, washers, and hex nuts are used to secure the drill press to the workbench.

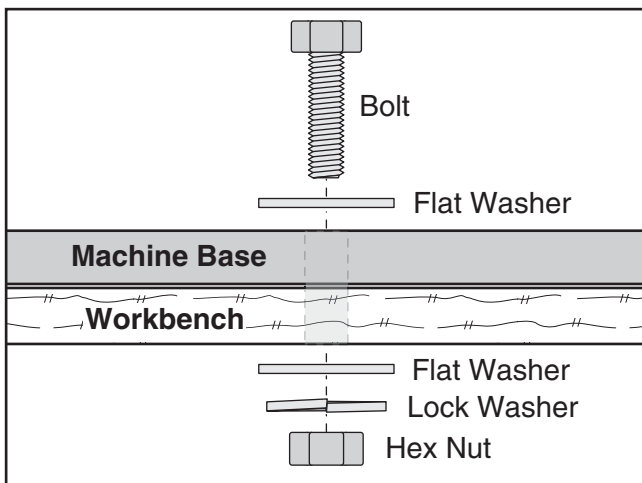


Figure 7. Example of a through mount setup.

Another option for mounting is a "Direct Mount" where the machine is simply secured to the workbench with a lag screw.

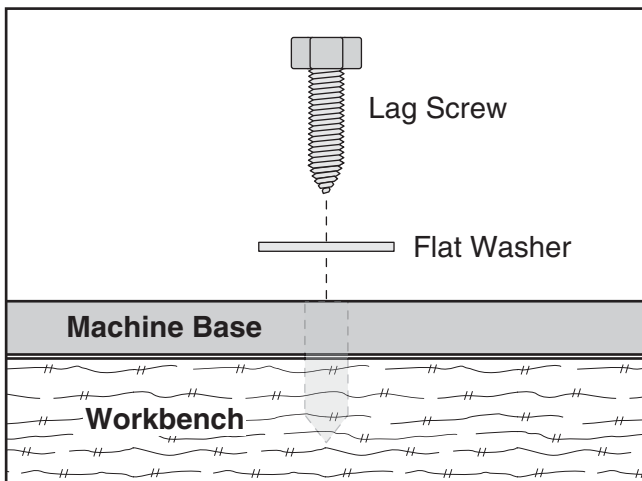


Figure 8. Example of a direct mount setup.

Bolting to Concrete Floors

Although not required, we recommend that you mount your new machine to the floor. This will require drilling holes in the stand. Because this is an optional step and floor materials may vary, floor mounting hardware is not included.

Lag shield anchors with lag bolts (Figure 7) and anchor studs 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.

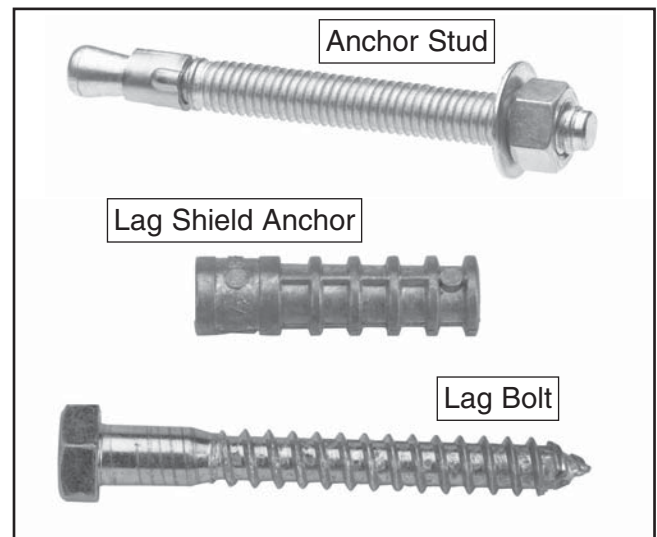


Figure 9. Typical fasteners for mounting to concrete floors.

Once the stand is assembled (see **Assembly**) it is ready to be mounted to the shop floor.

To mount the stand to the floor:

1. Drill four holes in the inner lip at the bottom of the stand in the approximate locations shown in **Figure 10**. Be sure the holes are large enough for the anchor method you choose.

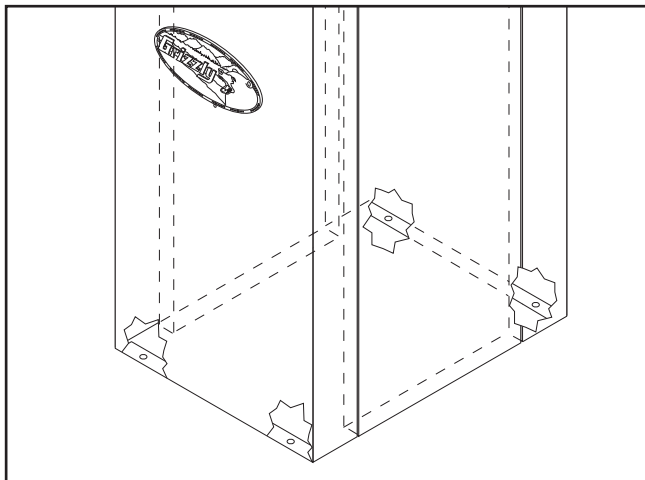


Figure 10. Mounting hole locations.

2. Place the stand in the desired location.
3. Reach into the stand from above and mark the position of the four holes you drilled in **Step 1** onto the shop floor.
4. Move the stand, then install mounting hardware into the floor using the method that best fits your specific application.
5. Place the stand over the mounting hardware, and secure it according to the mounting hardware manufacturer's specifications.

NOTICE

We strongly recommend securing your machine to the floor if it is hardwired to the power source. Consult with your electrician to ensure compliance with local codes.

Assembly

Assembly consists of assembling the stand (if necessary), mounting the machine, and attaching the handle, support roller, and work stop.

To assemble the machine:

1. Attach the front panel to one of the side panels with three M8-1.25 x 20 hex bolts, nuts, and six flat washers, as shown in **Figure 11**.

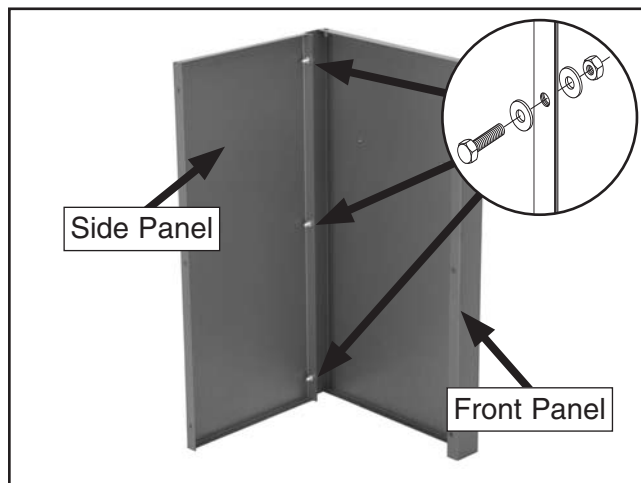


Figure 11. Front and side panels.

2. Attach the remaining side panel in the same manner as **Step 1**, as shown in **Figure 12**.

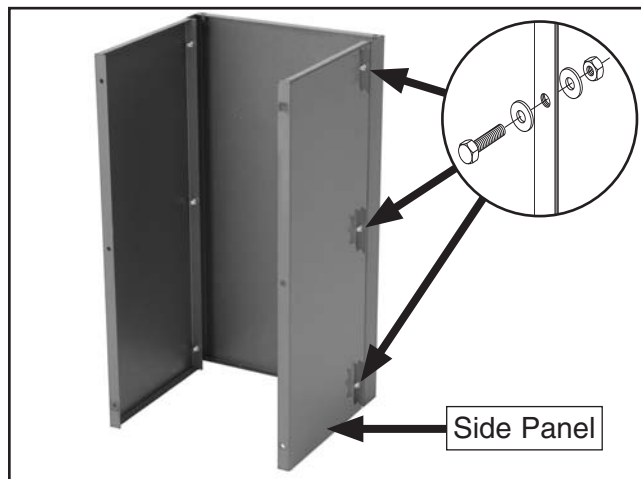


Figure 12. Second side panel attached.

3. Attach the rear panel to the stand with the remaining hex bolts, nuts, and (12) 8mm flat washers.

Note: If you plan to mount your machine stand to the floor, do so now (see **Mounting to Shop Floor** on **Page 13**), then return to **Step 4**, below, to mount the machine to the stand. Otherwise, continue with **Step 4**, below.

4. Place the saw onto the stand and secure it with the four M8-1.25 X 35 hex bolts and flat washers (**Figure 13**).

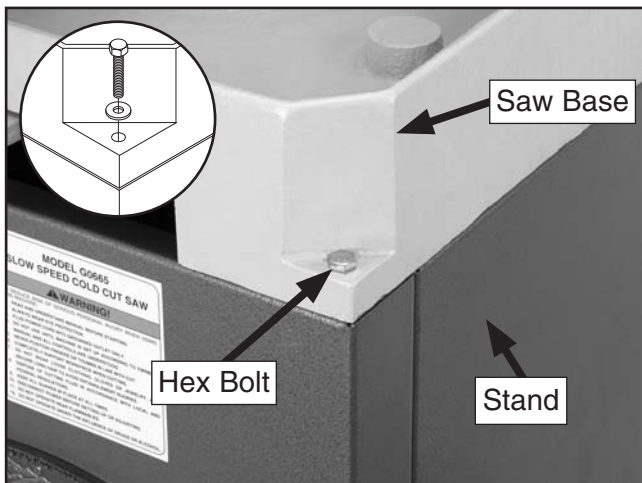


Figure 13. Mounting saw onto stand.

5. Attach the handle by threading it into the gearbox head, then tightening the jam nut, as shown in **Figure 14**.

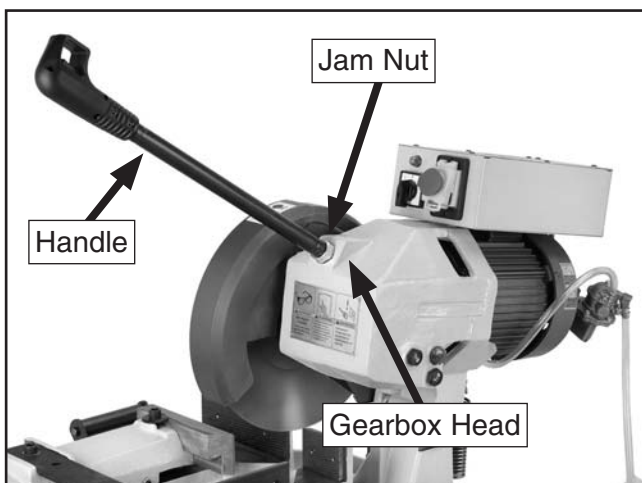


Figure 14. Installing handle.

6. Connect the handle switch plug to the control box by aligning the plug with the socket, then threading the lock collar (**Figure 15**).

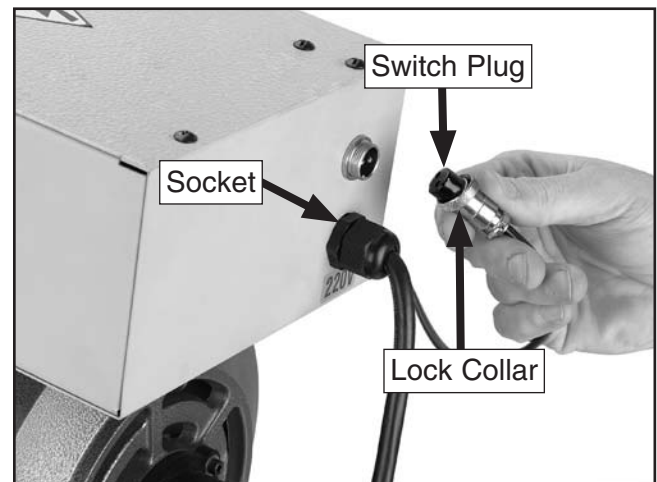


Figure 15. Connecting switch plug.

7. Connect the support roller to the machine base by removing the two hex bolts, aligning the bracket over the holes, as shown in **Figure 16**, then re-installing the hex bolts. Before fully tightening the hex bolts, use a straightedge to make sure the roller is even with the vise table.

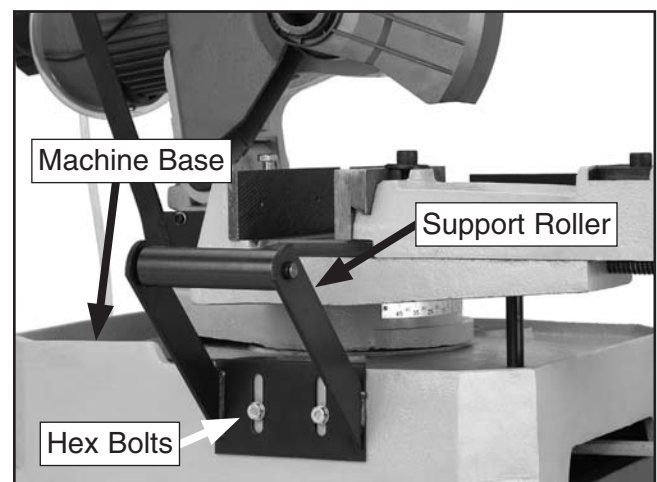


Figure 16. Support roller.

8. Attach the work stop rod by sliding it into the hole in the side of the vise base and using the set screw to secure it in place, as shown in **Figure 17**.

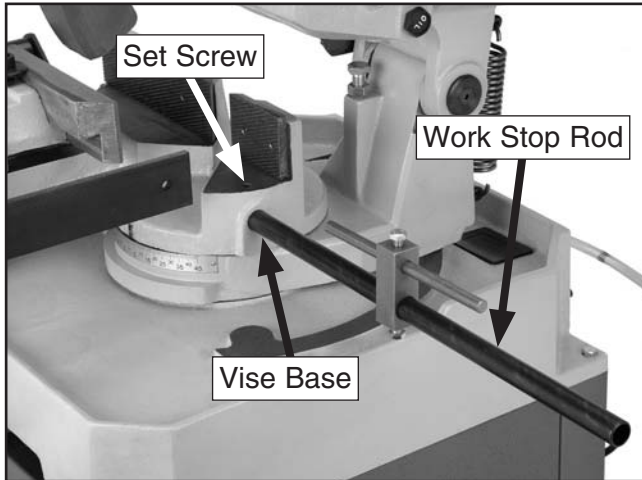


Figure 17. Work stop rod.

9. Slide the work stop onto the work stop rod and secure it by tightening the hex bolt (**Figure 18**).

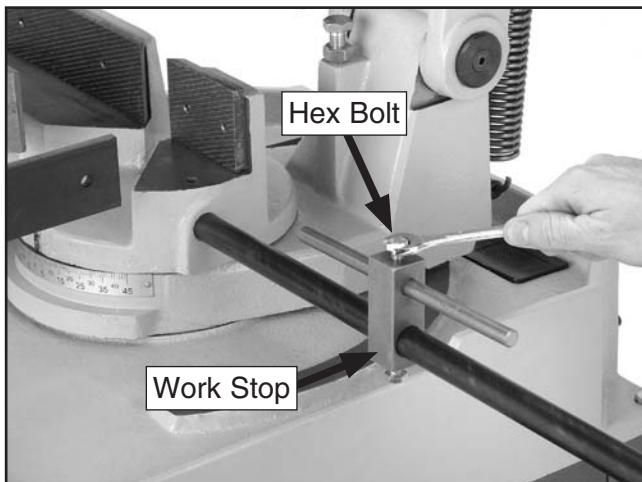


Figure 18. Work stop secured.

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 32**. 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 oil is seen in the sightglass, no further action is required. Continue to **Step 3**.

—If no oil is seen in the sightglass, see **Gearbox Oil** on **Page 31**.

3. Make sure all tools and objects used during assembly are cleared from the machine, then connect the machine to the power source.

4. Lift the red stop button and press the green button to turn the machine **ON**. Move the high/low speed switch to the high position, then press the trigger switch on the handle.

5. Listen to 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 potential problems.

6. Verify that the motor is turning the correct direction. The blade should rotate so that the front portion of the blade moves downward.

—If the blade does not turn the correct direction, stop the machine, shut off the power source, then swap any two of the three power wires that connect to the machine.

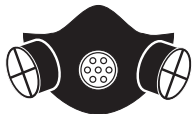
7. Turn the machine **OFF**.



SECTION 4: OPERATIONS

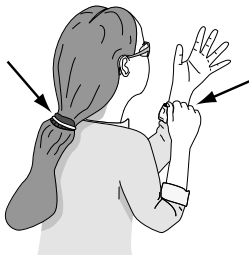
! WARNING

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.



! WARNING

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 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.

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*.

High/Low Speed Switch: Selects the high (84 RPM) or low (42 RPM) blade speed.

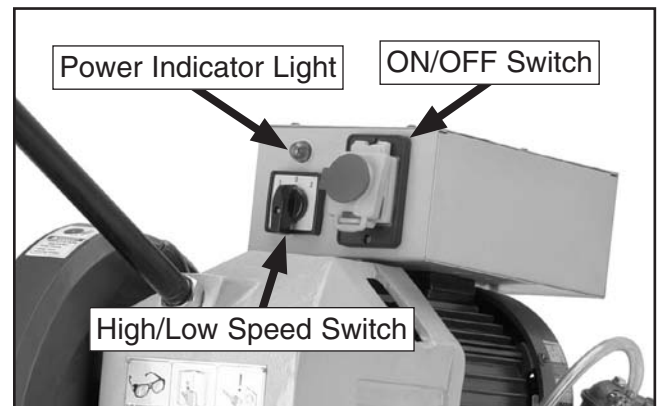


Figure 19. Control box.

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

Vise Quick Release Lever: Quickly opens and closes the vise jaws for repetitive clamping procedures.

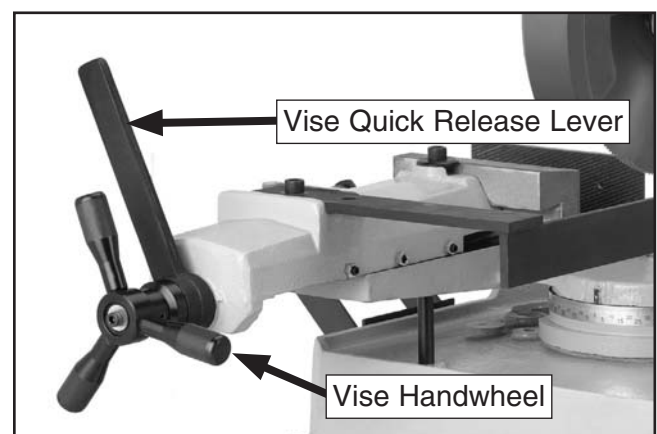


Figure 20. Vise controls.

Saw Handler: Lowers the saw into the workpiece.

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

Miter Lock Lever: Releases or locks the rotation of the saw base for angled cuts.

Work Stop: Set at a particular distance from the blade to produce multiple same-length cuts.

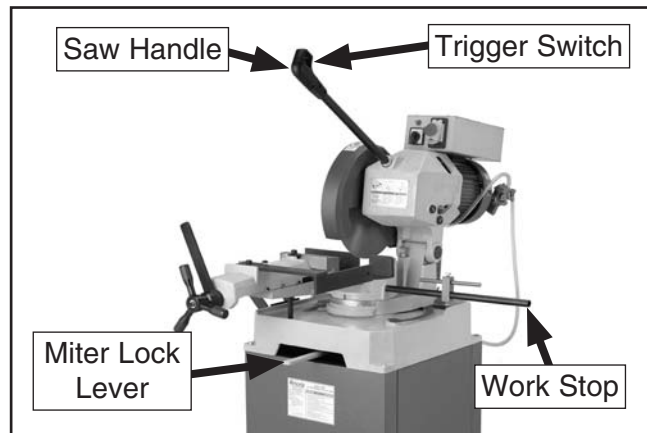


Figure 21. Saw controls.

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

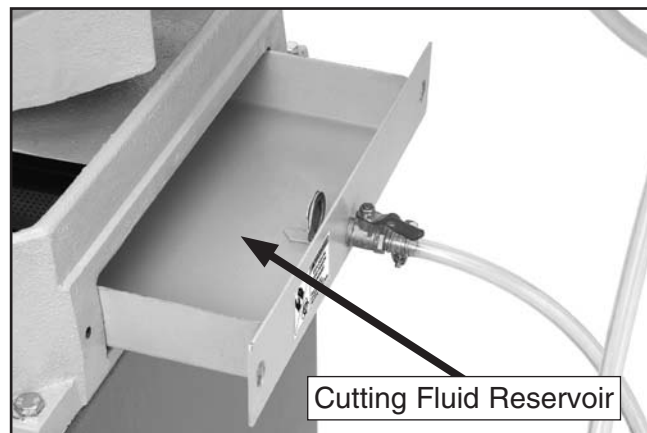


Figure 22. Cutting fluid reservoir.

Cutting Angle

To set the cutting angle:

1. DISCONNECT SAW FROM POWER!
2. Move the miter lock lever to the left to release the saw pivot (**Figure 23**).



Figure 23. Miter lock lever.

3. 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 moving the lever to the right.
4. Test the blade clearance by lowering the saw. If necessary, move the adjustable vise jaw and the auxiliary stability bracket to provide adequate clearance, as outlined in **Vise** on **Page 19**.
5. Return the saw to the upright position.

Vise

Adjustable Vise Jaw

The vise jaw on the Model G0682 can be adjusted for maximum support while still providing clearance at a variety of cutting angles. The Model G0682 also features an auxiliary stability bracket for additional support during cutting procedures.

NOTICE

Prior to cutting, both the jaw and stability bracket must be checked for blade clearance. Failure to do this could cause the blade to contact the vise during the cut, resulting in damage to the machine.

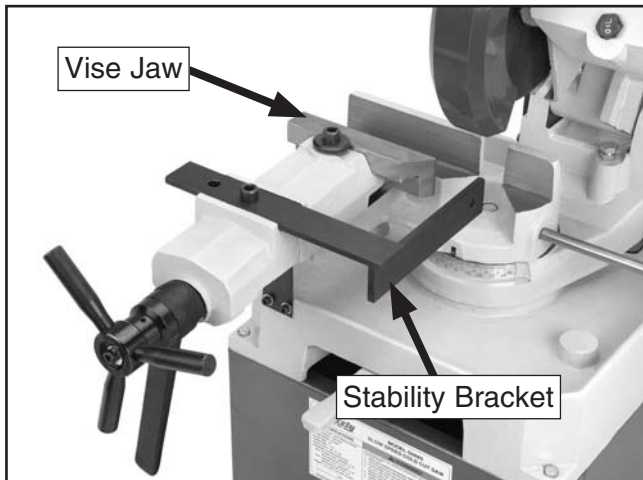


Figure 24. Adjustable vise jaw.

To adjust the vise jaw:

1. DISCONNECT SAW FROM POWER!
2. Set the cutting angle, as described in **Cutting Angle** on **Page 18**.
3. Lower the saw to check for clearance.

—If the saw blade lowers completely without touching the vise jaw or stability bracket, no adjustments are necessary.

—If the saw blade hits the vise jaw, perform **Steps 4–7**.

—If the saw blade hits the auxiliary stability bracket, see **Auxiliary Stability Bracket** on **Page 20**.

4. Loosen the cap screw until the jaw slides freely (**Figure 25**).

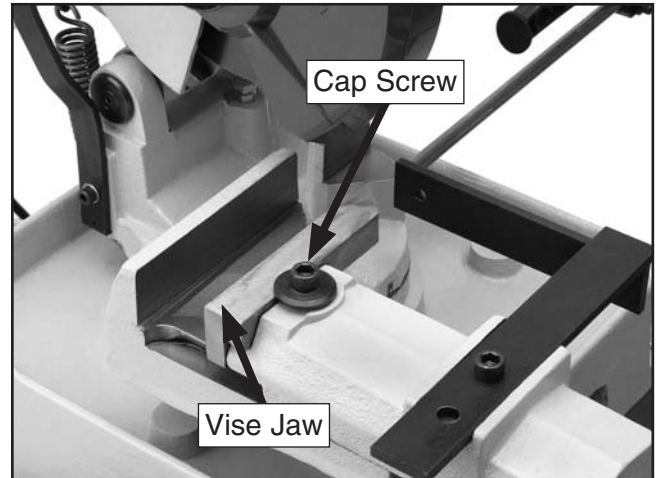


Figure 25. Sliding jaw.

5. Slide the jaw so that it is approximately $\frac{1}{2}$ " away from the blade (**Figure 26**).

Note: At certain angle settings, it may not be possible to set the jaw within the specifications described above. If this is the case, adjust the jaw as far as it can go while still being securely clamped.

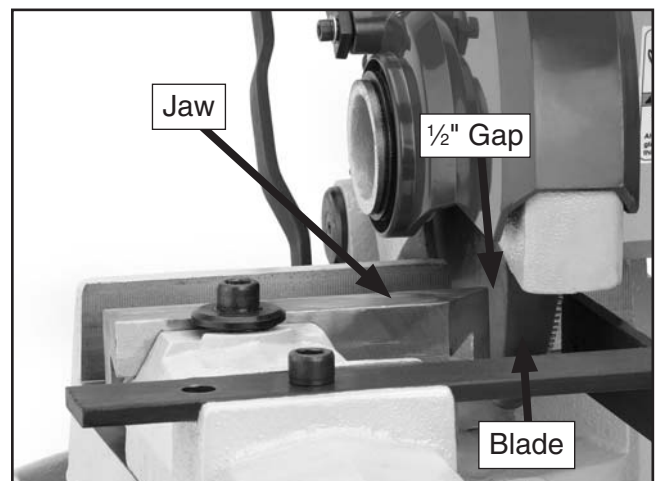


Figure 26. Setting blade clearance.

6. Tighten the cap screw.
7. Return to **Step 3** and re-check for clearance.

Auxiliary Stability Bracket

The auxiliary stability bracket can be placed in two positions. Depending on the angle of the cut, the bracket may have to be moved to provide adequate clearance for the blade.

To adjust the auxiliary stability bracket:

1. DISCONNECT SAW FROM POWER!
2. Loosen and remove the cap screw and washer shown in **Figure 27**.

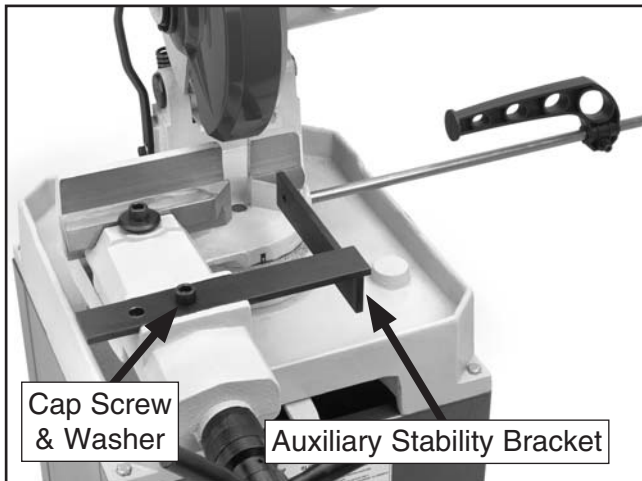


Figure 27. Auxiliary stability bracket.

3. Remove the auxiliary stability bracket and replace it in the position that does not interfere with the range of motion of the saw blade.

Note: At angles greater than approximately 35° away from the vise, it is necessary to remove the auxiliary stability bracket entirely.

Vise Quick Release Lever

For repetitive cutting procedures that require frequent clamping and unclamping of the same size stock, the Model G0682 is equipped with a quick release lever that allows the workpiece to be released, repositioned, then quickly reclamped.

To use the quick release lever:

1. DISCONNECT SAW FROM POWER!
2. Rotate the lever clockwise to the upward position, as shown in **Figure 28**.



Figure 28. Quick release lever.

3. Open the vise wide enough to accept the workpiece, then place the workpiece into the vise.
4. Close the vise to within approximately 1/8" of the workpiece, as shown in **Figure 29**.

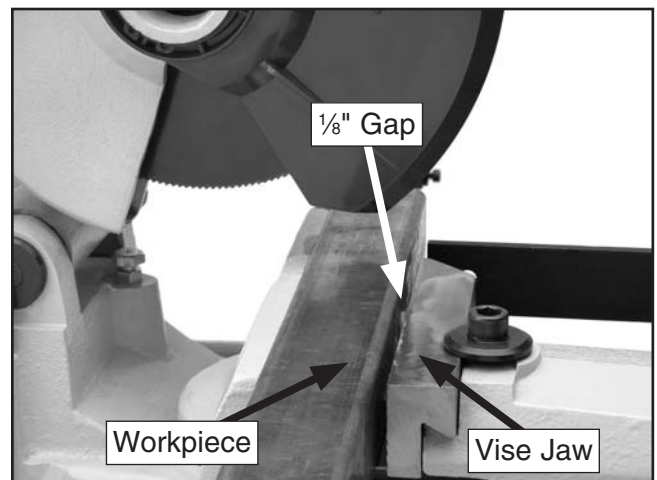


Figure 29. Closing vise.

5. Rotate the quick release lever counterclockwise to clamp the workpiece. Between cuts, rotate the lever clockwise to release the workpiece, then counterclockwise again to reclamp it (**Figure 30**).

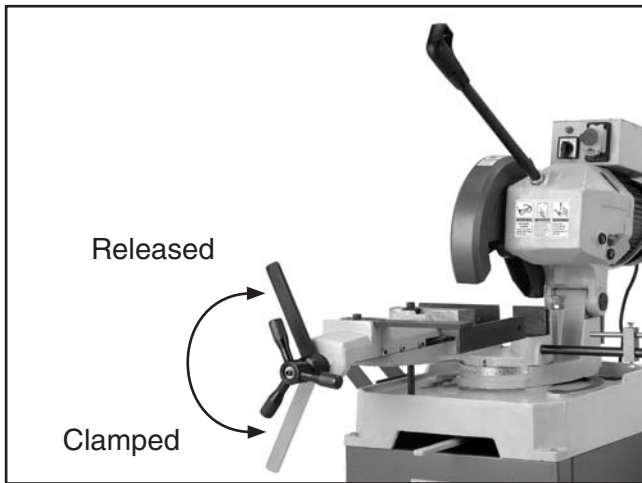


Figure 30. Quick release lever positions.

Note: An alternative method for using the quick release lever is to rotate the lever downward prior to clamping the workpiece. With the lever in this position, fully clamp the workpiece using the vise handwheel. To release the workpiece, rotate the lever clockwise to the up position. The method you practice is a matter of personal preference.

Work Stop

Use the work stop to perform consistent length cuts.

To use the work stop:

1. DISCONNECT SAW FROM POWER!
2. Loosen the work stop hex bolt (**Figure 31**).

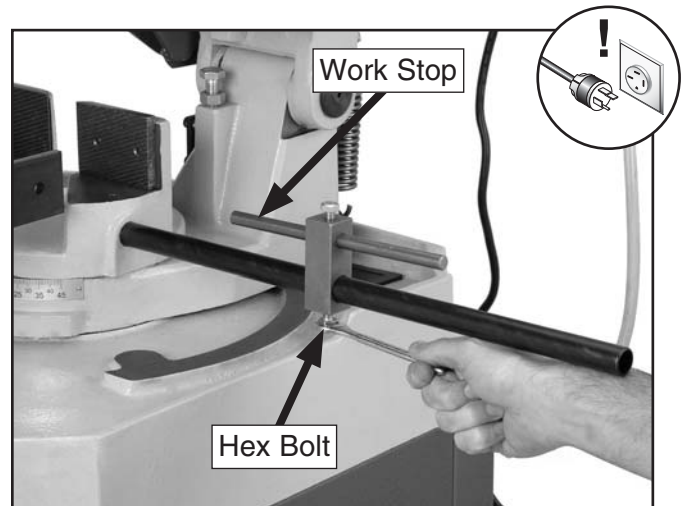


Figure 31. Work stop adjustment.

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 hex bolt (**Figure 32**).

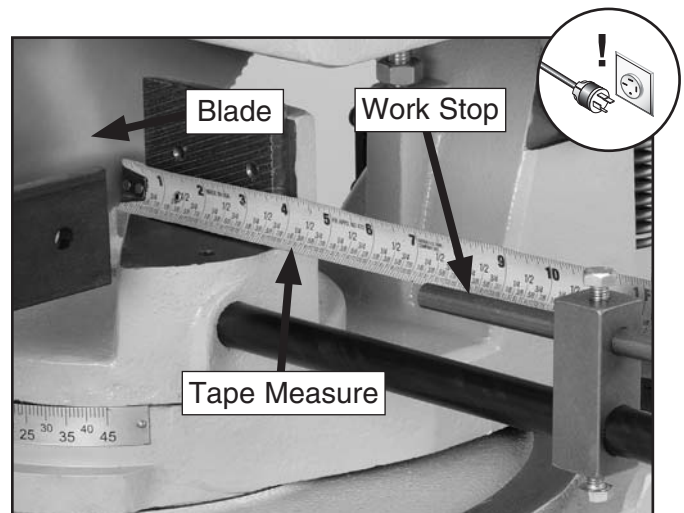


Figure 32. Measuring length of cut.

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

Filling Cutting Fluid Reservoir

1. DISCONNECT SAW FROM POWER!
2. Remove the cap screws and washers from the cutting fluid reservoir (**Figure 33**).

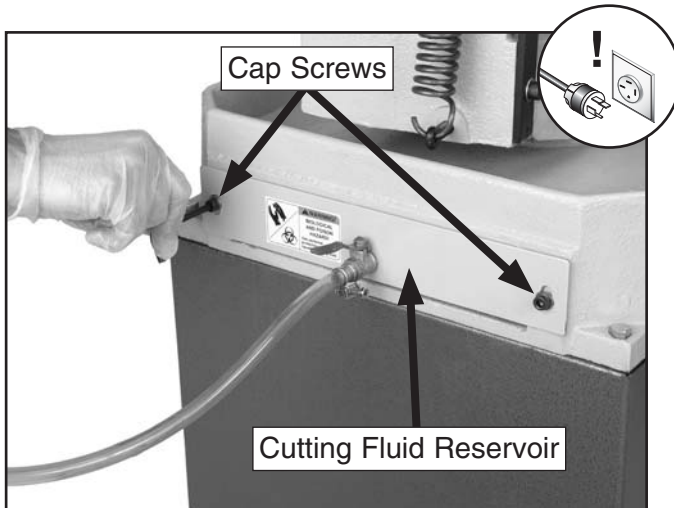
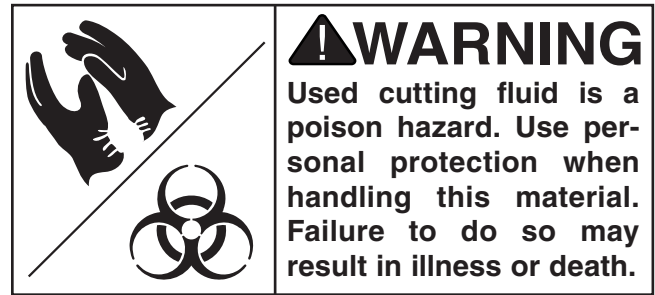


Figure 33. Opening cutting fluid reservoir.

3. Slide the tray out from the machine base.
4. Wearing protective equipment, fill the reservoir with 2¼ quarts of 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

1. DISCONNECT SAW FROM POWER!
2. Wearing protective equipment, drain and dispose the cutting fluid following government-approved 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 34**).

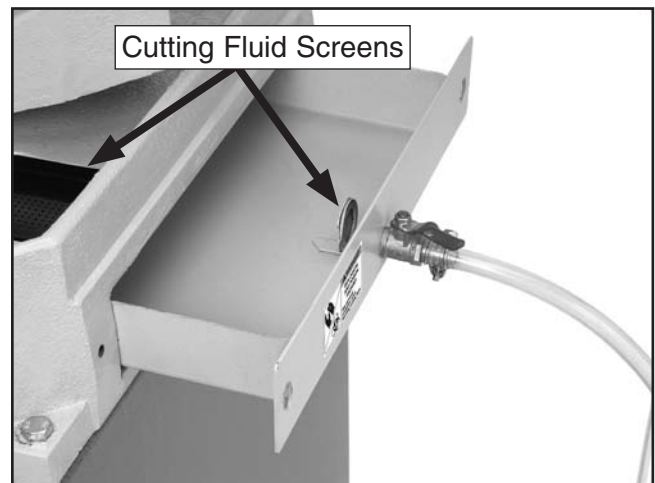


Figure 34. Cutting fluid screens.

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



Blade Terminology

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

Blade Terminology

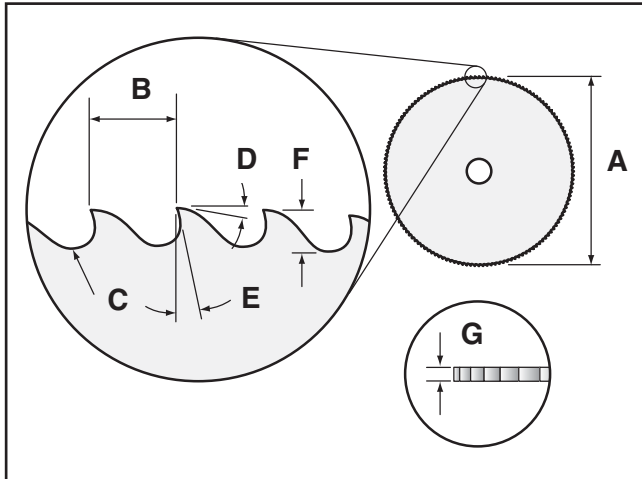


Figure 35. Blade terminology.

- A. Blade Size (Diameter):** The overall diameter of the blade. The Model G0682 uses 12" 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 of the blade.
- F. Tooth Depth:** The distance from the tip of the tooth to the bottom of the adjacent 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 G0682 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 36**). Use a blade pitch that keeps at least three teeth in the workpiece at any time.

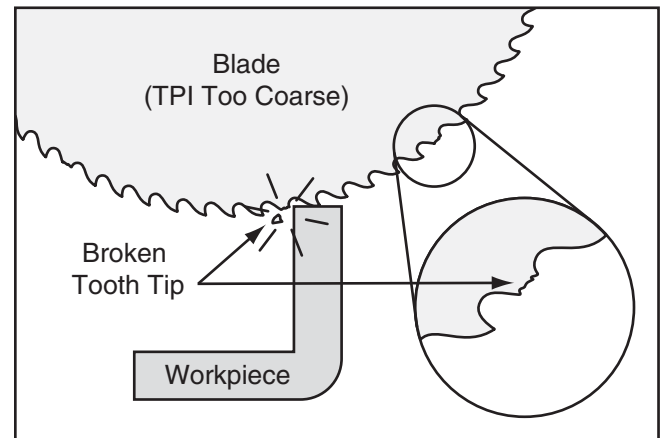


Figure 36. TPI too coarse for workpiece.

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 37**).

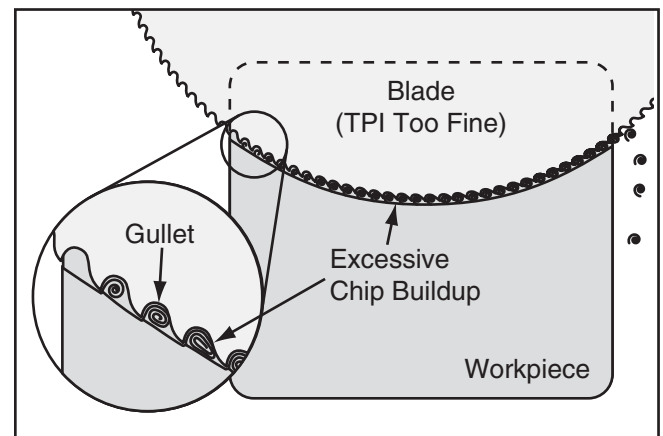


Figure 37. TPI too fine for workpiece.

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 38**).

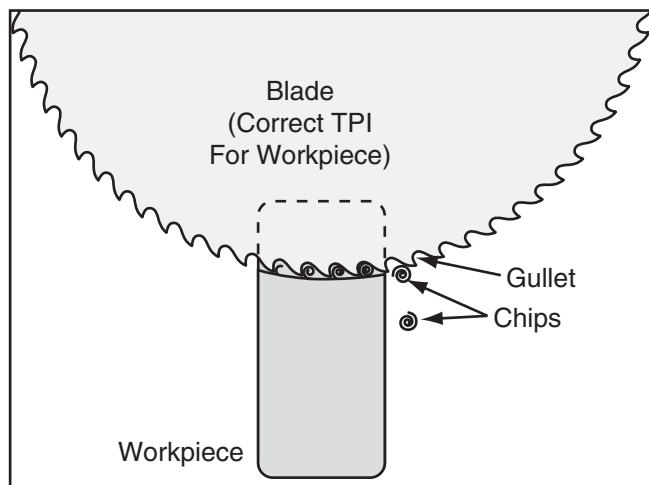


Figure 38. Correct TPI.

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 39**.

—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 39**, 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 **Accessories on Page 29**.

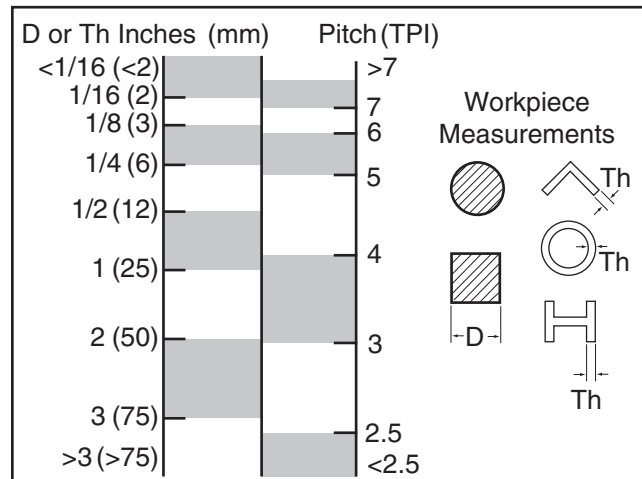


Figure 39. Blade selection chart.

Blade Feed Rate

Blade feed rate refers to the period of time it takes to cut through a workpiece. On the Model G0682, 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 or 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 27**.



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 40** to calculate approximate square inches for many typical cuts.

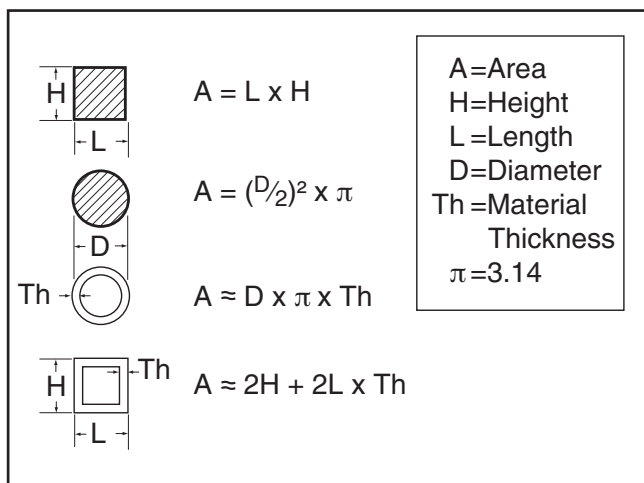
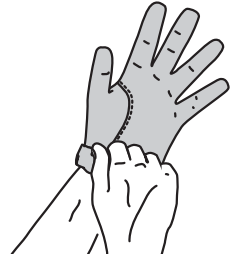


Figure 40. Calculating cut area for break-in.

Blade Changes



⚠ 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 5, 10mm..... 1 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 41**).

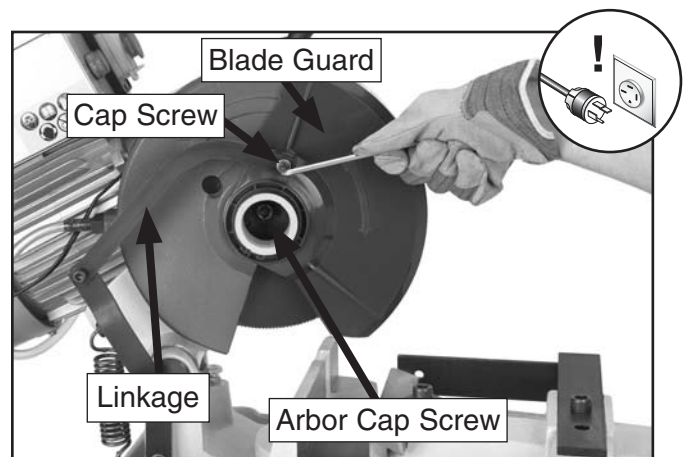


Figure 41. Removing guard linkage.



3. Rotate the blade guard and linkage out of the way, as shown in **Figure 42**.

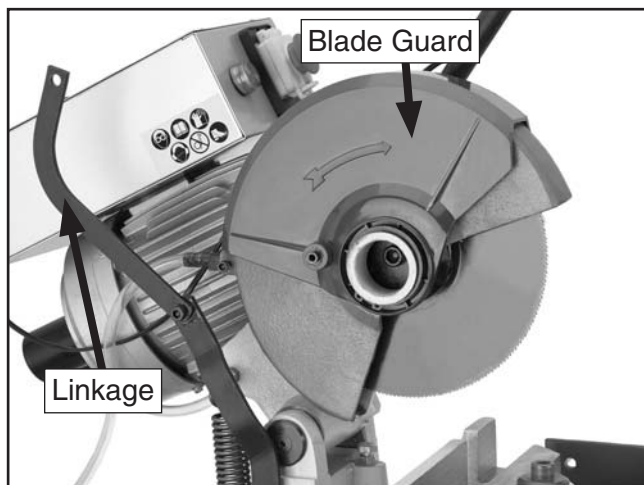


Figure 42. Exposing blade.

4. Remove the arbor cap screw. It has left-hand threads and loosens when turned clockwise (see **Figure 42**).
5. Remove the blade and blade flange (**Figure 43**).

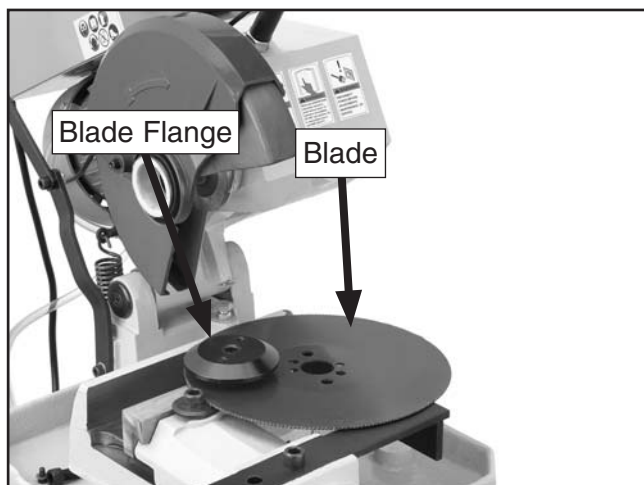


Figure 43. Blade removed.

6. Place the blade flange on the new blade, as shown in **Figure 44**.

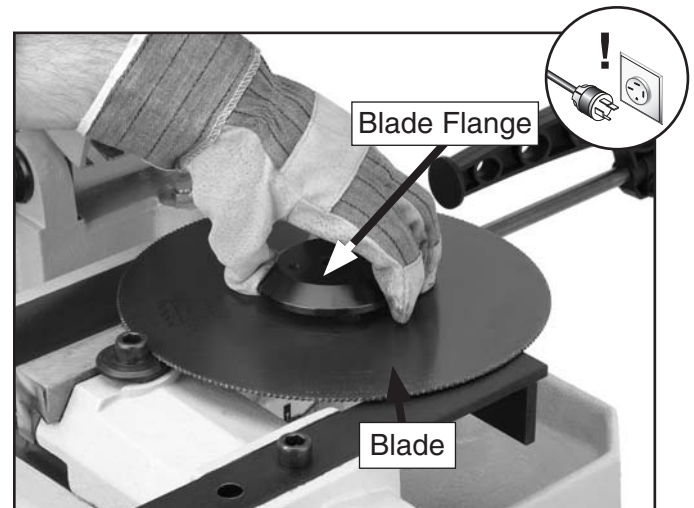


Figure 44. Installing new blade.

7. Place the blade and flange over the arbor, then thread and tighten the left-hand thread arbor cap screw (**Figure 45**).

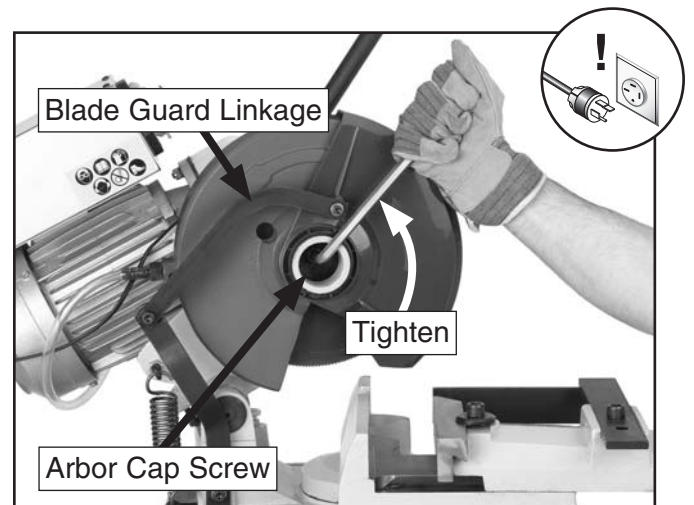


Figure 45. Tightening blade.

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

Figure 46. Chip inspection chart.

Cutting Procedures

After familiarizing yourself with the controls of the Model G0682, 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 18**).
3. Check the vise blade clearance (**Page 19**).
4. Set the work stop if required for the task being performed (**Page 21**).
5. Clamp the workpiece (**Page 19**).
6. Check the cutting fluid reservoir level (**Page 22**).
7. Make sure the saw is in the fully upright position.
8. Connect the saw to power.
9. Select a blade speed.
 - Position "1" will result in a blade speed of 42 RPM or a surface speed of 131 Feet Per Minute (FPM).
 - Position "2" will result in a blade speed of 84 RPM or a surface speed of 262 Feet Per Minute (FPM).
10. 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 may 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

- T20806—120 Tooth
- T20807—150 Tooth
- T20808—180 Tooth
- T20809—220 Tooth
- T20810—280 Tooth

Replacement blades for the Model G0682.

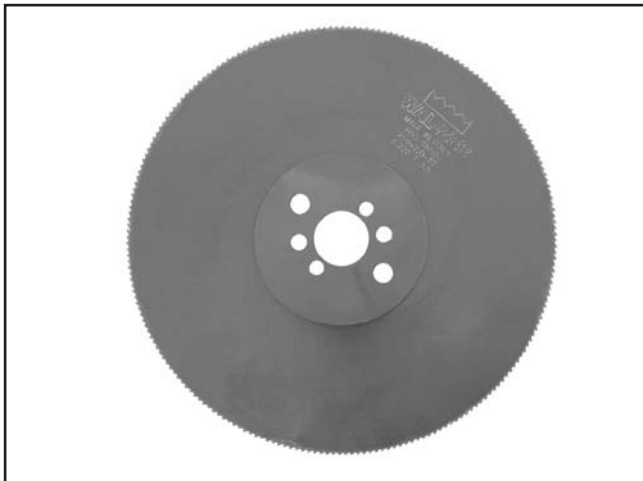


Figure 47. Replacement blades for the G0682.

G8983—Tilting Roller Stand

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

G8984—Single Roller Stand

Adjusts from 26 5/8" to 45". 250 lb. capacity.

G8985—5 Roller Stand

Adjusts from 26" to 44 5/8". 250 lb. capacity.

These super heavy-duty roller stands feature convenient hand knobs for fast height adjustment.



Figure 48. Shop Fox® Roller Stands.

- T20501—Face Shield Crown Protector 4"
- T20502—Face Shield Crown Protector 7"
- T20503—Face Shield Window
- 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 49. Our most popular eye protection.

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!

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SECTION 6: MAINTENANCE



Schedule

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

Daily Check:

- 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 the gearbox oil level.
- Clean/grease the vise leadscrew.
- Check the 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 G0682 is relatively easy. Vacuum excess metal chips and wipe off the remaining debris and cutting fluid residue with a dry cloth.

Unpainted Cast Iron

Protect the unpainted cast iron surfaces on the machine by wiping them clean after every use—this ensures moisture does not remain on bare metal surfaces.

Keep 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 mineral spirits or other degreaser and relubricate.



Gearbox Oil

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

Tools Needed	Qty
Wrench 7/8".....	1
Drain Pan.....	1
Funnel.....	1

To change the gearbox oil:

1. DISCONNECT SAW FROM POWER!
2. Raise the saw handle to the up-most position.
3. Hold the drain pan under the oil drain plug, then remove the oil drain plug (**Figure 50**).

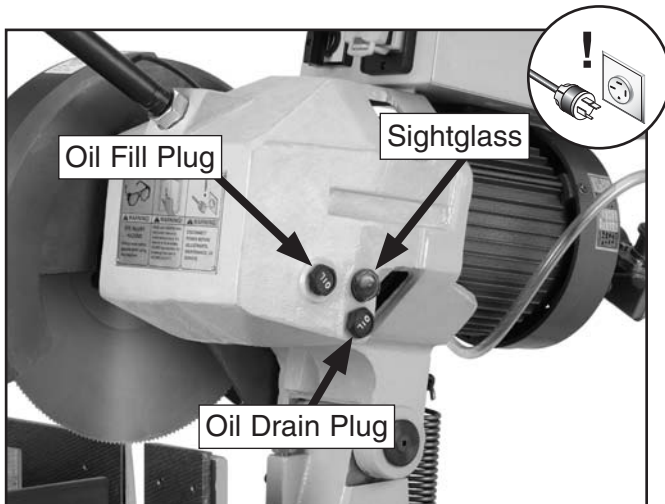


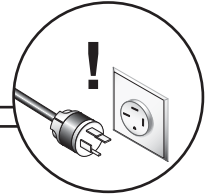
Figure 50. Hinge pin lubrication.

4. Allow all of the oil to drain out.
5. Replace the oil drain plug.
6. Remove the oil fill plug and refill the gearbox with standard automotive 85w-140 gear oil until it is full.
7. Replace the oil fill plug.

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

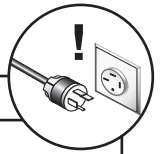


Motor & Electrical

Symptom	Possible Cause	Corrective Action
Machine does not start/indicator light does not come on or a breaker trips.	<ol style="list-style-type: none"> 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. 6. Power supply switched OFF or is at fault. 7. Wiring is open/has high resistance. 8. Motor ON/OFF switch is at fault. 9. Motor is at fault. 	<ol style="list-style-type: none"> 1. Reset switch by opening cover. 2. Test for good contacts; correct the wiring. 3. Ensure circuit size is suitable for this machine; replace weak breaker. 4. Replace light. 5. Check fuses in control box (illuminated fuse lamp indicates blown fuse). 6. Ensure power supply is switched ON; 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.	<ol style="list-style-type: none"> 1. Feed pressure too great for task. 2. Motor connection is wired incorrectly. 3. Plug/receptacle is at fault. 4. Motor is at fault. 	<ol style="list-style-type: none"> 1. Decrease feed pressure. 2. Correct motor wiring connections. 3. Test for good contacts; correct the wiring. 4. Test/repair/replace.
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> 1. Motor or component is loose. 2. Motor mount loose/broken. 3. Machine is incorrectly mounted or sits unevenly. 4. Motor fan is rubbing on fan cover. 5. Motor bearings are at fault. 	<ol style="list-style-type: none"> 1. Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid. 2. Tighten/replace. 3. Tighten/replace anchor studs in floor; relocate/shim machine. 4. Replace dented fan cover; replace loose/damaged fan. 5. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.
Indicator light is on and trigger switch fails to activate motor.	<ol style="list-style-type: none"> 1. Plug connecting trigger switch to control box is unplugged. 2. Trigger switch at fault. 3. Motor is at fault. 	<ol style="list-style-type: none"> 1. Correctly insert plug. 2. Test/repair/replace. 3. Test/repair/replace.



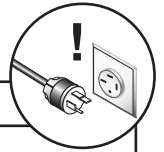
Operations



Symptom	Possible Cause	Corrective Action
Premature blade wear.	<ol style="list-style-type: none"> 1. Feed pressure is too high. 2. Incorrect blade for material type. 3. Inadequate blade lubrication. 	<ol style="list-style-type: none"> 1. Reduce feed pressure. 2. Choose the correct blade for the material type. 3. Check the level of the cutting fluid, valve positions, functionality of the pump, and flow of the hoses.
Chipped teeth on blade.	<ol style="list-style-type: none"> 1. Material type is too hard, incorrectly shaped, or has flaws. 2. Wrong tooth pitch. 3. Vibrations in machine causing blade to "bounce" on workpiece. 4. Blade lowered too rapidly into workpiece. 	<ol style="list-style-type: none"> 1. Decrease feed pressure. 2. Use correct blade. 3. Find/correct source of machine vibration. 4. Lower blade in a slow and controlled manner.
Vibration when cutting.	<ol style="list-style-type: none"> 1. Wrong tooth pitch/profile. 2. Workpiece is not secured in vise. 3. Cross section of workpiece is too large. 	<ol style="list-style-type: none"> 1. Use correct blade. 2. Secure workpiece. 3. Adhere to maximum cutting capacities for this machine.
Cut is not straight.	<ol style="list-style-type: none"> 1. Cutting pressure is too high. 2. Workpiece is not secured in vise. 3. Cutting angle is not properly set. 4. Debris on vise. 5. Roller assembly is not level with the vise table. 	<ol style="list-style-type: none"> 1. Reduce feed pressure. 2. Secure workpiece. 3. Set cutting angle according to the scale. 4. Clean vise. 5. Correct positioning of the roller assembly.
Blade sticks in cut.	<ol style="list-style-type: none"> 1. Cutting pressure is too high. 2. Waste material/cutting fluid buildup on blade. 3. Inadequate blade lubrication. 	<ol style="list-style-type: none"> 1. Reduce feed pressure. 2. Clean blade. 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 style="list-style-type: none"> 1. Feed speed/pressure too high. 2. Blade is not square to table. 3. Blade has broken teeth. 	<ol style="list-style-type: none"> 1. Reduce feed pressure by relieving pressure on the feed lever during operation. 2. Adjust cutting angle. 3. Inspect/repair blade.
Blade teeth dull prematurely.	<ol style="list-style-type: none"> 1. Feed speed/pressure too low. 2. Blade pitch too fine for cut. 3. Insufficient blade cooling. 4. Impurities in workpiece. 5. Blade not broken-in correctly. 	<ol style="list-style-type: none"> 1. Increase feed speed/pressure. 2. Check blade pitch, use a coarser-pitch blade. 3. Check coolant level/type, clean hoses, valves, and nozzles. 4. Inspect/clean/discard workpiece. 5. Replace blade and follow Blade Break-in on Page 25.
Blade teeth are broken/missing.	<ol style="list-style-type: none"> 1. Feed speed/pressure too high. 2. Blade was in contact with the workpiece when machine was turned ON. 3. Blade tooth pitch incorrect for cut. 4. Blade not broken-in correctly. 5. Insufficient blade cooling. 	<ol style="list-style-type: none"> 1. Reduce feed pressure by relieving pressure on the feed lever during operation. 2. Never start the blade in contact with the workpiece. 3. Check blade tooth pitch. 4. Replace blade and follow Blade Break-in on Page 25. 5. Check coolant level/type, clean hoses, valves, and nozzles.
Blade is broken.	<ol style="list-style-type: none"> 1. Feed speed/pressure too high. 2. Blade was in contact with the workpiece when machine was turned ON. 3. Insufficient blade cooling. 4. Workpiece shifted in vise. 	<ol style="list-style-type: none"> 1. Reduce feed speed/pressure 2. Never start the blade in contact with the workpiece. 3. Check coolant level/type, clean hoses, valves, and nozzles. 4. Be sure workpiece is properly clamped before starting cut.



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.

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. CIRCUIT REQUIREMENTS.** You MUST follow the requirements on **Page 9** when connecting your machine to a power source.
- 3. 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.
- 4. 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.
- 5. 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.
- 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. 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.
- 8. EXPERIENCING DIFFICULTIES.** If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

NOTICE

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

COLOR KEY

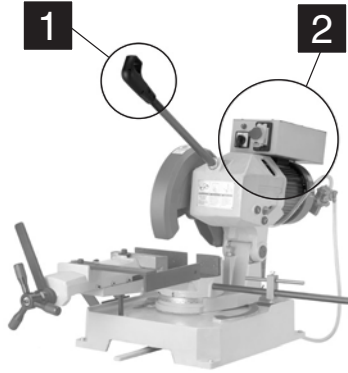
BLACK 	BLUE 	YELLOW 	LIGHT BLUE 
WHITE 	BROWN 	YELLOW GREEN 	BLUE WHITE 
GREEN 	GRAY 	PURPLE 	TURQUOISE 
RED 	ORANGE 	PINK 	



Wiring Diagram



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



WARNING!
SHOCK HAZARD!
Disconnect power before working on wiring.

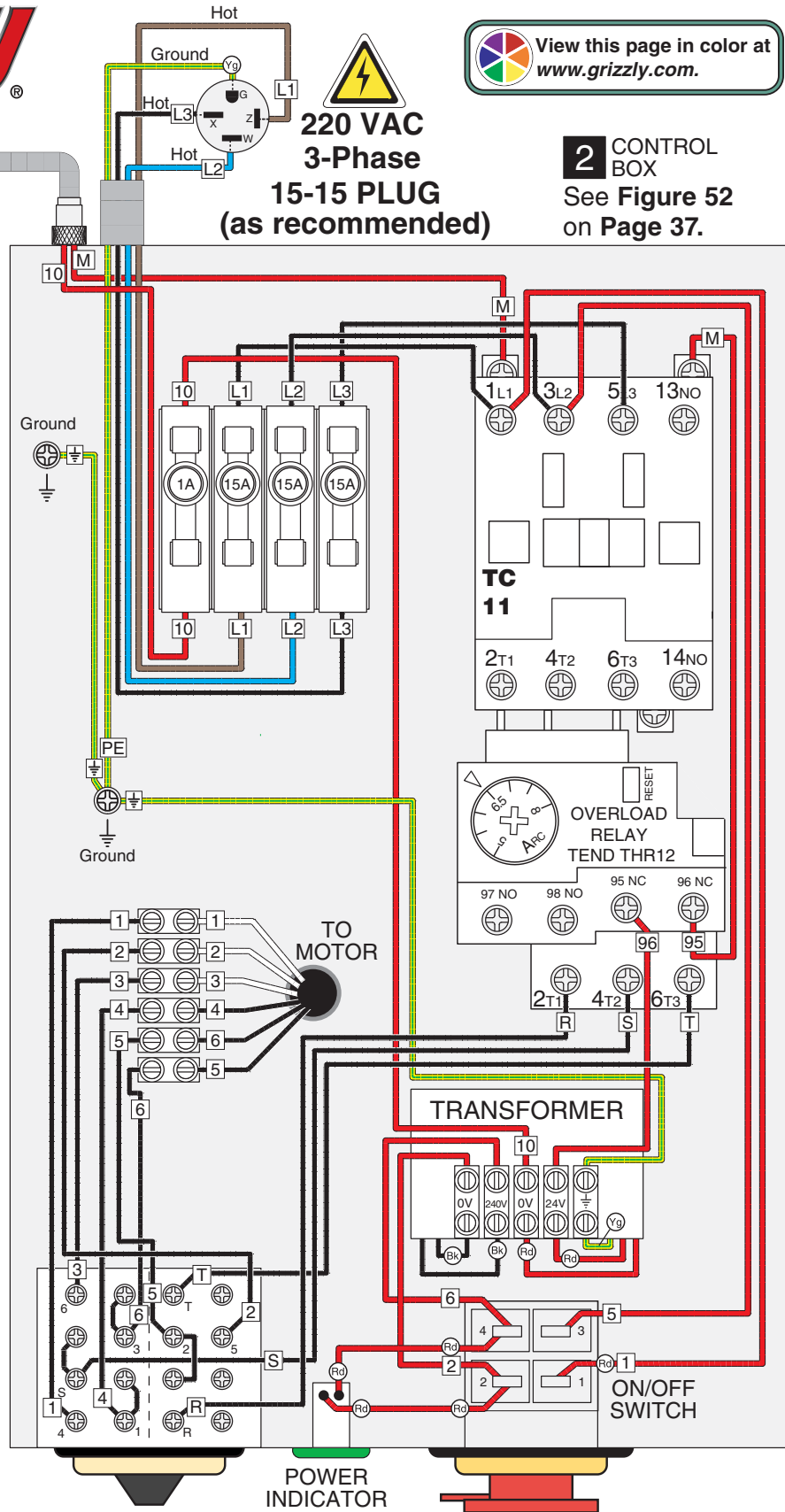
1 TRIGGER SWITCH



Figure 51. Trigger Switch.

NOTICE
The motor wiring shown here is current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.

HIGH/LOW SPEED SWITCH



2 CONTROL BOX
See Figure 52 on Page 37.



Electrical Components

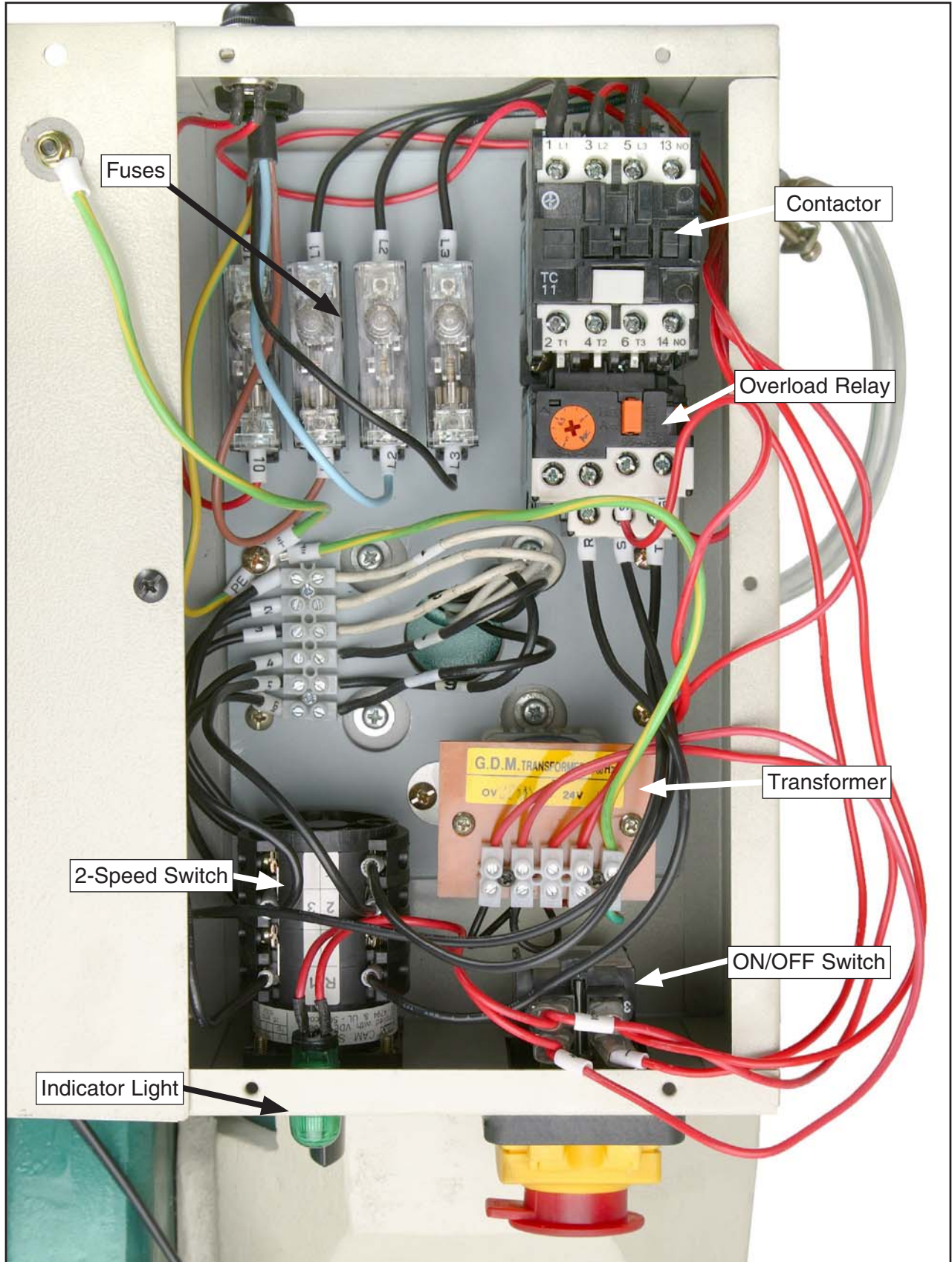
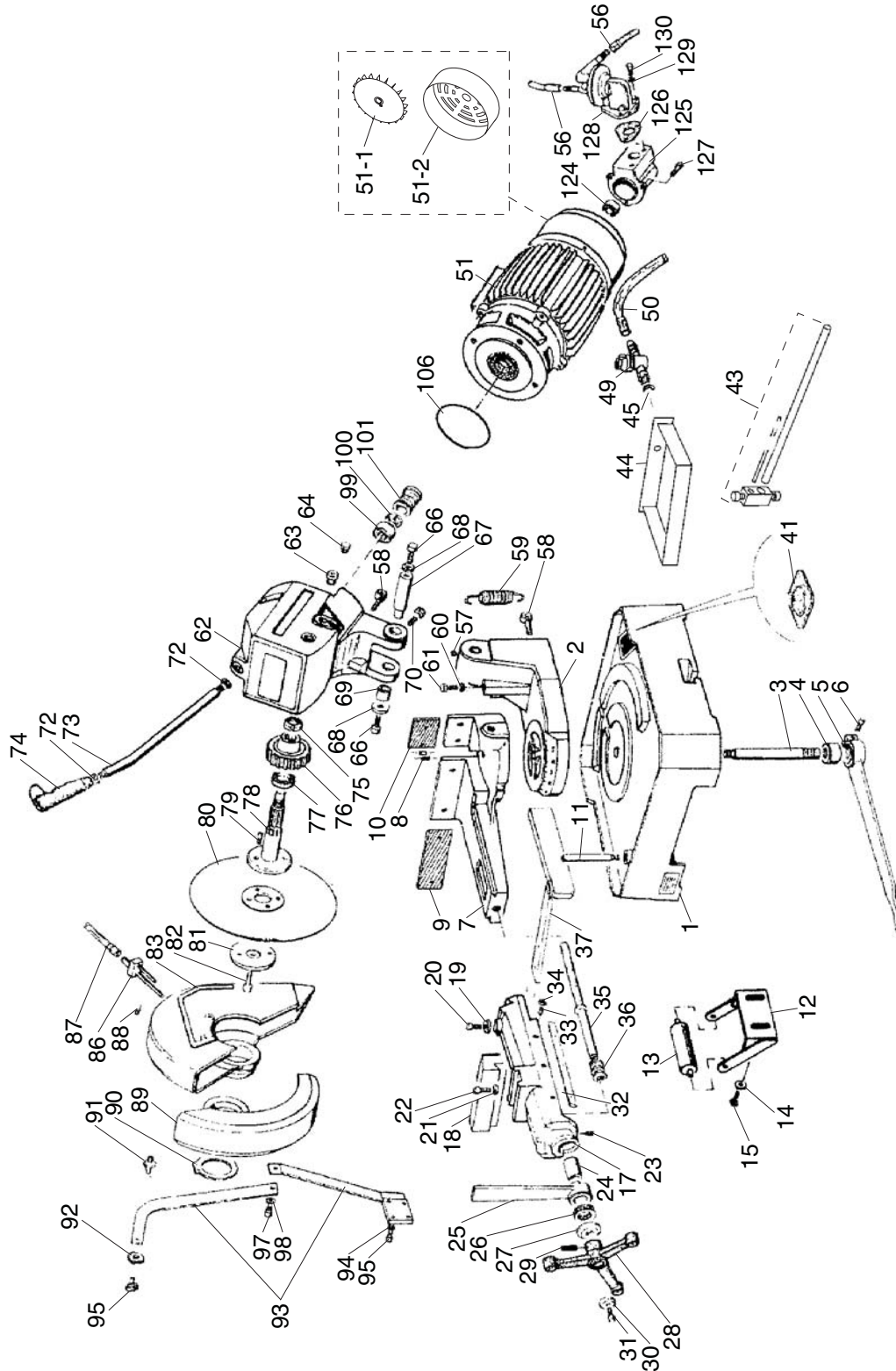


Figure 52. G0682 electrical components.

SECTION 9: PARTS

Parts Breakdown



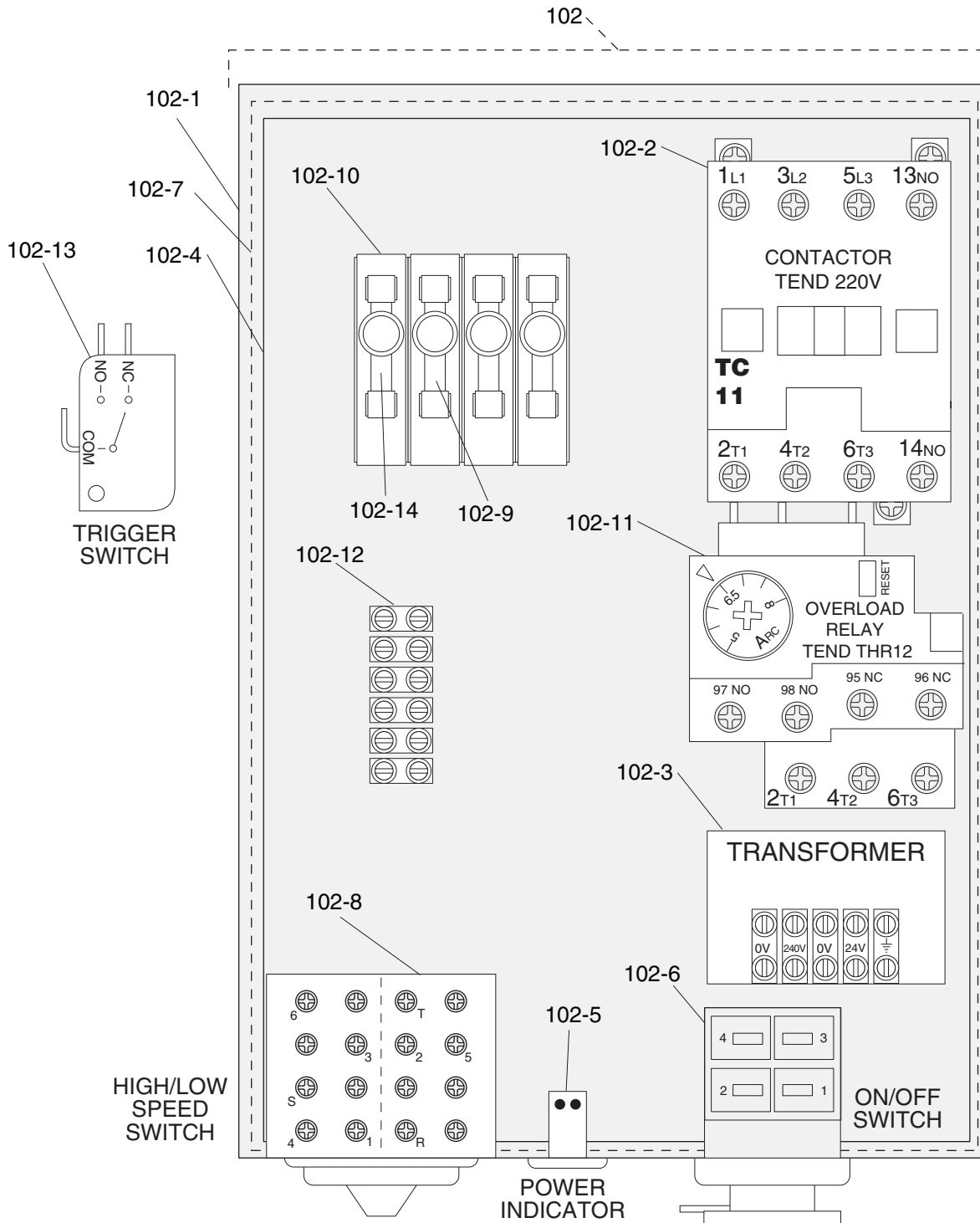
Parts List

REF	PART #	DESCRIPTION
1	P0682001	SAW BASE
2	P0682002	PIVOTING BASE
3	P0682003	LOCK PIN
4	P0682004	BUSHING
5	P0682005	LEVER
6	PSB14M	CAP SCREW M8-1.25 X 20
7	P0682007	WISE BASE
8	PSS06M	SET SCREW M8-1.25 X 16
9	P0682009	WISE JAW LARGE
10	P0682010	WISE JAW SMALL
11	P0682011	SUPPORT
12	P0682012	ROLLER BRACKET
13	P0682013	ROLLER
14	PW01M	FLAT WASHER 8MM
15	PSB14M	CAP SCREW M8-1.25 X 20
17	P0682017	MOVING VISE BASE
18	P0682018	MOVING VISE JAW
19	P0682019	CLAMP WASHER
20	PSB36M	CAP SCREW M12-1.75 X 25
21	P0682021	SPECIAL WASHER
22	PSB36M	CAP SCREW M12-1.75 X 25
23	PSS21M	SET SCREW M8-1.25 X 25
24	P0682024	SPACER
25	P0682025	QUICK RELEASE LEVER
26	P51106	THRUST BEARING 51106
27	P0682027	FLANGE
28	P0682028	HANDLE
29	PRP58M	ROLL PIN 6 X 45
30	PW06M	FLAT WASHER 12MM
31	PSB36M	CAP SCREW M12-1.75 X 25
32	P0682032	GIB
33	PSS21M	SET SCREW M8-1.25 X 25
34	PN03M	HEX NUT M8-1.25
35	P0682035	LEADSCREW
36	P0682036	COMPRESSION SPRING
37	P0682037	AUX VISE BRACKET
41	P0682041	COOLANT TANK SCREEN
43	P0682043	WORK STOP BAR ASSEMBLY
44	P0682044	COOLANT TRAY
45	P0682045	CLAMP
49	P0682049	COOLANT VALVE
50	P0682050	COOLANT TUBE
51	P0682051	MOTOR 2.2 HP 220V 3-PH
51-1	P0682051-1	MOTOR FAN
51-2	P0682051-2	MOTOR FAN COVER
56	P0682056	COOLANT TUBE
57	PSS25M	SET SCREW M6-1 X 20

REF	PART #	DESCRIPTION
58	P0682058	SPRING HOOK
59	P0682059	EXTENSION SPRING
60	PN02M	HEX NUT M10-1.5
61	PSB84M	CAP SCREW M10-1.5 X 35
62	P0682062	GEARBOX
63	P0682063	OIL LEVEL SIGHTGLASS
64	P0682064	OIL PLUG
66	P0682066	FLAT HD SCR M8-1.25 X 20
67	P0682067	PIVOT PIN
68	PW01M	FLAT WASHER 8MM
69	P0682069	BUSHING
70	PSS25M	SET SCREW M6-1 X 20
72	PN13M	HEX NUT M16-2
73	P0682073	HEAD LEVER
74	P0682074	HEAD LEVER HANDGRIP
75	P0682075	SPECIAL NUT
76	P0682076	WORM GEAR
77	P0682077	GASKET
78	P0682078	ARBOR
79	P0682079	ARBOR KEY
80	P0682080	SAW BLADE
81	P0682081	ARBOR FLANGE
82	P0682082	CAP SCREW M12-1.5 X 30 LH
83	P0682083	FIXED GUARD
86	P0682086	COOLANT TUBE
87	P0682087	COOLANT TUBE
88	PSB06M	CAP SCREW M6-1 X 25
89	P0682089	BLADE GUARD
90	PR71M	EXT RETAINING RING 60MM
91	PSB01M	CAP SCREW M6-1 X 16
92	PW03M	FLAT WASHER 6MM
93	P0682093	BLADE GUARD LINKAGE 2-PC
94	PW03M	FLAT WASHER 6MM
95	PSB02M	CAP SCREW M6-1 X 20
97	PSB14M	CAP SCREW M8-1.25 X 20
98	PLN04M	LOCK NUT M8-1.25
99	P6301-ZZ	BALL BEARING 6301ZZ
100	PN13M	HEX NUT M16-2
101	P0682101	WORM SHAFT
106	P0682106	SEAL
124	P609A-ZZ	BALL BEARING 609ZZ
125	P0682125	PUMP CONNECTION BOX
126	P0682126	PUMP GASKET
127	PSB16M	CAP SCREW M4-.7 X 16
128	P0682128	COOLANT PUMP
129	PW03M	FLAT WASHER 6MM
130	PSBS05M	BUTTON HD CAP SCR M6-1 X 20



Control Box Breakdown

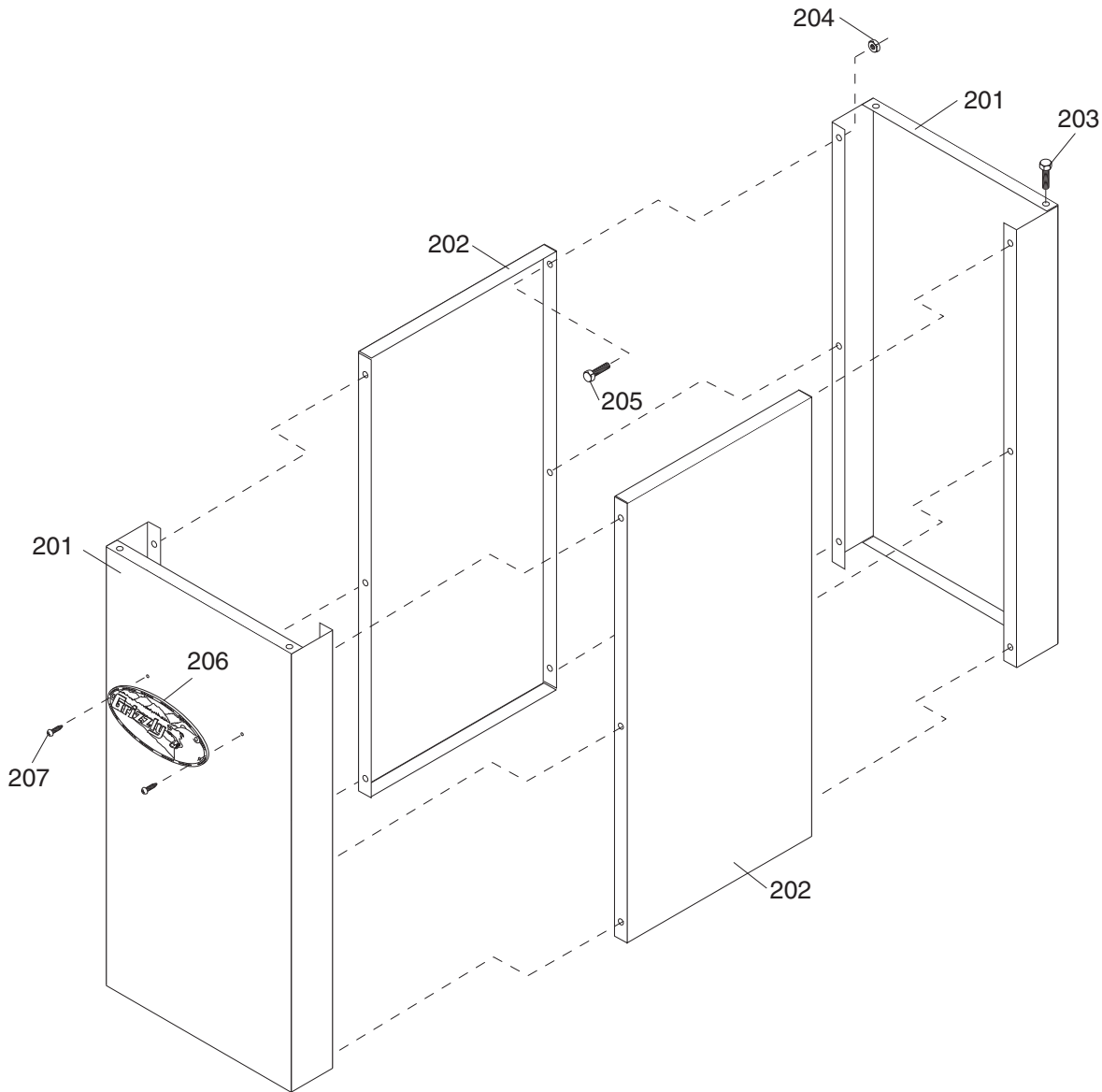


REF	PART #	DESCRIPTION
102	P0682102	CONTROL BOX
102-1	P0682102-1	CASE
102-2	P0682102-2	CONTACTOR TECD TC-11 220V
102-3	P0682102-3	TRANSFORMER 250V
102-4	P0682102-4	BACKING PLATE
102-5	P0682102-5	INDICATOR LIGHT
102-6	P0682102-6	ON/OFF SWITCH
102-7	P0682102-7	COVER

REF	PART #	DESCRIPTION
102-8	P0682102-8	TWO STEP SWITCH
102-9	P0682102-9	FUSE 15A
102-10	P0682102-10	FUSE HOLDER
102-11	P0682102-11	OL RELAY TEND 5-8A
102-12	P0682102-12	JUNCTION BLOCK
102-13	P0682102-13	TRIGGER SWITCH
102-14	P0682102-14	FUSE 1A



Stand Breakdown

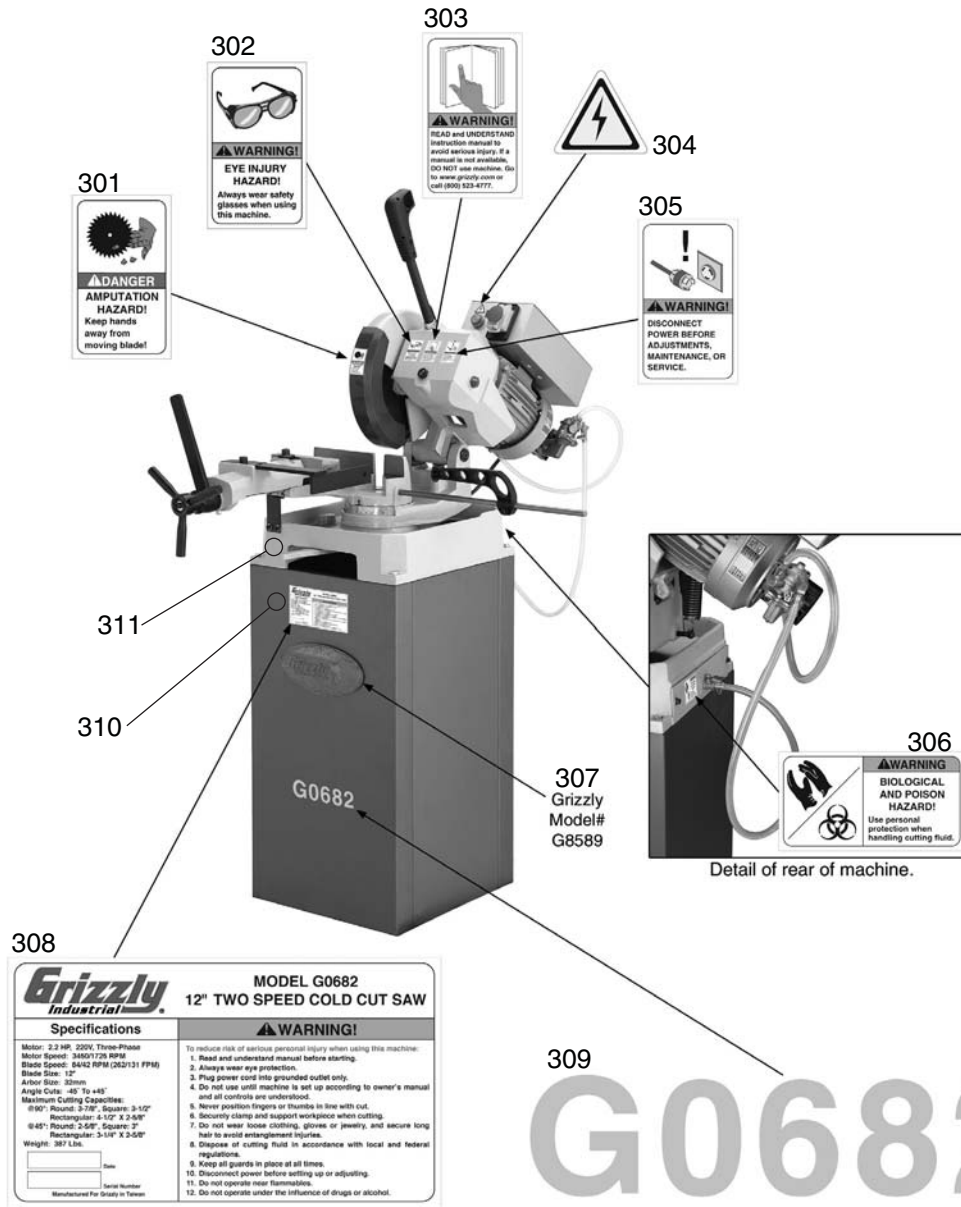


REF	PART #	DESCRIPTION
201	P0682201	END PANEL
202	P0682202	SIDE PANEL
203	PB20M	HEX BOLT M8-1.25 X 35
204	PN03M	HEX NUT M8-1.25

REF	PART #	DESCRIPTION
205	PB09M	HEX BOLT M8-1.25 X 20
206	G8589	GRIZZLY NAMEPLATE
207	PHTEK24	TAP SCREW #5 X 3/8



Warning Labels



REF	PART #	DESCRIPTION
301	P0682301	BLADE DANGER WARNING
302	PLABEL-11A	SAFETY GLASSES LABEL
303	PLABEL-12C	READ MANUAL LABEL
304	PLABEL-14	ELECTRICITY LABEL
305	PLABEL-63A	DISCONNECT LABEL
306	P0682306	BIOLOGICAL HAZARD LABEL

REF	PART #	DESCRIPTION
307	P0682307	MODEL NUMBER LABEL
308	G8589	GRIZZLY NAMEPLATE
309	P0682309	MODEL ID LABEL
310	PPAINT-1	GRIZZLY GREEN TOUCHUP PAINT
311	PPAINT-11	GRIZZLY PUTTY TOUCHUP PAINT

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.





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<input type="checkbox"/> Live Steam	<input type="checkbox"/> RC Modeler	<input type="checkbox"/> Woodworker West
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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

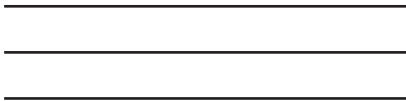
9. Would you allow us to use your name as a reference for Grizzly customers in your area?

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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.

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