

Grizzly **Industrial, Inc.**®

MODEL T31681 **1 HP COMMERCIAL-GRADE** **BONE SAW** **OWNER'S MANUAL**

(For models manufactured since 12/19)



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 **WARNING!**

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

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

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

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

 **WARNING!**

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

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

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

Table of Contents

INTRODUCTION	2	SECTION 5: CLEANING & SANITIZING	20
Machine Description	2	Cleaning Saw	20
Contact Info	2	Proper Sanitation	22
Manual Accuracy	2	SECTION 6: ACCESSORIES	23
Identification	3	SECTION 7: MAINTENANCE	24
Controls & Components	4	Schedule	24
Machine Data Sheet	5	Cleaning & Sanitizing	24
SECTION 1: SAFETY	7	Lubrication	24
Safety Instructions for Machinery	7	SECTION 8: SERVICE	25
Additional Safety for Bone Saws	9	Troubleshooting	25
SECTION 2: POWER SUPPLY	10	SECTION 9: WIRING	26
SECTION 3: SETUP	12	Wiring Safety Instructions	26
Needed for Setup	12	Wiring Diagram	27
Unpacking	12	Electrical Components	28
Assembly	12	SECTION 10: PARTS	29
Site Considerations	13	Main	29
Test Run	14	Labels	31
Cleanup	15	WARRANTY & RETURNS	32
SECTION 4: OPERATIONS	16		
Changing Blade	16		
Tensioning Blade	18		
Cutting Meat	19		

WARNING

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

WARNING

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

INTRODUCTION

Machine Description

The Model T31681 1 HP Commercial-Grade Bone Saw is a stainless-steel and aluminum-alloy saw for cutting fresh or frozen meat and bones.

The included meat pusher and adjustable fence are used to make consistently-sized cuts. Many of the parts can be quickly removed for easy cleaning and sanitizing.

During operation, in-line blade wipers clear blade scraps and deposit them in an easy-to-clean tray under the base of the machine.

The motor features an internal brake that brings the blade to a quick stop when the convenient ON/OFF switch is used.

Adjustable vibration-absorbing feet allow for stable benchtop operation.

Contact Info

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

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

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

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

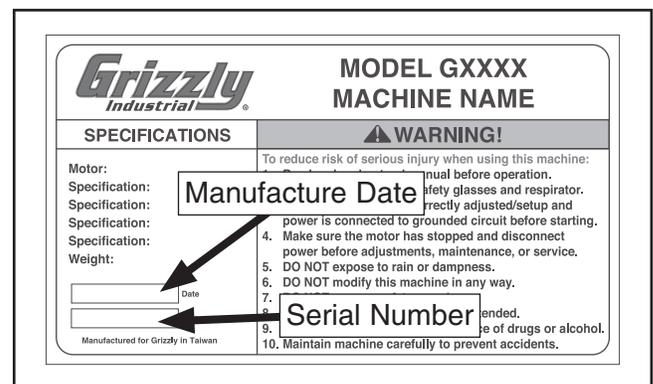
Manual Accuracy

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

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

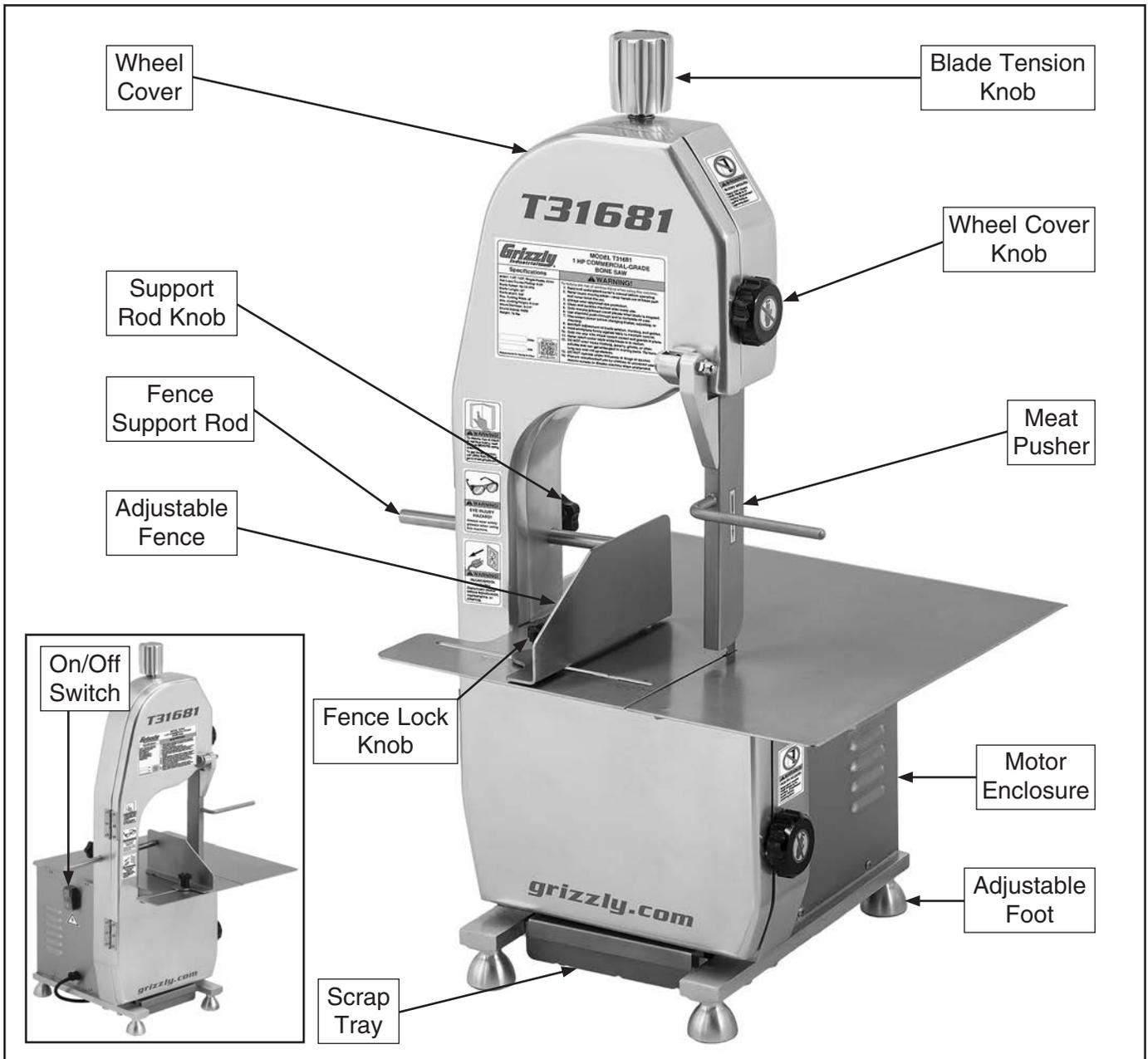
If you find this to be the case, and the difference between the manual and machine leaves you confused or unsure about something, check our website for an updated version. We post current manuals and manual updates for free on our website at www.grizzly.com.

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



Identification

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



	<p>⚠ WARNING To reduce your risk of serious injury, read this entire manual BEFORE using machine.</p>
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Controls & Components



Refer to the following figures and descriptions to become familiar with the basic controls and components of this machine. Understanding these items and how they work will help you understand the rest of the manual and minimize your risk of injury when operating this machine.

- A. Blade Tension Knob:** Adjusts blade tension. Turn clockwise to increase tension. Turn counterclockwise to reduce tension.
- B. Wheel Cover Knob:** Locks and unlocks wheel cover. Turn clockwise to unlock wheel cover. Turn counterclockwise to lock wheel cover.
- C. Fence:** Supports workpiece when making straight cuts. Distance from blade determines width of cut. Removable for cleaning and sanitizing.

- D. Scrap Tray:** Collects scraps attached to blade after cut is made. Removable for cleaning and sanitizing.
- E. Wheel Cover:** Covers saw blade and upper and lower wheels. Disconnects power to motor when opened.
- F. Support Rod Knob:** Locks and unlocks fence support rod. Turn clockwise to lock support rod. Turn counterclockwise to unlock support rod.
- G. Meat Pusher:** Pushes meat for safe and consistently-sized cuts. Removable for cleaning and sanitizing.
- H. Fence Lock Knob:** Locks and unlocks fence. Turn clockwise to lock fence. Turn counterclockwise to unlock fence.
- I. On/Off Push Button Switch:** Starts and stops the motor. Push the green "I" button to turn the motor **ON**. Push the red "O" button to turn the motor **OFF**.
- J. Fence Support Rod:** Adjusts fence parallelism and braces fence throughout length of cut.

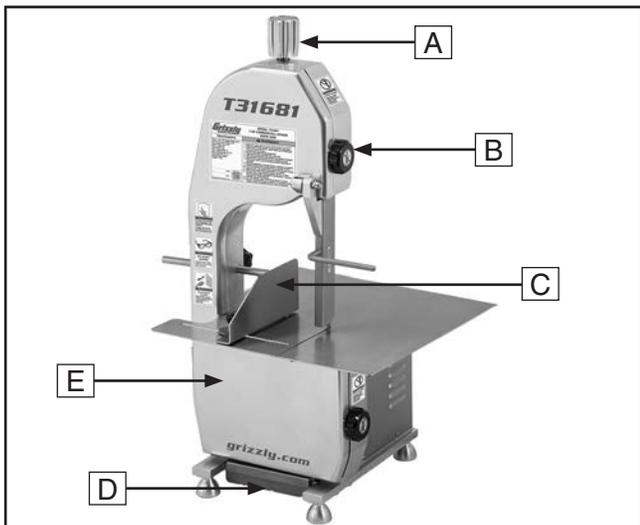


Figure 1. Front components.

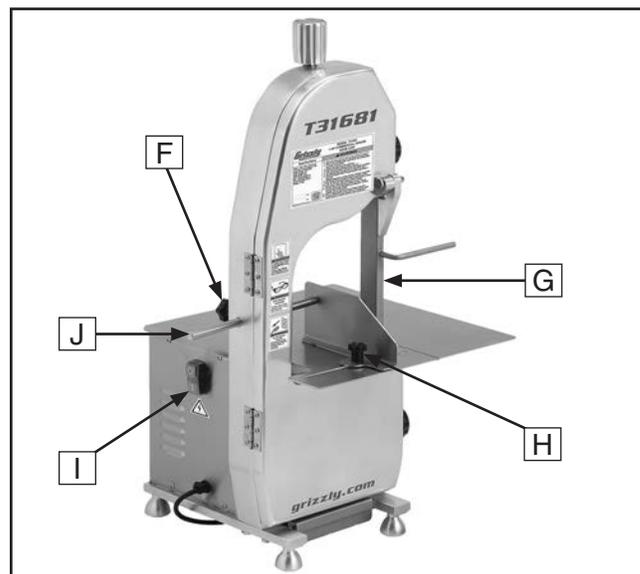


Figure 2. Rear components.





MACHINE DATA SHEET

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

MODEL T31681 1 HP COMMERCIAL-GRADE BONE SAW

Product Dimensions:

Weight 79 lbs.
Width (side-to-side) x Depth (front-to-back) x Height 18 x 18-1/2 x 34-1/2 in.
Footprint (Length x Width) 9-1/2 x 13 in.

Shipping Dimensions:

Type Wood Crate
Content Machine
Weight 117 lbs.
Length x Width x Height 23 x 22 x 41 in.
Must Ship Upright Yes

Electrical:

Power Requirement 110V, Single-Phase, 60 Hz
Full-Load Current Rating 8.5A
Minimum Circuit Size 15A
Connection Type Cord & Plug
Power Cord Included Yes
Power Cord Length 60 in.
Power Cord Gauge 16 AWG
Plug Included Yes
Included Plug Type 5-15
Switch Type ON/OFF Push Button

Motor:

Main

Horsepower 1 HP
Phase Single-Phase
Amps 8.5A
Speed 1650 RPM
Type ODP PSC
Power Transfer Direct
Bearings Shielded & Permanently Lubricated



Main Specifications:

Operation Information

Bandsaw Size.....	8 in.
Max. Cutting Width (Left of Blade)	8 in.
Max. Cutting Height.....	8 in.
Blade Speed.....	3840 FPM

Blade Information

Standard Blade Length.....	65 in.
Blade Width	5/8 in.

Table Information

Table Length.....	18-1/4 in.
Table Width.....	17-1/4 in.
Table Thickness.....	1/8 in.
Floor-to-Table Height.....	14 in.

Construction

Table	Stainless Steel
Fence.....	Stainless Steel
Base	Aluminum-Magnesium Alloy
Body	Aluminum-Magnesium Alloy
Wheels.....	Cast Stainless Steel
Wheel Cover.....	Aluminum-Magnesium Alloy

Other Related Information

Wheel Diameter.....	8-1/4 in.
Wheel Width	1-1/4 in.

Other Specifications:

Country of Origin.....	China
Warranty.....	1 Year
Approximate Assembly & Setup Time.....	30 Min.
Serial Number Location	ID Label
ISO 9001 Factory.....	Yes

Features:

- Adjustable Fence
- Scrap Meat Tray
- Non-Slip Rubber Feet
- Built-In Meat Pusher



SECTION 1: SAFETY

For Your Own Safety, Read Instruction Manual Before Operating This Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures. Always use common sense and good judgment.

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

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

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

NOTICE Alerts the user to useful information about proper operation of the machine to avoid machine damage.

Safety Instructions for Machinery

WARNING

OWNER'S MANUAL. Read and understand this owner's manual **BEFORE** using machine.

TRAINED OPERATORS ONLY. Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make your workshop kid proof!

DANGEROUS ENVIRONMENTS. Do not use machinery in areas that are wet, cluttered, or have poor lighting. Operating machinery in these areas greatly increases the risk of accidents and injury.

MENTAL ALERTNESS REQUIRED. Full mental alertness is required for safe operation of machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

ELECTRICAL EQUIPMENT INJURY RISKS. You can be shocked, burned, or killed by touching live electrical components or improperly grounded machinery. To reduce this risk, only allow qualified service personnel to do electrical installation or repair work, and always disconnect power before accessing or exposing electrical equipment.

DISCONNECT POWER FIRST. Always disconnect machine from power supply **BEFORE** making adjustments, changing tooling, or servicing machine. This prevents an injury risk from unintended startup or contact with live electrical components.

EYE PROTECTION. Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are **NOT** approved safety glasses.



WARNING

WEARING PROPER APPAREL. Do not wear clothing, apparel or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to reduce risk of slipping and losing control or accidentally contacting cutting tool or moving parts.

HAZARDOUS DUST. Dust created by machinery operations may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material. Always wear a NIOSH-approved respirator to reduce your risk.

HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

REMOVE ADJUSTING TOOLS. Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!

USE CORRECT TOOL FOR THE JOB. Only use this tool for its intended purpose—do not force it or an attachment to do a job for which it was not designed. Never make unapproved modifications—modifying tool or using it differently than intended may result in malfunction or mechanical failure that can lead to personal injury or death!

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

CHILDREN & BYSTANDERS. Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.

GUARDS & COVERS. Guards and covers reduce accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly **BEFORE** operating machine.

FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.

NEVER STAND ON MACHINE. Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.

STABLE MACHINE. Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.

USE RECOMMENDED ACCESSORIES. Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

UNATTENDED OPERATION. To reduce the risk of accidental injury, turn machine **OFF** and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

DAMAGED PARTS. Regularly inspect machine for damaged, loose, or mis-adjusted parts—or any condition that could affect safe operation. Immediately repair/replace **BEFORE** operating machine. For your own safety, **DO NOT** operate machine with damaged parts!

MAINTAIN POWER CORDS. When disconnecting cord-connected machines from power, grab and pull the plug—**NOT** the cord. Pulling the cord may damage the wires inside. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

EXPERIENCING DIFFICULTIES. If at any time you experience difficulties performing the intended operation, stop using the machine! Contact our Technical Support at (570) 546-9663.



Additional Safety for Bone Saws

WARNING

Serious cuts, amputation, or death can occur from contact with the moving saw blade during operation or if blade breakage occurs. To reduce this risk, anyone operating this machine MUST completely heed the hazards and warnings below.

HAND PLACEMENT. Placing hands or fingers in line with blade during operation may result in serious injury if hands slip or workpiece moves unexpectedly. Do not position fingers or hands in line with blade, and never reach under table while blade is moving.

BLADE SPEED. Cutting workpiece before blade is at full speed could cause blade to grab workpiece and pull hands into blade. Allow blade to reach full speed before starting cut. **DO NOT** start machine with workpiece contacting blade.

FEED RATE. To avoid risk of workpiece slipping and causing operator injury, always feed stock evenly and smoothly.

BLADE CONDITION. Dull blades require more effort to perform cut, increasing risk of accidents. Do not operate with dirty, dull, cracked or badly worn blades. Inspect blades for cracks and missing teeth before each use. Always maintain proper blade tension and tracking while operating.

CLEARING JAMS AND CUTOFFS. Always stop bone saw and disconnect power **BEFORE** clearing scrap pieces that get stuck between blade and table. Use brush or push stick, not hands, to clean scraps from table.

BLADE CONTROL. To avoid risk of injury due to blade contact, always allow blade to stop on its own. **DO NOT** try to stop or slow blade with your hand or the workpiece.

CLEANING & SANITIZING. Keep machine and work area clean and sanitary using solutions approved for food processing by the USDA. **DO NOT** use solvents that can contaminate meat and cause illness. Properly clean and sanitize saw before and after each use.

BLADE REPLACEMENT. Under normal conditions, saw blade should be replaced after sawing 4400 lbs. of meat or bone. To avoid mishaps that could result in operator injury, make sure blade teeth face down toward table and blade is properly tensioned and tracked before operating.

SUPPORTING CUTS. Cuts should always be fully supported by table, fence, and included meat pusher. If necessary to maintain safe cuts, use auxiliary fixtures. Do not cut very small or thin pieces that are hard to control.

CUTTING TECHNIQUES. To avoid blade getting pulled off wheels or accidentally breaking and striking operator, always turn bone saw **OFF** and wait for blade to come to a complete stop before backing workpiece out of blade. **DO NOT** back workpiece away from blade while bone saw is running. **DO NOT** force or twist blade while cutting. This could result in blade damage or breakage.

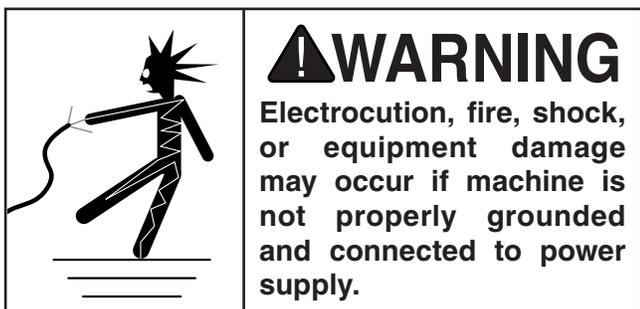
WORKPIECE MATERIAL. This machine is designed to cut fresh and frozen meat and bones. This machine is **NOT** designed to cut wood, metal, glass, stone, tile, etc.



SECTION 2: POWER SUPPLY

Availability

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



Full-Load Current Rating

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

Full-Load Current Rating at 110V..... 8.5 Amps

The full-load current is not the maximum amount of amps that the machine will draw. If the machine is overloaded, it will draw additional amps beyond the full-load rating.

If the machine is overloaded for a sufficient length of time, damage, overheating, or fire may result—especially if connected to an undersized circuit. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets the specified circuit requirements.

! WARNING

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

110V Circuit Requirements

This machine is prewired to operate on a power supply circuit that has a verified ground and meets the following requirements:

Nominal Voltage110V, 115V, 120V
Cycle60 Hz
PhaseSingle-Phase
Power Supply Circuit 15 Amps

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

! CAUTION

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

Note: *Circuit requirements in this manual apply to a dedicated circuit—where only one machine will be running on the circuit at a time. If machine will be connected to a shared circuit where multiple machines may be running at the same time, consult an electrician or qualified service personnel to ensure circuit is properly sized for safe operation.*



Grounding & Plug Requirements

This machine **MUST** be grounded. In the event of certain malfunctions or breakdowns, grounding reduces the risk of electric shock by providing a path of least resistance for electric current.

This machine is equipped with a power cord that has an equipment-grounding wire and a grounding plug. Only insert plug into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances. **DO NOT** modify the provided plug!

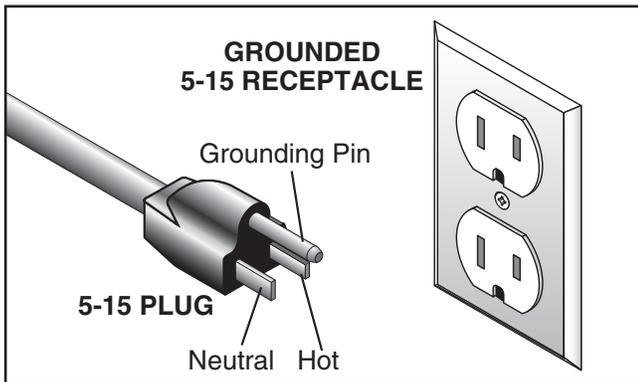


Figure 3. Typical 5-15 plug and receptacle.

⚠ CAUTION

SHOCK HAZARD!

Two-prong outlets do not meet the grounding requirements for this machine. Do not modify or use an adapter on the plug provided—if it will not fit the outlet, have a qualified electrician install the proper outlet with a verified ground.

Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

Extension Cords

We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

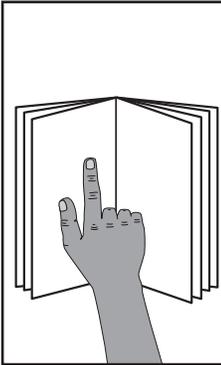
Extension cords cause voltage drop, which can damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must be in good condition and contain a ground wire and matching plug/receptacle. Additionally, it must meet the following size requirements:

Minimum Gauge Size14 AWG
Maximum Length (Shorter is Better)..... 50 ft.



SECTION 3: SETUP



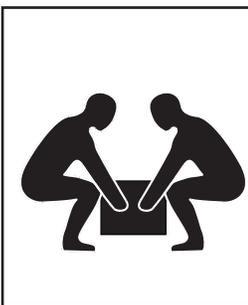
⚠️ WARNING

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



⚠️ WARNING

Wear safety glasses during the entire setup process!



⚠️ WARNING

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

Needed for Setup

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

Description	Qty
• Additional Person for Lifting	1
• Safety Glasses (for each person)	1 Pair
• Heavy Leather Gloves (for each person)	1 Pair
• Hex Wrench 6mm	1
• Open-End Wrench 8mm	1
• Metal Shims	As Needed
• Level	1
• Two/Three Compartment Sink	1
• Dishwasher	1
• Soft Sponge/Cloth	1
• Rubber Dishwashing Gloves	1 Pair
• Hot Water	As Needed
• Dishwashing Detergent	As Needed
• Food-Grade Sanitizer	As Needed

Unpacking

This machine was carefully packaged for safe transport. When unpacking, separate all enclosed items from packaging materials and inspect them for shipping damage. ***If items are damaged, please call us immediately at (570) 546-9663.***

IMPORTANT: Save all packaging materials until you are completely satisfied with the machine and have resolved any issues between Grizzly or the shipping agent. *You MUST have the original packaging to file a freight claim. It is also extremely helpful if you need to return your machine later.*

Assembly

The Model T31681 1 HP Commercial-Grade Bone Saw is completely assembled at the factory, but it must be removed from the shipping container before operation.

Unpacking Machine

1. Remove banding straps, top cover, and side-walls of wooden crate.
2. Loosen 8mm hex bolts attaching machine to U-bracket and remove (see **Figure 4**).

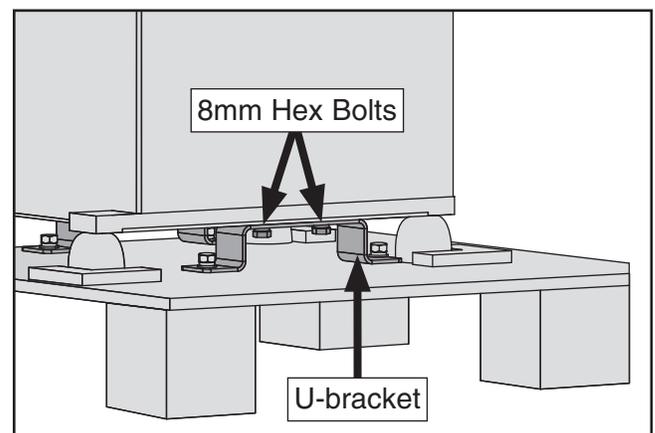


Figure 4. Location of U-bracket hex bolts.



3. With the help of an additional person, carefully lift machine off shipping container and place on a flat, stable surface.

Leveling Machine

1. Loosen cap screw attaching each adjustable foot to foot rail (see **Figure 5**) using 6mm hex wrench.
2. Place metal shims (as required) between adjustable foot and foot rail until machine is level (see **Figure 5**).

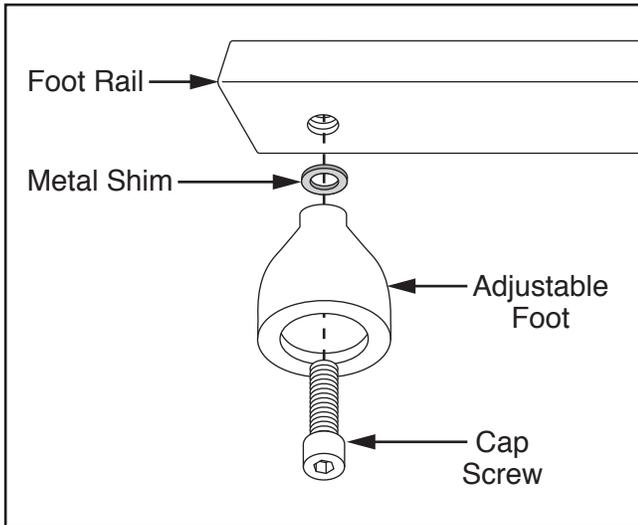


Figure 5. Leveling machine with metal shim.

3. Tighten cap screws and verify machine does not wobble on surface.

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 the weight of the machine and workpiece materials.

Placement Location

Consider anticipated workpiece sizes and additional space needed for auxiliary stands, work tables, or other machinery when establishing a location for this machine in the shop. Below is the minimum amount of space needed for the machine.

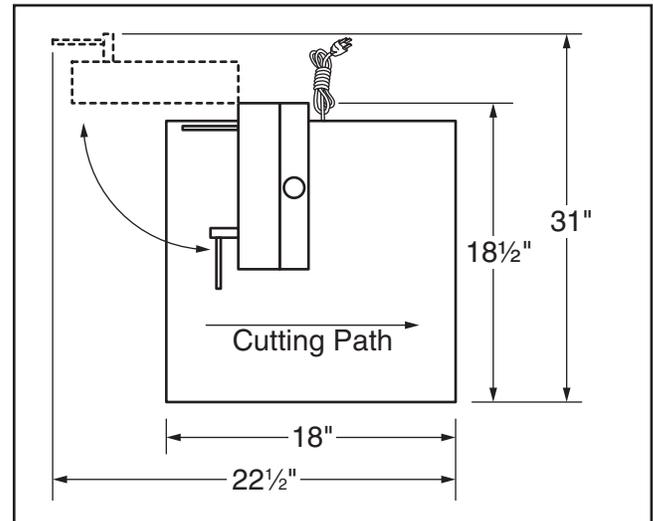


Figure 6. Minimum working clearances.

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

Once assembly is complete, test run the machine to ensure it is properly connected to power and safety components are functioning correctly.

If you find an unusual problem during the test run, immediately stop the machine, disconnect it from power, and fix the problem BEFORE operating the machine again. The **Troubleshooting** table in the **SERVICE** section of this manual can help.

The Test Run consists of verifying the following:

- 1) The blade is properly tracked and tensioned.
- 2) The motor powers up and runs correctly, and the wheel cover limit switch operates correctly.

⚠️ WARNING

Serious injury or death can result from using this machine BEFORE understanding its controls and related safety information. DO NOT operate, or allow others to operate, machine until the information is understood.

⚠️ WARNING

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

To test run machine:

1. Clear all setup tools away from machine.
2. DISCONNECT MACHINE FROM POWER!
3. Open wheel cover to expose wheels.
4. Verify blade is centered in blade guide and rests against blade wipers, as shown in **Figures 7 & 8**.

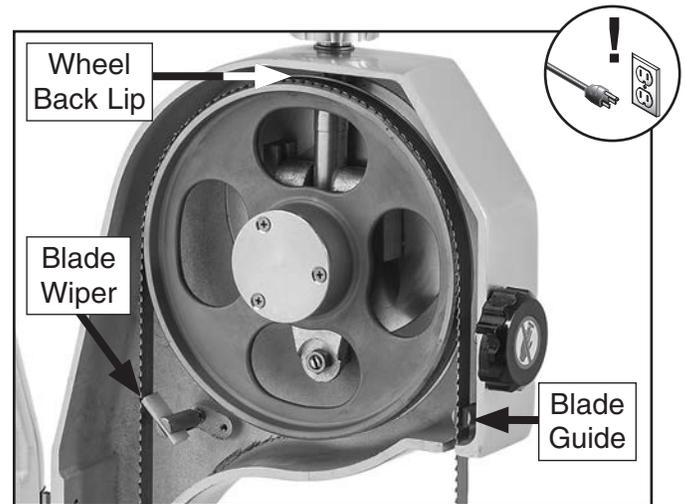


Figure 7. Top wheel blade guide and wiper.

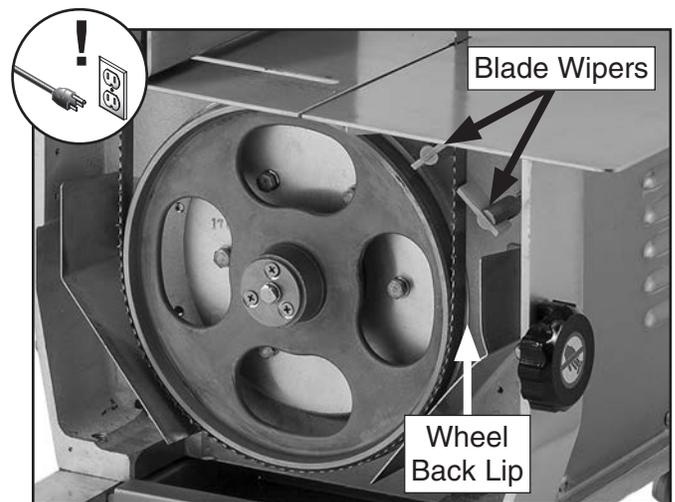


Figure 8. Bottom wheel back lip and wipers.

5. Verify blade teeth are facing down through table, as shown in **Figure 9**.

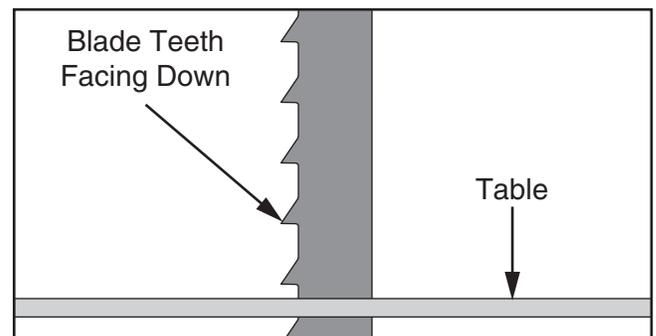


Figure 9. Correct blade teeth orientation.



- Verify blade is flush against back lip of upper and lower wheels (see **Figure 10**).

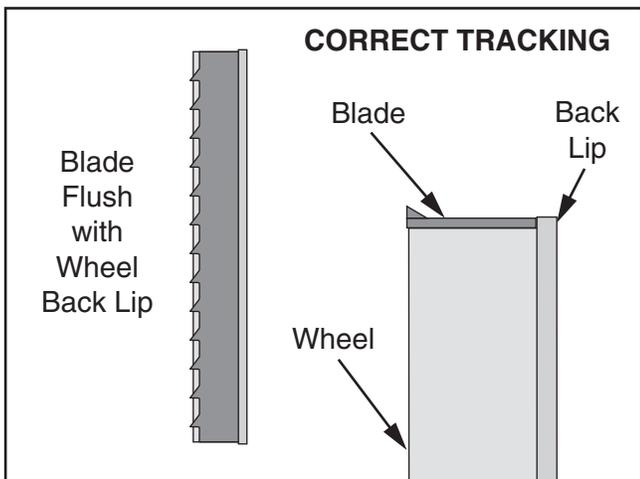


Figure 10. Correct tracking of blade on wheel.

- Close wheel cover and secure.
- Rotate blade tension knob clockwise (see **Figure 11**) to tension blade until there is approximately $\frac{1}{4}$ " deflection when pressure is applied to middle of blade.

Note: Rotate tension knob clockwise to increase blade tension and counterclockwise to decrease blade tension.

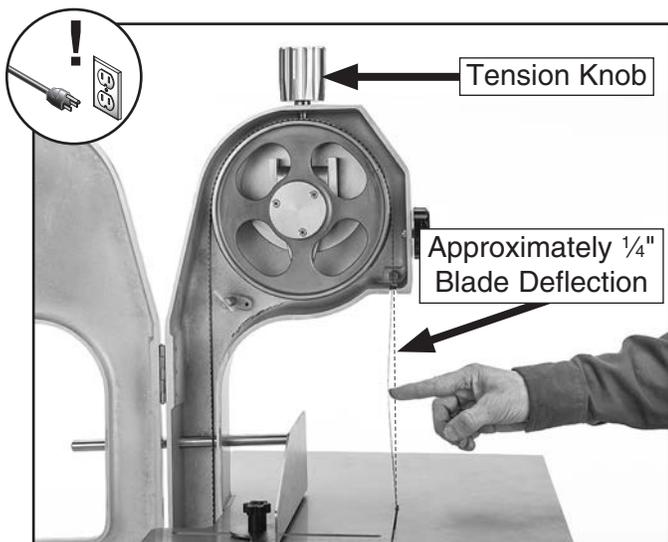


Figure 11. Blade deflection during tensioning.

- Connect machine to power supply.
- Turn machine **ON**, verify motor operation, and then turn machine **OFF**.

Note: The motor should run smoothly and without unusual problems or noises.

- Open wheel cover approximately 1" to activate limit switch.
- While standing clear of blade and wheel cover, press the green "I" button to turn the motor **ON**. The machine should NOT start.

—If the machine *does not* start, the limit switch is working as designed.

—If the machine *does start*, immediately push the red "O" button to turn the motor **OFF**, then close the wheel cover. This safety feature must work properly before proceeding with regular operations. Contact Tech Support for help.

- Press the red "O" button to reset machine, then close wheel cover and secure.

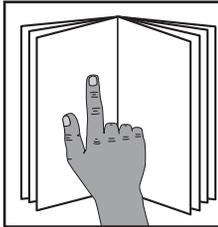
Congratulations! Test Run is complete.

Cleanup

After unpacking machine and performing initial setup, thoroughly clean and sanitize the saw as directed in **CLEANING & SANITIZING** on **Page 20** before beginning operation. Get in the habit of properly cleaning and sanitizing the saw before and after each use to avoid contamination and illness.



SECTION 4: OPERATIONS



!WARNING

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



!WARNING

To reduce risk of eye or face injury from flying debris, always wear safety glasses and face shield when operating this machine.



!CAUTION

Saw blades are very sharp and can quickly cause cutting injuries. Always wear heavy-leather gloves when handling saw blades.

NOTICE

If you are not experienced with this type of machine, **WE STRONGLY RECOMMEND** that you seek additional training outside of this manual. Read books/magazines or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

Changing Blade

The saw blade included with the Model T31681 is a general purpose 4 TPI (Teeth Per Inch) blade. Under normal conditions, the saw blade should be replaced after sawing 4400 lbs. of meat or bone.

Refer to **ACCESSORIES** on **Page 23** for replacement blades. Do research to help select the proper blade for the application.

!WARNING

ONLY use food-grade saw blades (typically stainless steel) to prevent food contamination from metal corrosion.

To change saw blade:

1. DISCONNECT MACHINE FROM POWER!
2. Open wheel cover to expose wheels.
3. Rotate tension knob counterclockwise to decrease blade tension until blade moves freely.
4. Remove blade from machine.
5. Install replacement blade over upper and lower wheels until it is flush against wheel back lip (see **Figures 12 & 13** on **Page 17**). Hold in place for now.



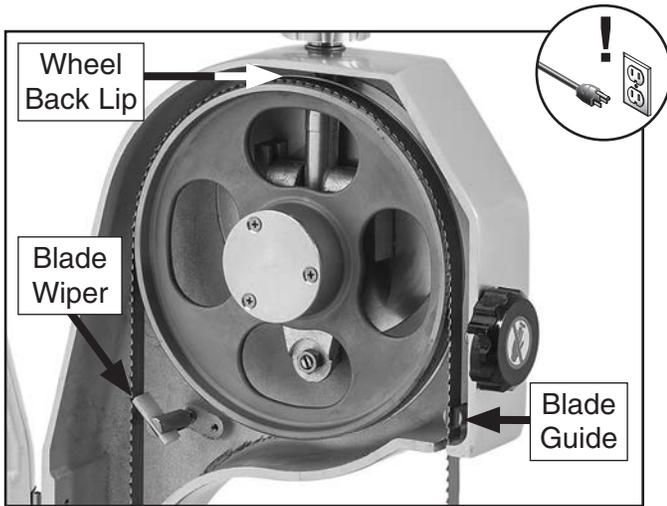


Figure 12. Top wheel blade guide and wiper.

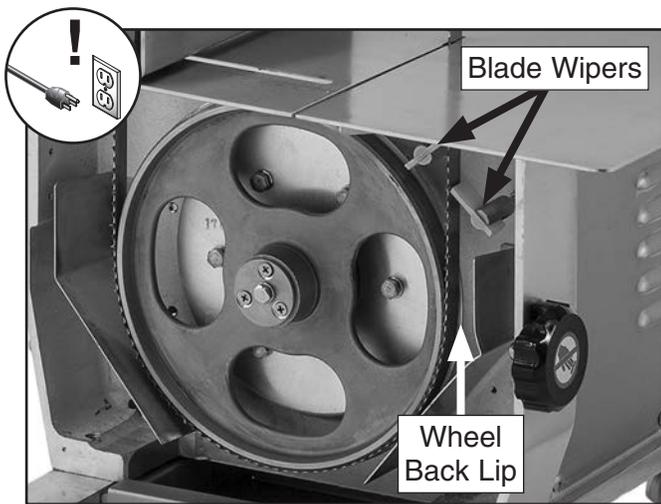


Figure 13. Bottom wheel back lip and wipers.

6. Rotate blade tension knob until blade no longer moves freely.
7. Verify blade teeth are facing down through table, as shown in **Figure 14**.

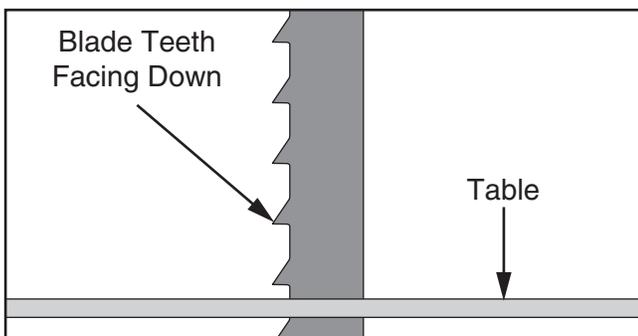


Figure 14. Correct blade teeth orientation.

8. Verify blade is flush against back lip of upper and lower wheels (see **Figure 15**).

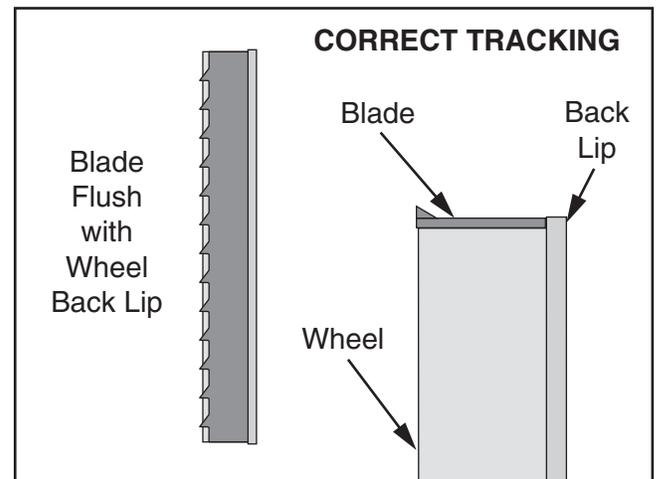


Figure 15. Correct tracking of blade on wheel.

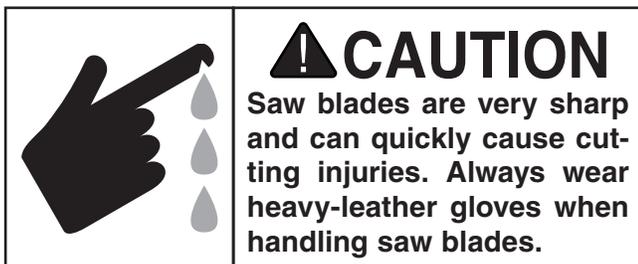
9. Verify blade is centered in blade guide and rests against blade wipers, as shown in **Figures 12 & 13**.
10. Close wheel cover and secure.
11. Properly tension blade as instructed in **Tensioning Blade on Page 18**.



Tensioning Blade

A properly tensioned blade is essential for making accurate cuts and maximizing the blade life. However, a properly tensioned blade will not compensate for cutting problems caused by excessive feed rate, hardness variations between workpieces, and improper blade selection.

Over-tensioning the blade increases the chance of the blade breaking or wheel misalignment. Under-tensioned blades wander excessively while cutting and will not track properly during operation.



To tension saw blade:

1. DISCONNECT MACHINE FROM POWER!
2. Open wheel cover to expose wheels.
3. Verify blade is tracking correctly per **Steps 7–10 of Changing Blade on Page 17.**
4. Rotate blade tension knob clockwise to tension blade until there is approximately $\frac{1}{4}$ " deflection when pressure is applied to middle of blade, as shown in **Figure 16.**

Note: Rotate tension knob clockwise to increase blade tension and counterclockwise to decrease blade tension.

5. Close wheel cover and secure.

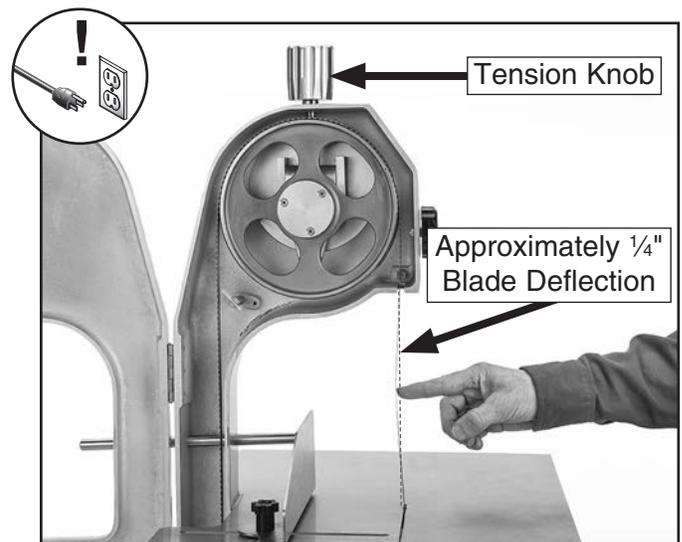
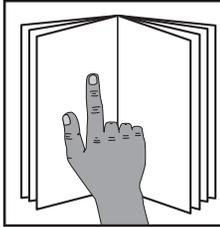


Figure 16. Blade deflection during tensioning.



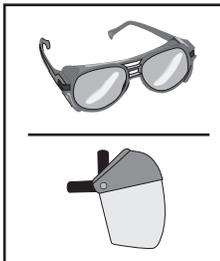
Cutting Meat

The Model T31681 1 HP Commercial-Grade Bone Saw is designed for cutting fresh or frozen meat and bones.



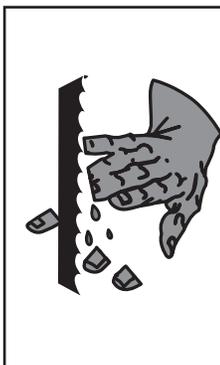
!WARNING

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



!WARNING

To reduce risk of eye or face injury from flying debris, always wear safety glasses and face shield when operating this machine.



!WARNING

This saw can quickly cause cutting or amputation injuries. Use the included meat pusher and fence to guide the meat through the blade. **NEVER** place your hand or fingers in line with or near the moving blade.

To complete a typical operation, the operator does the following:

1. Makes sure all components of saw are properly cleaned and sanitized (refer to **CLEANING & SANITIZING** on **Page 20**).
2. Verifies blade is properly installed and tensioned, as instructed in **Changing Blade** on **Page 16**.
3. Adjusts fence for desired thickness of cut.

Note: To ensure cutting accuracy, the fence should be aligned parallel with the blade. Use the fence support rod to brace fence and prevent it from shifting during cutting.

4. Tightens fence lock knob and fence rod knob to secure fence in place.
5. Raises meat pusher and aligns workpiece.
6. Turns saw **ON** and waits for blade to reach full speed.
7. Using fence and meat pusher, slowly feeds meat through cut.

Note: If motor slows down or struggles with cut, reduce feed rate.

8. Turns machine **OFF**, waits for blade to completely stop, then removes cut-off piece.
9. Properly aligns remaining uncut meat with fence and blade, then repeats **Steps 5–9** to make additional cuts.
10. Turns saw **OFF** once all cuts are completed, then cleans and sanitizes saw as directed in **CLEANING & SANITIZING** on **Page 20**.



SECTION 5: CLEANING & SANITIZING



⚠️ WARNING

If you are not familiar with safe meat handling techniques, contact your local Board of Health or the USDA for proper sanitizing procedures.



⚠️ WARNING

Always be as thorough as possible when cleaning and sanitizing the saw and its parts. Any surface that has been exposed to raw meat or bone may develop bacteria that could cause illness or death if not properly cleaned and sanitized.



⚠️ WARNING

Cleaning saw while it is connected to power could cause severe electrical shock or death. ALWAYS disconnect saw from power before cleaning and sanitizing. DO NOT reconnect it to power until all parts are completely dry.

⚠️ WARNING

When cleaning with sanitizers, make sure the product is approved for stainless steel food processing equipment and always follow the manufacturer's recommendations. To prevent illness or death, never use a product that will make the meat unsafe for human consumption.

Cleaning Saw

Get in the habit of properly cleaning and sanitizing the saw before and after each use to avoid contamination and illness.

To clean saw and prepare for sanitizing:

1. Prepare a clean and sanitized area, preferably stainless steel, for placing parts as you remove them from saw.
2. DISCONNECT MACHINE FROM POWER!
3. Remove saw blade (refer to **Steps 1–4 of Changing Blade on Page 16**).
4. Lift upper wheel and remove from tension shaft (see **Figure 17**).

Note: If upper wheel is difficult to remove from tension shaft, push down on tension knob as you are lifting wheel.

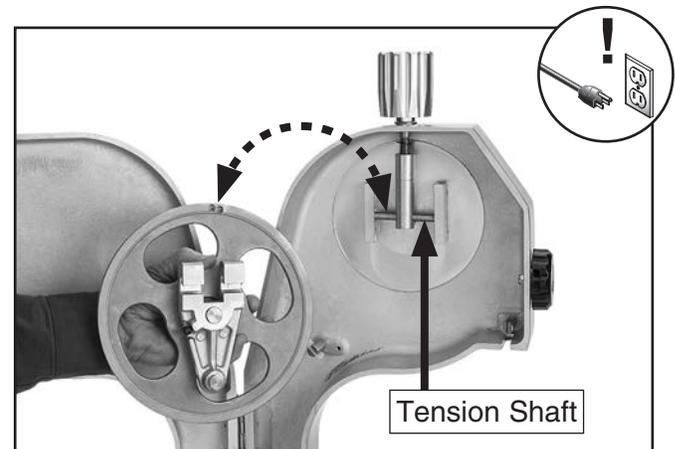


Figure 17. Upper wheel removed from shaft.



5. Remove scrap tray from underneath lower wheel (see **Figure 18**).

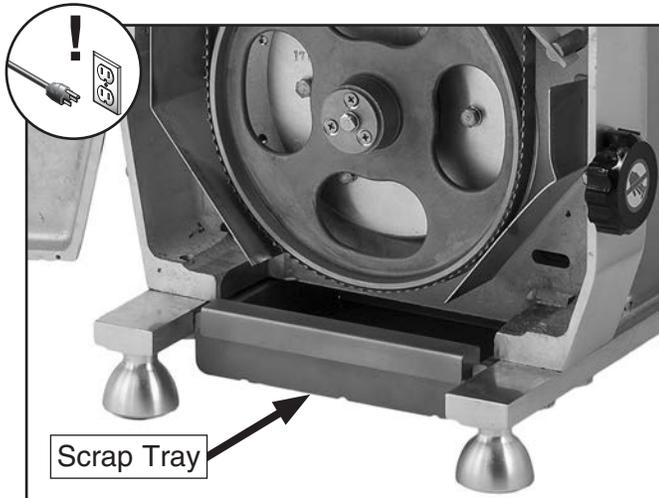


Figure 18. Scrap tray located beneath lower wheel.

6. Remove and dispose of largest particles of meat/bone.
7. Using hot water and a soft sponge/cloth, rinse and wipe away as much leftover material as possible.

NOTICE

Never use abrasive material (course sponges, steel wool, steel brushes, etc.) to clean the machine. Abrasives remove the protective coating on stainless steel and should always be avoided.

8. Clean sink compartments with hot water (minimum 171°F [77°C]) and dish soap, then rinse them thoroughly with hot water.
9. Sanitize sink compartment as instructed in **Proper Sanitation on Page 22**.

Note: *Dishwashers are a good option for cleaning AND sanitizing at the same time because they use heat. Place the parts that can fit inside the dishwasher and use the highest possible heat settings. If it is an option, use the dishwasher to dry parts with hot air.*

10. Fill a clean and sanitized sink compartment with hot, soapy water (minimum 171°F [77°C]).
11. Submerge removed parts in hot, soapy water and scrub all surfaces thoroughly.
12. Rinse all parts with hot, clean water (minimum 171°F [77°C]) until all visible suds are removed.
Note: *If the soapy water becomes hazy, drain compartment, clean and sanitize, and refill with more hot, soapy water (minimum 171°F [77°C]).*
13. Clean all other surfaces of saw body with a soft sponge/cloth and hot, soapy water (minimum 171°F [77°C]).

NOTICE

To avoid damaging electrical parts when reconnecting saw to power, do not spray saw body with water or solutions. Do not allow any liquid to enter the side vents around the motor. Instead, use a cloth rag and hot, soapy water to thoroughly clean the surfaces of the saw body.

14. Use hot, clean water (minimum 171°F [77°C]) and a clean, soft sponge/cloth to remove soapy residue.
15. Allow all parts and surfaces to air dry after rinsing.
Note: *DO NOT dry parts with a cloth or towel to prevent spreading contaminants.*
16. Sanitize removed parts and saw body as instructed in **Proper Sanitation on Page 22**.
17. Lubricate entire saw blade and table top as instructed in **Lubrication on Page 24**.
18. Re-assemble components and cover machine with a clean, dry cloth until next use.



Proper Sanitation



! WARNING

When using sanitizers, always follow the recommendations on the manufacturer's label, and make sure that the product will do the job for which you intend. Never use a product that will cause exposed surfaces to render meat unsafe for human consumption and cause illness or death.

NOTICE

Acidic solutions, saline-based solutions, disinfectants, and sterilizers (hypochlorites, tetravalent ammonia salts, iodine compounds, nitric acid, etc.) will corrode stainless steel over time. Verify your cleaning compound is made for cleaning stainless steel before using on machine.

All surfaces of the saw that are exposed to the cutting process must be properly cleaned and sanitized. Cleaning the food debris and residue away is only half of the process. These surfaces must now be disinfected with solutions that will remove bacteria and other micro-organisms, and prevent their growth.

Some sanitizers require direct applications, while others are designed to be diluted in water and used to soak the item for a specified period of time. The best method for choosing a chemical sanitizer is to do the research and determine which product is best for your particular situation. Sanitizing solutions should be changed as soon as they become dirty, or every two hours.

One simple sanitizer that can be used for many applications is regular bleach.

Note: *DO NOT use bleach that contains odor-masking agents or surfactants. These chemicals have not been proven effective for this type of sanitation.*

To use bleach as a sanitizer, scrub a sink compartment with hot, soapy water (minimum 171°F [77°C]), then rinse it clear. Fill the sink with one tablespoon of bleach per gallon of COOL water.

Note: *NEVER exceed 200 ppm (parts per million) of available chlorine in equipment sanitizing solutions. Use a pH testing kit to confirm the effectiveness of your sanitizing solution.*

For removable parts, submerge each item for two minutes. For larger surfaces, use a clean cloth and the bleach solution to wipe down these surfaces for two minutes. Allow to air dry—**DO NOT rinse these items after sanitizing!**

If porous surfaces, such as wood, are used in the cutting process, clean as previously described, then soak for two minutes in a solution of three tablespoons of bleach to one gallon of COOL water. **Rinse items thoroughly after sanitizing!**



SECTION 6: ACCESSORIES

! WARNING

Installing unapproved accessories may cause machine to malfunction, resulting in serious personal injury or machine damage. To reduce this risk, only install accessories recommended for this machine by Grizzly.

NOTICE

Refer to our website or latest catalog for additional recommended accessories.

Food-Grade Replacement Blade, $\frac{5}{8}$ " x 65"
T27928—4 TPI (Fresh or Frozen Meat)

T21247—Maple Butcher Block

This 60" x 24" x 2 $\frac{1}{4}$ " Maple Butcher Block will handle all your meat processing chores with plenty of room to spare. They are made of Eastern hard rock (sugar) maple and coated with a Durakryl finish. This finish leaves the maple a natural color with a satin smooth, low sheen surface which is virtually maintenance free. The top can be cleaned like any other counter surface using soap and water, or bleach.

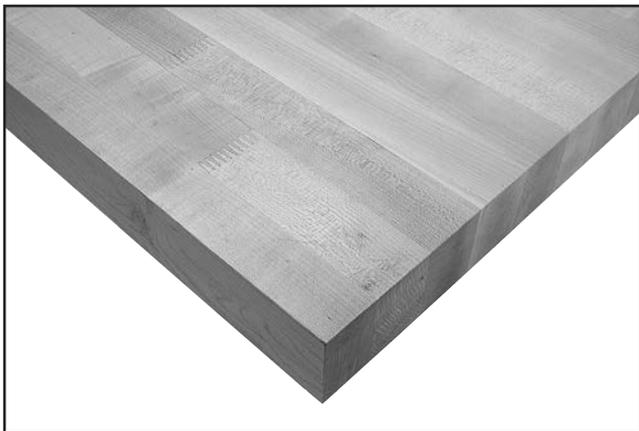


Figure 19. Model T21247 Maple Butcher Block.

H6245—25" Handsaw for Meat

Cut through meat and bone just like a professional butcher with this handsaw. High tension, cam lever blade locks make blade removal and cleaning a cinch. 25" long with 5 $\frac{3}{4}$ " throat. 10 TPI blade.



Figure 20. Model H6245 25" Handsaw for Meat.

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

T27717—Bifocal Magnifiers Black/Clear 1.5x

T27718—Bifocal Magnifiers Black/Clear 2.0x

T27719—Bifocal Magnifiers Black/Clear 2.5x

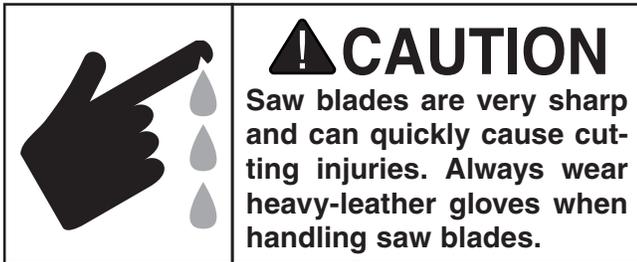
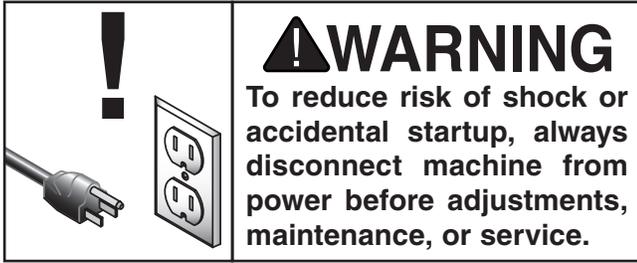


Figure 21. Variety of eye protection.

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



SECTION 7: MAINTENANCE



Schedule

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

Ongoing

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

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

Daily Maintenance

- Clean and sanitize machine before and after every use.
- Lubricate entire blade and table top.
- Cover machine with a clean, dry cloth until next use.

Monthly Check

- Under normal conditions, replace saw blade after sawing 4400 lbs. of meat or bone.

Cleaning & Sanitizing

Thoroughly clean and sanitize the saw as directed in **CLEANING & SANITIZING** on **Page 20** before and after every use. Get in the habit of properly cleaning and sanitizing the saw daily to avoid contamination and illness.

All surfaces of the saw that are exposed to the cutting process must be properly cleaned and sanitized. Cleaning the food debris and residue away is only half of the process. These surfaces must also be disinfected with solutions that will remove bacteria and other micro-organisms.

Lubrication

Maintain the blade and table top with a thin film of **food-grade lubricant** that will NOT support bacterial growth or become rancid.

Note: *DO NOT use food-grade oils typically used for cooking (vegetable oil, olive oil, etc.) that can become rancid over time and may cause illness.*

Make sure the product you use is specifically designed for protecting food processing machinery, such as 100% food-grade mineral oil certified by the NSF (National Science Foundation). Always follow the manufacturer's recommendations when using their products.

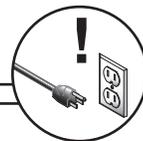
The wheel bearings are shielded and lubricated, and require no maintenance throughout their lifespan.



SECTION 8: SERVICE

Review the troubleshooting procedures in this section if a problem develops with your machine. If you need replacement parts or additional help with a procedure, call our Technical Support. **Note:** *Please gather the serial number and manufacture date of your machine before calling.*

Troubleshooting



Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start or power supply breaker trips immediately after startup.	<ol style="list-style-type: none"> 1. Wheel cover limit switch engaged/at fault. 2. Incorrect power supply voltage or circuit size. 3. Power supply circuit breaker tripped or fuse blown. 4. Contactor not energized/at fault. 5. Wiring broken, disconnected, or corroded. 6. ON/OFF switch at fault. 7. Motor at fault. 	<ol style="list-style-type: none"> 1. Close wheel cover/replace switch. 2. Ensure correct power supply voltage and circuit size. 3. Ensure circuit is sized correctly and free of shorts. 4. Test all legs for power; replace as necessary. 5. Fix broken wires or disconnected/corroded connections (Page 28). 6. Replace switch. 7. Test/repair/replace.
Machine stalls or is underpowered.	<ol style="list-style-type: none"> 1. Meat/bone crooked during feed. 2. Fence loose or misadjusted. 3. Machine undersized for task. 4. Blade undersized for task. 5. Blade slipping on wheels. 6. Run capacitor at fault. 7. Contactor not energized/at fault. 8. Motor at fault. 	<ol style="list-style-type: none"> 1. Straighten or replace meat/bone. 2. Adjust fence. 3. Reduce feed rate or depth of cut. 4. Use correct blade. 5. Adjust blade tracking and tension (Page 18). 6. Test/repair/replace. 7. Test all legs for power; replace as necessary. 8. Test/repair/replace.
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> 1. Motor or component loose. 2. Motor fan rubbing on fan cover. 3. Motor mount loose/broken. 4. Feet not adjusted properly. 5. Blade weld at fault/teeth broken. 6. Motor bearings at fault. 	<ol style="list-style-type: none"> 1. Replace damaged or missing bolts/nuts or tighten if loose. 2. Fix/replace fan cover; replace loose/damaged fan. 3. Tighten/replace. 4. Adjust feet to stabilize machine (Page 13). 5. Replace blade (Page 16). 6. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.



Saw Operation



Symptom	Possible Cause	Possible Solution
Blade or teeth break/crack.	<ol style="list-style-type: none"> 1. Blade tension is incorrect. 2. Blade is incorrect for application. 3. Feed rate/pressure is too heavy. 4. Blade is dull/worn or blade weld at fault. 5. Blade is tracking incorrectly. 	<ol style="list-style-type: none"> 1. Adjust blade tension (Page 18). 2. Use correct blade for application. 3. Reduce feed pressure. 4. Replace blade (Page 16). 5. Adjust blade tracking (Page 17).
Blade tracks incorrectly or comes off wheels.	<ol style="list-style-type: none"> 1. Tracking is not adjusted properly. 2. Blade tension too loose. 3. Feeding meat/bone too fast. 4. Incorrect blade for saw. 	<ol style="list-style-type: none"> 1. Adjust blade tracking (Page 17). 2. Increase blade tension. 3. Feed workpiece slower. 4. Install correct blade.
Cuts are not straight and clean.	<ol style="list-style-type: none"> 1. Feed rate/pressure is too heavy. 2. Blade tension too loose. 3. Blade is too narrow or tooth type/TPI is incorrect for the cut. 4. Blade dull or has damaged tooth set. 5. Blade tracking is incorrect. 	<ol style="list-style-type: none"> 1. Reduce feed rate/pressure. 2. Increase blade tension (Page 18). 3. Use wider blade. Ensure tooth type & TPI is correct. 4. Replace blade (Page 16). 5. Adjust blade tracking (Page 17).
Material difficult to move across table.	<ol style="list-style-type: none"> 1. Material built up on table. 	<ol style="list-style-type: none"> 1. Clean and sanitize table, then apply a thin coat of food-grade lubricant (Page 20).



SECTION 9: WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Compare the manufacture date of your machine to the one stated in this manual, and study this section carefully.

If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine. An updated wiring diagram may be available. **Note:** *Please gather the serial number and manufacture date of your machine before calling. This information can be found on the main machine label.*

WARNING

Wiring Safety Instructions

SHOCK HAZARD. Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

MODIFICATIONS. Modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire. This includes the installation of unapproved after-market parts.

WIRE CONNECTIONS. All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.

CIRCUIT REQUIREMENTS. You MUST follow the requirements at the beginning of this manual when connecting your machine to a power source.

WIRE/COMPONENT DAMAGE. Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components.

MOTOR WIRING. The motor wiring shown in these diagrams is current at the time of printing but may not match your machine. If you find this to be the case, use the wiring diagram inside the motor junction box.

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

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

NOTICE

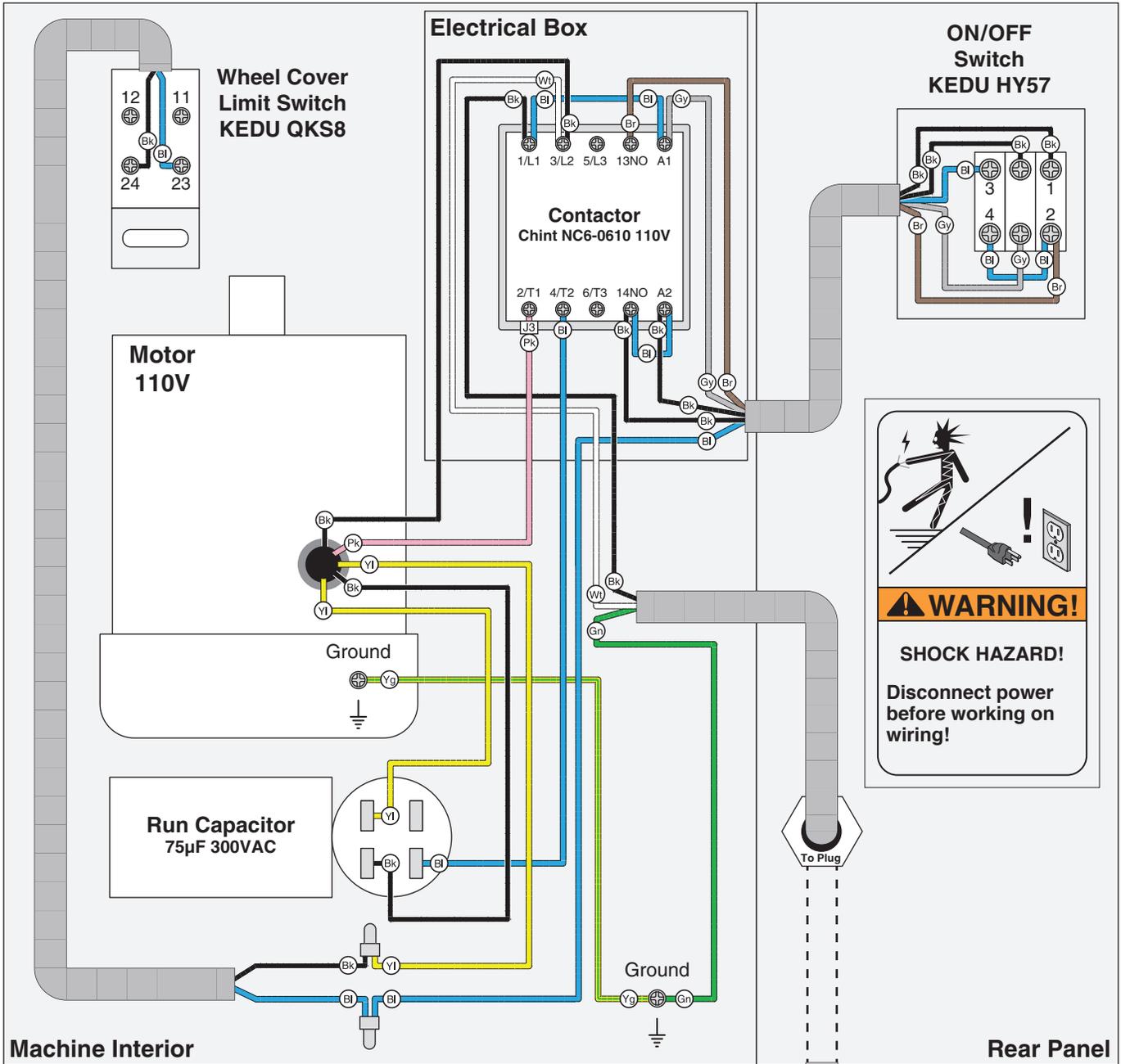
The photos and diagrams included in this section are best viewed in color. You can view these pages in color at www.grizzly.com.

COLOR KEY

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

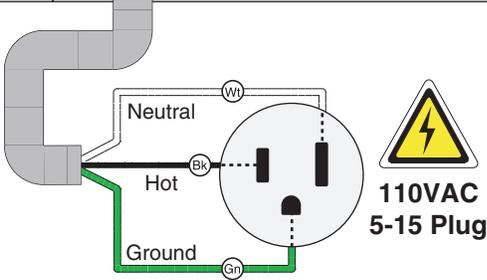


Wiring Diagram



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

NOTICE
The machine 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.



Electrical Components

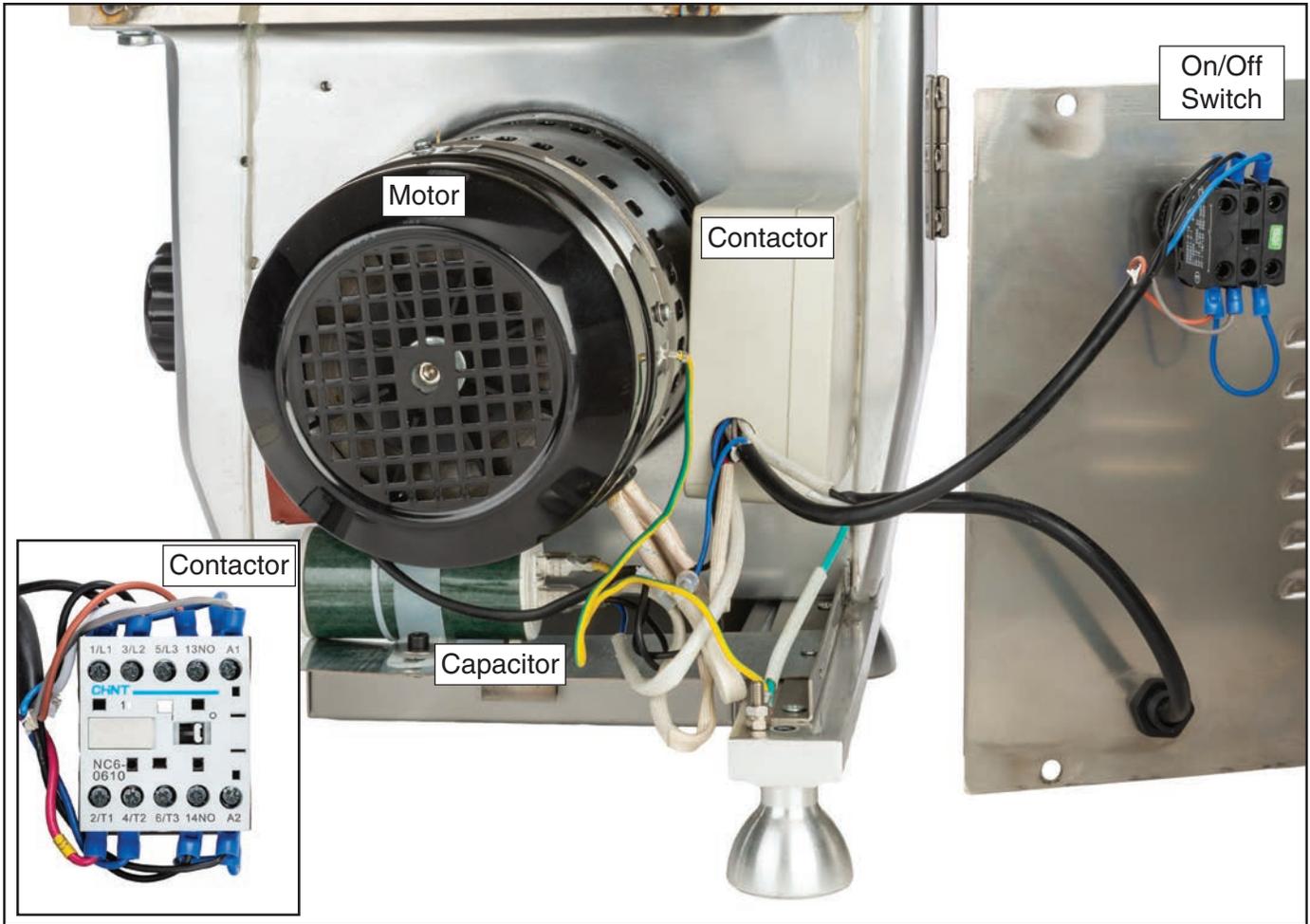


Figure 22. Main electrical wiring.

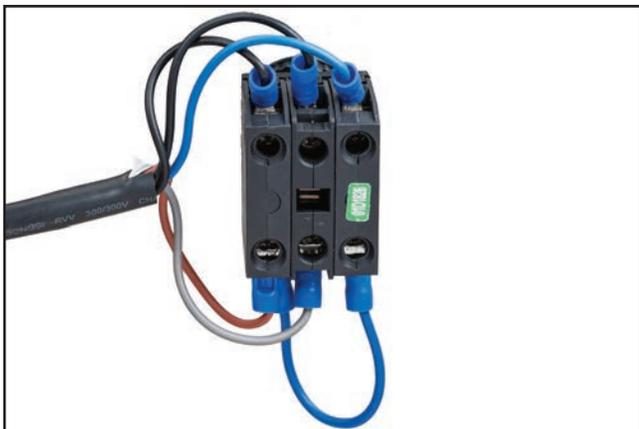


Figure 23. On/Off switch wiring.

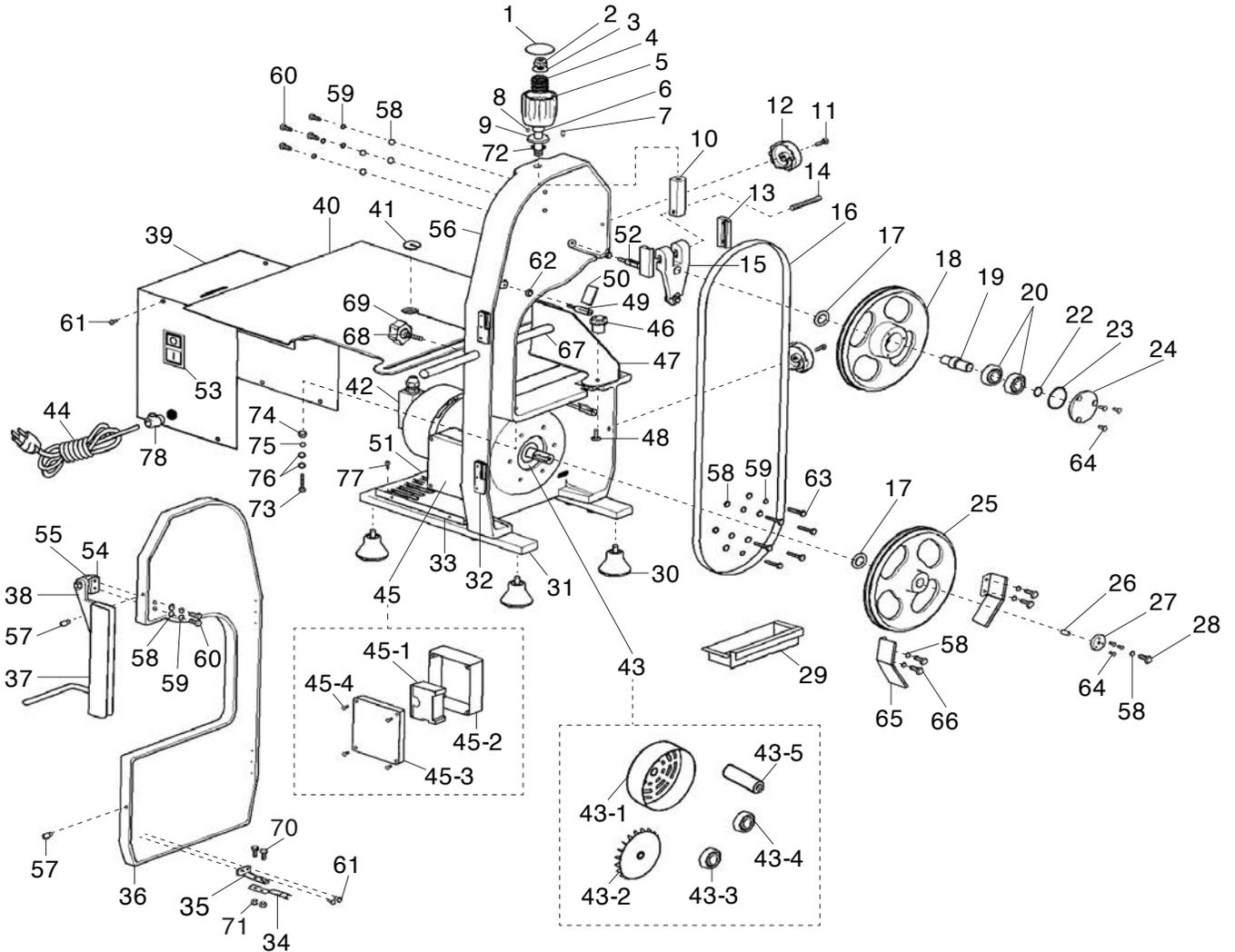


Figure 24. Wheel cover limit switch wiring.

SECTION 10: PARTS

Please Note: We do our best to stock replacement parts whenever possible, but we cannot guarantee that all parts shown here are available for purchase. Call (800) 523-4777 or visit our online parts store at www.grizzly.com to check for availability.

Main



Main Parts List

REF	PART #	DESCRIPTION
1	PT31681001	KNOB COVER
2	PT31681002	LOCK NUT M10-1.5 SS
3	PT31681003	FENDER WASHER 11 X 30 X 2.5MM
4	PT31681004	COMPRESSION SPRING 4 X 27 X 38
5	PT31681005	TENSIONING KNOB, D56, TAPERED
6	PT31681006	KNOB SHAFT
7	PT31681007	KEY 4 X 4 X 10 RE
8	PT31681008	STEEL BALL 6MM
9	PT31681009	FLAT WASHER 13MM SS
10	PT31681010	TENSIONING MANDREL
11	PT31681011	HEX BOLT M6-1 X 25 SS
12	PT31681012	WHEEL COVER KNOB
13	PT31681013	TENSIONING SLIDE PLATE GUIDE
14	PT31681014	TENSIONING SHAFT
15	PT31681015	TENSIONING SLIDE PLATE
16	PT31681016	SAW BLADE 5/8" X 65" 4 TPI
17	PT31681017	HYDRAULIC SEAL 22 X 30 X 6MM
18	PT31681018	WHEEL 8-1/4" (UPPER)
19	PT31681019	WHEEL SHAFT (UPPER)
20	PT31681020	BALL BEARING 6203ZZ
22	PT31681022	EXT RETAINING RING 17MM
23	PT31681023	O-RING 41.2 X 1.8 RUBBER
24	PT31681024	WHEEL AXLE COVER (UPPER)
25	PT31681025	WHEEL 8-1/4" (LOWER)
26	PT31681026	KEY 6 X 6 X 25 RE
27	PT31681027	SHAFT COVER (SS)
28	PT31681028	HEX BOLT M6-1 X 25 LH SS
29	PT31681029	SCRAP TRAY (SS)
30	PT31681030	ADJUSTABLE FOOT
31	PT31681031	FOOT RAIL
32	PT31681032	WHEEL COVER HINGE
33	PT31681033	MOTOR COVER RAIL
34	PT31681034	ADJUSTABLE MOUNT KEY
35	PT31681035	KEY MOUNT
36	PT31681036	WHEEL COVER
37	PT31681037	MEAT PUSHER
38	PT31681038	MEAT PUSHER ARM
39	PT31681039	MOTOR COVER
40	PT31681040	TABLE
41	PT31681041	TABLE INSERT
42	PT31681042	DOOR LIMIT SWITCH KEDU QKS8
43	PT31681043	MOTOR 750W 110V 1-PH W/CAPACITOR
43-1	PT31681043-1	MOTOR FAN COVER

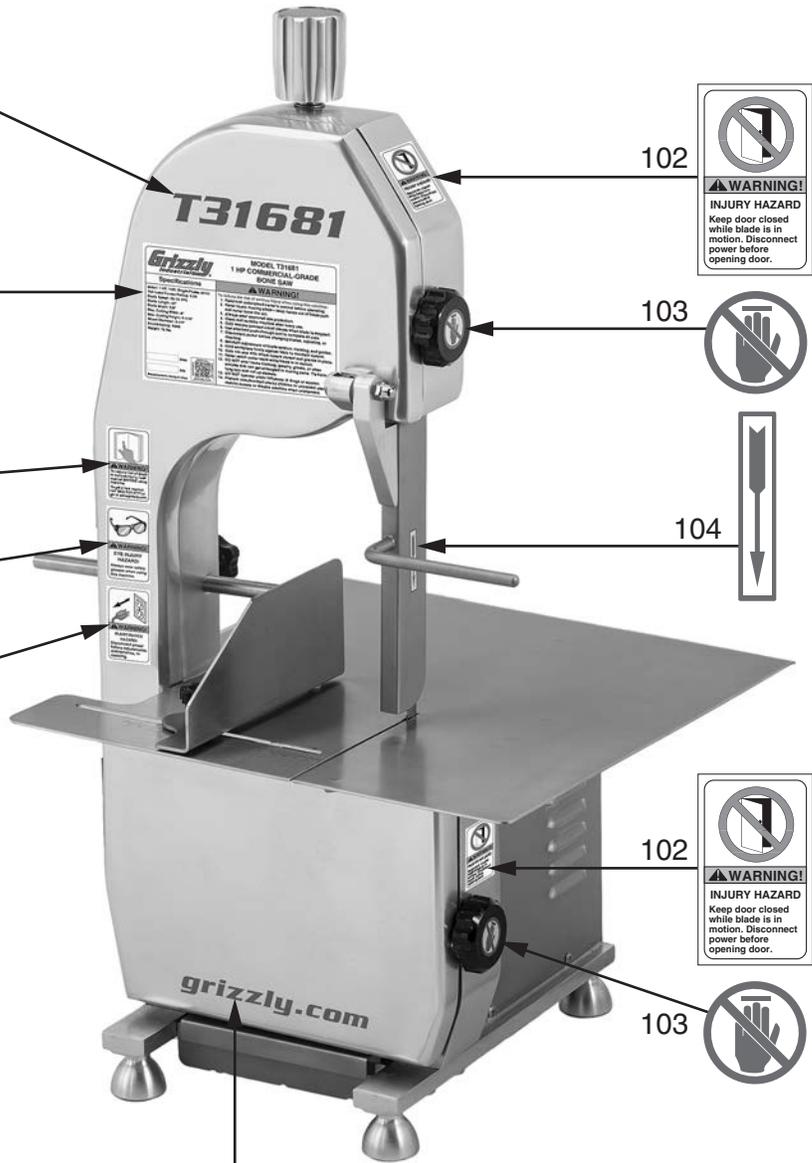
REF	PART #	DESCRIPTION
43-2	PT31681043-2	MOTOR FAN
43-3	PT31681043-3	BALL BEARING 6203-2RZ
43-4	PT31681043-4	BALL BEARING 6203-2RZ
43-5	PT31681043-5	R CAPACITOR 75M 300V 1-3/4 X 3-1/2
44	PT31681044	POWER CORD 16G 3W 72" 5-15P
45	PT31681045	ELECTRICAL BOX ASSEMBLY
45-1	PT31681045-1	CONTACTOR CHINT MC6-0610 110V
45-2	PT31681045-2	ELECTRICAL BOX
45-3	PT31681045-3	ELECTRICAL BOX COVER
45-4	PT31681045-4	FLAT HD SCR M4-.7 X 16
46	PT31681046	FENCE KNOB M6-1, 6-LOBE, D30
47	PT31681047	FENCE
48	PT31681048	ROUND HEAD BOLT M6-1 X 14 SS
49	PT31681049	BLADE WIPER HOLDER
50	PT31681050	BLADE WIPER PAD
51	PT31681051	FRAME COVER (BOTTOM)
52	PT31681052	BLADE GUIDE
53	PT31681053	ON/OFF SWITCH KEDU HY57
54	PT31681054	MEAT PUSHER MOUNT
55	PT31681055	MEAT PUSHER SPINDLE
56	PT31681056	FRAME
57	PT31681057	SLOTTED ROUND HEAD STUD (SS)
58	PT31681058	FLAT WASHER 6MM SS
59	PT31681059	LOCK WASHER 6MM SS
60	PT31681060	HEX BOLT M6-1 X 20 SS
61	PT31681061	PHLP HD SCR M4-.7 X 8 SS
62	PT31681062	HEX NUT M5-.8 SS
63	PT31681063	HEX BOLT M6-1 X 25 SS
64	PT31681064	FLAT HD SCR M5-.8 X 8 SS
65	PT31681065	SCRAP DEFLECTOR (SS)
66	PT31681066	HEX BOLT M6-1 X 12 SS
67	PT31681067	FENCE SUPPORT ROD 14 X 270MM SS
68	PT31681068	KNOB BOLT M8-1.25 X 40, 5-LOBE, D38
69	PT31681069	HEX NUT M8-1.25 SS
70	PT31681070	HEX BOLT M4-.7 X 10 SS
71	PT31681071	HEX NUT M4-.7 SS
72	PT31681072	EXT RETAINING RING 12MM
73	PT31681073	HEX BOLT 5/16-18 X 1-1/2
74	PT31681074	HEX NUT 5/16-18
75	PT31681075	LOCK WASHER 5/16
76	PT31681076	FLAT WASHER 5/16
77	PT31681077	FLAT HD SCR M5-.8 X 12
78	PT31681078	STRAIN RELIEF TYPE-2 11MM



Labels & Cosmetics

T31681

Grizzly Industrial	
MODEL T31681 1 HP COMMERCIAL-GRADE BONE SAW	
Specifications	⚠ WARNING!
Motor: 1 HP, 110V, 1-Ph, 60 Hz Full-Load Current Rating: 8.5A Blade Speed: 2840 FPM Blade Length: 65" Blade Width: 6 1/8" Max. Cutting Width: 8" Max. Cutting Height: 8" Wheel Diameter: 6 1/4" Weight: 78 lbs.	To reduce the risk of serious injury when using this machine: 1. Read and understand owner's manual before operating. 2. Never touch moving blade—keep hands out of blade path and never force the cut. 3. Always wear approved eye protection. 4. Clean and sanitize machine after every use. 5. Only remove jammed cutoff pieces when blade is stopped. 6. Use attached push-through tool to complete all cuts. 7. Disconnect power before changing blades, adjusting, or cleaning. 8. Maintain adjustment of blade tension, tracking, and guides. 9. Hold workpiece firmly against table to maintain control. 10. Only run saw with wheel covers closed and guards in place. 11. Never reach under table while blade is in motion. 12. DO NOT wear loose clothing, jewelry, gloves, or other articles that can get entangled in moving parts. Tie back long hair and roll up sleeves. 13. DO NOT operate under influence of drugs or alcohol. 14. Prevent unauthorized use by children or untrained users; restrict access or disable machine when unattended.
_____ Date _____ Use	
<small>Manufactured for Grizzly in China</small>	



109

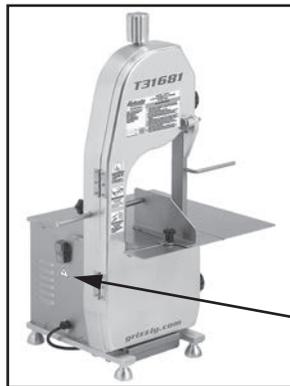
⚠ WARNING!
To reduce risk of death or serious injury, read manual **BEFORE** using machine.
To get a new manual, call (800) 523-4777 or go to www.grizzly.com

108

⚠ WARNING!
EYE INJURY HAZARD!
Always wear safety glasses when using this machine.

107

⚠ WARNING!
INJURY/SHOCK HAZARD!
Disconnect power before adjustments, maintenance, or cleaning.



106

⚠

102

⚠ WARNING!
INJURY HAZARD!
Keep door closed while blade is in motion. Disconnect power before opening door.

103

⚠

104

↓

102

⚠ WARNING!
INJURY HAZARD!
Keep door closed while blade is in motion. Disconnect power before opening door.

103

⚠

105

grizzly.com

REF PART #	DESCRIPTION
101	PT31681101 MODEL NUMBER LABEL
102	PT31681102 DOOR CLOSED BLADE LABEL
103	PT31681103 DO NOT TOUCH LABEL
104	PT31681104 ARROW LABEL
105	PT31681105 GRIZZLY.COM LABEL

REF PART #	DESCRIPTION
106	PT31681106 ELECTRICITY LABEL
107	PT31681107 DISCONNECT POWER LABEL
108	PT31681108 EYE INJURY WARNING LABEL
109	PT31681109 READ MANUAL LABEL
110	PT31681110 MACHINE ID LABEL

⚠ WARNING

Safety labels help reduce the risk of serious injury caused by machine hazards. If any label comes off or becomes unreadable, the owner of this machine **MUST** replace it in the original location before resuming operations. For replacements, contact (800) 523-4777 or www.grizzly.com.



WARRANTY & RETURNS

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

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

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

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

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

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

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



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