

MODEL T28366 10" SLOW SPEED COLD CUT SAW OWNER'S MANUAL

(For models manufactured since 04/18)



COPYRIGHT © MAY, 2018 BY GRIZZLY INDUSTRIAL, INC. WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC. #ESAB19337 PRINTED IN CHINA

V1.05.18

WARNING!

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

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

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

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



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

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

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

Table of Contents

INTRODUCTION	2
Contact Info	2
Manual Accuracy	2
Identification	3
Controls & Components	4
Machine Data Sheet	5
SECTION 1: SAFETY	7
Safety Instructions for Machinery	7
Additional Safety for Metal Cutting Saws	9
SECTION 2: POWER SUPPLY	10
SECTION 3: SETUP	12
Unpacking	12
Needed for Setup	12
Inventory	12
Cleanup	13
Site Considerations	14
Lifting & Placing	14
Bench Mounting	15
Assembly	16
Test Run	17
SECTION 4: OPERATIONS	19
Operation Overview	19
Using Coolant System	20
Selecting Blades	21
Breaking In Blades	23
Controlling Feed Rate	23
Installing/Changing Blades	24
Evaluating Cutting Performance	26
Adjusting Vise	27
Adjusting Miter Angle	28

SECTION 5: ACCESSORIES	29
SECTION 6: MAINTENANCE	30
Schedule	30
Cleaning & Protecting	30
Checking Coolant	30
Lubrication	32
SECTION 7: SERVICE	34
Troubleshooting	34
Adjusting Miter Lock Lever	36
SECTION 8: WIRING	37
Wiring Safety Instructions	37
Electrical Components	38
Wiring Diagram	39
SECTION 9: PARTS Motor Headstock Base Electrical Labels & Cosmetics	40 42 43 44 45
WARRANTY AND RETURNS	49

INTRODUCTION

Contact Info

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

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

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

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

Manual Accuracy

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

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

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

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

		MODEL GXXXX MACHINE NAME
SPECIFICA	TIONS	A WARNING!
Motor: Specification: Specification:	Manu	nual before operation. facture Date afety glasses and respirator. rectly adjusted/setup and
Specification: Specification: Weight:	Date	power is connected to grounded circuit before starting Make sure the motor has stopped and disconnect power before adjustments, maintenance, or service. DO NOT expose to rain or dampness. DO NOT modify this machine in any way.



Identification







Controls & Components



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

Refer to **Figures 1–3** and the following 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 stay safe when operating this machine.



Figure 1. Saw headstock and control box.

- A. Start Button: Starts blade rotation and activates coolant pump.
- B. Lever Arm: Pull down to lower blade.
- C. Emergency Stop Button: Cuts power to motor and remains depressed until reset. Twist clockwise to reset.
- **D.** Master Power Switch: Supplies power to machine for operation.
- E. Depth Stop: Stops blade at specific depth to produce multiple same-depth cuts.



Figure 2. Coolant system.

- F. Coolant Flow Control Valve: Enables flow of coolant from reservoir to nozzle.
- **G.** Coolant Reservoir: Houses coolant and coolant pump and also performs coolant filtration.



Figure 3. Saw controls.

- **H. Vise Jaws:** Independently adjustable vise jaws with beveled edges for saw blade clearance.
- I. Vise Handwheel: Opens and closes self-centering vise jaws to clamp the workpiece.
- J. Miter Lock Lever: Releases or locks rotation of saw base for angled cuts.





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

MODEL T28366 10" SLOW SPEED COLD CUT SAW

Product Dimensions:

Weight	
Width (side-to-side) x Depth (front-to-back) x Height	
Foot Print (Length/Width)	

Shipping Dimensions:

Туре	
Content	
Weight	
Length/Width/Height	
Must Ship Upright	Yes

Electrical:

Power Requirement	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	6 ft.
Power Cord Gauge	14 AWG
Plug Included	Yes
Included Plug Type	5-15
Switch Type	Push-Button, E-Stop

Motor:

Main

Туре	TEFC Capacitor-Start Induction
Horsepower	1 HP
Voltage	115V
Phase	Single-Phase
Amps	
Number Of Speeds	1
Speed	
Power Transfer	Gear Drive
Bearings	Sealed & Permanently Lubricated

Coolant Pump

Туре	Universal
Horsepower	
Voltage	
Phase	
Amps	
Flow	
Number Of Speeds	
Bearings	
-	-



Main Specifications:

Operation Information

Blade Speed	
Blade Size	
Arbor Size	
Angle Cuts	0–45 deg. L/R
Vise Jaw Depth	
Vise Jaw Height	2 in.
Maximum Capacity Square @ 90°	
Maximum Capacity Round @ 90°	2-1/2 in.
Maximum Capacity Square @ 45°	
Maximum Capacity Round @ 45°	2-1/8 in.
Floor-to-Vise Height	9-3/4 in. (35 in. w/ Optional T28367 Stand)

Construction

Table Construction	Cast Iron
Saw Wheel Cover	Steel
Saw Wheel Guard	
Body Construction	Cast Iron
Paint	Enamel

Other Specifications:

Country of Origin	China
Warranty	1 Year
Approximate Assembly & Setup Time	1 Hour
Serial Number Location	Machine ID Label
ISO 9001 Factory	No
Certified by a Nationally Recognized Testing Laboratory (NRTL)	No

Features:

Gear-Driven Blade for Low-RPM Cutting Built-in Coolant System w/Flow Control Valve Quick-Release Handle for Fast Miter Cut Adjustments Dual-Clamping Vise Action for Fast Clamping Four Individually Adjustable Clamping Jaws on Vise for Safe and Secure Workpiece Control Push-Button Start Control on Handle

Recommended Accessories:

T28367 Stand for T28366 T28368 160T Cold Saw Blade 250 x 32mm



SECTION 1: SAFETY

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

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



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

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

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

NOTICE

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

Safety Instructions for Machinery

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.



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 Metal Cutting Saws

AWARNING

Serious injury or death can occur from getting fingers, hair, or clothing entangled in rotating or moving parts. Workpieces can be ejected by saw, striking operator or bystanders. Long-term respiratory damage can occur from breathing metal dust created while cutting. To minimize risk of injury, anyone operating this machine MUST completely heed hazards and warnings below.

HAND PLACEMENT. Never position fingers or thumbs in line with the cut. Hands could be crushed in vise or from falling machine components.

ENTANGLEMENT HAZARDS. Do not operate this saw without blade guard in place. Loose clothing, jewelry, long hair and work gloves can be drawn into working parts.

BLADE CONDITION. Do not operate with dull, cracked, or badly worn blade. Inspect blades for cracks and missing teeth before each use.

BLADE REPLACEMENT. When replacing blades, disconnect the machine from power, wear gloves to protect hands and safety glasses to protect eyes.

FIRE HAZARD. Use EXTREME CAUTION if cutting magnesium. Using the wrong coolant will lead to chip fire and possible explosion.

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.

POWER INTERRUPTION. Unplug machine after power interruption. Machines without magnetic switches can start up after power is restored.

LOSS OF STABILITY. Unsupported workpieces may jeopardize machine stability and cause the machine to tip and fall, which could cause serious injury.

COOLANT SAFETY. Always follow manufacturer's coolant safety instructions. Pay particular attention to contact, contamination, inhalation, storage, and disposal warnings. Spilled coolant invites slipping hazards.

ATTENTION TO WORK AREA. Never leave a machine running and unattended. Pay attention to the actions of others in the area to avoid accidents.

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.

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.

HOT SURFACES. Contact with hot surfaces from machine components, ejections of hot chips, swarf, and the workpiece itself can cause burns.

No list of safety guidelines can be complete. Every shop environment is different. Like all machines there is danger associated with this machine. 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: POWER SUPPLY

Availability

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



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

Full-Load Current Rating

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

Full-Load Current Rating at 115V.....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.

Circuit Information

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

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

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

Circuit Requirements for 115V

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

Nominal Voltage	110V, 115V, 120V
Cycle	60 Hz
Phase	Single-Phase
Power Supply Circuit	
Plug/Receptacle	NEMA 5-15



Grounding 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.

For 115V operation: This machine is equipped with a power cord that has an equipment-grounding wire and a grounding plug (see following figure). The plug must only be inserted into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances.



Figure 4. Typical 5-15 plug and receptacle.



AWARNING

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

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

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

Extension Cords

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

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

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

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



SECTION 3: SETUP

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.



SUFFOCATION HAZARD! Keep children and pets away from plastic bags or packing materials shipped with this machine.

Needed for Setup

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

Des	cription Qty
•	Additional People1
•	Safety Glasses (Per Person) 1
•	Leather Gloves (Per Person)1 Pair
•	Cleaner/Degreaser (Page 13) As Needed
•	Disposable Shop Rags As Needed
•	Lifting Straps (Rated Min. 250 lbs.)
•	Flat Head Screwdriver #21
•	Adjustable Wrench1
•	Open-End Wrench 12mm1
•	Hex Wrench 8mm1
•	Hex Wrench 5mm1
•	Retaining Ring Pliers1
•	T28368 Cold Saw Blade (Not Included) 1

Inventory

The following is a list of items shipped with your machine. Before beginning setup, lay these items out and inventory them.

If any non-proprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.

Inventory (Figure 5) Qty

- and Flat Washer 22mm 1
- D. Miter Lock Lever.....1
- E. Eye Bolts 28mm, M12-1.75 x 22 4



Figure 5. T28366 inventory.

NOTICE

If you cannot find an item on this list, carefully check around/inside the machine and packaging materials. Often, these items get lost in packaging materials while unpacking or they are pre-installed at the factory.



Cleanup

The unpainted surfaces of your machine are coated with a heavy-duty rust preventative that prevents corrosion during shipment and storage. This rust preventative works extremely well, but it will take a little time to clean.

Be patient and do a thorough job cleaning your machine. The time you spend doing this now will give you a better appreciation for the proper care of your machine's unpainted surfaces.

There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

Before cleaning, gather the following:

- Disposable rags
- Cleaner/degreaser (WD•40 works well)
- Safety glasses & disposable gloves
- Plastic paint scraper (optional)

Basic steps for removing rust preventative:

- 1. Put on safety glasses.
- 2. Coat the rust preventative with a liberal amount of cleaner/degreaser, then let it soak for 5–10 minutes.
- 3. Wipe off the surfaces. If your cleaner/degreaser is effective, the rust preventative will wipe off easily. If you have a plastic paint scraper, scrape off as much as you can first, then wipe off the rest with the rag.
- 4. Repeat **Steps 2–3** as necessary until clean, then coat all unpainted surfaces with a quality metal protectant to prevent rust.



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



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

NOTICE

Avoid chlorine-based solvents, such as acetone or brake parts cleaner, that may damage painted surfaces.

T23692—Orange Power Degreaser

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



Figure 6. T23692 Orange Power Degreaser.



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 7. Minimum working clearances.



CAUTION Children and visitors may be seriously injured if unsuper-

vised around this machine. Lock entrances to the shop or unplug power connection to prevent unsupervised use.

Lifting & Placing



Lifting heavy machinery or parts without proper assistance or equipment may result in strains, back injuries, crushing injuries, or property damage.

To lift and place machine:

1. Place shipping crate next to workbench or optional T28367 stand (see **Figure 8**) where machine will be placed.



Figure 8. Optional T28367 stand for Model T28366.

- 2. Remove hex bolts and hex nuts holding machine to pallet.
- **3.** Secure saw headstock in downward position with a strap or rope (see **Figure 9**).



Figure 9. Headstock secured in downward position.





- 4. Lift and place machine:
 - If lifting and placing machine *without* help, proceed to Step 5.
 - If lifting and placing machine with help, lift machine off pallet and carefully place machine onto workbench or optional T28367 stand, and proceed to Step 8.
- 5. Thread (4) eye bolts (see Figure 10) into machine base, then thread lifting straps through eye bolts. If using larger lifting straps, attach shackles (not included) to eye bolts.



Figure 10. Lifting and placing machine.

- 6. Use forklift or other lifting equipment to lift machine off pallet and carefully place machine onto workbench or optional T28367 stand.
- 7. Remove eye bolts from machine base.
- 8. Mount machine to workbench using following instruction in **Bench Mounting** or to optional stand following instructions included with Model T28367.

Bench Mounting

The base of this machine has mounting holes that allow it to be fastened to a workbench or other mounting surface to prevent it from moving during operation and causing accidental injury or damage.

The strongest mounting option is a "Through Mount" (see example below) where holes are drilled all the way through the workbench—and hex bolts, washers, and hex nuts are used to secure the machine in place.



Figure 11. "Through Mount" setup.

Another option is a "direct mount" (see example below) where the machine is secured directly to the workbench with lag screws and washers.



Figure 12. "Direct Mount" setup.



Assembly

The machine must be fully assembled before it can be operated. Before beginning the assembly process, refer to **Needed for Setup** and gather all listed items. To ensure the assembly process goes smoothly, first clean any parts that are covered or coated in heavy-duty rust preventative (if applicable).

Note: Gearbox is pre-filled with oil.

To assemble machine:

1. Thread (4) vise handwheel handles into handwheel hub (see Figure 13).



Figure 13. Vise handwheel handles threaded into handwheel hub.

2. Remove temporary gearbox oil plug (see Figure 14) from lever arm mounting hole and reverse positions of M22-2.5 hex nut and 22mm flat washer on lever arm. (Washer secured on lever arm for shipping purposes only.)



Figure 14. Location of temporary plug.

- 3. Thread lever arm into headstock as far as it goes, then back it off less than a full turn to position it so start button cord is on top of lever arm, as shown in **Figure 15**, then tighten hex nut to secure lever arm.
- 4. Connect start button cord to control box (see Figure 15).



Figure 15. Lever arm and trigger button cord installed.

 Verify there is oil in gearbox by lowering headstock and allowing oil to settle for 10 seconds, then check oil sight glass (see Figure 16). Oil level should be halfway up sight glass, near red indicator dot.



Figure 16. Location of oil sight glass.

- If oil level is *not* halfway up sight glass, refer to Gearbox Oil on Page 32.
- If oil level is *at least* halfway up sight glass, no further action is required. Continue to Step 6.

6. Thread miter lock lever into miter base (see Figure 17).

Test Run



Figure 17. Miter lock lever installed.

- Add coolant to coolant reservoir (refer to Checking Coolant on Page 30 for instructions).
- 8. Install blade (refer to Installing/Changing Blades on Page 24 for instructions).

T28368—Blade for T28366 Cold Cut Saw This 160-tooth, 10" (250mm) blade, provides, straight, burr-free cut and precise miters for a wide range of metal projects. Features a 1.26" (32mm) bore.



Figure 18. T28368 blade for T28366 Cold Cut Saw.

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 motor powers up and runs correctly, and 2) the safety disabling mechanism works 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.

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. Press Emergency Stop button (see Figure 19).



Figure 19. Location of machine power controls.

- 3. Connect machine to power supply.
- Rotate Emergency Stop button (see Figure 20) clockwise to reset.



Figure 20. Resetting emergency stop button.

- 5. Turn master power switch to "1" (ON) position (see Figure 19).
- **6.** Press start button on lever arm. Blade should begin spinning.

7. Slowly turn coolant flow control valve to open position (see **Figure 21**). Coolant should begin flowing onto blade.

Note: Starting machine with coolant flow control valve fully open will make a mess and can make the work area unsafe due to a slipping hazard on floor.



Figure 21. Location of coolant flow control valve.

- **8.** Motor should run smoothly and without unusual problems or noises.
 - Address strange or unusual noises by referring to **Troubleshooting** on **Page 34** for help.
 - Always disconnect machine from power BEFORE investigating or correcting potential problems.
- 9. Turn machine *OFF* by releasing start button.
- **10.** Press Emergency Stop button, then press start button. Saw should NOT start.

If saw *does* start, turn off master power switch and immediately disconnect power to saw. The Emergency Stop button may not be working properly. The safety feature *must* work properly before proceeding with regular operations. Refer to **Troubleshooting** on **Page 34** for help.



SECTION 4: OPERATIONS

Operation Overview

The purpose of this overview is to provide the novice machine operator with a basic understanding of how the machine is used during operation, so the machine controls/components discussed later in this manual are easier to understand.

Due to the generic nature of this overview, it is **not** intended to be an instructional guide. To learn more about specific operations, read this entire manual, seek additional training from experienced machine operators, and do additional research outside of this manual by reading "how-to" books, trade magazines, or websites.



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

AWARNING

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



NOTICE

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

- 1. DISCONNECTS MACHINE FROM POWER!
- 2. Checks coolant reservoir.
- **3.** Examines workpiece to make sure it is suitable for cutting.
- **4.** Adjusts miter angle, if necessary, to desired angle of cut.
- 5. Ensures proper blade clearance of vise and table.
- 6. Adjusts workpiece, then secures it in vise.
- 7. Connects saw to power.
- **8.** Turns master power switch to "1", then resets Emergency Stop button.
- 9. Puts on safety glasses and face shield.
- **10.** Presses start button on lever arm to start blade and flow of coolant.
- **11.** Lowers blade into workpiece while confirming coolant is flowing onto workpiece.
- **12.** Raises blade and releases trigger button to stop machine.



Using Coolant System

The Model T28366 has a built-in coolant system that can extend the life of your blades by preventing them from overheating.

Use only water soluble coolants, such as H9240 Heavy-Duty Soluble Oil (see **Figure 41** on **Page 29**), with the Model T28366. This chlorinated, general purpose coolant contains extreme pressure additives (EP additives) to provide excellent tool life. It can be used on all metals except titanium.

The coolant system (see **Figure 22**) consists of a coolant reservoir, pump, and hose with a control valve. The pump pulls fluid from the reservoir and sends it to the valve, which controls the flow of coolant. As the fluid leaves the work area, it drains back into the reservoir through the tray screen, where the swarf and metal chips are filtered out.



Figure 22. T28366 coolant system.



FIRE HAZARD! DO NOT cut magnesium when using oil-water solutions as coolant! Water in the solution could cause a magnesium-chip fire.

To use coolant system:

1. Add coolant to coolant reservoir (refer to **Coolant System** on **Page 30** for instructions).

Note: Coolant is **not** recommended for cutting cast iron.

2. Turn master power switch to "1" (ON) position and press start button on lever arm (see Figure 23).



Figure 23. Location master power switch and start button.

3. Slowly turn coolant flow control valve to open position (see **Figure 22**). Coolant should begin flowing onto blade.

Note: Starting machine with coolant flow control valve fully open will make a mess and can make the work area unsafe due to a slipping hazard on floor.



Selecting Blades

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

Grizzly recommends the T28368 10" x 160T cold cut saw blade (see **Figure 39** on **Page 29**), which is designed for cutting rectangular, square, and round metal workpieces.

Blade Terminology



Figure 24. Blade terminology.

- A. Blade Size (Diameter): The overall diameter of the blade.
- **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 T28366 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 (see **Figure 25**). Use a blade pitch that keeps at least three teeth in the workpiece at any time.



Figure 25. 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 (see **Figure 26**).



Figure 26. 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) (see **Figure 27**).



Figure 27. 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 correct blade pitch:

- 1. Measure thickness of workpiece.
 - For solid workpieces, this measurement is length of cut taken from where tooth enters workpiece, sweeps through, and exits workpiece. See (D) on chart in Figure 28.
 - For hollow or profiled workpieces, this measurement is wall thickness at its thickest point (Th).
- Refer to "D or Th" column of blade selection chart in Figure 28, and read down to find workpiece thickness you need to cut. Read across to find appropriate Pitch (TPI) for cut. See Accessories on Page 29.



Figure 28. Blade selection chart.



Breaking In Blades

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 breakin 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 29** to calculate approximate square inches for many typical cuts.



Figure 29. Calculating cut area for break-in.

Controlling Feed Rate

Blade feed rate refers to the period of time it takes to cut through a workpiece. 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.

Feed rate will vary depending upon the type of material being cut, the proper flow of coolant, and the amount of pressure applied by the user. Practice on a sample workpiece to learn how much pressure is needed for a specific cut.

Installing/Changing Blades

Metal cutting blades should be checked regularly for wear or damage to help ensure operator safety and high-quality cutting results. Always immediately replace any blade found with damage.

Item(s) Needed

New 10" Cold Cut Saw Blade	1
Hex Wrench 5mm	1
Hex Wrench 8mm	1
Retaining Ring Pliers	1



ACAUTION The teeth of saw blades are

Qtv

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

To install/change blade:

- 1. DISCONNECT MACHINE FROM POWER!
- Disconnect blade guard linkage by removing cap screws connecting linkage to base of column neck (see Figure 30). This releases tension on retractable blade guards (see Figure 31).



Figure 30. Location of blade guard linkage and cap screws.

3. Remove arbor cap screw (see **Figure 31**). It has left-hand threads and loosens when turned clockwise.



Figure 31. Removing arbor cap screw.

4. Remove retaining ring from retractable guard hub (see **Figure 32**) to provide clearance to remove/install blade. DO NOT remove plastic bushing from hub.



Figure 32. Removing retaining ring.



5. Rotate retractable blade guards out of way, and remove blade flange and blade (see Figure 33).

Note: Blade flange and blade need to be moved slightly to the left to clear pins on blade arbor (see **Figure 33**).

6. Slide blade onto blade arbor and rotate until pins (see **Figure 33**) align with holes in blade, then push blade against blade arbor.



Figure 33. Blade flange and blade removed and blade arbor exposed.

- 7. Slide blade flange onto blade arbor and rotate until arbor pins (see **Figure 34**) align with holes in flange, then push flange against blade.
- 8. Tighten arbor cap screw (see Figure 34). It has left-hand threads and tightens when turned counterclockwise.



Figure 34. Blade order of installation.

- 9. Attach retaining ring to retractable guard hub.
- **10.** Lower blade guard and reconnect blade guard linkage.



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

Chip Appearance	Chip Description	Chip Color	Feed Rate	Additional Actions
0	Thin & Curled Silver		Good	
~/~	Hard, Thick & Short	Brown or Blue	Decrease	
J~	Hard, Strong & Thick	Brown or Blue	Decrease	
Ø	Hard, Strong & Thick	Silver or Light Brown	Decrease Slightly	Check Blade Pitch
Hard & Thin		Silver	Decrease	Check Blade Pitch
Straight & Thin Silv		Silver	Increase	
Powdery Silver		Silver	Increase	
Curled Tight & Silver		Silver	Decrease	Check Blade Pitch

Figure 35. Chip inspection chart.



Adjusting Vise

This machine features a self-centering vise that provides maximum support, while still providing enough clearance for cutting at a variety of angles.

Each vise jaw is independently adjustable left or right to provide proper support and blade clearance for the cut. The jaws provide the best support during cutting operations when positioned as close to the blade as possible.

Item(s) Needed	Qty
Hex Wrench 6mm	1



Prior to cutting, always check vise jaws for blade clearance. Failure to do this could cause blade to contact vise during cut, resulting in damage to blade or jaws.

To adjust vise jaws:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Set cutting angle (refer to Adjusting Miter Angle on Page 28 for instructions).
- 3. Lower saw blade to check jaw clearance.
 - If saw blade lowers completely without touching jaws, no further adjustments are necessary.
 - If saw blade contacts jaws, perform Steps 4-8.

4. To adjust each jaw independently, loosen vise jaw cap screw until jaw slides freely (see Figure 36).



Figure 36. Location of vise components.

5. Slide jaws away from blade, then lower blade and position each jaw approximately ½" away from blade (see **Figure 37**).

Note: At certain angle settings, it may not be possible to set vise jaw within ½" of workpiece. If this is the case, then just adjust jaw as far as it can go while still being securely clamped.



Figure 37. Correct blade clearance setting.

- 6. Tighten cap screw for each jaw.
- 7. Turn vise handwheel clockwise until jaws clamp workpiece in desired position.
- 8. Repeat **Step 3** to re-check blade clearance.



Adjusting Miter Angle

The head and column rotate 90° left or right of center for precise angled cuts. The miter scale shows the angle of the blade, and the miter lock lever secures the angle for repeated cuts.

Ensure saw is properly mounted to benchtop (see **Page 15**) before performing cuts, as saw base can shift with larger workpieces.

NOTICE

Prior to cutting, always check vise jaws for blade clearance. Failure to do this could cause blade to contact vise during cut, resulting in damage to blade or jaws.

To set miter angle:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Release miter lock lever (see Figure 38).



Figure 38. Location of miter lock lever and miter scale.

- 3. Rotate saw headstock to desired angle using miter scale as a guide. Once desired angle is reached, move miter lock lever left to secure setting.
- 4. Ensure blade clearance by lowering saw blade. If necessary, adjust vise jaw to provide adequate clearance, as outlined in **Adjusting Vise** on **Page 27**.
- 5. Return saw to upright position.



SECTION 5: ACCESSORIES

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.

T28368—Blade for T28366 Cold Cut Saw

This 160-tooth, 10" (250mm) blade provides a clean, straight, burr-free cut and precise miters for a wide range of metal projects. Features a 1.26" (32mm) bore.



Figure 39. T28368 blade for T28366 Cold Cut Saw.

T28367—Stand for T28366 Cold Cut Saw

Use this optional stand for mounting the T28366 Cold Cut Saw. Powder coated in Grizzly Green to match.





NOTICE

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

H9240—Rustlick™ WS5050 Heavy-Duty Soluble Oil, 1 Gal.

Effective general purpose and heavy-duty chlorinated E.P. additive provides excellent tool life, and helps protect neoprene seals. Can be used on all metals except titanium.



Figure 41. H9240 Rustlick[™] WS5050 Heavy-Duty Soluble Oil.

T26685—ISO 32 Moly-D Machine Oil, 1 Gal. T27914—ISO 68 Moly-D Machine Oil, 1 Gal.

Moly-D oils are some of the best we've found for maintaining the critical components of machinery because they tend to resist run-off and maintain their lubricity under a variety of conditions—as well as reduce chatter or slip..



Figure 42. ISO 68 and ISO 32 machine oil.

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

SECTION 6: MAINTENANCE



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

Schedule

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

Ongoing

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

- Loose mounting bolts/screws/nuts.
- Damaged or worn saw blade.
- Coolant level (see Page 31).
- Proper function of blade guard.
- General cleanup to prevent buildup of metal particulate.

Weekly Maintenance

- Clean machine thoroughly,
- Drain and clean coolant reservoir, including screens (see **Page 31**).
- Check/adjust gearbox oil level (see Page 32).
- Lubricate vise leadscrew (see Page 32).

Monthly Check

- Check/tighten machine bolts.
- Check/tighten machine bolts.
- Lubricate column hinge-pin (see Page 33).
- Lubricate saw base pivot (see Page 33).

Every Six Months

• Change gearbox oil (see Page 32).

Cleaning & Protecting

Metal chips left on the machine that have been soaked with water-based coolant will invite oxidation and a gummy residue build-up around the moving parts. Use a brush and shop vacuum to remove chips and debris from the working surfaces of the saw. Never blow off the saw with compressed air, as this will force metal chips deep into the mechanisms and may cause injury to yourself or bystanders.

Remove any rust build-up from unpainted cast iron surfaces, and treat with a non-staining lubricant after cleaning. Protect other unpainted castiron surfaces with regular applications of ISO 68 oil or other quality metal protectant.

Checking Coolant

Coolant is consistently cycled and stored in the coolant reservoir. For efficient operation and tool longevity, add coolant when it runs low, and change coolant when it becomes dirty from excessive use.



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

requirements for proper

disposal.



Coolant

Coolant Type H9240 Soluble O	il or Equivalent
Coolant Amount	¹ / ₂ Liter
Check/Add Frequency	Daily
Change Frequency	Monthly

Qtv

neni(3) neeueu

	•
Goggles	1
Gloves	1
Respirator (Optional)	1
Empty 2-litre Container	1
New Coolant	2 Liters
Siphon Hose (2 ft. or Longer)	1
Small Brush	1
Disposable Shop Rags	As Needed

To add coolant:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Pre-mix coolant in an empty 2-liter container.

Note: Refer to manufacturer's specifications for proper water/oil mix.

3. Wearing protective equipment, open coolant reservoir lid (see **Figure 43**).



Figure 43. Location of coolant system components.

- **4.** Pour coolant into reservoir until pump is submerged (approximately ³/₄ full).
- 5. Close coolant reservoir lid.



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

To drain and clean coolant reservoir:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Wearing protective equipment, open coolant reservoir lid (see Figure 43).
- **3.** Remove and wipe coolant pump clean (see **Figure 43**).
- 4. Siphon and dispose of old coolant and swarf according to federal, state, and fluid manufacturer's requirements.
- 5. Thoroughly clean tray screen, reservoir screen, and inside of coolant reservoir (see Figure 44).



Figure 44. Cleaning screens and reservoir.

- **6.** Use a rag to wipe out residual coolant and swarf inside reservoir.
- 7. Place pump back into coolant reservoir.
- 8. Add coolant (refer **To add coolant** procedure on **This Page** for instructions).



Lubrication

This cold cut saw requires regular lubrication to maintain smooth movement and ensure long-last-ing operation.

An essential part of lubrication is cleaning the components before lubricating them. Clean all exterior components in this section with mineral spirits, shop rags, and brushes *before* lubricating.

This step is critical because grime and chips build up on lubricated components over time, which makes them hard to move.

Gearbox Oil

Lube Type Model T27914 or	ISO 68 Equivalent
Lube Amount	¹ / ₂ -Liter
Check/Add Frequency	Weekly
Change Frequency	Every 6 Months

Items Needed	Qty
Hex Wrench 8mm	1
Adjustable Wrench	1
Drain Pan	1
Funnel	1
Additional Person	1

To add/change gearbox oil:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Raise saw to upmost position, and remove lever arm (see Figure 45) to access oil fill hole to allow oil to drain more freely.
- **3.** Place oil drain pan beneath saw gearbox, and remove oil drain plug, located on bottom side of gearbox (see **Figure 45**).

4. Place oil drain pan beneath saw gearbox, and remove oil drain plug, located on bottom side of gearbox (see Figure 45).



Figure 45. Oil fill and drain plug locations.

- 5. Hold drain pan under drain plug, then tilt saw gearbox forward, allowing oil to drain out.
- 6. Have an assistant hold headstock in place, and replace drain plug.
- Insert funnel into fill hole. Add approximately ¹/₂-liter of ISO 68 or equivalent oil until oil level is halfway in sight glass. Wait 10 seconds to allow oil to settle in sight glass before taking a reading.
- 8. Wipe away any excess oil and re-install lever arm.

Vise Leadscrew

Proper lubrication of the vise leadscrew (see **Figure 46**) is done with a pump-type oil can that has a tip wide enough to seal the ball oil inlet. We *do not* recommend using metal needle or lance-type tips, as they can push the ball too far into the oiler, break the spring seat, and lodge the ball in the oil galley.



Push the oil can nozzle tip against ball oiler, and pump oil can twice. If you see sludge and contaminants coming out of the lubrication area, continue pumping oil can until the oil runs clear, and wipe away any excess oil. There are two ball oilers, located on the front and rear vise bodies (see **Figure 46**).

Note: For best performance, periodically clean leadscrew thoroughly with mineral spirits or other degreaser and then relubricate.



Figure 46. Vise leadscrew lubrication.

Column Hinge Pin

Proper lubrication of the column hinge-pin allows for smooth movement of the saw headstock.

If saw headstock movement becomes difficult, apply a small amount of oil to column joints (see **Figure 47**). Move the saw headstock back-and-forth several times to distribute oil evenly.



Figure 47. Location of column hinge pin.

Saw Base Pivot

Lube Type...Model T26685 or ISO 32 Equivalent Lube Amount......Thin Coat Lubrication Frequency..........8 hrs. of Operation

Proper lubrication around the saw base pivot allows for smooth rotation when adjusting the miter angle.

If base pivot movement becomes difficult, apply a small amount of oil to openings beside the miter angle gauge (see **Figure 48**). Rotate the base back-and-forth several times to distribute oil evenly.



Figure 48. Base pivot oil locations.

SECTION 7: SERVICE

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

Troubleshooting



Motor & Electrical

Symptom	Possible Cause	Possible Solution		
Machine does not	1. Emergency stop button depressed/at fault.	1. Rotate button head to reset. Replace.		
start, or power	2. Incorrect power supply voltage or circuit	2. Ensure correct power supply voltage and circuit		
supply fuse/breaker	size.	size.		
trips immediately	3. Power supply circuit breaker tripped or fuse	3. Ensure circuit is sized correctly and free of shorts.		
after startup.	blown.	Reset breaker or replace fuse.		
	4. Wiring open/has high resistance.	4. Check/fix broken, disonnected, or corroded wires.		
	5. Start capacitor at fault.	5. Test/replace if at fault.		
	6. Centrifugal switch/contact points at fault.	6. Adjust/replace centrifugal switch/contact points if		
		available.		
	7. Start button at fault.	7. Test/replace switch.		
	8. Master power switch at fault.	8. Test/replace switch.		
	9. Motor at fault.	9. Test/repair/replace.		
Machine stalls or is	1. Dull blade.	1. Sharpen/replace blade (Page 24).		
under powered.	2. Workpiece crooked; vise jaws are loose or	2. Straighten or replace workpiece/adjust vise jaws to		
	incorrectly adjusted.	avoid workpiece binding saw blade.		
	3. Not enough coolant flowing onto workpiece	3. Increase flow of coolant onto workpiece (Page 20).		
	4. Machine undersized for task.	4. Use correct blade for workpiece (Page 21); reduce		
		feed rate (Page 23); increase flow of coolant onto		
		workpiece (Page 20).		
	5. Motor overheated.	5. Clean motor, let cool, and reduce workload.		
	6. Motor bearings at fault.	6. Test/repair/replace.		
	7. Gearbox at fault.	7. Replace broken or slipping gears.		
Machine has	1. Workpiece not properly secured in vise.	1. Check vice, jaws, and clamping pressure (Page 27).		
vibration or	2. Machine incorrectly mounted/resting on	2. Tighten mounting bolts; relocate/shim machine.		
noisy operation.	floor, workbench, or stand.			
	3. Motor or component loose.	3. Inspect/replace damaged bolts/nuts, and re-tighten		
		with thread-locking fluid.		
	4. Motor fan rubbing on fan cover.	4. Fix/replace fan cover; replace loose/damaged fan.		
	5. Centrifugal switch/contact points at fault.	5. Test all legs for power; replace if necessary.		
	6. Motor bearings at fault.	6. Test by rotating shaft; rotational grinding/loose shaft		
		requires bearing replacement.		
	7. Gearbox at fault.	7. Rebuild gearbox for bad gear(s)/bearing(s).		



Cutting Operations

Symptom	Possible Cause		Possible Solution	
Premature blade	1.	Inadequate blade lubrication.	1.	Check level of coolant (Page 30), valve position,
wear.				fluid screens, functionality of pump, and flow of
				hose.
	2.	Feed rate too high.	2.	Reduce feed rate (Page 23).
	3.	Feed rate too low.	3.	Increase feed rate (Page 23).
	4.	Blade not worn in correctly.	4.	Follow correct procedure for breaking in new blade
		Musers to other sitely (such le for user during a	_	(Page 23).
Ta ath leas a birs a sa)).]	wrong tooth pitch/profile for workpiece.)). _	Obsective of blade for workpiece (Page 21).
Leeth breaking or	'.	inadequate blade lubrication.	1.	Check level of coolant (Page 30), valve position,
chipping.	2	Feed rate too high	2	Beduce feed rate (Page 23)
	3	Workpiece material type too hard incorrectly	3	Decrease feed rate (Page 23), choose correct blade
	0.	shaped, or has flaws.	0.	for workpiece (Page 21): ensure workpiece does not
				contain flaws.
	4.	Blade not worn in correctly.	4.	Follow correct procedure for breaking in new blade
				(Page 23).
	5.	Wrong tooth pitch/profile for workpiece.	5.	Use correct type of blade for workpiece (Page 21).
	6.	Dull blade.	6.	Sharpen/replace blade (Page 24).
	7.	Workpiece not properly secured in vise.	7.	Check vice, jaws, and clamping pressure (Page 27).
	8.	Vibrations in machine causing blade to	8.	Find/correct source of machine vibration.
		"bounce" on workpiece.		
	9.	l eeth touching workpiece before cut begins.	9.	Do not allow blade teeth to touch workpiece during
Vibration when		Inadequate blade lubrication	1	Check level of coolant (Page 30), valve position
cutting	''	inadequate blade lubication.	'.	functionality of pump, and flow of hose
outting.	2.	Workpiece not properly secured in vise.	2.	Check vice, jaws, and clamping pressure (Page 27).
	3.	Wrong tooth pitch/profile for workpiece.	З.	Use correct type of blade for workpiece (Page 21).
	4.	Dull blade.	4.	Sharpen/replace blade (Page 24).
	5.	Machine undersized for task.	5.	Use correct blade for workpiece (Page 21); reduce
				feed rate (Page 23); increase flow of coolant onto
				workpiece (Page 20).
	6.	Workpiece exceeds saw capacity.	6.	Adhere to maximum cutting capacities for this
	_			machine (Page 6).
Blade sticks in	1.	Inadequate blade lubrication.	1.	Check level of coolant (Page 30), valve position,
cut.		–		functionality of pump, and flow of hose.
	2.	Feed rate too high.	2.	Reduce feed rate (Page 23).
	3. ⊿	Wrong tooth pitch/profile for workpiece.	3. ⊿	Use correct type of blade for workpiece (Page 21).
	5	Waste material/coolant buildup on blade	5	Clean blade, replace coolant regularly
	0.		0.	(Page 30).
Cut is not	1	Feed rate too high.	1.	Reduce feed rate (Page 23).
straight.	2.	Workpiece is not properly secured in vise.	2.	Check vice, jaws, and clamping pressure (Page 27).
	3.	Cutting angle not properly set.	3.	Set cutting angle according to scale (Page 28).
	4.	Debris on vise.	4.	Clean vise.
	5.	Dull/warped blade.	5.	Sharpen/replace blade (Page 24).



Adjusting Miter Lock Lever

The miter lock lever (see **Figure 49**) ensures the swiveling saw base remains locked at a desired angle during the cut.

Lock lever adjustment components can be accessed underneath the saw base.



Figure 49. Location of miter lock lever.

To adjust lock lever:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Loosen cap screws securing miter lock lever to lock bolt shown in **Figure 50**.



Figure 50. Miter lock lever adjustment components.

3. Rotate miter lock lever left or right, as needed. Re-tighten cap screws and tensioner hex nuts, and then test miter lock lever range of movement.

Note: Check lock lever clearance to ensure it does not interfere with the vise handwheel rotation when fully locked.



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. 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.

Wiring Safety Instructions

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

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

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

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

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

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

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

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

NOTICE

COLOR KEY BLACK (BI)= LIGHT BLUE YELLOW = (Bk (YI) The photos and diagrams BLUE YELLOW included in this section are (Br) WHITE = (Wt) BROWN (Yg) BLUE GREEN best viewed in color. You WHITE (Gy)= GREEN (Gn) GRAY PURPLE Έu can view these pages in TUR-QUOISE Rd) (Or) PINK ORANGE Pk color at www.grizzly.com. RED



Electrical Components



Figure 51. Power switch.

Figure 52. Connector.

Figure 53. Start and run capacitors.

Figure 54. Emergency Stop and On button.

Figure 55. Transformer.

Figure 56. Coolant pump motor.

Wiring Diagram

SECTION 9: PARTS

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

-40-

Motor Parts List

REF	PART #	DESCRIPTION
1	PT28366001	POWER BUTTON LA51-11
2	PT28366002	EXT THREAD COLLAR 24 X 8MM
3	PT28366003	LEVER ARM HANDLE
4	PT28366004	LEVER ARM
5	PT28366005	HEX NUT M18-2.5 THIN
6	PT28366006	FLAT WASHER 18MM
7	PT28366007	HEADSTOCK
8	PT28366008	CAP SCREW M6-1 X 35
9	PT28366009	CAP SCREW M6-1 X 20
10	PT28366010	MOTOR MOUNT
11	PT28366011	EXT RETAINING RING 14MM
12	PT28366012	KEY 5 X 5 X 10
13	PT28366013	GEAR 17T
14	PT28366014	MOTOR 1HP 115V 1-PH
14-1	PT28366014-1	MOTOR FAN COVER
14-2	PT28366014-2	MOTOR FAN
14-3	PT28366014-3	CENTRIFUGAL SWITCH
14-4	PT28366014-4	CONTACT PLATE
14-5	PT28366014-5	BALL BEARING
14-6	PT28366014-6	BALL BEARING
15	PT28366015	HEX NUT M47
16	PT28366016	MOTOR GUARD
17	PT28366017	ELECTRICAL BOX

REF	PART #	DESCRIPTION
18	PT28366018	CAP SCREW M47 X 10
19	PT28366019	FLAT WASHER 4MM
20	PT28366020	CAP SCREW M47 X 10
21	PT28366021	CAP SCREW M47 X 10
22	PT28366022	ELECTRICAL BOX COVER
22-1	PT28366122-1	ELECTRICAL BOX COVER GASKET
23	PT28366023	FLAT WASHER 4MM
24	PT28366024	CAP SCREW M6-1 X 30
25	PT28366025	FLAT WASHER 6MM
26	PT28366026	LOCK WASHER 6MM
27	PT28366027	OIL SIGHT GLASS
28	PT28366028	OIL PLUG
29	PT28366029	EXT RETAING RING 20MM
30	PT28366030	GEAR 27T
31	PT28366031	WORM SHAFT
32	PT28366032	BALL BEARING 6004-2RS
33	PT28366033	GASKET 75 X 3.55
34	PT28366034	HEADSTOCK COVER
35	PT28366035	CAP SCREW M6-1 X 16
36	PT28366036	KEY 6 X 6 X 15
37	PT28366037	BALL BEARING 6006-2RS
38	PT28366038	BALL BEARING BUSHING

Headstock

REF	PART #	DESCRIPTION	
39	PT28366039	EXT RETAINING RING 8MM	
40	PT28366040	LINKAGE BRACKET	
41	PT28366041	FLAT WASHER 8MM	
42	PT28366042	CAP SCREW M6-1 X 16	
43	PT28366043	RETAINING PIN	
44	PT28366044	GUARD LINKAGE (LOWER)	
45	PT28366045	EXT RETAINING RING 8MM	
46	PT28366046	FLAT WASHER 8MM	
47	PT28366047	RETAINING PIN	
48	PT28366048	GUARD LINKAGE (LOWER)	
49	PT28366049	SET SCREW M6-1 X 8	
50	PT28366050	LOCK COLLAR	
51	PT28366051	RETAINING PIN	
52	PT28366052	HINGE PIN	
53	PT28366053	RETAINING PIN	
54	PT28366054	FLAT WASHER 8MM PLASTIC	
55	PT28366055	FLAT WASHER 8MM	
56	PT28366056	SMALL GUARD LINKAGE (OUTER)	
57	PT28366057	RETAINING PIN	
58	PT28366058	SMALL GUARD LINKAGE (INNER)	
59	PT28366059	EXT RETAINING RING 8MM	
60	PT28366060	FLAT WASHER 8MM PLASTIC	
61	PT28366061	BLADE GUARD (UPPER)	
62	PT28366062	BLADE HOOD	
63	PT28366063	COOLANT CONTROL VALVE	
64	PT28366064	PIPE FITTING	
65	PT28366065	ARBOR SHAFT SEAT	
66	PT28366066	ARBOR SHAFT SEAL	
67	PT28366067	BALL BEARING 6006-2RS	
68	PT28366068	RUBBER GASKET 56 X 2.65 X 61.3	
69	PT28366069	ARBOR SHAFT BUSHING	
70	PT28366070	ARBOR SHAFT	

71 PT28366071 WORM GEART 28T 72 PT28366072 KEY 8 X 7 X 20MM 73 PT28366073 ARBOR SHAFT BUSHING 74 PT28366074 BALL BEARING 6006-2RS 75 PT28366075 EXT RETAINING RING 25MM 76 PT28366076 RUBBER GASKET 47.5 X 2.65 X 52.8 77 PT28366077 ARBOR SHAFT COVER 78 PT28366079 TENSION SPRING 80 PT28366080 SET SCREW M6-1 X 10 81 PT28366080 SET SCREW M8-1.25 X 20 82 PT28366081 CAP SCREW M8-1.25 X 60 83 PT28366083 HEX NUT M8-1.25 84 PT28366084 SPRING ARM (UPPER) 85 PT28366085 FLAT WASHER 8MM 86 PT28366088 STOP BLOCK CUSHION 87 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 16 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366094 HINGE PIN 95 PT28366095 CAP SCREW M6-1 X 35 <	REF	PART #	DESCRIPTION
72 PT28366072 KEY 8 X 7 X 20MM 73 PT28366073 ARBOR SHAFT BUSHING 74 PT28366074 BALL BEARING 6006-2RS 75 PT28366075 EXT RETAINING RING 25MM 76 PT28366076 RUBBER GASKET 47.5 X 2.65 X 52.8 77 PT28366077 ARBOR SHAFT COVER 78 PT28366079 TENSION SPRING 80 PT28366080 SET SCREW M6-1 X 10 81 PT28366081 CAP SCREW M8-1.25 X 20 82 PT28366081 CAP SCREW M8-1.25 X 60 83 PT28366083 HEX NUT M8-1.25 84 PT28366084 SPRING ARM (UPPER) 85 PT28366085 FLAT WASHER 8MM 86 PT28366083 STOP BLOCK CUSHION 87 PT28366089 CAP SCREW M6-1 X 25 90 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 35 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366094 HINGE PIN <td>71</td> <td>PT28366071</td> <td>WORM GEART 28T</td>	71	PT28366071	WORM GEART 28T
73 PT28366073 ARBOR SHAFT BUSHING 74 PT28366074 BALL BEARING 6006-2RS 75 PT28366075 EXT RETAINING RING 25MM 76 PT28366076 RUBBER GASKET 47.5 X 2.65 X 52.8 77 PT28366077 ARBOR SHAFT COVER 78 PT28366078 CAP SCREW M6-1 X 16 79 PT28366080 SET SCREW M6-1 X 10 80 PT28366081 CAP SCREW M8-1.25 X 20 82 PT28366082 CAP SCREW M8-1.25 X 60 83 PT28366083 HEX NUT M8-1.25 84 PT28366084 SPRING ARM (UPPER) 85 PT28366085 FLAT WASHER 8MM 86 PT28366086 STOP BLOCK CUSHION 87 PT28366086 STOP BLOCK 88 PT28366089 CAP SCREW M6-1 X 25 90 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 16 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366094 HINGE PIN 95 PT28366095 CAP SCREW M6-1 X 35	72	PT28366072	KEY 8 X 7 X 20MM
74 PT28366074 BALL BEARING 6006-2RS 75 PT28366075 EXT RETAINING RING 25MM 76 PT28366076 RUBBER GASKET 47.5 X 2.65 X 52.8 77 PT28366077 ARBOR SHAFT COVER 78 PT28366079 CAP SCREW M6-1 X 16 79 PT28366080 SET SCREW M6-1 X 10 80 PT28366081 CAP SCREW M8-1.25 X 20 82 PT28366082 CAP SCREW M8-1.25 X 60 83 PT28366083 HEX NUT M8-1.25 84 PT28366084 SPRING ARM (UPPER) 85 PT28366085 FLAT WASHER 8MM 86 PT28366086 STOP BLOCK CUSHION 87 PT28366086 STOP BLOCK 88 PT28366089 CAP SCREW M6-1 X 25 90 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 16 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366094 HINGE PIN 95 PT28366095 CAP SCREW M6-1 X 35 96 PT28366096 BUSHING PLASTIC <	73	PT28366073	ARBOR SHAFT BUSHING
75 PT28366075 EXT RETAINING RING 25MM 76 PT28366076 RUBBER GASKET 47.5 X 2.65 X 52.8 77 PT28366077 ARBOR SHAFT COVER 78 PT28366079 CAP SCREW M6-1 X 16 79 PT28366079 TENSION SPRING 80 PT28366080 SET SCREW M6-1 X 10 81 PT28366081 CAP SCREW M8-1.25 X 20 82 PT28366082 CAP SCREW M8-1.25 X 60 83 PT28366083 HEX NUT M8-1.25 84 PT28366084 SPRING ARM (UPPER) 85 PT28366085 FLAT WASHER 8MM 86 PT28366086 STOP BLOCK CUSHION 87 PT28366086 STOP BLOCK 88 PT28366087 FLAT WASHER 6MM 88 PT28366088 STOP BLOCK 89 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 25 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366094 HINGE PIN 95 PT28366095 CAP SCREW M6-1 X 35 96	74	PT28366074	BALL BEARING 6006-2RS
76 PT28366076 RUBBER GASKET 47.5 X 2.65 X 52.8 77 PT28366077 ARBOR SHAFT COVER 78 PT28366078 CAP SCREW M6-1 X 16 79 PT28366079 TENSION SPRING 80 PT28366080 SET SCREW M6-1 X 10 81 PT28366081 CAP SCREW M8-1.25 X 20 82 PT28366082 CAP SCREW M8-1.25 X 60 83 PT28366083 HEX NUT M8-1.25 X 60 84 PT28366084 SPRING ARM (UPPER) 85 PT28366085 FLAT WASHER 8MM 86 PT28366086 STOP BLOCK CUSHION 87 PT28366087 FLAT WASHER 6MM 88 PT28366089 CAP SCREW M6-1 X 25 90 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 25 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366094 HINGE PIN 95 PT28366095 CAP SCREW M6-1 X 35 96 PT28366097 BLADE FLANGE <td>75</td> <td>PT28366075</td> <td>EXT RETAINING RING 25MM</td>	75	PT28366075	EXT RETAINING RING 25MM
77 PT28366077 ARBOR SHAFT COVER 78 PT28366078 CAP SCREW M6-1 X 16 79 PT28366079 TENSION SPRING 80 PT28366080 SET SCREW M6-1 X 10 81 PT28366081 CAP SCREW M8-1.25 X 20 82 PT28366082 CAP SCREW M8-1.25 X 60 83 PT28366083 HEX NUT M8-1.25 X 60 84 PT28366084 SPRING ARM (UPPER) 85 PT28366086 STOP BLOCK CUSHION 86 PT28366087 FLAT WASHER 6MM 86 PT28366088 STOP BLOCK 87 PT28366089 CAP SCREW M6-1 X 25 90 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 16 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366094 HINGE PIN 95 PT28366095 CAP SCREW M6-1 X 35 96 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366097 BLADE FLANGE 99 P	76	PT28366076	RUBBER GASKET 47.5 X 2.65 X 52.8
78 PT28366078 CAP SCREW M6-1 X 16 79 PT28366079 TENSION SPRING 80 PT28366080 SET SCREW M6-1 X 10 81 PT28366081 CAP SCREW M8-1.25 X 20 82 PT28366082 CAP SCREW M8-1.25 X 60 83 PT28366083 HEX NUT M8-1.25 X 60 83 PT28366084 SPRING ARM (UPPER) 84 PT28366085 FLAT WASHER 8MM 86 PT28366086 STOP BLOCK CUSHION 87 PT28366087 FLAT WASHER 6MM 88 PT28366088 STOP BLOCK 89 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 25 90 PT28366091 CAP SCREW M6-1 X 16 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366094 HINGE PIN 95 PT28366095 CAP SCREW M6-1 X 35 96 PT28366097 BLADE FLANGE 97 PT28366097 BLADE FLANGE 99<	77	PT28366077	ARBOR SHAFT COVER
79 PT28366079 TENSION SPRING 80 PT28366080 SET SCREW M6-1 X 10 81 PT28366081 CAP SCREW M8-1.25 X 20 82 PT28366082 CAP SCREW M8-1.25 X 60 83 PT28366083 HEX NUT M8-1.25 X 60 84 PT28366084 SPRING ARM (UPPER) 85 PT28366085 FLAT WASHER 8MM 86 PT28366086 STOP BLOCK CUSHION 87 PT28366087 FLAT WASHER 6MM 88 PT28366089 CAP SCREW M6-1 X 25 90 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 16 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366094 HINGE PIN 95 PT28366095 CAP SCREW M6-1 X 35 96 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366099 ROLL PIN 100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102	78	PT28366078	CAP SCREW M6-1 X 16
80 PT28366080 SET SCREW M6-1 X 10 81 PT28366081 CAP SCREW M8-1.25 X 20 82 PT28366082 CAP SCREW M8-1.25 X 60 83 PT28366083 HEX NUT M8-1.25 X 60 84 PT28366084 SPRING ARM (UPPER) 85 PT28366085 FLAT WASHER 8MM 86 PT28366086 STOP BLOCK CUSHION 87 PT28366087 FLAT WASHER 6MM 88 PT28366089 CAP SCREW M6-1 X 25 90 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 16 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366094 HINGE PIN 95 PT28366095 CAP SCREW M6-1 X 35 96 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366090 ROLL PIN 100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH	79	PT28366079	TENSION SPRING
81 PT28366081 CAP SCREW M8-1.25 X 20 82 PT28366082 CAP SCREW M8-1.25 X 60 83 PT28366083 HEX NUT M8-1.25 X 60 84 PT28366084 SPRING ARM (UPPER) 85 PT28366085 FLAT WASHER 8MM 86 PT28366086 STOP BLOCK CUSHION 87 PT28366087 FLAT WASHER 6MM 88 PT28366089 CAP SCREW M6-1 X 25 90 PT28366090 SPRING ARM (LOWER) 91 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 16 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366094 HINGE PIN 95 PT28366095 CAP SCREW M6-1 X 35 96 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366099 ROLL PIN 100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH	80	PT28366080	SET SCREW M6-1 X 10
82 PT28366082 CAP SCREW M8-1.25 X 60 83 PT28366083 HEX NUT M8-1.25 84 PT28366084 SPRING ARM (UPPER) 85 PT28366086 STOP BLOCK CUSHION 86 PT28366087 FLAT WASHER 8MM 86 PT28366088 STOP BLOCK CUSHION 87 PT28366088 STOP BLOCK 88 PT28366089 CAP SCREW M6-1 X 25 90 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 16 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366094 HINGE PIN 95 PT28366095 CAP SCREW M6-1 X 35 96 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366099 ROLL PIN 100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	81	PT28366081	CAP SCREW M8-1.25 X 20
83 PT28366083 HEX NUT M8-1.25 84 PT28366084 SPRING ARM (UPPER) 85 PT28366085 FLAT WASHER 8MM 86 PT28366086 STOP BLOCK CUSHION 87 PT28366087 FLAT WASHER 6MM 88 PT28366088 STOP BLOCK 89 PT28366089 CAP SCREW M6-1 X 25 90 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 16 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366095 CAP SCREW M6-1 X 35 95 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366090 BUL PIN 100 PT28366010 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	82	PT28366082	CAP SCREW M8-1.25 X 60
84 PT28366084 SPRING ARM (UPPER) 85 PT28366085 FLAT WASHER 8MM 86 PT28366086 STOP BLOCK CUSHION 87 PT28366087 FLAT WASHER 6MM 88 PT28366088 STOP BLOCK 89 PT28366089 CAP SCREW M6-1 X 25 90 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 16 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366095 CAP SCREW M6-1 X 35 95 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366100 BLADE GUARD (LOWER) 100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	83	PT28366083	HEX NUT M8-1.25
85 PT28366085 FLAT WASHER 8MM 86 PT28366086 STOP BLOCK CUSHION 87 PT28366087 FLAT WASHER 6MM 88 PT28366088 STOP BLOCK 89 PT28366089 CAP SCREW M6-1 X 25 90 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 16 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366095 CAP SCREW M6-1 X 35 95 PT28366095 CAP SCREW M6-1 X 35 96 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366099 ROLL PIN 100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	84	PT28366084	SPRING ARM (UPPER)
86 PT28366086 STOP BLOCK CUSHION 87 PT28366087 FLAT WASHER 6MM 88 PT28366088 STOP BLOCK 89 PT28366089 CAP SCREW M6-1 X 25 90 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 16 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366094 HINGE PIN 95 PT28366095 CAP SCREW M6-1 X 35 96 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366090 ROLL PIN 100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	85	PT28366085	FLAT WASHER 8MM
87 PT28366087 FLAT WASHER 6MM 88 PT28366088 STOP BLOCK 89 PT28366089 CAP SCREW M6-1 X 25 90 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 16 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366094 HINGE PIN 95 PT28366095 CAP SCREW M6-1 X 35 96 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366090 ROLL PIN 100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	86	PT28366086	STOP BLOCK CUSHION
88 PT28366088 STOP BLOCK 89 PT28366089 CAP SCREW M6-1 X 25 90 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 16 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366095 CAP SCREW M6-1 X 35 95 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366100 BLADE GUARD (LOWER) 100 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	87	PT28366087	FLAT WASHER 6MM
89 PT28366089 CAP SCREW M6-1 X 25 90 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 16 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366095 CAP SCREW M6-1 X 35 95 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366090 BUL PIN 100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	88	PT28366088	STOP BLOCK
90 PT28366090 SPRING ARM (LOWER) 91 PT28366091 CAP SCREW M6-1 X 16 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366095 CAP SCREW M6-1 X 35 95 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366090 BUL PIN 100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	89	PT28366089	CAP SCREW M6-1 X 25
91 PT28366091 CAP SCREW M6-1 X 16 92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366094 HINGE PIN 95 PT28366095 CAP SCREW M6-1 X 35 96 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366009 ROLL PIN 100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	90	PT28366090	SPRING ARM (LOWER)
92 PT28366092 VISE BASE 93 PT28366093 PIVOT SHAFT 94 PT28366094 HINGE PIN 95 PT28366095 CAP SCREW M6-1 X 35 96 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366099 ROLL PIN 100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	91	PT28366091	CAP SCREW M6-1 X 16
93 PT28366093 PIVOT SHAFT 94 PT28366094 HINGE PIN 95 PT28366095 CAP SCREW M6-1 X 35 96 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366099 ROLL PIN 100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	92	PT28366092	VISE BASE
94 PT28366094 HINGE PIN 95 PT28366095 CAP SCREW M6-1 X 35 96 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366090 ROLL PIN 100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	93	PT28366093	PIVOT SHAFT
95 PT28366095 CAP SCREW M6-1 X 35 96 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366099 ROLL PIN 100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	94	PT28366094	HINGE PIN
96 PT28366096 BUSHING PLASTIC 97 PT28366097 BLADE FLANGE 99 PT28366099 ROLL PIN 100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	95	PT28366095	CAP SCREW M6-1 X 35
97 PT28366097 BLADE FLANGE 99 PT28366099 ROLL PIN 100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	96	PT28366096	BUSHING PLASTIC
99 PT28366099 ROLL PIN 100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	97	PT28366097	BLADE FLANGE
100 PT28366100 BLADE GUARD (LOWER) 101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	99	PT28366099	ROLL PIN
101 PT28366101 CAP SCREW M10-1.5 X 25 LH 102 PT28366102 CUTTING LABEL	100	PT28366100	BLADE GUARD (LOWER)
102 PT28366102 CUTTING LABEL	101	PT28366101	CAP SCREW M10-1.5 X 25 LH
	102	PT28366102	CUTTING LABEL

Base

REF	PART #	DESCRIPTION
103	PT28366103	CAP SCREW M8-1.25 X 20
104	PT28366104	VISE BODY (REAR)
105	PT28366105	BALL OILER 6MM PRESS-IN
106	PT28366106	HEX NUT M8-1.25
107	PT28366107	RUBBER SEAL
108	PT28366108	VISE JAW BEVEL (LEFT)
109	PT28366109	CAP SCREW M6-1 X 10
110	PT28366110	SPLASH GUARD
111	PT28366111	RIVET 2 X 6MM
112	PT28366112	SPLASH GUARD SUPPORT
113	PT28366113	CAP SCREW M6-1 X 16
114	PT28366114	RUBBER GASKET
115	PT28366115	SCALE PLATE
116	PT28366116	VISE BASE
117	PT28366117	ANGLE INDICATOR PLATE
118	PT28366118	RIVET 2 X 6MM
119	PT28366119	HEX NUT M8-1.25
120	PT28366120	CAP SCREW M8-1.25 X 20
121	PT28366121	VISE JAW BEVEL (RIGHT)
122	PT28366122	BALL OILER 6MM PRESS-IN
123	PT28366123	VISE BODY (FRONT)
124	PT28366124	LEADSCREW COVER
125	PT28366125	FLAT WASHER 4MM
126	PT28366126	CAP SCREW M47 X 10
127	PT28366127	VISE GUIDE SHAFT

REF	PART #	DESCRIPTION
128	PT28366128	VISE LEADSCREW
129	PT28366129	KEY 5 X 5 X 10
130	PT28366130	FIXED HANDLE 12 X 130, M8-1.25 X 10
131	PT28366131	HANDWHEEL HUB COVER
132	PT28366132	HEX NUT M12-1.75 THIN
133	PT28366133	HANDWHEEL HUB
134	PT28366134	EYE BOLT M10-1.5 X 20
135	PT28366135	ROLL PIN 8 X 20
136	PT28366136	MITER BASE
137	PT28366137	SPACER 26 ID X 60 OD
138	PT28366138	STUD-UDE M20-2.5
139	PT28366139	TENSION NUT M20-2.5
140	PT28366140	HEX NUT M6-1
141	PT28366141	FIXED HANDLE 12X 260, M12-1.75 X 15
142	PT28366142	CAP SCREW M6-1 X 28
143	PT28366143	FLAT WASHER 8MM
144	PT28366144	LOCK WASHER 8MM
145	PT28366145	CAP SCREW M8-1.25 X 35
146	PT28366146	MACHINE BASE W/COOLANT RESERVOIR
147	PT28366147	PUMP SONGLONG SL-401 120V 15W
148	PT28366148	COOLANT HOSE 12 X 610MM
149	PT28366149	SET SCREW M6-1 X 10
150	PT28366150	MESH FILTER
151	PT28366151	HOSE CLAMP 12MM

REF	PART #	DESCRIPTION
152	PT28366152	E-STOP BUTTON ZB2-BE102C
153	PT28366153	TRANSFORMER 115V AC IP 24V AC OP
154	PT28366154	ROTARY SWITCH CANSEN LW30-20
155	PT28366155	CONTACTOR TELEMECANIQUE 115V
156	PT28366156	R CAPACITOR 65UF 250V 1-1/2" X 3-1/4"
157	PT28366157	S CAPACITOR 500UF 125V 1-1/2" X 3-1/4"

REF PART # DESCRIPTION

158	PT28366158	STRAIN RELIEF TYPE-3 M16-1.5
159	PT28366159	POWER CORD 3W 14G 72" 5-15P
160	PT28366160	STRAIN RELIEF TYPE-4 AD13
161	PT28366161	CONDUIT 13 X 610
162	PT28366162	AVIATION PLUG 2 PIN

PART #	DESCRIPTION
PT28366163	BIOHAZARD LABEL
PT28366164	UNPLUG LABEL
PT28366165	MODEL NUMBER LABEL
PT28366166	BLADE FINGERS LABEL
PT28366167	ELECTRICITY LABEL
	PT28366163 PT28366164 PT28366165 PT28366166 PT28366166 PT28366167

REF	PART #	DESCRIPTION
168	PT28366168	GRIZZLY.COM LABEL
169	PT28366169	READ MANUAL LABEL
170	PT28366170	MACHINE ID LABEL
171	PT28366171	EYE PROTECTION LABEL

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.

ivai	ne		
Stre	et		
City		_ State	Zip
Pho	one #	_ Email	
Moo	del #	_ Order #	Serial #
The bett	following information is given or er products and services. Of co t	n a voluntary basis. It will be used for ma u rse, all information is strictly confide	arketing purposes to help us develop ential.
1.	How did you learn about us? Advertisement Card Deck	Friend Website	Catalog Other:
2.	Which of the following maga	zines do you subscribe to?	
	 Cabinetmaker & FDM Family Handyman Hand Loader Handy Home Shop Machinist Journal of Light Cont. Live Steam Model Airplane News Old House Journal Popular Mechanics 	 Popular Science Popular Woodworking Precision Shooter Projects in Metal RC Modeler Rifle Shop Notes Shotgun News Today's Homeowner Wood 	 Wooden Boat Woodshop News Woodsmith Woodwork Woodworker West Woodworker's Journal Other:
3.	What is your annual househo \$20,000-\$29,000 \$50,000-\$59,000	bld income? \$30,000-\$39,000 \$60,000-\$69,000	\$40,000-\$49,000 \$70,000+
4.	What is your age group? 20-29 50-59	30-39 60-69	40-49 70+
5.	How long have you been a v 0-2 Years	voodworker/metalworker? 2-8 Years8-20 Yea	ars20+ Years
6.	How many of your machines	or tools are Grizzly? 3-56-9	10+
7.	Do you think your machine re	epresents a good value?	YesNo
8.	Would you recommend Grizz	rly Industrial to a friend?	YesNo
9.	Would you allow us to use yo Note: <i>We never use names</i>	our name as a reference for Grizzly of more than 3 times.	customers in your area? YesNo
10.	Comments:		

FOLD ALONG DOTTED LINE

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

Մեհեսենենեներինեներիներիներիների

FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name		
Street		
City	_State	_Zip

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY AND RETURNS

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

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

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

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

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

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

Buy Direct and Save with Grizzly[®] – Trusted, Proven and a Great Value! ~*Since 1983*~

Visit Our Website Today For Current Specials!

