

Grizzly *Industrial, Inc.*®

MODEL G0629 52" COMBINATION 3-IN-1 SHEET METAL MACHINE OWNER'S MANUAL



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

#CR11323 PRINTED IN CHINA

 **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.

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INTRODUCTION

Foreword

We are proud to offer the Model G0629 Combination 3-in-1 Sheet Metal Machine. This machine is part of a growing Grizzly family of fine metalworking machinery. When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

The specifications, drawings, and photographs illustrated in this manual represent the Model G0629 when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly. For your convenience, we always keep current Grizzly manuals available on our website at www.grizzly.com. Any updates to your machine will be reflected in these manuals as soon as they are complete. Visit our site often to check for the latest updates to this manual!

Contact Info

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

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

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

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

Functional Overview

This Combination 3-in-1 Sheet Metal Machine offers the metal worker the following three separate metal-forming tools, which are combined into one machine.

Slip Roll

Three heavy steel rollers joined by gears and adjusted by hand knobs allow the user to create bends and cylinders out of sheet metal up to 20 gauge. The minimum diameter of a cylinder that can be formed is 2".

The sheet metal is first placed between the top and bottom rollers. The upper roller is then adjusted to the thickness of the workpiece. The workpiece is then fed through the top and bottom rollers and into the rear roller. By turning the radius adjustment knobs, the rear roller can be raised to increase or decrease the diameter of a bend. Small diameter tubing and wire can be shaped using the wire channels located on one end of the top and bottom rollers.

Brake

This brake is designed to fold boxes, pans, or trays from sheet metal up to 20 gauge. A number of fingers of different widths can be arranged in a variety of combinations to make bends of varying widths. The minimum reverse bend is 1/2". Movable fingers also permit the sides of a box to be bent, without interfering with the sides that have previously been bent.

Shear

The shear cuts 20 gauge sheet metal with a fixed and moving blade that is controlled by a work lever mounted on either side of the machine. From left to right, the upper blade moves past the lower fixed blade creating a shearing action. An adjustable stop can set straight cuts or create angled cuts. The extendable work lever allows for extra leverage when making a cut.



Identification

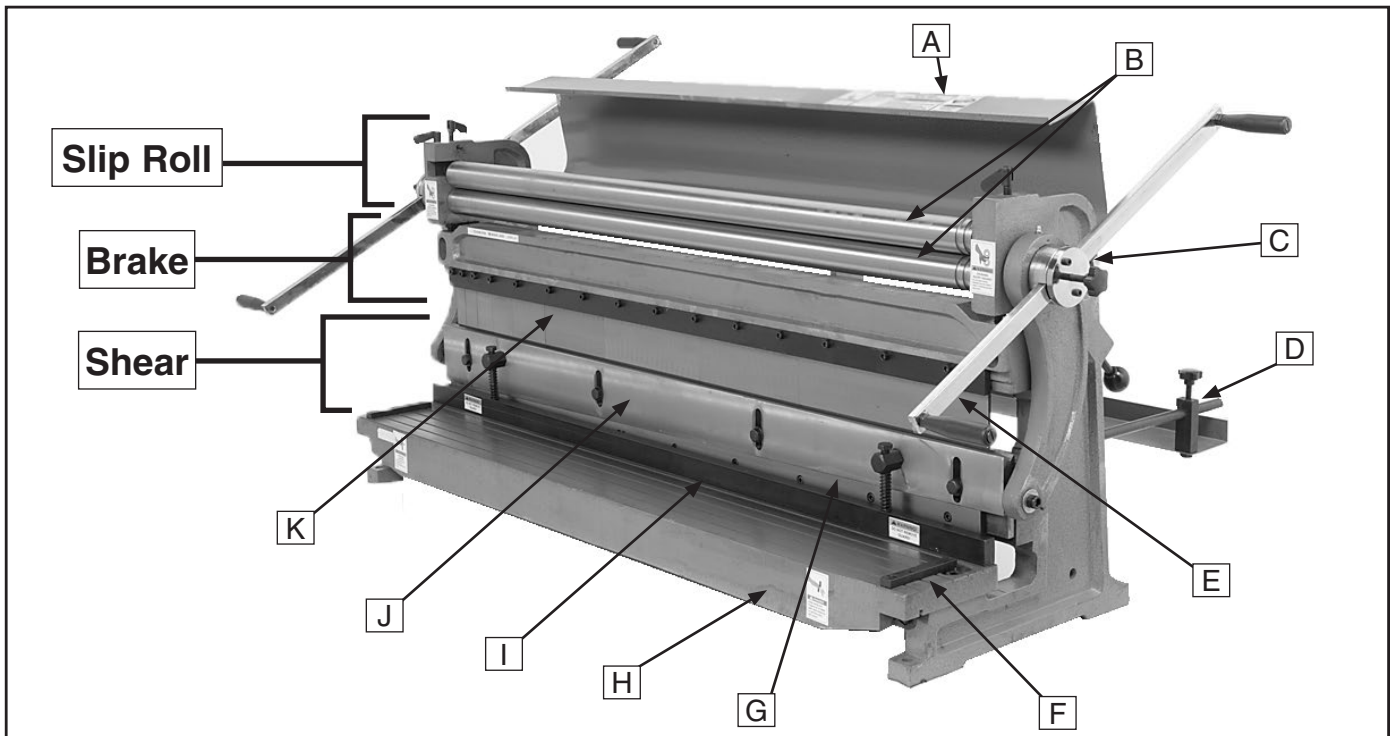


Figure 1. Identification.

- | | |
|---|--|
| A. Slip Roll Cover | G. SK4 Steel Shear Blade |
| B. Slip Roll Rollers | H. Shear Table |
| C. Adjustable Work Lever Hub | I. Shear Hold Down and Finger Guard |
| D. Shear and Brake Adjustable Stop | J. Brake Finger Receiver |
| E. Work Lever | K. Brake Fingers |
| F. Shear Guide | |





MACHINE DATA SHEET

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

MODEL G0629 52" 3-IN-1 SHEET METAL MACHINE

Product Dimensions:

Weight..... Not Available lbs.
 Width (side-to-side) x Depth (front-to-back) x Height..... 69-1/2 x 28 x 34 in.
 Footprint (Length x Width)..... 55 x 18 in.

Shipping Dimensions:

Type..... Wood Crate
 Content..... Machine
 Weight..... 791 lbs.
 Length x Width x Height..... 21 x 67 x 29 in.
 Must Ship Upright..... Yes

Main Specifications:

Capacities

Maximum Width..... 52 in.
 Maximum Thickness Mild Steel..... 20 Gauge
 Minimum Reverse Bend..... 1/2 in.
 Maximum Height of Pan/Box Brake Sides..... 1-3/4 in.
 Slip Roll Minimum Cylinder Diameter..... 2 in.
 Slip Roll Roller Diameter..... 2 in.
 Slip Roll Wire Sizes..... 1/4, 5/16, 3/8 in.

Construction

Base..... Cast Iron
 Brake..... Precision Ground Steel, Hardened Edge
 Frame..... Cast Iron
 Hold-Down Clamp..... Spring-Loaded Cast I
 Shear Table..... Precision Ground Cast Iron
 Shear Hold-Down Clamp..... Cast Iron
 Table..... Cast Iron
 Shear Blades..... Precision Ground SK-4 or Better Hardened Steel
 Shear Blade Type..... Reversible

Other Specifications:

Country of Origin China
 Warranty 1 Year
 Approximate Assembly & Setup Time 30 Minutes
 Serial Number Location ID Label on Front of Machine
 ISO 9001 Factory No
 Certified by a Nationally Recognized Testing Laboratory (NRTL) No

Features:

- Shear Table Front Guides & Adjustable Rear Stops
- Rear Extension Arms
- Powder Coated Paint
- All Steel Construction

The information contained herein is deemed accurate as of 8/15/2017 and represents our most recent product specifications. Due to our ongoing improvement efforts, this information may not accurately describe items previously purchased.



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.



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



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

NOTICE

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

WARNING

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.



WARNING

Additional Safety for Combination 3-in-1 Sheet Metal Machines

- 1. OVERLOADING BRAKE.** Overloading this tool can cause injury from flying parts. Do not exceed the capacities specified on Page 4.
- 2. USAGE.** Do not use the brake as a press or a lever-operated crushing tool. Never use this machine without fully understanding its limitations.
- 3. METAL EDGES.** Always chamfer and deburr sharp sheet metal edges before bending or rolling sheet metal. Sharp edges can cut your fingers to the bone.
- 4. PINCHING.** Always keep hands away from the rollers, clamping fingers, and the shear blade. These areas present a severe pinching and amputation hazard.
- 5. GLOVES, GLASSES, AND BOOTS.** Always wear leather gloves, approved safety glasses, and heavy leather boots with extra toe protection when using this tool.
- 6. TOOLS IN POOR CONDITION.** Inspect this combination machine for any cracked linkage, levers, or loose fasteners. Correct any problems before use.
- 7. GUARDS.** Keep all guards in place and in working order.
- 8. FOOTING.** Always have a secure footing when using this combination machine.
- 9. OPERATOR POSITION.** Keep all body parts out of the way of all moving parts. Serious pinches and cuts could occur.
- 10. PROPER USE.** Only use the shear for the purpose it was designed. DO NOT cut round stock, cable, chain, or hardened metals.
- 11. BLADE ADJUSTMENTS AND MAINTENANCE.** Always keep blades properly adjusted and sharp.
- 12. OVERLOADING.** Never use any sort of cheater pipe on the end of the work lever or handle, or you may overload the machine.
- 13. EXPERIENCING DIFFICULTIES.** If at any time you are experiencing difficulties performing the intended operation, STOP using the tool and contact our Technical Support at (570) 546-9663, or ask a qualified expert how the operation should be performed.

WARNING

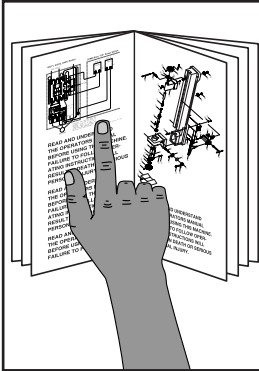
Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored,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

CAUTION

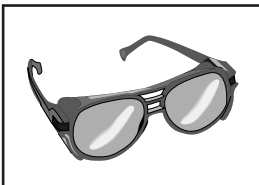
No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or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



SECTION 2: 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 heavy. Get lifting help to reduce the risk of injury.

Set Up Items Needed

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

Description	Qty
• Forklift or Hoist (1000 lb. min. capacity).....	1
• Lifting Straps (1000 lb. min. capacity)	2
• Safety Glasses (for each person).....	1
• Shop Rags.....	As Needed
• Cleaning Solvent	As Needed
• Standard Feeler Gauge Set	1
• Medium Weight Paper.....	1-2 Sheets
• Hex Wrench 6mm.....	1
• Wrench 17mm	1
• Wrench 20mm	1
• Wrench 24mm	1

Unpacking

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

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.* When you are completely satisfied with the condition of your shipment, inventory the contents.



Inventory

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

Box 1: (Figure 2)	Qty
A. Stop Flange.....	1
B. Hex Nuts M16-2 (Stop Rods)	2
C. Stop Rods.....	2
D. Stop Blocks	2
E. Flat Washers 12mm (Stop Blocks)	2
F. Hex Bolts M12-1.75 x 20 (Stop Blocks).....	2
G. Work Lever 39½"	1
H. Work Lever 27½"	1
I. Handles	4
J. Knobs (Stop Blocks/Work Levers).....	4

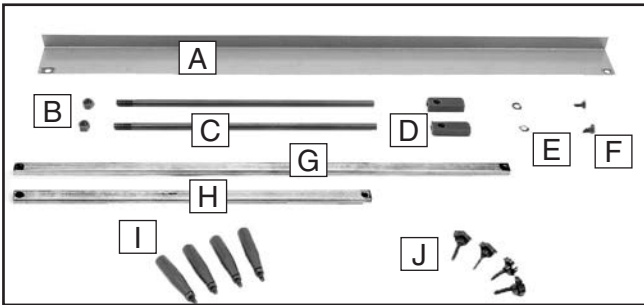
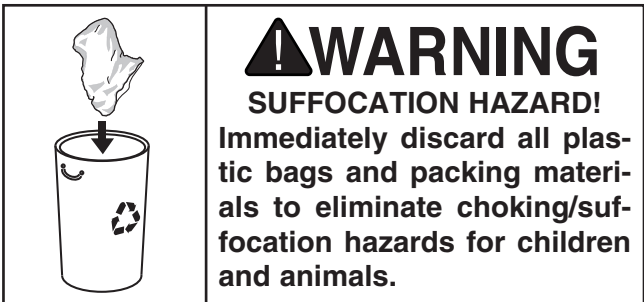


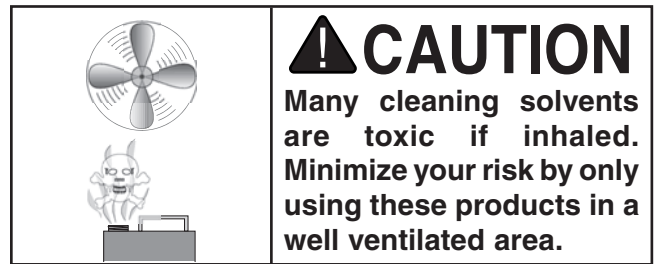
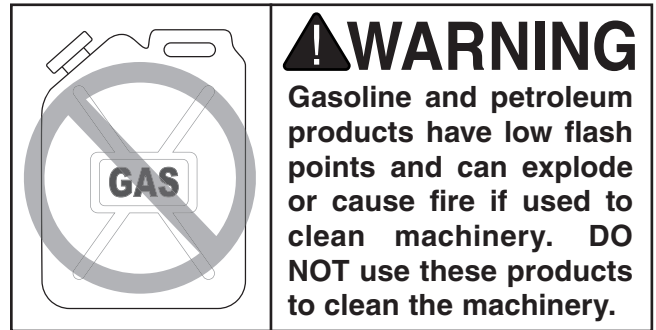
Figure 2. Small item inventory.

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



Clean Up

The unpainted surfaces are coated with a waxy oil to prevent corrosion during shipment. Remove this protective coating with a solvent cleaner or degreaser, such as shown in **Figure 3**. For thorough cleaning, some parts must be removed as covered in **Assembly** starting on **Page 12**. Avoid chlorine-based solvents, such as acetone or brake parts cleaner that may damage painted surfaces. Always follow the manufacturer's instructions when using any type of cleaning product.



G2544—Solvent Cleaner & Degreaser

H9692—Orange Power Degreaser

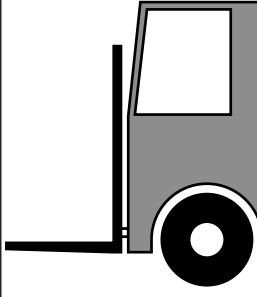
Great products for removing shipping grease.



Figure 3. Cleaner/degreasers available from Grizzly.



Lifting

	<p>⚠️ WARNING The Model G0629 is a heavy machine. Serious personal injury may occur if safe moving methods are not used. To be safe, get assistance and use power equipment to move the shipping crate and remove the machine from the crate.</p>
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- If you are unsure of how to lift this equipment safely, consult a qualified professional.
- When lifting the machine, make sure the weight is supported evenly with two or more lifting straps or chains at both ends that can hold at least 1000 lbs. each.
- Make sure both straps are connected as shown in **Figure 4** and that the sheet metal cover is open and clear of the lifting straps.



Figure 4. Combination machine must be supported evenly by two lifting straps.

Site Considerations

Workbench Load

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

Placement Location

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your new machine. See **Figure 5** for the minimum working clearances.

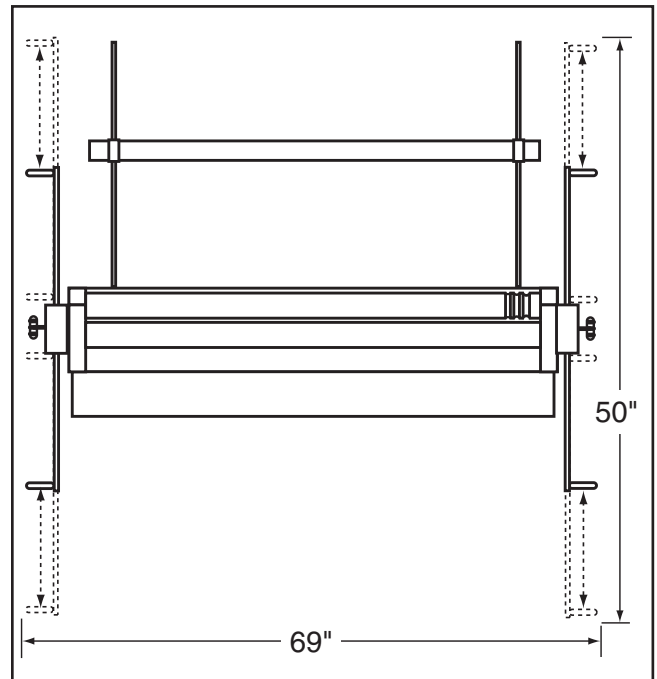
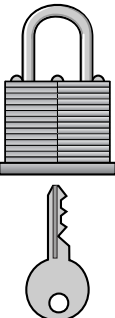


Figure 5. Minimum working clearances.

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

Mount this machine to a sturdy workbench through the holes in the base.

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

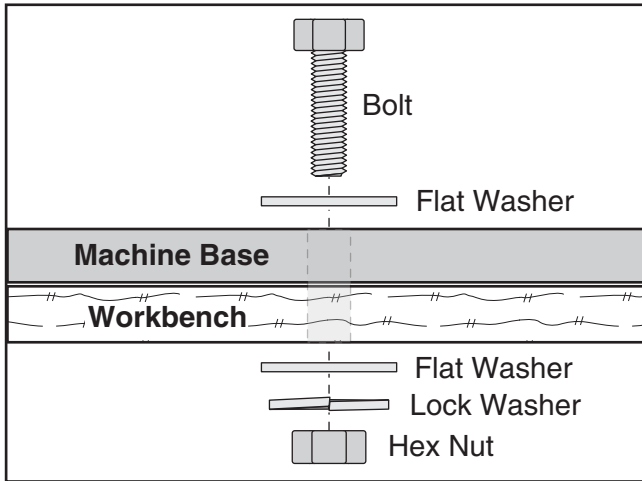


Figure 6. Example of a through mount setup.

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

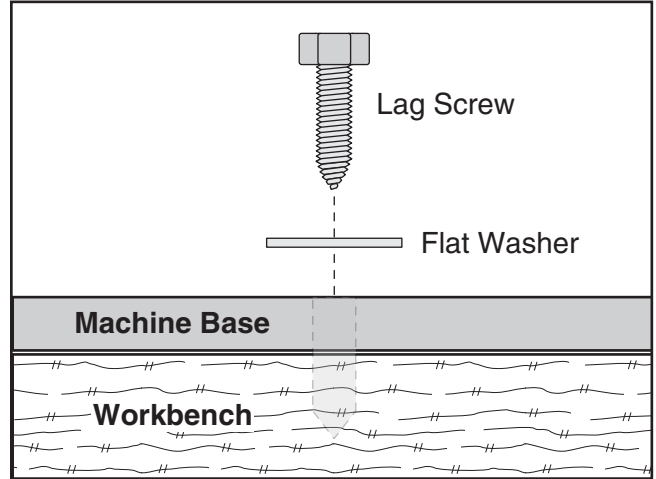


Figure 7. Example of a direct mount setup.



Setup

The Model G0629 comes from the factory almost fully assembled. However, some disassembly is required to remove storage grease and to relubricate the cleaned parts.

To set up your machine:

1. Insert both work levers into the hubs and secure in place with two lock knobs (**Figure 8**).

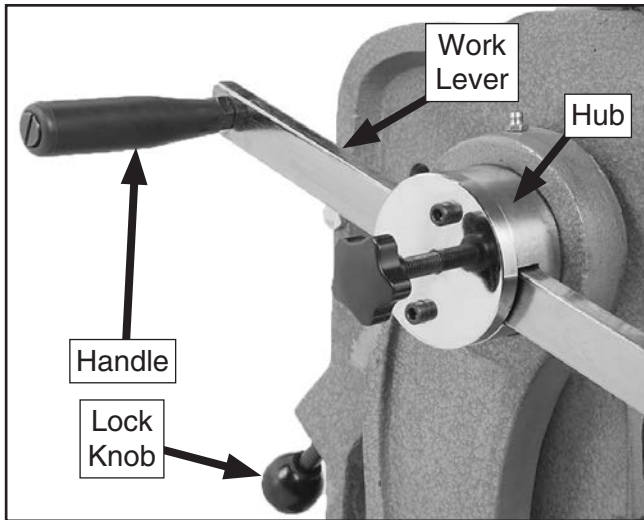


Figure 8. Work lever installation.

2. Using a 17mm wrench, install four work lever handles onto both work levers (**Figure 8**).
3. Thread one M16-2 hex nut onto each stop rod and thread both rods into the lower holes of the outfeed side of the casting (**Figure 9**).

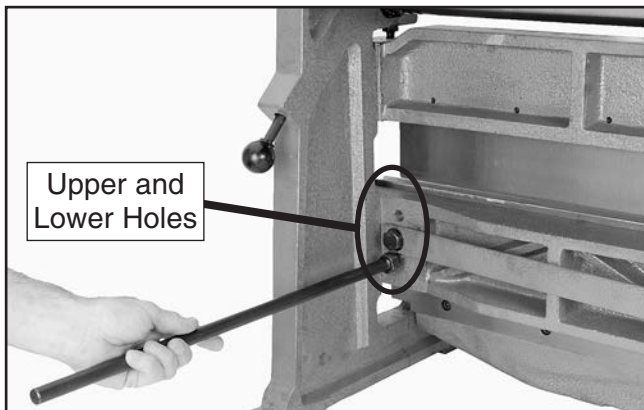


Figure 9. Stop rod installation in lower hole.

4. Using the 17mm wrench, tighten both M16-2 hex nuts to lock the stop rods in place.

Note: In the current position where the stop flange is pointing up, the stop assembly is used for the brake. If the flange is inverted to point down, the stop assembly is used for the shear.

5. Fasten both stop blocks to the stop flange with the two M12-1.75 x 20 hex bolts, both flat washers, and install the stop blocks onto the stop rods as shown in **Figure 10**.

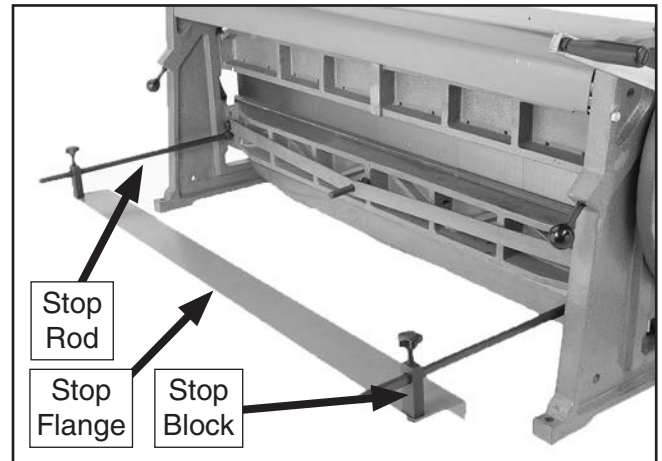


Figure 10. Stop assembly installation.

6. Using the work lever, position the finger receiver to the uppermost position (**Figure 11**).

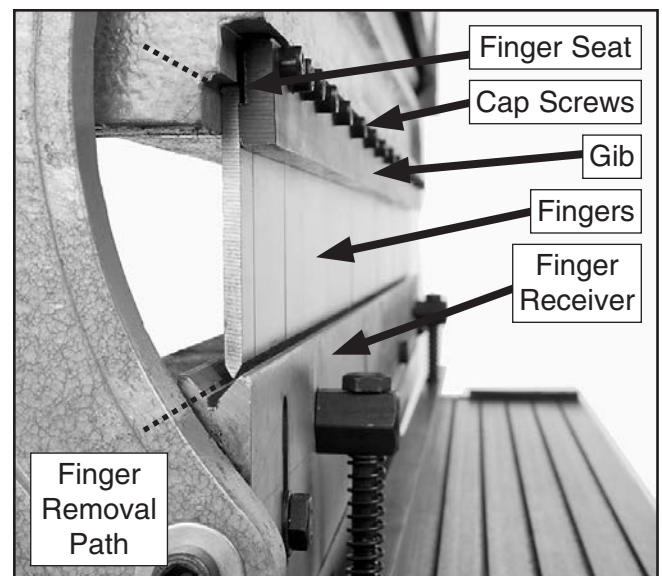


Figure 11. Removing fingers.



7. Using a 6mm hex wrench, loosen all of the cap screws that hold the gib (Figure 11). Then, one at a time, slide the fingers out.
8. Clean all fingers, the finger gib, and finger seat in the casting with mineral spirits. Dry and relubricate all with any high-quality anti-rust lubricant like what is shown in **Accessories** on **Page 24, Figure 36**.
9. Position the gib and finger-tighten the cap screws. The goal is to be able to slide the fingers back into the finger receiver without the fingers falling out.
10. Install the fingers so the widest fingers are to the right of the machine. It is okay if a gap exists (Figure 12) between the finger and the finger seat at this time. The gap will help with finger installation.

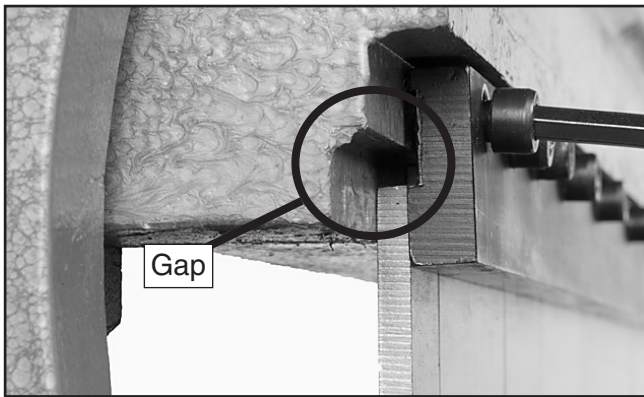


Figure 12. Installing fingers.

11. Place a flat wooden plank that is the full length of the brake on the finger receiver (Figure 13).

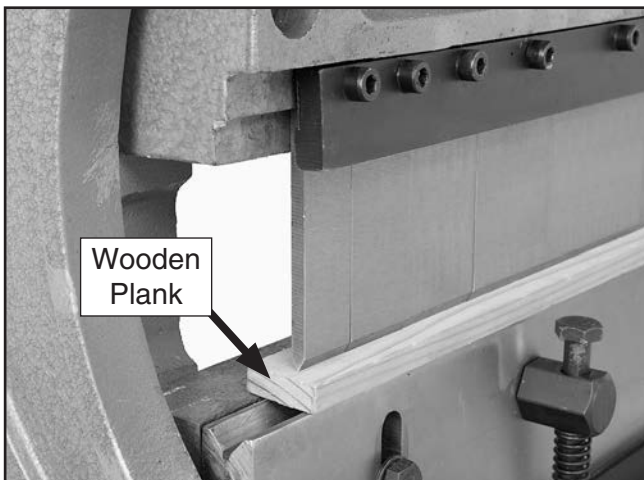


Figure 13. Seating fingers.

12. Use the work lever to move and hold the receiver upward to force the wooden plank against the fingers and create a minor indent in the wood. At this point the fingers will have slid upward and seated in the finger grooves.
13. While holding the fingers in the seated position (Figure 14) with the work lever, tighten all the cap screws.



Figure 14. Seated fingers.

14. Remove the wooden plank. Before putting this machine into service, complete all lubrication procedures in the **Maintenance** and **Service** sections.



SECTION 3: OPERATIONS

General Slip Roll Operations

The slip roll is used to form mild sheet metal up to 20 gauge into arcs and cylinders. Three steel rollers joined by gears at the right end of the machine are driven by the work lever. The orientation between these three rollers is adjusted by set of leaf bolts and knobs.

The top driven roller is adjustable and the bottom roller is fixed. The top roller is adjusted so it slightly pinches the workpiece between itself and the bottom roller. This pinch or grab helps feed the workpiece into the rear roller without slipping.

The rear idler roller is also an adjustable roller. This roller is responsible for creating the final bend diameter of the sheet metal. The closer the roller is adjusted to the top roller, the smaller the diameter the final roll of metal will be. This slip roll is not designed to roll bent metal into flat sheets.

The sheet metal is fed through the top and bottom rollers and against the rear roller. By turning the diameter adjustment knobs, the rear roller can be raised or tilted to form arcs, cones, or cylinders. The minimum cylinder diameter is 2".

Small diameter tubing and wire can be shaped using the wire channels located on one end of the lower and rear roller.

The top roller is easily removed to allow unloading of cylindrical-shaped final workpieces.

Always make certain that the workpiece and rollers are free of grit, metal shavings, stones, and other items that may damage the workpiece and the slip rolls.

Keep the slip rolls and mechanisms well lubricated during and after use.

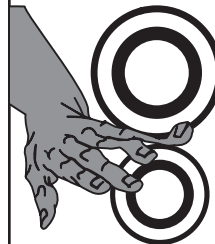
WARNING

Damage to your eyes, hands and feet could result from using this machine without proper protective gear. Always wear safety glasses, leather gloves, and steel toe footwear when operating this machine.



CAUTION

The rollers of this machine present a pinching hazard. Make sure no body part or clothing is near the area between the rollers. Failure to follow this warning may result in fingers, hair, or clothing being pulled into the machine, causing personal injury.



NOTICE

If you have never used this type of machine or equipment before, **WE STRONGLY RECOMMEND** that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.



Rolling Cylinders

The slip roll can be used to easily and accurately create cylinders.

If you know the diameter of the cylinder you want to create, use the formula below to calculate the length of material needed.

$$C = \pi D$$

C=Circumference
(Length of Material Needed)

π =Pi (Approximately 3.142)

D=Diameter

Example: Suppose you want to create a 6" diameter cylinder. You would use the above formula as follows:

$$C = \pi D$$
$$C = (3.142) \times 6"$$
$$C = 18.852"$$

The result of 18.852" indicates that you need to start with a piece of sheet metal that is approximately 18.852" in length in order to create a 6" diameter cylinder.

You can use the slip roll to create a bend with the correct radius so that the two ends meet, forming a 6" diameter cylinder (**Figure 15**).

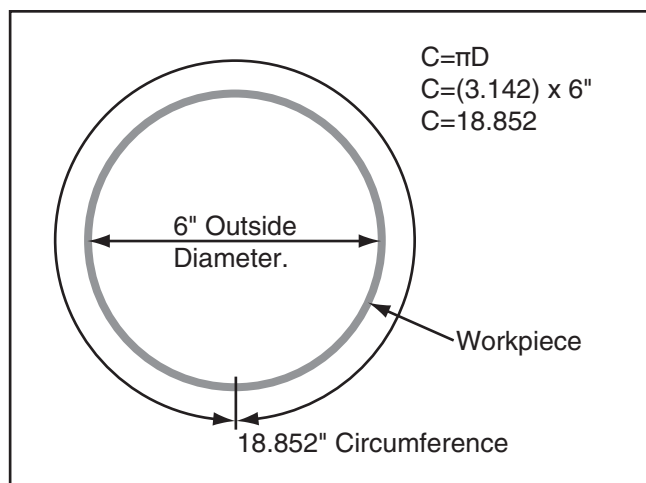


Figure 15. Calculating circumference example.

Rolling Sheet Metal

⚠ CAUTION

Depending on the size and shape of your workpiece, you may need assistance to support the workpiece as it exits the machine. Failure to adequately support the workpiece may result in the workpiece falling, causing crushing injuries.

No single positioning will create the same curve on all materials, due to the many variations among sheet metal types. Rolling sheet metal to achieve an exact radius is a trial-and-error process.

To avoid pitted sheet metal and damaged roller surfaces, make sure the rollers and the workpiece are clean and free of grit and any foreign material before every use.

To avoid creating coned workpieces, always adjust both ends of the rolls to keep the rolls parallel to one another.

Note: In the following steps, adjustments are to be made at both ends of the rollers regardless if just one adjustment location is mentioned in the figures and steps.

To use the slip roll:

1. Clean and de-burr the workpiece, and open the slip roll cover (**Figure 16**).



Figure 16. Slip roll preparation.



2. Unscrew the diameter adjustment knobs until the rear roller is backed-off completely (**Figure 17**).

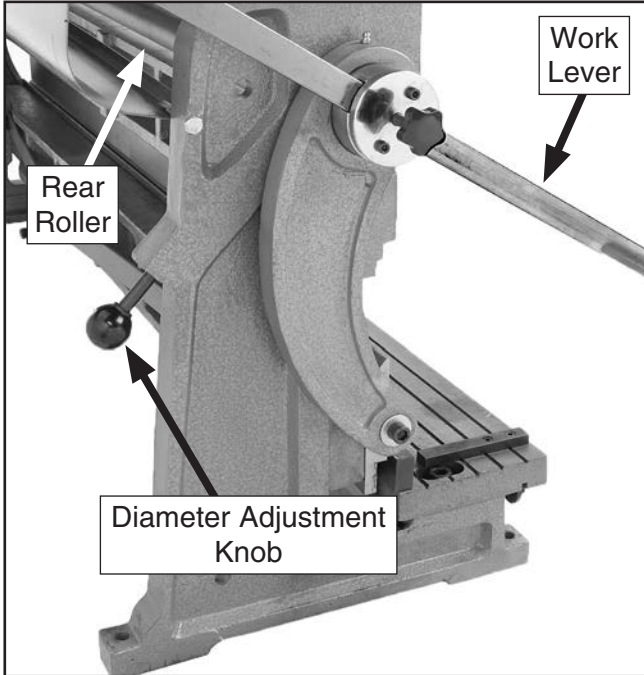


Figure 17. Adjustment knobs.

3. Unscrew the thickness adjustment leaf bolt until the gap (**Figure 18**) between the leaf bolt and the bushing is wider than the thickness of the workpiece.

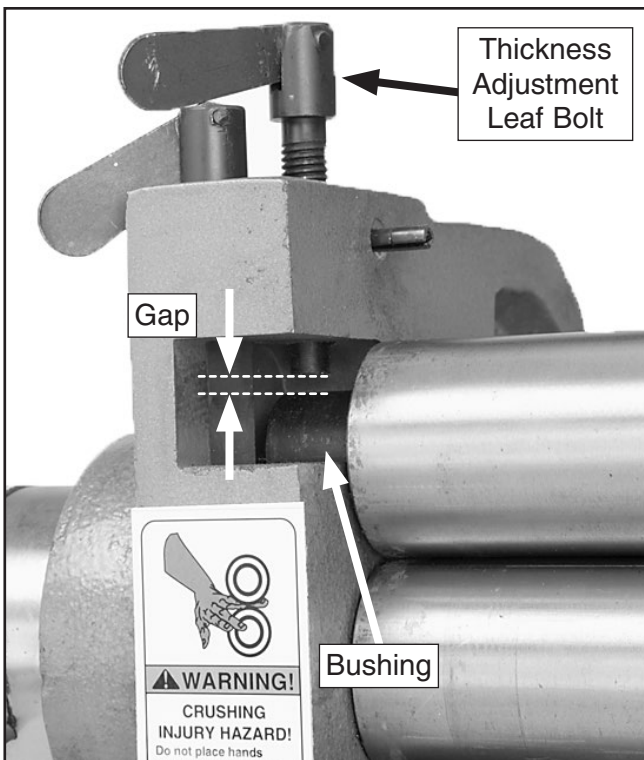


Figure 18. Backing off the top roller.

4. While rotating the work lever, feed the sheet metal between the top and bottom rollers (**Figure 19**) until approximately 1-inch protrudes through the other side.

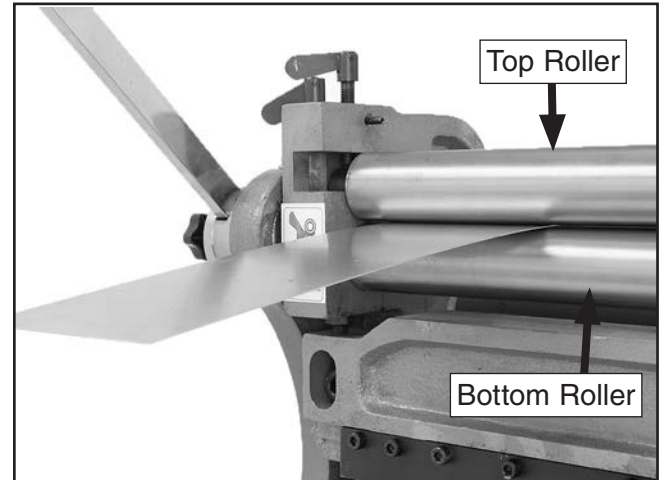


Figure 19. Sheet metal inserted between the top and bottom rollers.

5. With the metal positioned between the top and bottom rollers, tighten the thickness adjustment leaf bolts until they are snug.
6. Tighten the diameter adjustment knobs to raise the rear roller a few millimeters to get your initial bend setting.

Note: *The heavier the gauge of metal, the less aggressively you can adjust the rear roller. With rigid metals such as aluminium, you may have to leave the rear roller at the lowest position and make more rolling repetitions to achieve the needed bend radius.*

Tip: *To ease feeding the workpiece past the third roller on the first rolling operation, use the brake first to make a slight initial bend in the workpiece, so the workpiece does not butt up against the rear roller, but rather rides up and over the roller.*



7. Rotate the work lever to feed the sheet metal through the rollers (**Figure 20**). Often after the first feed is made, an initial flat is created (**Figure 21**) at the leading tip of the workpiece.

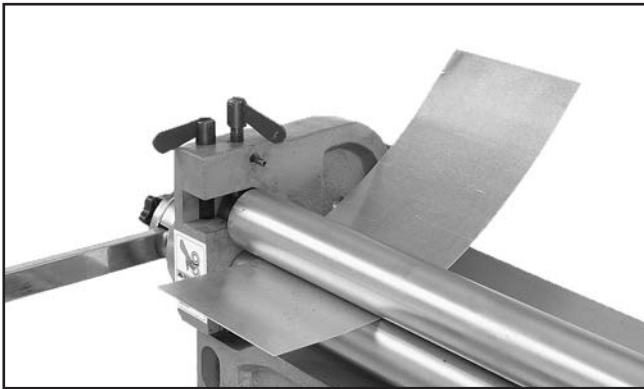


Figure 20. First rolling operation.

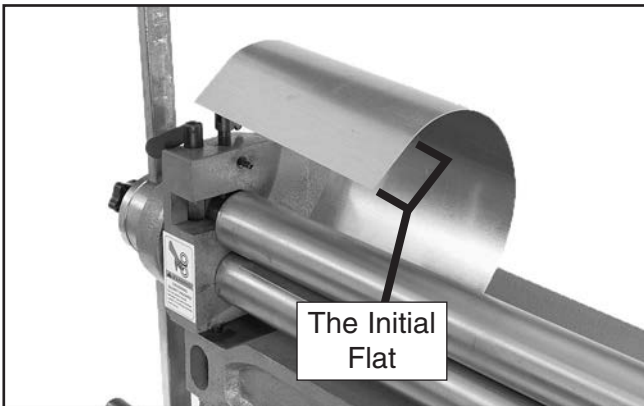


Figure 21. An initial flat.

8. To remove this flat, rotate the workpiece and feed it in from the tail end this time (**Figure 22**). This step may have to be repeated a few times depending on the final radius required.



Figure 22. Repositioning workpiece to remove the initial flat.

9. In small increments, tighten the radius adjustment knobs for each and every subsequent pass until the needed bend radius or cylinder diameter is reached.

Note: To create cones, adjust the rear roller on one end only.

10. To remove a cylinder, loosen the thickness adjustment leaf bolt, and rotate the lock leaf pin so the flat in the pin (**Figure 23**) allows the end of the top roller to be removed.

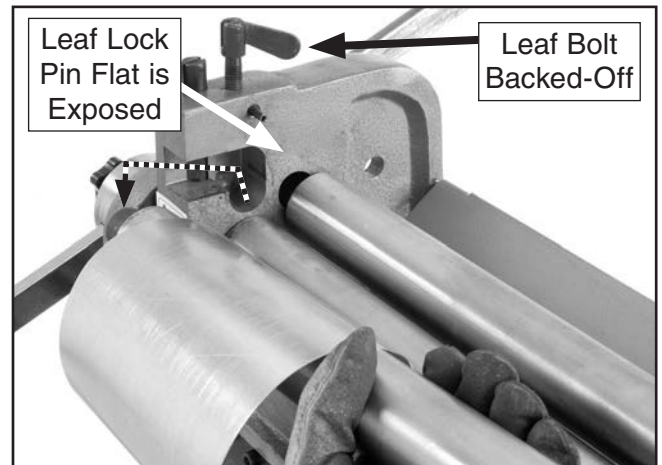


Figure 23. Cylinder removal.

CAUTION

We recommend getting assistance to support the top roller while removing cylinders. Failure to adequately support the top roller may result in the roller falling, causing crushing injuries.

11. While you hold the end of the roller outward (**Figure 23**), and the other end is pressed in the machine, have an assistant slide the cylinder off. The roller is heavy, so do not try this alone.



Rolling Wire Rings

The Model G0629 can be used to shape wires, rods, and small-diameter tubing. The wire grooves can also be used when rolling sheet metal that has a wire bead at one end.

To use the wire grooves:

1. Place your workpiece into the smallest possible groove on the wheel. The three sizes are $\frac{1}{4}$ ", $\frac{5}{16}$ ", and $\frac{3}{8}$ " (**Figure 24**).

Example: Suppose you want to bend a piece of $\frac{1}{4}$ " rod. Though it would fit in any of the three grooves, you would use the $\frac{1}{4}$ " groove since it is the smallest possible groove that the rod will fit into.

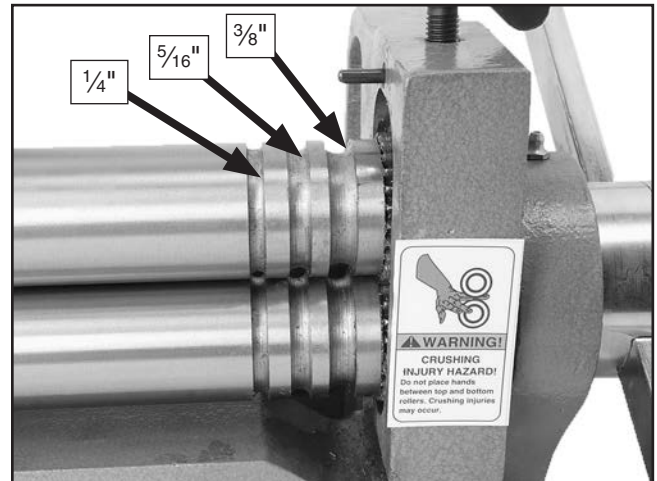


Figure 24. Wire grooves.

2. Process the material through the machine as described in **Rolling Sheet Metal** on **Page 15**.

—If you want to make a loop of wire, follow the instructions in **Rolling Cylinders** on **Page 15**.



General Brake Operations

The Model G0629 52" is a bench-mounted brake that bends mild sheet metal up to 20 gauge thick and 52" wide.

To create a bend, the user places the sheet metal on top of the finger receiver. The receiver is then rased so the tips of the fingers line up with the bend line drawn or scribed into the metal. If needed the rear stop can be adjusted so repeated bends at the same location can be made. The work lever is moved and the finger receiver moves upward causing the fixed fingers to push the sheet metal downward into the finger receiver V-groove. To remove the workpiece, the user lowers the finger receiver and slides the workpiece out from the front of the machine.

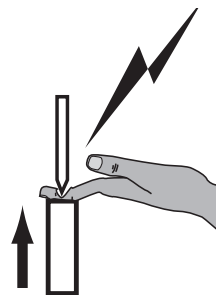
Note: When creating boxes, the fingers can be removed for clearance to allow all four box flanges to be bent upward.

⚠ WARNING

Damage to your eyes, hands and feet could result from using this machine without proper protective gear. Always wear safety glasses, leather gloves, and steel toe footwear when operating this machine.







⚠ WARNING

The bending brake on this machine presents a pinching hazard. Make sure no body part or clothing is near the area where metal bending occurs. Failure to follow this warning may result in fingers being crushed or severed, leading to severe personal injury.

NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

Bending Allowance

To bend metal objects accurately, you need to consider the total length of each bend, especially when more than one bend is required. This is called bend allowance.

Subtract bend allowance from the sum of the workpiece outside dimensions to obtain the overall length and width of the blank needed to make a particular part.

Exact allowances can only be obtained by trial due to differences in sheet metal hardness, whether the bend is with or across the grain, and difficulties in making an exact bend radius. Bend allowances accurate enough for average use can be found in metalworking handbooks or in the chart in **Figure 25**.

Typical 90° Bend Allowances				
Mild Steel, Half-Hard Aluminum, Brass, and Copper.				
Gauge	Inch	1-Bend	2-Bends	3-Bends
20	0.037	0.057	0.114	0.171
22	0.030	0.046	0.092	0.138
24	0.024	0.037	0.074	0.112
26	0.018	0.028	0.056	0.084
28	0.015	0.023	0.046	0.070
30	0.012	0.018	0.036	0.054

Figure 25. Bend allowance chart.



Bending Sheet Metal

⚠️ WARNING

Do not operate the Model G0629 unless it has been securely clamped in place or mounted to the floor, or it could tip over on you, causing a severe injury!

Bending operations require the fingers to be in line with the finger receiver. When moved, the fingers are held stationary while the work lever raises the workpiece and finger receiver into the tips of the fingers. As a result a bend occurs. If a pan or box bend is desired, choose a finger or a selection of fingers that are as close as possible to the length of the pan or box side lengths. Remove the fingers that may interfere with the bend.

Tip: *During a bending operation, the fingers push the sheet metal down into the groove of the finger receiver. As the sheet metal slides down into the groove, scoring may occur. To avoid these marks, keep the receiver free of burrs, and adhere a strip of tape on the workpiece underside along the location to be bent.*

To perform a basic bending operation:

1. Draw or scribe a line in the sheet metal where the bend is to take place.
2. Use the work handle to lower the finger receiver and insert the metal between the fingers and the receiver (**Figure 26**).



Figure 26. Inserting workpiece.

3. Line up the bend line that is drawn or scribed into the sheet metal with the tips of the fingers (**Figure 27**).

Note: *For long workpieces or for quick repeatability of bends in multiple pieces of sheet metal, the adjustable stop can be used for speedy alignment.*

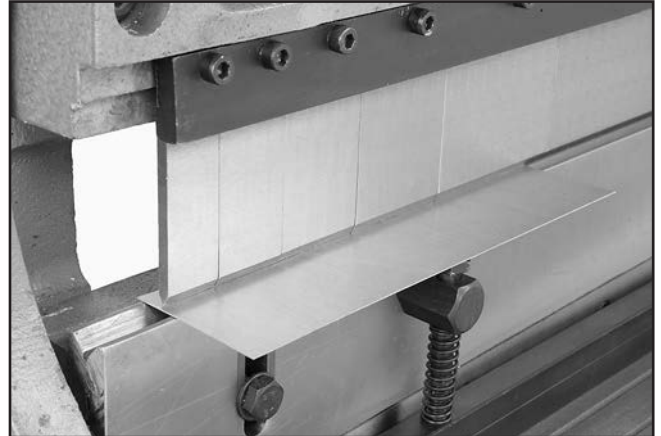


Figure 27. Workpiece alignment.

4. While holding the sheet metal steady, use the work lever to raise the finger receiver and bend the workpiece to the desired bend radius (**Figure 28**).



Figure 28. Bending the workpiece.



5. Lower the finger receiver and remove the workpiece (**Figure 29**).



Figure 29. Workpiece removal.

6. If a reverse bend is required, reinstall the workpiece upside-down and repeat **Step 3** (**Figure 30**).

Note: *The minimum reverse bend possible is $\frac{1}{2}$ " .*

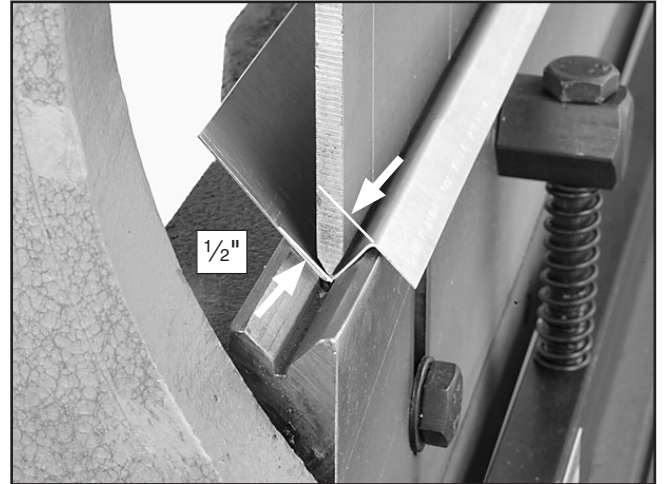


Figure 30. Minimum reverse bend.



General Shear Operations

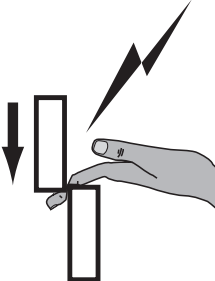
This machine uses a set of reversible blades that shear mild steel up to 20 gauge. A movable upper blade passes next to a fixed lower blade creating a shearing action. For repetitive cuts at the same dimensions, an adjustable rear stop is used.

⚠ WARNING

Damage to your eyes, hands and feet could result from using this machine without proper protective gear. Always wear safety glasses, leather gloves, and steel toe footwear when operating this machine.







⚠ WARNING

The shear on this machine presents an amputation hazard. Make sure no body part or clothing is near the area where metal shearing occurs. Failure to follow this warning may result in fingers being crushed or severed, leading to severe personal injury.

NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

Shearing Tips

- To avoid rolling the edge of the sheet metal and pinching it between the two blades, never cut any piece narrower than eight times the thickness of the material.

For example: If you have a sheet of 20 gauge mild steel where the thickness is at 0.036", the minimum width of metal that can be cut is 0.288", or approximately 1/4" of an inch.

- Keep the blade gap to the smallest distance possible.
- The table below lists other materials and the equivalent decimal thicknesses that can be cut on this shear.

	16 GA.	18 GA.	20 GA.
Mild Steel	0.060"	0.048"	0.036"
Stainless			0.031"
Cold Rolled	0.048"	0.035"	0.030"
Aluminum	0.100"	0.090"	0.063"
Brass, Yellow			
• Soft	0.072"	0.064"	0.051"
• 1/2 Hard	0.064"	0.051"	0.036"
• Hard	0.054"	0.051"	0.036"
Bronze, Phosphor			
• Annealed	0.064"	0.051"	0.040"
Copper			
• Soft	0.072"	0.064"	0.051"
• Hard	0.064"	0.051"	0.040"

Figure 31. Equivalent material thickness chart.



Cutting Sheet Metal

To cut sheet metal:

1. Adjust the rear stop to fine tune your cut length (**Figure 32**). For the most accurate cuts, make sure that you have at least one square edge of the workpiece up against the stop or a guide.

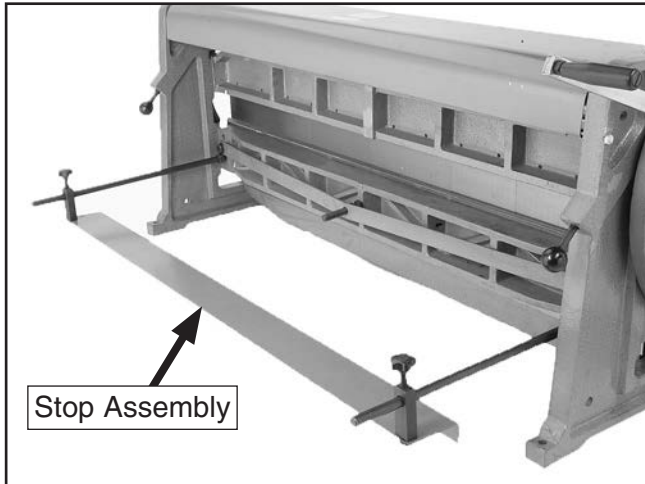


Figure 32. Rear adjustable stop assembly.

2. Place your workpiece to the far left of the shearing table and against the guide (**Figure 33**).

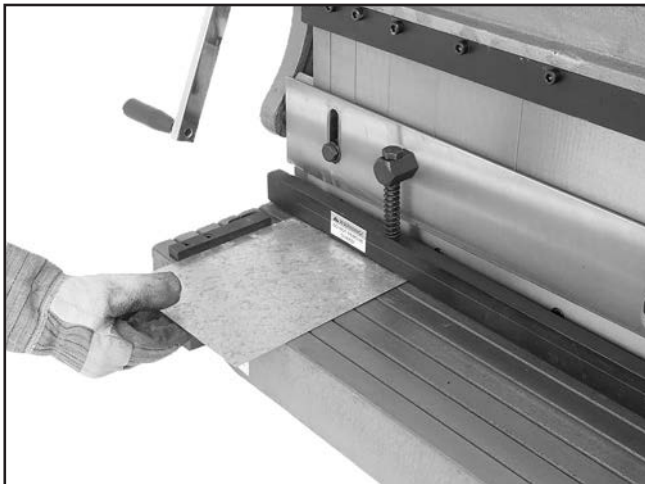


Figure 33. Workpiece positioning.

3. Keeping all body parts away from the blade, use the work lever to begin the shearing action of the two blades. The shearing action begins at the left of the workpiece and cuts to the right (**Figure 34**).

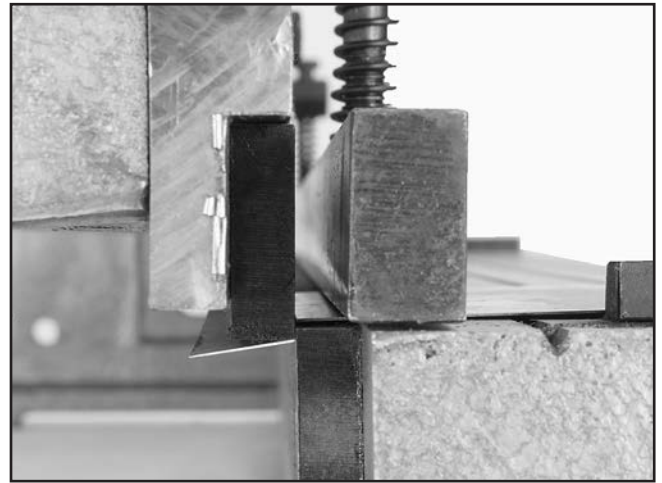


Figure 34. Shearing in progress.

4. When the cut is complete, release the metal from the rear of the machine.



SECTION 4: ACCESSORIES

H5614—Wire Gauge US Standard

Calibrated for sheet metal sized from 0 to 30 gauge. The front is marked with gauge sizes, the back is marked with actual inch measurements.



Figure 35. H5614 Wire Gauge.

G5562—SLIPIT® 1 Qt. Gel

G5563—SLIPIT® 12 oz Spray

G2871—Boeshield® T-9 12 oz Spray

G2870—Boeshield® T-9 4 oz Spray

H3788—G96® Gun Treatment 12 oz Spray

H3789—G96® Gun Treatment 4.5 oz Spray



Figure 36. Recommended products for protecting unpainted cast iron/steel part on machinery.

Call 1-800-523-4777 To Order

H6073—Deluxe Power Snip

Lightweight aluminum cast handles. Full 3½" length of cut. Replaceable steel blades. Fully enclosed finger loops protect hands from sharp edges. Long handles provide plenty of leverage. Multi-purpose snip for sheet metal, vinyl and plastic.



Figure 37. Model H6073 Deluxe Power Snip.

G5618—Deburring Tool with two Blades

G5619—Extra Aluminum Blades

G5620—Extra Brass and Cast Iron Blade

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



Figure 38. G5618 Deburring tool.

Call 1-800-523-4777 To Order



G4956—Super Nibbler

The super nibbler is just the ticket for cutting sheet metal up to $\frac{3}{64}$ " thick. Extremely narrow headed design allows cuts in hard-to-reach areas, yet still features a safety guard to prevent flying splinters. 10 $\frac{1}{4}$ " overall.



Figure 39. Model G4956 Super Nibbler.

H5958—Sheet Metal Pliers

For bending and forming sheet metal. Jaws are 3 $\frac{1}{2}$ " side. Rubber grips. Overall length is 8". Ideal for HVAC Installers.



Figure 40. Model H5958 Sheet Metal Pliers.

G8781—4 $\frac{1}{2}$ " Suction Cup

Handle plate glass, glass mirrors and sheet metal with safety and security. Simple had lever action provides tremendous gripping power on any flat, smooth material. Buy two Suction Cups for two-handed control!



Figure 41. Model G8781 4 $\frac{1}{2}$ " Suction Cup.

H6131—Heavy-Duty Hand Riveter

Whether you're a full time sheet metal fabricator, or just making occasional repairs, you might as well invest in the best. This Heavy-Duty Hand Riveter with reinforced cast construction will be one of your most dependable tools.



Figure 42. Model H6131 Heavy-Duty Hand Riveter.

Call 1-800-523-4777 To Order



SECTION 5: MAINTENANCE

Schedule

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

Daily Check:

- Loose mounting bolts.
- Any other unsafe condition.

Weekly Maintenance:

- Clean machine.
- Lubricate gears.
- Lubricate bushings.

Cleaning

Cleaning the Model G0629 is relatively easy. Periodically wipe down the machine to remove dust and oil on the paint. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning.

Unpainted Cast Iron

Protect the unpainted cast iron surfaces on the machine by wiping it clean after every use—this ensures rust-promoting debris does not remain on bare metal surfaces.

Keep the machine rust-free with regular applications of products like SLIPIT®, or Boeshield® T-9 (see **Section 5: Accessories** on **Page 24** for more details).



Lubrication

Apply applications of products like SLIPIT®, or Boeshield® T-9 to all exposed machined surfaces, such as the rollers, fingers, finger receiver, blades and table (Figure 43).

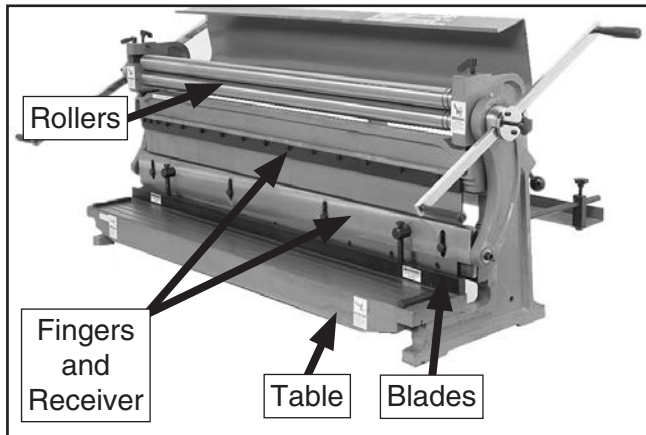


Figure 43. Oil locations.

Lubricating the Model G0629 consists of applying lubricant to the gears, adjustment screws, and the roller bushings.

To lubricate the machine with grease:

1. Open the slip roll cover and brush a light coat of multi-purpose grease on the gear teeth at the end of the rollers (Figure 44). Turn the work lever to disperse the grease.

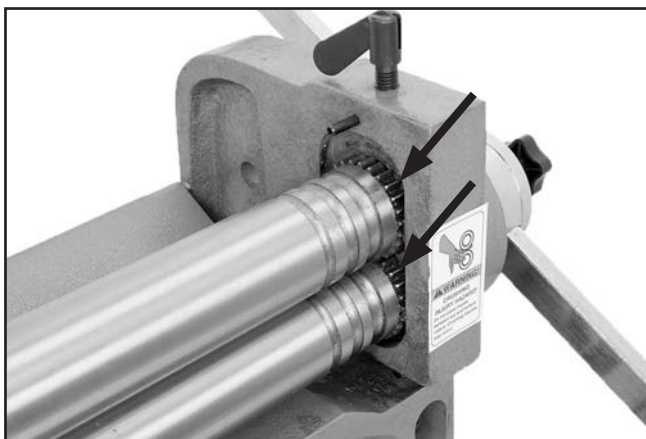


Figure 44. Gear grease locations.

2. Using a grease gun filled with multi-purpose grease, wipe both grease fittings off and apply two pumps of grease to each fitting on each hub (Figure 45). Turn the work lever to disperse the grease.

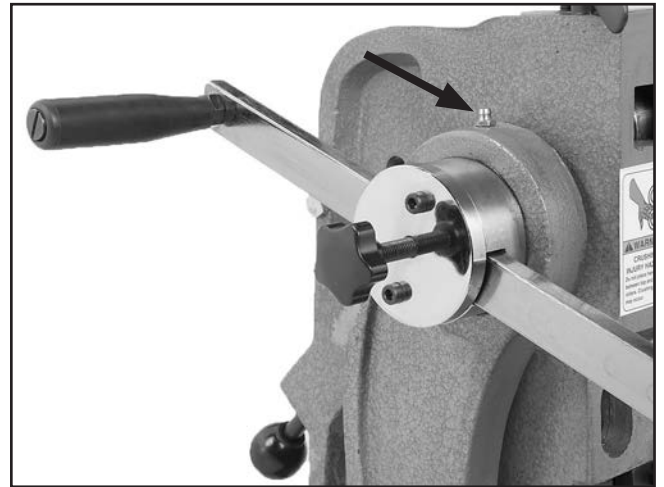


Figure 45. Hub grease location.



SECTION 6: SERVICE

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

Troubleshooting

Slip Roll Operation

Symptom	Possible Cause	Possible Solution
Slip roll creates cones when trying to create cylinders.	1. Rollers are not parallel.	1. Adjust rear roller adjustment knobs as necessary to be sure the rear roller and top roller are parallel.
A noticeable crease is formed in the workpiece.	1. Excessive pressure applied in one spot.	1. Reduce the radius and perform the bend in several passes.
Workpiece is pitted.	1. Workpiece is dirty, roller is damaged.	1. Clean workpiece, polish out any nicks in the rollers.

Brake Operation

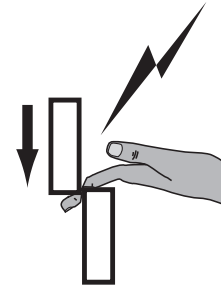
Symptom	Possible Cause	Possible Solution
Heavy resistance during bends.	1. Machine capacities are exceeded.	1. Use materials within the capacity of the machine.
Bend radius is not consistent across workpiece.	1. Machine capacities are exceeded. 2. Fingers and finger receiver not aligned.	1. Use materials within the capacity of the machine. 2. Adjust brake alignment (Page 31).
Point of fingers are chipping or rolling.	1. Fingers and finger receiver not aligned. 2. Workpiece is too thick.	1. Adjust brake alignment (Page 31). 2. Use materials within the capacity of the machine.
Workpiece shows scoring marks after bend.	1. Fingers or finger receiver has scratches.	1. Polish out scratches, and apply tape at the bend locations for protection.

Shear Operation

Symptom	Possible Cause	Possible Solution
Won't cut material.	1. Improper blade gap distance. 2. Cut exceeds machine capacities.	1. Widen gap to accommodate thicker gauge material. 2. Make cuts within the capacity of the machine.
Cuts aren't square.	1. Blade gap unequal across length. 2. Too much bow in blade. 3. Inadequate hold-down pressure. 4. Uneven contact with guides.	1. Adjust blade gap to be equal across length (Page 33). 2. Adjust blade bow (Page 33). 3. Adjust gap of hold-down (Page 34). 4. Maintain consistent contact with guides.
Poor quality of cuts, ripping or tearing.	1. Dull blades. 2. Poor blade gap set up. 3. Loose blade.	1. Replace or sharpen blades. 2. Adjust blade gap (Page 33). 3. Remove blade, clean blade mounting, and reinstall.



Blade Sharpening/ Replacement



⚠ WARNING

The shear on this machine presents an amputation hazard. Make sure no body part is near the blades when shearing occurs. Failure to follow this warning may result in fingers being severed leading to severe personal injury.

The blades on this shear are reversible, so when the first cutting edge has worn and become dull, the blades can be rotated to reveal the second cutting edge. When in position, the shearing blade uses a 5° relief edge and the lower fixed blade does not. When both edges on both blades have reached the end of their usable life, the blades will have to be reground using wet grinding techniques for SK-4 metal or better. However, if sharpening services are not available in your area, replacement blades are available through www.grizzly.com.

Tools Required	Qty
Wrench 19mm	1
Hex Wrench 6mm.....	1

To rotate or replace the blades:

1. Remove the hold-down with the 19mm wrench.
2. Raise the shearing blade to the top of its stroke, and chain the work lever in position to prevent accidental shearing.
3. Put on heavy leather gloves, remove the nine blade cap screws from the upper blade, and remove the blade (**Figure 47**).

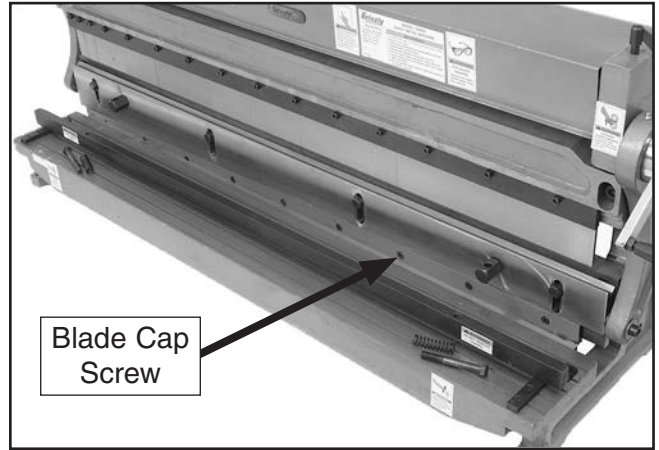


Figure 46. Blade access.

4. Rotate or replace the shearing blade and reinstall the cap screws.
5. Working from the rear of the shear, repeat **Step 3** and **4** on the lower blade.
6. While keeping fingers clear of the blade (**Figure 47**), shear a sheet of paper at all locations along the blade.



Figure 47. Blade shear test.

—If the shear cuts at all locations along the blade, reinstall the hold-down and adjust the hold-down as outlined in **Hold-Down Adjustment** on **Page 27**.

—If the shear cuts the paper poorly at the ends of the blades complete the **Blade Adjustment** procedures on **Page 33**.

—If the shear cuts paper at all locations except at one or two locations in the center of the blade, loosen the blade fasteners where the cut is poor, insert a piece of paper between the blade and seat, and retighten the fasteners. This step will shim the blade out slightly for best adjustment.



Slip Roll Service Lubrication

Twice a year or more frequently if under heavy use, we recommend that you remove and relubricate the roller bushings.

Tools Required	Qty
Oil Can	1
Multi Purpose Grease.....	1 Oz
Assistant.....	1
Clean Rags.....	1

To lubricate the bushings:

1. With the help of an assistant, carefully remove the upper roller (**Figure 48**) without causing any dents in the roller surface.

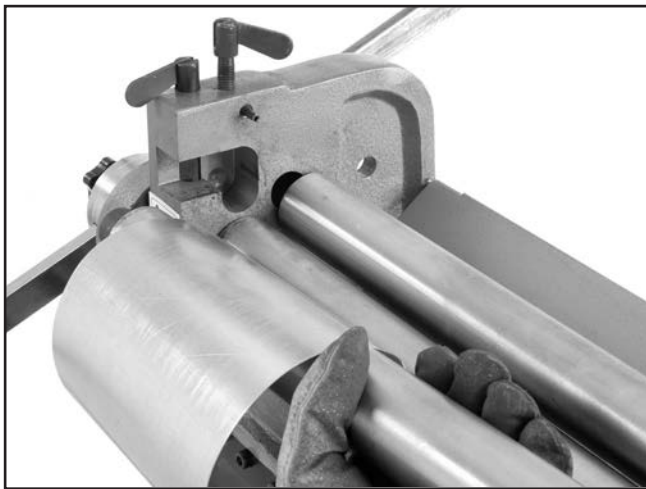


Figure 48. Upper roller removal.

2. Remove both upper roller bushings (**Figures 49 and 50**).

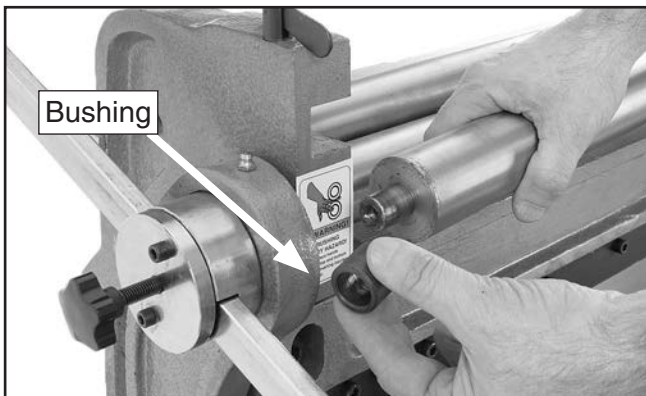


Figure 49. Left bushing removal.

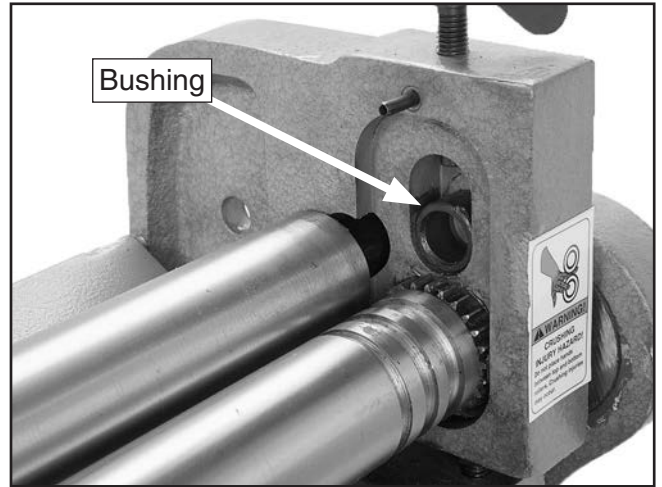


Figure 50. Right bushing removal.

3. Using mineral spirits and a rag, wipe all grease from the bushings, roller journals, gear teeth, and the bushing pockets (**Figure 50**).
4. Dry all parts and brush a liberal coat of multi-purpose grease on the bushings, roller journals, and the gear teeth.
5. Slide the rear roller to the left to expose the right-hand journal (**Figure 51**).

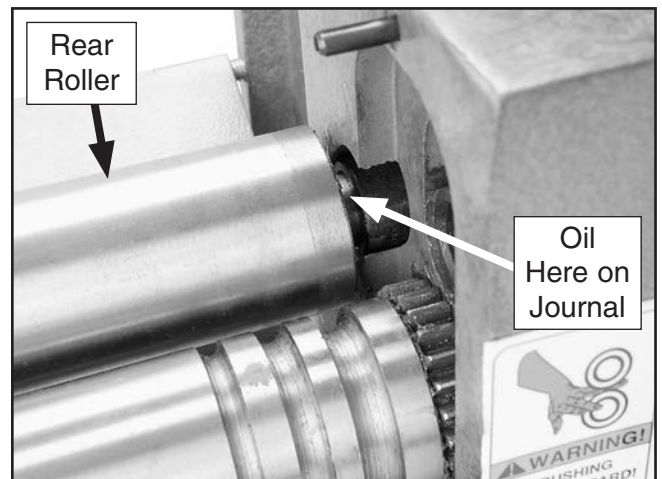


Figure 51. Rear roller journal.



Brake Alignment

6. Using an oil gun filled with any standard non-detergent SAE 30W motor oil, squirt the right-hand journal with oil, and spin the roller to work the oil into the bushings (**Figure 51**).

7. Repeat **Steps 5** and **6** on the left journal.

Note: *The bottom roller bushings are lubricated for the life of the machine and do not need service.*

8. With the help of your assistant, reinstall the top roller.

9. Unthread both rear roller adjustment knobs and remove the rods (**Figure 52**).

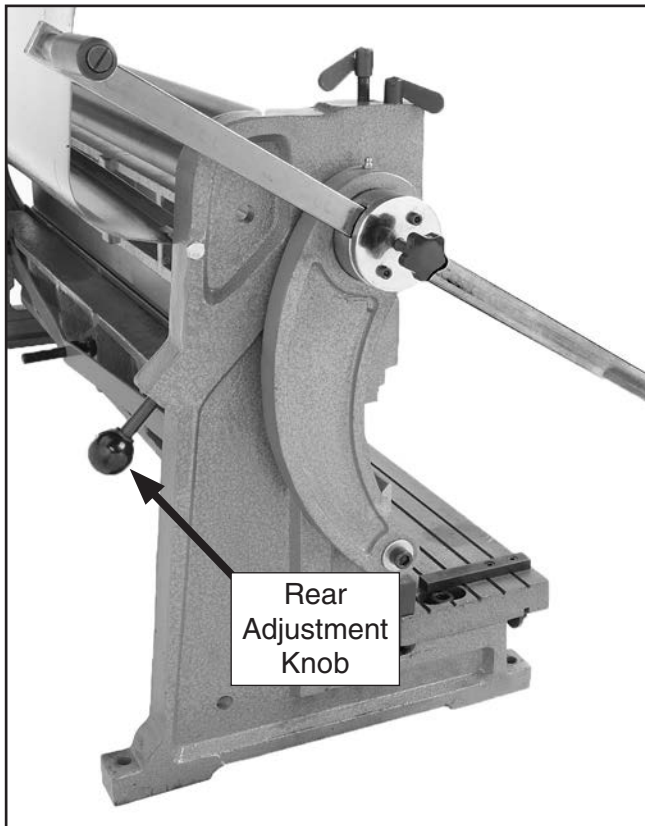
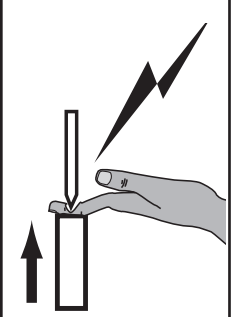


Figure 52. Rear roller adjustment location.

10. Using mineral spirits and a rag, wipe all grease or oil from the threads. Relubricate with a few drops of the motor oil and reinstall.



⚠ WARNING

The bending brake on this machine presents a pinching hazard. Make sure no body part or clothing is near the area where metal bending occurs. Failure to follow this warning may result in fingers being crushed or severed, leading to severe personal injury.

During the life of your machine, you may need to realign the fingers and the receiver on your bending brake. This is a simple and straightforward task.

Tools Required	Qty
Wrench 19mm	1
Hex Wrench 12mm.....	1
Long Steel Pipe 1/2" to 3/4" Diameter x 54"	1

To align the brake:

1. Clean and de-burr all finger tips and the finger receiver V-groove.
2. Make sure all fingers are tight and seated completely.
3. Place the straight steel pipe in the finger receiver V-groove (**Figure 53**).



Figure 53. Finger alignment pipe.



4. Raise the finger receiver so the side of the pipe makes light contact with the fingers (**Figure 54**).

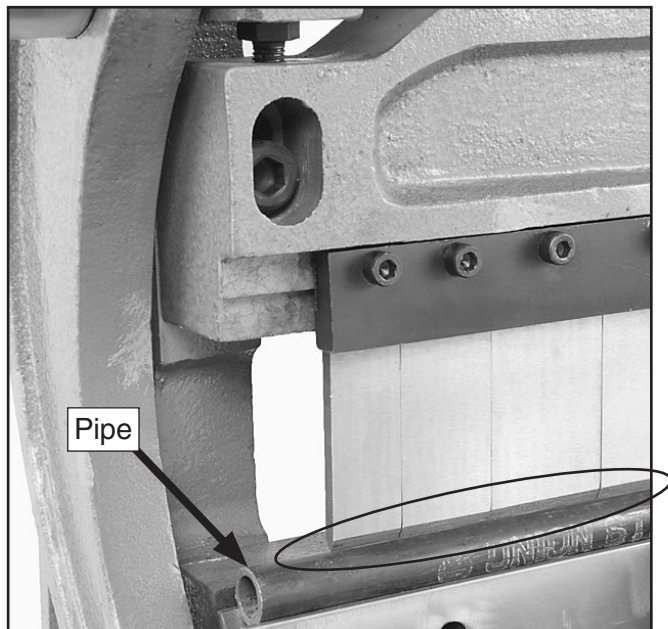


Figure 54. Brake alignment clearance.

5. Starting at one end of the brake, visually inspect for consistent contact between the pipe and the finger tips.

6. If you find that there is a gap at one end of the brake, loosen the carriage lock cap screw at that end and adjust the jack bolt until the finger tips just touch the pipe (**Figure 55**).

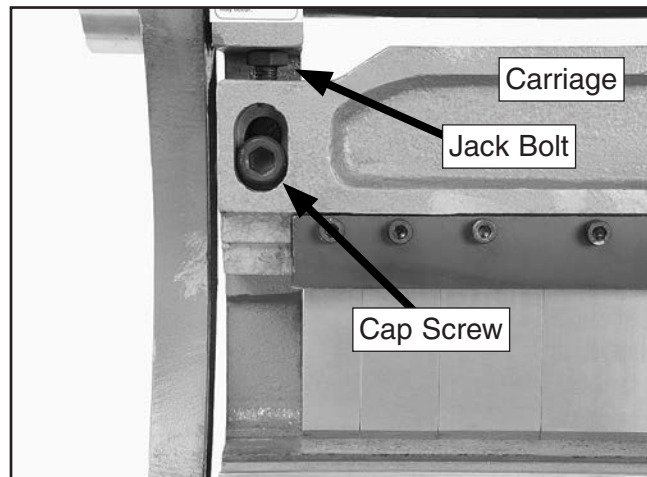
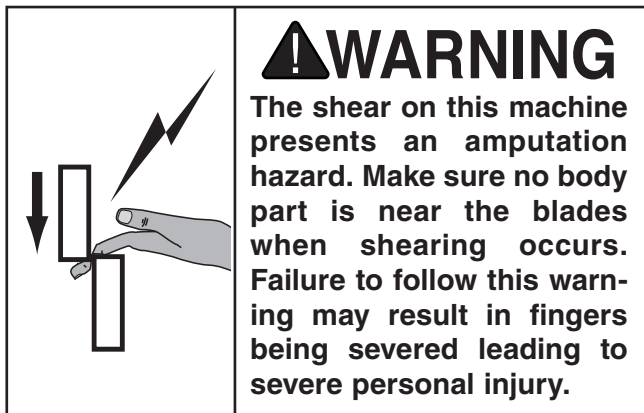


Figure 55. Brake adjustment locations.

7. Tighten the cap screw and remove the pipe.
8. Cycle the brake a few times, and recheck the alignment with the pipe.
9. Readjust as required to achieve parallel alignment between the finger tips and the pipe surface.



Blade Adjustment



The blade adjustment has been made at the factory before shipment. A few test cuts will determine if this adjustment is satisfactory for your needs. If it is, you are ready to start using the shear. However, you may find it necessary to check the blade adjustment before continuing. Depending on how often you change the type and gauge of material you cut, this adjustment process may become routine.

Tools Required	Qty
Wrench 19mm	1
Hex Wrench 12mm	1
Standard Screwdriver #3	1

To perform the blade adjustment:

1. Remove the hold-down with the 19mm wrench, and loosen the two table cap screws on both ends of the table (**Figure 56**).

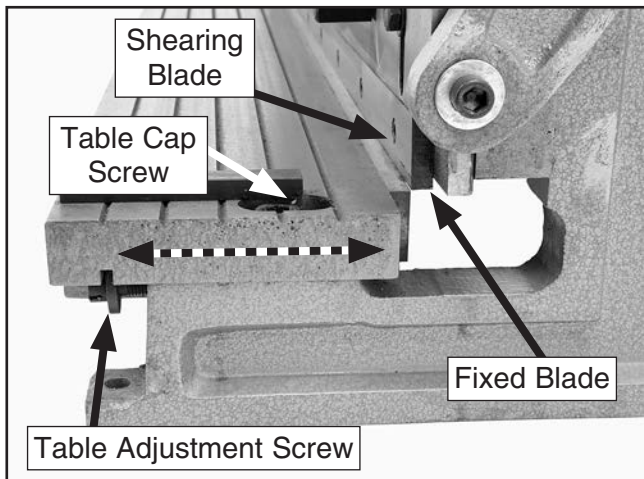


Figure 56. Adjustment screws.

2. Using the screwdriver, tighten or loosen the table adjustment screws on either side of the table to bring the blade into adjustment.

Note: *These screws move the table and the fixed blade closer or away from the shearing blade. The idea is to move the fixed blade against the shearing blade to achieve snug and consistent blade rub without causing the knives to bind. However the moving blade should never overlap the fixed blade. This will cause damage to both.*

3. Tighten the table cap screws.
4. While keeping fingers clear of the blade (**Figure 57**), shear a sheet of paper at all locations along the blade to test for clean cuts.



Figure 57. Shear test.

—If the shear cuts the paper clean at all locations along the blade, the blade is adjusted correctly. Reinstall the hold-down and adjust it as outlined in **Hold-Down Adjustment** on **Page 34**.

—If the shear cuts the paper clean only at one end of the knife but not the other, repeat **Steps 2** and **3** until the paper is cut clean at all blade locations.

Continued on next page →



—If the shear cuts the paper at both ends of the blade but not at the center, turn the bow nut (**Figure 58**) clockwise until the paper is cut clean at all blade locations.

—If the shear cuts paper at the center but not the ends of the blade, turn the bow nut (**Figure 58**) counterclockwise until the paper can easily cut across the full blade length.

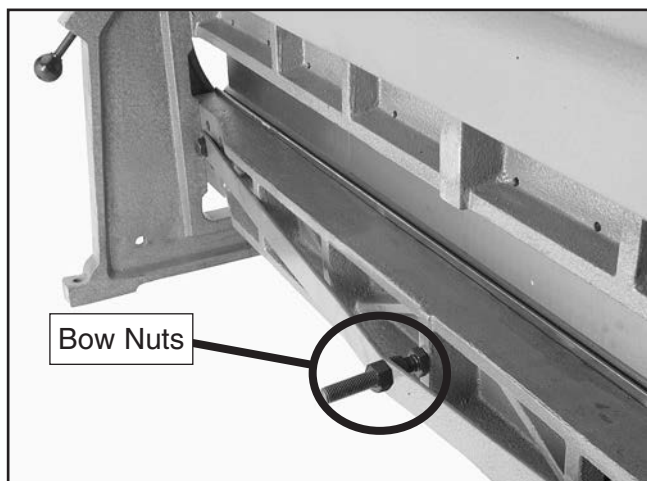


Figure 58. Adjusting bow nut.

5. When the shear makes clean cuts at all locations along the blade, the blade is adjusted correctly. Reinstall the hold-down and adjust it as outlined in **Hold-Down Adjustment** on this page.

Hold-Down Adjustment

The hold-down secures the workpiece while it is being sheared and helps prevent the operator's fingers from getting in the blade cutting path. The ideal adjustment provides only $\frac{1}{4}$ " clearance to feed the workpiece under the hold-down.

Items Needed	Qty
Wrench 19mm	1

To adjust the hold-down:

1. Use the work lever and lower the blade completely. Loosen or tighten the hex bolt so there is approximately $1\frac{1}{8}$ " between the stud and the underside of the bolt head, as shown in **Figure 59**.

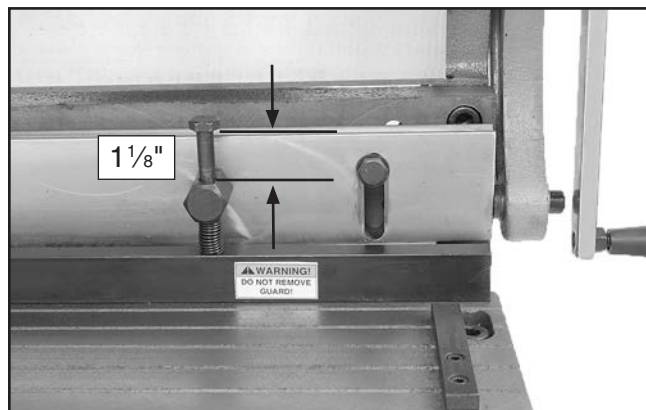


Figure 59. Hold-down bolt height.

2. Use the work lever and raise the blade completely. Measure the feed gap between the table and the hold-down. If this clearance is not $\frac{1}{4}$ " (**Figure 60**), repeat **Step 1** until it is.

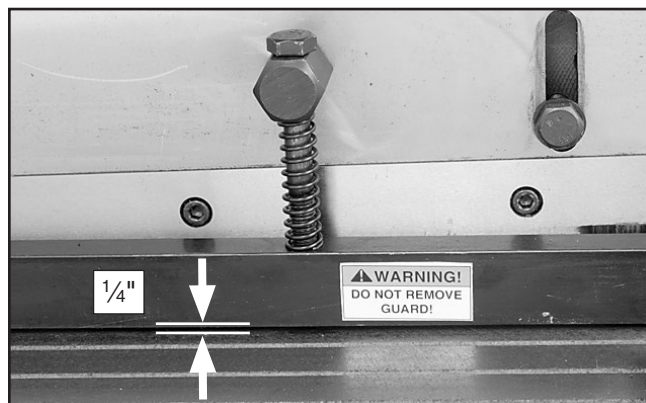


Figure 60. Measuring hold-down feed gap.

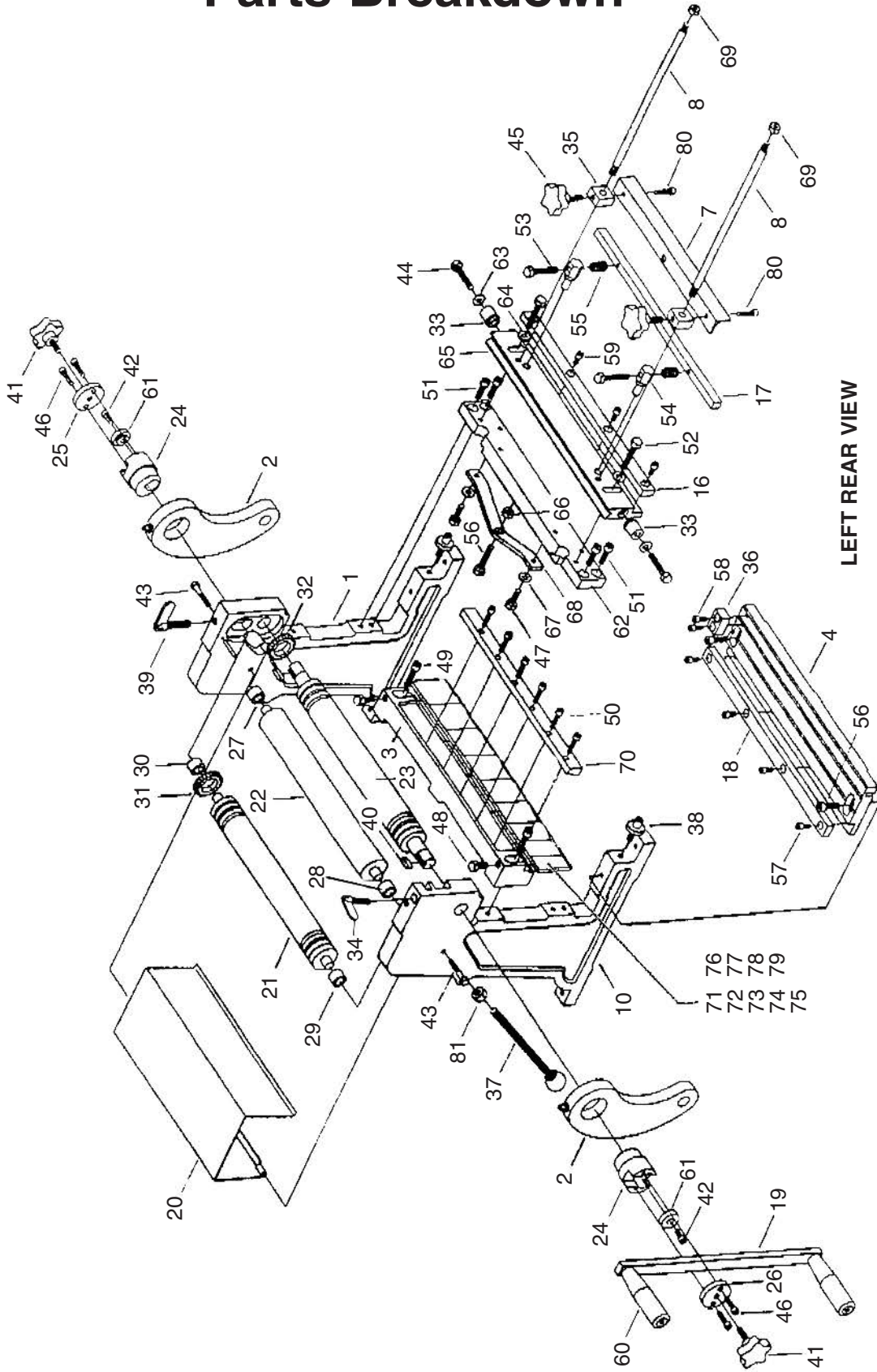


Notes



SECTION 7: PARTS

Parts Breakdown



LEFT REAR VIEW



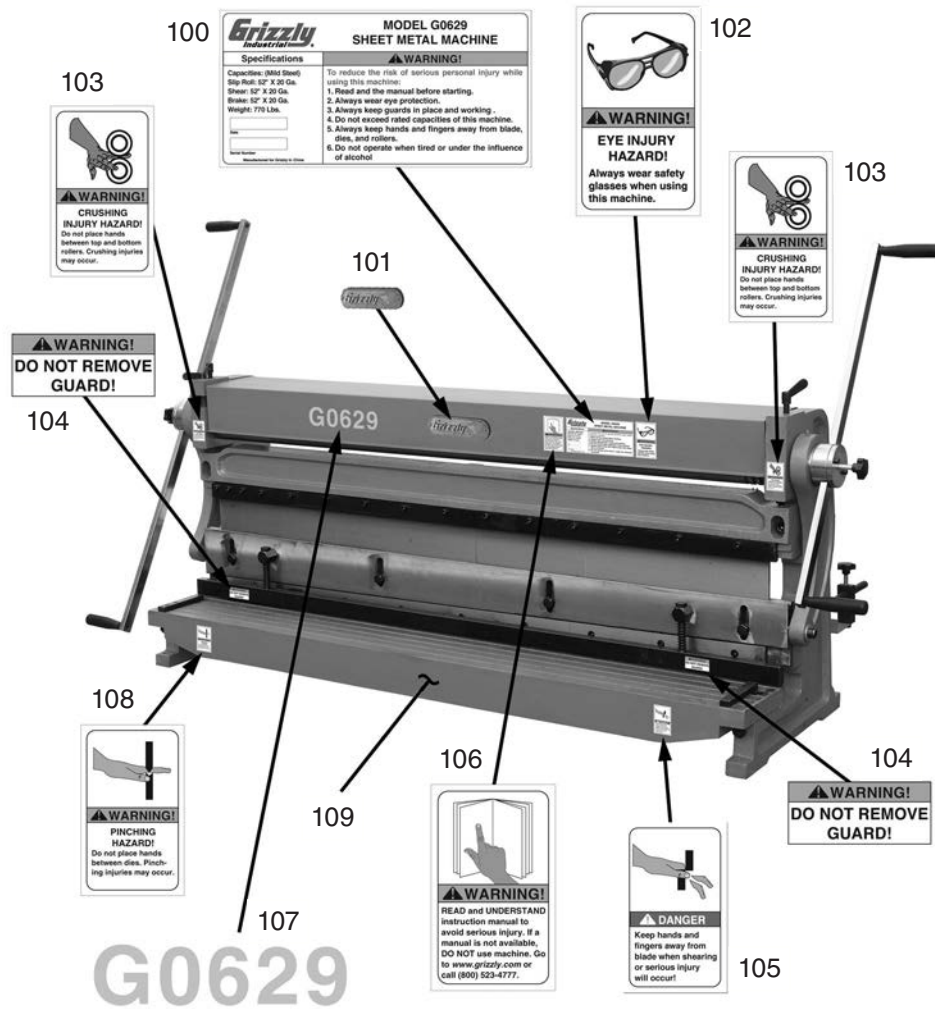
Parts List

REF	PART #	DESCRIPTION
1	P0629001	RIGHT FRAME CASTING
2	P0629002	CRANK ARM
3	P0629003	CARRIAGE CASTING
4	P0629004	TABLE
7	P0629007	STOP ANGLE
8	P0629008	STOP ROD
10	P0629010	LEFT FRAME CASTING
16	P0629016	UPPER BLADE
17	P0629017	CLAMP BAR
18	P0629018	LOWER BLADE
19	P0629019	WORK LEVER
20	P0629020	COVER
21	P0629021	TOP ROLLER
22	P0629022	REAR ROLLER
23	P0629023	BOTTOM ROLLER
24	P0629024	HUB
25	P0629025	RIGHT HUB PLATE
26	P0629026	LEFT HUB PLATE
27	P0629027	BUSHING
28	P0629028	BUSHING
29	P0629029	BUSHING
30	P0629030	BUSHING
31	P0629031	GEAR 25T
32	P0629032	GEAR 25T
33	P0629033	BUSHING
34	P0629034	LEAF LOCK PIN
35	P0629035	STOP BLOCK
36	P0629036	GUIDE BLOCK
37	P0629037	ADJUSTMENT ROD W/KNOB
38	P0629038	LEFT FRAME CASTING ADJ SCREW
39	P0629039	LEAF BOLT
40	P0629040	KEY 8 X 8 X 22
41	P0629041	KNOB
42	P0629042	CAP SCREW M6-1 X 16
43	P0629043	HEX BOLT M8-1.25 X 60
44	P0629044	HEX BOLT M12-1.75 X 70
45	P0629045	KNOB

REF	PART #	DESCRIPTION
46	P0629046	CAP SCREW M6-1 X 16
47	P0629047	HEX BOLT M16-2 X 40
48	P0629048	HEX BOLT M12-1.75 X 20
49	P0629049	CAP SCREW M16-2 X 55
50	P0629050	CAP SCREW M8-1.25 X 25
51	P0629051	CAP SCREW M16-2 X 35
52	P0629052	HEX BOLT M12-1.75 X 45
53	P0629053	HEX BOLT M12-1.75 X 100
54	P0629054	ANCHOR LATCH STUD
55	P0629055	COMPRESSION SPRING
56	P0629056	HEX BOLT M16-2 X 35
57	P0629057	CAP SCREW M8-1.25 X 15
58	P0629058	CAP SCREW M6-1 X 15
59	P0629059	CAP SCREW M8-1.25 X 15
60	P0629060	HANDLE
61	P0629061	FLANGE PLATE
62	P0629062	ANVIL CASTING
63	P0629063	FLAT WASHER 12MM
64	P0629064	FLAT WASHER 12MM
65	P0629065	FINGER RECEIVER
66	P0629066	HEX NUT M16-2
67	P0629067	LOCK WASHER 16MM
68	P0629068	STEEL STRAP
69	P0629069	HEX NUT M16-2
70	P0629070	GIB
71	P0629071	FINGER 15"
72	P0629072	FINGER 10"
73	P0629073	FINGER 9"
74	P0629074	FINGER 7"
75	P0629075	FINGER 4"
76	P0629076	FINGER 2-1/2"
77	P0629077	FINGER 2"
78	P0629078	FINGER 1-1/2"
79	P0629079	FINGER 1"
80	P0629080	HEX BOLT M12-1.75 X 20
81	P0629081	HEX NUT M16-2



Label Placement



REF	PART #	DESCRIPTION
100	P0629100	MACHINE ID LABEL
101	P0629101	DOMED LOGO LABEL
102	P0629102	SAFETY GLASSES LABEL
103	P0629103	CRUSHING WARNING LABEL
104	P0629104	DO NOT REMOVE GUARD LABEL

REF	PART #	DESCRIPTION
105	P0629105	AMPUTATION WARNING LABEL
106	P0629106	READ MANUAL LABEL
107	P0629107	MODEL NUMBER LABEL
108	P0629108	BRAKE WARNING LABEL
109	P0629109	GRIZZLY GREEN SPOT PAINT

WARNING

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





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 Model # _____ Order # _____ Serial # _____

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 Card Deck Website Other:

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

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

3. What is your annual household income?

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

4. What is your age group?

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

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

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

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

0-2 3-5 6-9 10+

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

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

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

Note: We never use names more than 3 times. Yes No

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

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

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

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

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

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