

Grizzly ***Industrial, Inc.***®

MODEL T32718 **41" SLIP ROLL** **OWNER'S MANUAL** *(For models manufactured since 07/21)*



COPYRIGHT © JULY, 2021 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.**
#CS21926 PRINTED IN CHINA

V1.07.21



WARNING!

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

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

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

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



WARNING!

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

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

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

Table of Contents

- INTRODUCTION..... 2**
 - Contact Info..... 2
 - Manual Accuracy..... 2
 - Identification 3
 - Controls & Components 4
 - Machine Data Sheet..... 5

- SECTION 1: SAFETY 6**
 - Safety Instructions for Machinery..... 6
 - Additional Safety for Slip Rolls..... 8

- SECTION 2: SETUP 9**
 - Unpacking 9
 - Needed for Setup 9
 - Inventory..... 9
 - Cleanup 10
 - Site Considerations 11
 - Assembly..... 12
 - Anchoring to Floor..... 13

- SECTION 3: OPERATIONS 14**
 - Operation Overview..... 14
 - Flat Rolling 15
 - Creating Bends..... 16
 - Creating Cylinders..... 18
 - Creating Cones 21
 - Using Wire Grooves to Bend Objects 29

- SECTION 4: ACCESSORIES 30**

- SECTION 5: MAINTENANCE..... 31**
 - Schedule 31
 - Cleaning & Protecting 31
 - Lubrication..... 32

- SECTION 6: SERVICE 33**
 - Troubleshooting..... 33

- SECTION 7: PARTS..... 34**
 - Main..... 34
 - Labels & Cosmetics 36

- WARRANTY & RETURNS 37**

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 | |
| SPECIFICATIONS | | ▲ WARNING! | |
| Motor: | | To reduce risk of serious injury when using this machine: | |
| Specification: | | 1. Read manual before operation. | |
| Specification: | | 2. Wear safety glasses and respirator. | |
| Specification: | | 3. Make sure safety glasses and respirator are properly adjusted/setup and | |
| Specification: | | 4. power is connected to grounded circuit before starting. | |
| Weight: | | 5. Make sure the motor has stopped and disconnect power before adjustments, maintenance, or service. | |
| | | 6. DO NOT expose to rain or dampness. | |
| | | 7. DO NOT modify this machine in any way. | |
| | | 8. Make sure power is disconnected. | |
| | | 9. Do not use while under the influence of drugs or alcohol. | |
| | | 10. Maintain machine carefully to prevent accidents. | |
| | | Manufactured for Grizzly in Taiwan | |

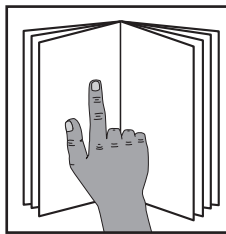
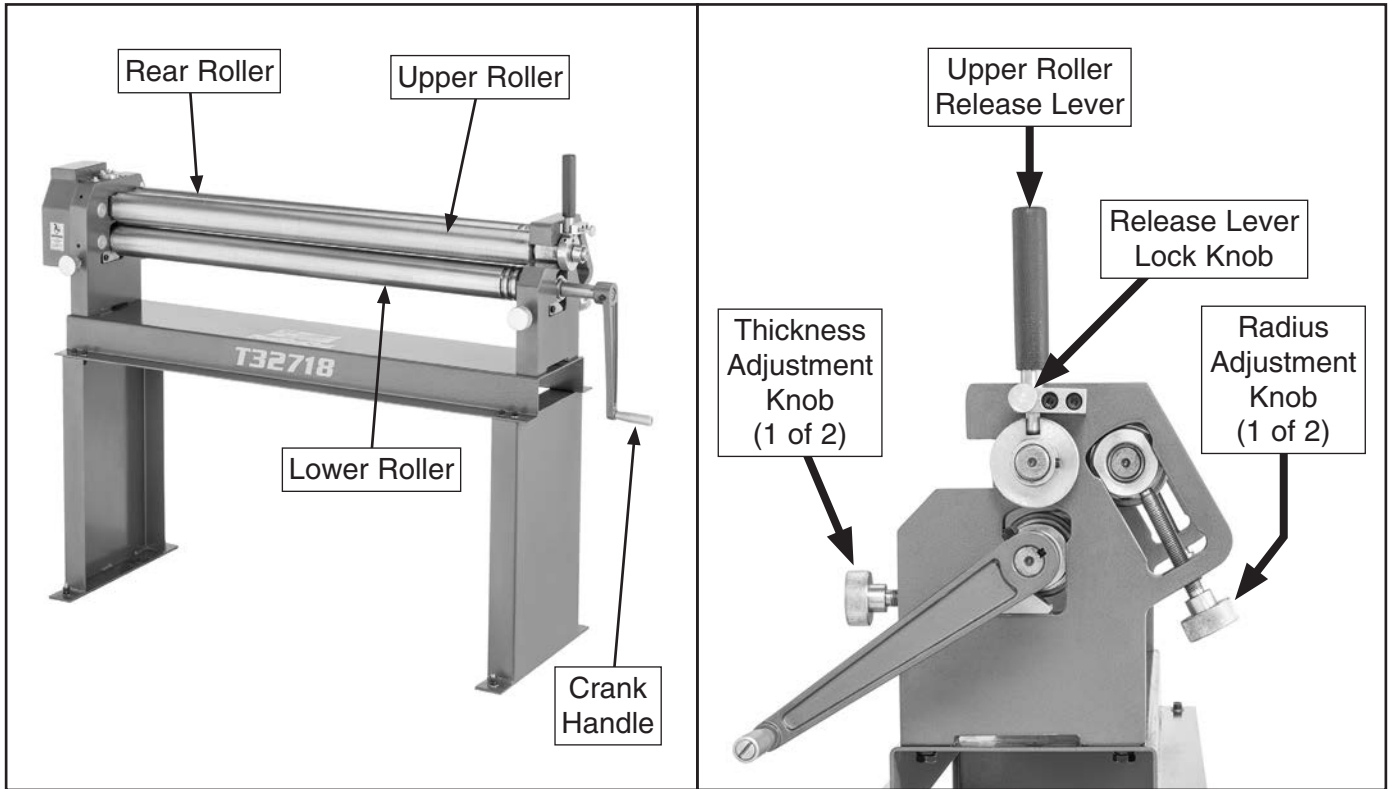
Manufacture Date

Serial Number



Identification

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

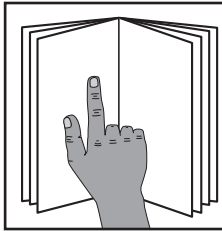


⚠️ WARNING

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



Controls & Components



!WARNING

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

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

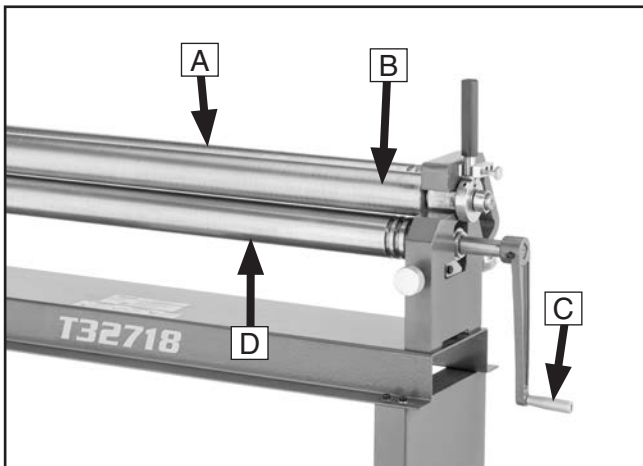


Figure 1. Main components.

- A. Rear Roller:** Controls bend radius.
- B. Upper Roller:** Secures and presses workpiece against lower roller.
- C. Crank Handle:** Turns lower roller, feeding workpiece through machine.
- D. Lower Roller:** Feeds workpiece through machine.

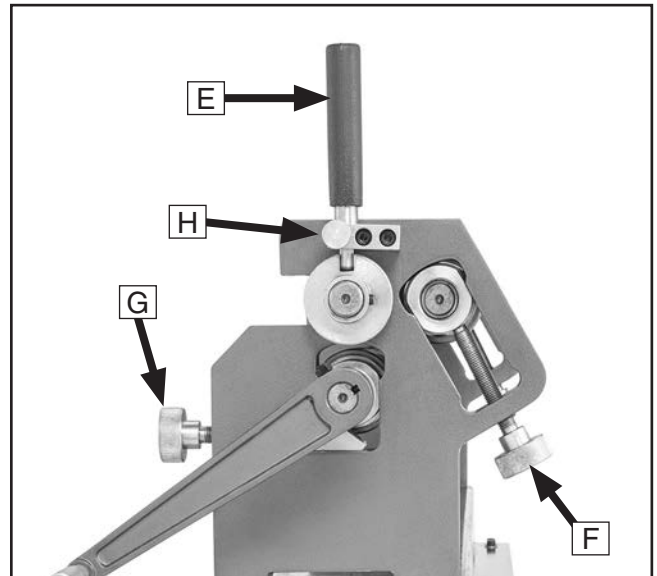


Figure 2. Adjustment components.

- E. Upper Roller Release Lever:** Releases upper roller from frame for workpiece removal.
- F. Radius Adjustment Knob (1 of 2):** Adjusts rear roller up and down for different sized radius bends.
- G. Thickness Adjustment Knob (1 of 2):** Adjusts lower roller up and down for different workpiece thicknesses.
- H. Release Lever Lock Knob:** Secures upper roller release lever.





MACHINE DATA SHEET

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

MODEL T32718 41" SLIP ROLL

Product Dimensions:

Weight..... 336 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 57-1/2 x 20-1/2 x 43 in.
Footprint (Length x Width)..... 45-1/2 x 18 in.

Shipping Dimensions:

Type..... Wood Crate
Content..... Machine
Weight..... 408 lbs.
Length x Width x Height..... 60 x 24 x 26 in.
Must Ship Upright..... Yes

Main Specifications:

Capacities

Maximum Width..... 41 in.
Maximum Thickness Mild Steel..... 15 Ga.
Slip Roll Minimum Cylinder Diameter..... 3 in.
Slip Roll Roller Diameter..... 3 in.
Slip Roll Wire Sizes..... 5/16, 3/8, 1/2 in.

Construction

Base..... Steel
Frame..... Steel
Head and Tail Supports..... Steel
Rollers..... Hardened Steel

Other Specifications:

Country of Origin China
Warranty 1 Year
Approximate Assembly & Setup Time 20 Minutes
Serial Number Location Machine ID Label
ISO 9001 Factory Yes

Features:


- 41" Maximum Capacity
- 3" Ground & Polished Rollers
- 5/16", 3/8", & 1/2" Wire/Rod Grooves
- Dual Knob Material Thickness Adjustment
- Quick-Release Top Roller




SECTION 1: SAFETY

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

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

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

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

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

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

Safety Instructions for Machinery

WARNING

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

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

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

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

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

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

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



WARNING

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



Additional Safety for Slip Rolls

WARNING

Serious injury can occur from fingers or hands getting crushed/pinched in rotating parts. Sharp metal edges can easily cut skin. An unsecured machine can tip during operation and cause crushing injuries. To minimize risk of injury, anyone operating this machine **MUST** completely heed hazards and warnings below.

CRUSHING & PINCHING INJURIES. Slip rolls can quickly crush or pinch fingers or hands. Never place fingers or hands between or near rollers during operation.

METAL EDGES. Sharp edges on sheet metal can result in severe cuts. Always wear leather gloves and buttoned long-sleeves when working with sheet metal. Always chamfer and deburr metal edges.

BACK INJURIES. Cranking motion required to operate slip roll is potentially harmful if proper technique is not used. To avoid back injuries, keep back vertical and never over-exert yourself or operate slip roll in awkward positions.

TOOL USAGE. Do not attempt to process any material outside capacities of this machine (e.g., glass, ceramic, plastic, etc.) that could result in material or tool breakage.

FOOT PROTECTION. Heavy workpieces accidentally falling off of rollers during operation can injure operator's feet. To reduce your risk, wear steel-toed boots when using machine.

SECURING SLIP ROLL. Before using, secure slip roll to floor so it can withstand dynamic forces involved with forming sheet metal. Otherwise, it may move or tip during operation, causing serious injury or property damage.

FEEDING WORKPIECE. Forcefully jamming workpiece through rollers could cause hands or fingers to slip and get caught in moving parts, causing pinching and crushing injuries. **DO NOT** use hands to force workpiece through rollers.

HAND PLACEMENT. Holding workpiece too close to rollers during operation increases risk of pinching and crushing injuries. To reduce your risk, **NEVER** place hands and fingers near rollers during operation.

CAPACITY. Exceeding capacity of machine may result in sudden breakage that ejects dangerous metal debris at the operator or bystanders, or causes machine damage. Only use sheet metal that is within the rated capacity of machine (refer to the **Machine Data Sheet**).

WARNING

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

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

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.***

Needed for Setup

The following are needed to complete the setup process, but are not included with your machine.

| Description | Qty |
|--|-----------|
| • Disposable Rags | As Needed |
| • Cleaner/Degreaser | As Needed |
| • Safety Glasses (for each person)..... | 1 |
| • Disposable Gloves | As Needed |
| • Additional People | 3 |
| • Wrench or Socket 13mm..... | 1 |
| • Hex Wrench 6mm..... | 1 |
| • Lifting Straps (rated for 500 lbs.)..... | 2 |
| • Forklift or Crane | 1 |
| • Flat Head Screwdriver 1/4"..... | 1 |
| • Mounting Hardware | As Needed |

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.

| Box 1 (Figure 3) | Qty |
|-------------------------------------|-----|
| A. Slip Roll (Not Shown) | 1 |
| B. Legs..... | 2 |
| C. Shoulder Screw M10-1.5 x 14..... | 1 |
| D. Hollow Handle | 1 |
| E. Cap Screws M8-1.25 x 25 | 8 |
| F. Flat Washers 8mm | 16 |
| G. Lock Washers..... | 8 |
| H. Hex Nuts M8-1.25..... | 8 |

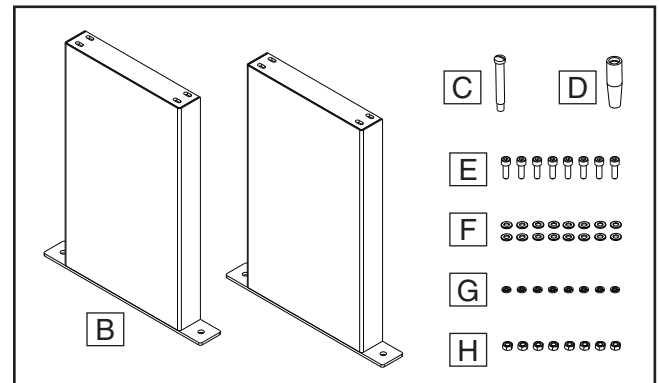


Figure 3. Loose inventory.

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.

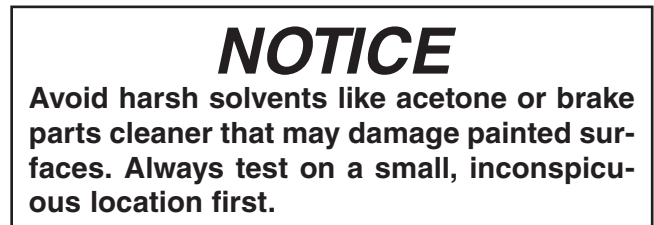
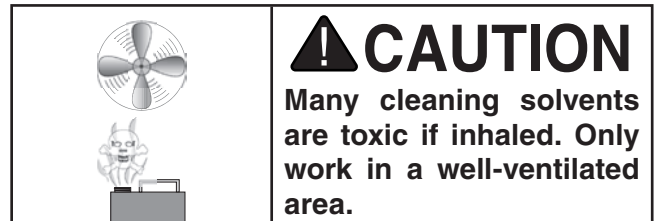
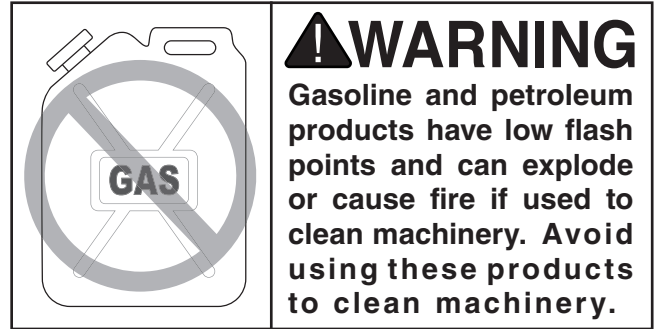
There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

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.



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 4. T23692 Orange Power Degreaser.



Site Considerations

Physical Environment

The physical environment where the machine is operated is important for safe operation and longevity of components. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions. Extreme conditions for this type of machinery are generally those where the ambient temperature range is outside 41°–104°F; the relative humidity range is outside 20–95% (non-condensing); or the environment is subject to vibration, shocks, or bumps.

Space Allocation

Consider the largest size of workpiece that will be processed through this machine and provide enough space around the machine for adequate operator material handling or the installation of auxiliary equipment. With permanent installations, leave enough space around the machine to open or remove doors/covers as required by the maintenance and service described in this manual. **See below for required space allocation.**

Weight Load

Refer to the **Machine Data Sheet** for the weight of your machine. Make sure that the surface upon which the machine is placed will bear the weight of the machine, additional equipment that may be installed on the machine, and the heaviest workpiece that will be used. Additionally, consider the weight of the operator and any dynamic loading that may occur when operating the machine.

Lighting

Lighting around the machine must be adequate enough that operations can be performed safely. Shadows, glare, or strobe effects that may distract or impede the operator must be eliminated.

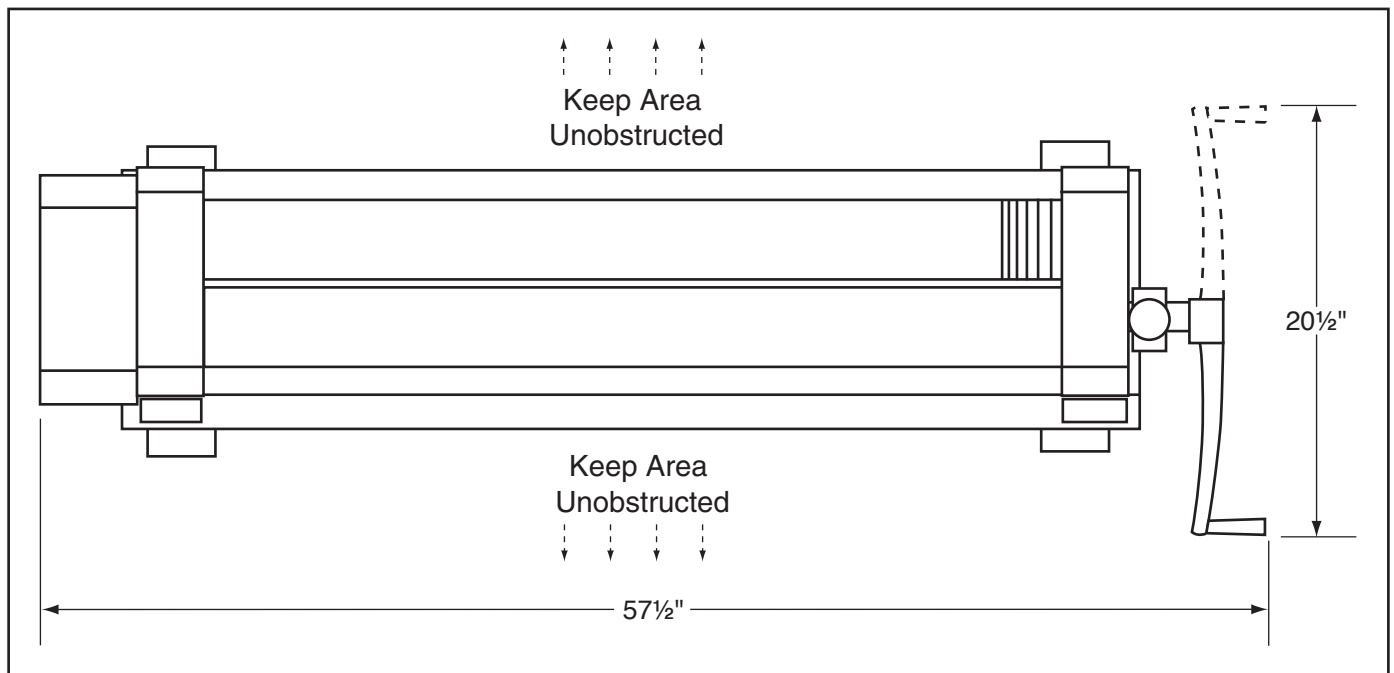
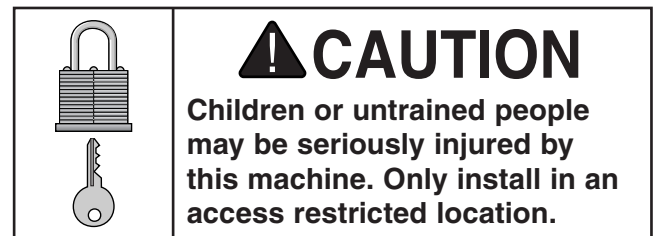


Figure 5. Working clearances.



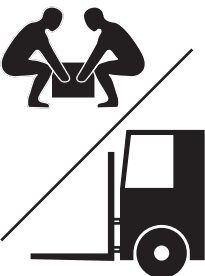
Assembly

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).

With the exception of the crank handle and stand legs, the slip roll is fully assembled when shipped.

To assemble machine:

1. Place shipping crate near installation location, then remove crate top and sides and set small items aside.
2. Unbolt machine from shipping pallet.
3. Place crate top on ground near machine to protect machine in next step.

| | |
|---|---|
|  | <p>! WARNING HEAVY LIFT! Straining or crushing injury may occur from improperly lifting machine or some of its parts. To reduce this risk, get help from other people and use a forklift (or other lifting equipment) rated for weight of this machine.</p> |
|---|---|

4. With help from assistants, move slip roll off of pallet and onto crate top and orient it on its side so model number label faces up (see **Figure 6**).

5. Attach (2) legs to slip roll, as shown in **Figure 6**, with (8) M8-1.25 x 25 cap screws, (16) 8mm flat washers, (8) lock washers, and (8) M8-1.25 hex nuts.

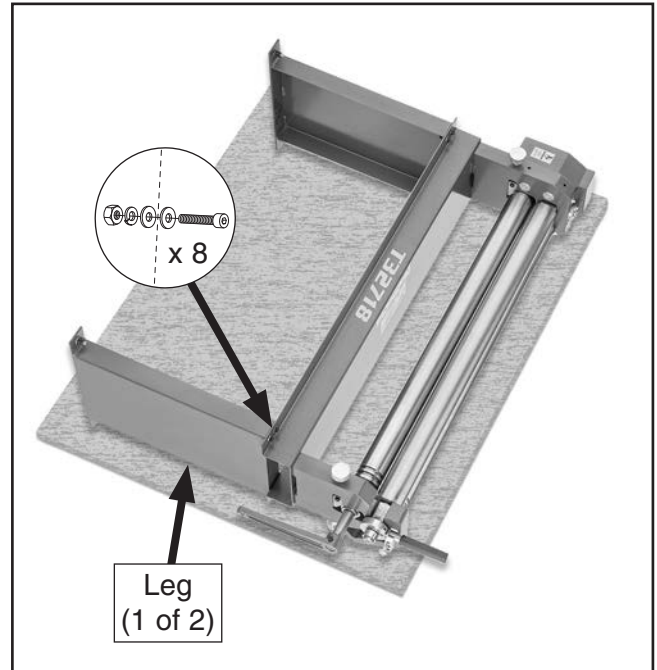


Figure 6. Legs attached to slip roll.

6. Place lifting straps around and under rollers at locations shown in **Figure 7**. Straps should spread as wide as possible.

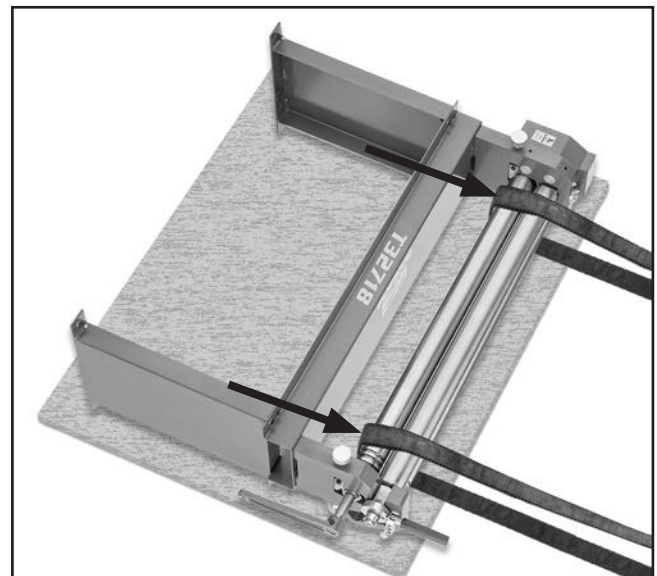


Figure 7. Lifting straps placed around and under rollers.



- With help of another person to steady load, use forklift or crane to lift machine from floor and onto legs at desired location (see **Figure 8**).

— If load is unbalanced, immediately lower machine and reposition lifting straps as necessary. Repeat this step until you are satisfied that load is safely balanced.



Figure 8. Machine lifted onto legs.

- Attach hollow handle to crank with M10-1.5 x 14 shoulder screw (see **Figure 9**).

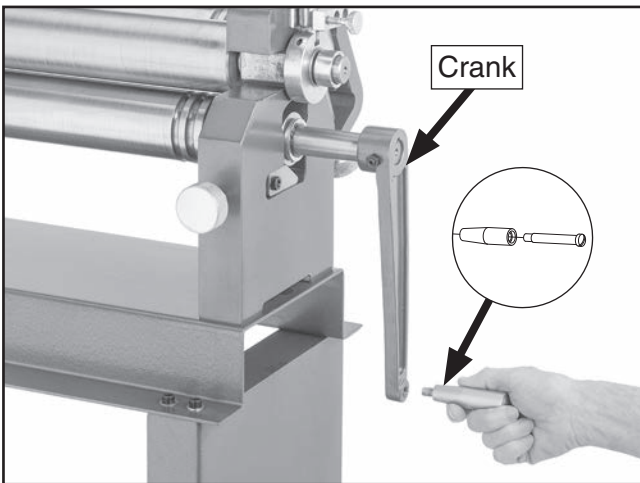


Figure 9. Attaching hollow handle to crank with shoulder screw.

Anchoring to Floor

Number of Mounting Holes 4
 Diameter of Mounting Hardware..... 3/8"

The Model T32718 is top heavy and may tip as a result of the dynamic forces necessary for operation. This machine must be anchored to the floor to prevent tipping or shifting. Because floor materials may vary, floor mounting hardware is not included.

⚠ WARNING

Severe injury may occur from machine tipping over. Anchor machine to floor to prevent tipping as a result of lateral force needed to operate this machine.

Anchoring to Concrete Floors

Lag shield anchors with lag screws (see below) are a popular way to anchor machinery to a concrete floor, because the anchors sit flush with the floor surface, making it easy to unbolt and move the machine later, if needed. However, anytime local codes apply, you MUST follow the anchoring methodology specified by the code.

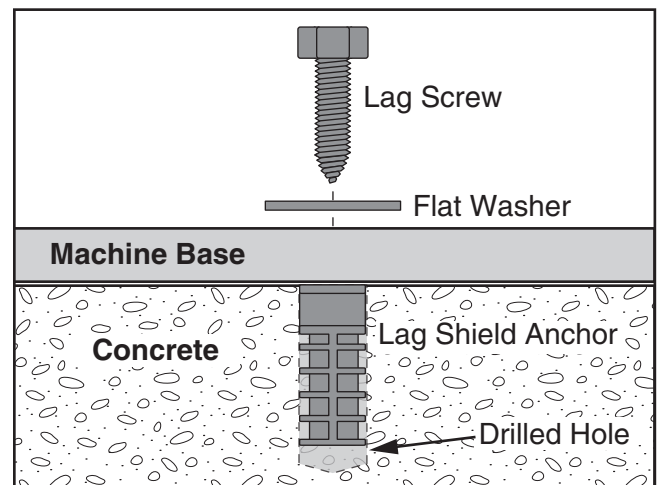


Figure 10. Popular method for anchoring machinery to a concrete floor.




SECTION 3: 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.

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

| | |
|---|--|
|  | WARNING Damage to your eyes and hands could result from using this machine without proper protective gear. Always wear leather gloves and safety glasses, 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. |
|--|

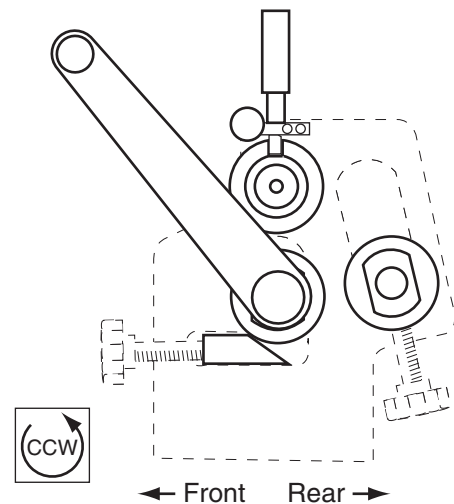
NOTICE

This machine is designed for cold rolling only. Using a torch or other means for hot rolling will permanently damage and deform rollers and frame of machine.

Sample Illustration

Throughout this manual, diagrams are used to illustrate how the components of the machine are used during the various steps of operation.

Familiarize yourself with the following illustration, its relationship to the machine, and the symbols used in it before proceeding through this manual.



Bold, solid lines indicate that this component is used in this step.



Light, dashed lines indicate that this component is not used in this step.



Arrows indicate the direction of movement of a component.



Rotational arrows indicate the direction a component must be turned.



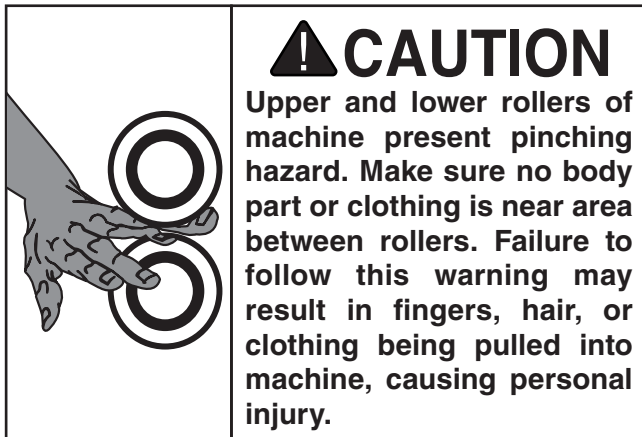
CW=Clockwise
CCW=Counterclockwise



Flat Rolling

This slip roll can be used to flat roll sheet metal up to 15 gauge mild steel. This can be done to straighten sheet metal that is slightly out of form.

Note: *Plastic deformation is permanent. Once a workpiece has been sharply creased or bent, it cannot be straightened using this slip roll.*



To flat roll:

1. Turn thickness adjustment knobs to adjust lower roller to approximately $\frac{1}{4}$ " below top roller (see **Figure 11**).
2. Lower rear roller to lowest position (see **Figure 11**).

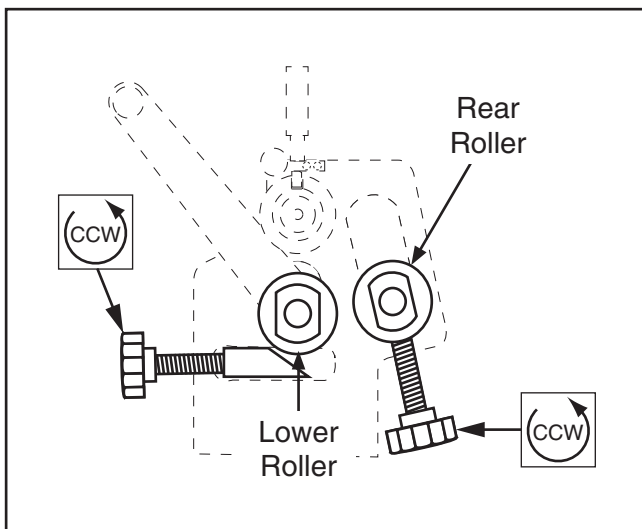


Figure 11. Slip roll preparation.

3. Place workpiece between upper and lower rollers, as shown in **Figure 12**. Turn thickness adjustment knobs to raise lower roller until workpiece is held snugly between upper and lower rollers. Make sure to turn knobs equal amounts so lower roller is parallel with upper roller.

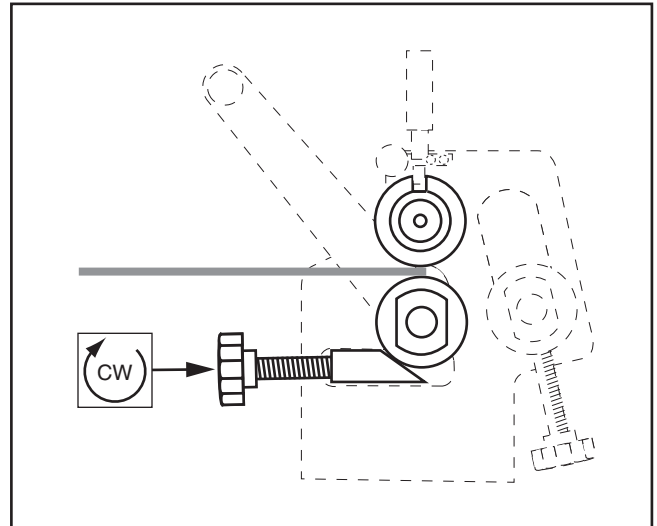


Figure 12. Raising lower roller.

4. Remove workpiece from between rollers, then raise lower roller slightly by rotating thickness adjustment knobs approximately $\frac{1}{4}$ turn (see **Figure 13**).

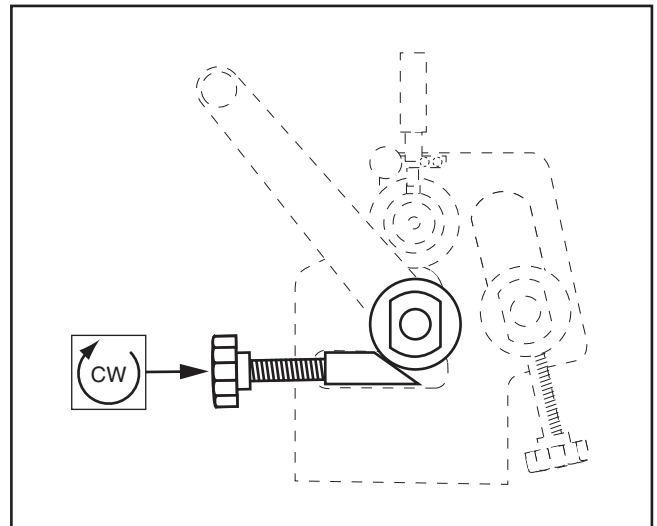


Figure 13. Raising lower roller $\frac{1}{4}$ turn.



5. With help of an assistant, feed workpiece into rollers while turning crank handle (see **Figure 14**).

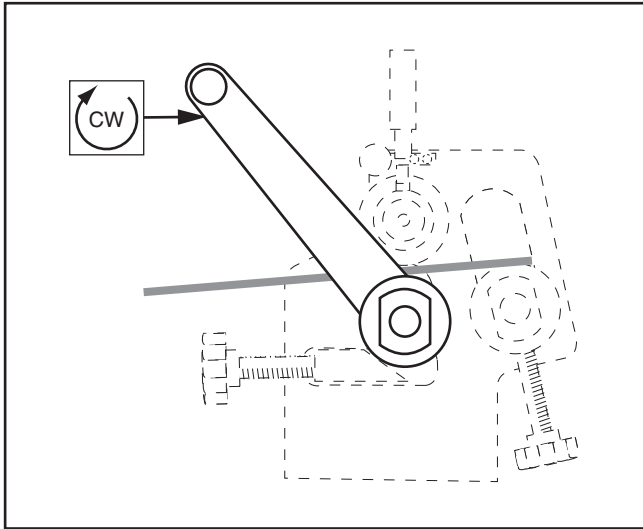
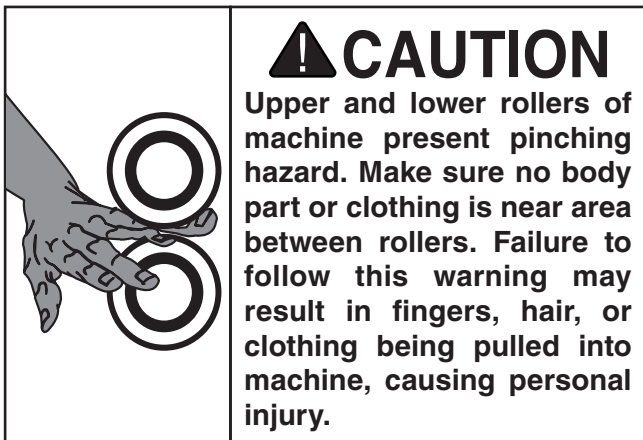


Figure 14. Flat rolling workpiece.

Creating Bends

This slip roll can create constant-radius bends in sheet metal up to 15 gauge mild steel.

Note: *The method for creating a specific radius is a trial-and-error process. Due to the many variations among metal workpieces, no single positioning will create the same curve on all materials. We recommend using scrap pieces the same dimensions and material as the final workpiece until the desired curve is achieved.*



To create bend:

1. Turn thickness adjustment knobs to adjust lower roller to approximately 1/4" below top roller (see **Figure 15**).
2. Lower rear roller to lowest position (see **Figure 15**).

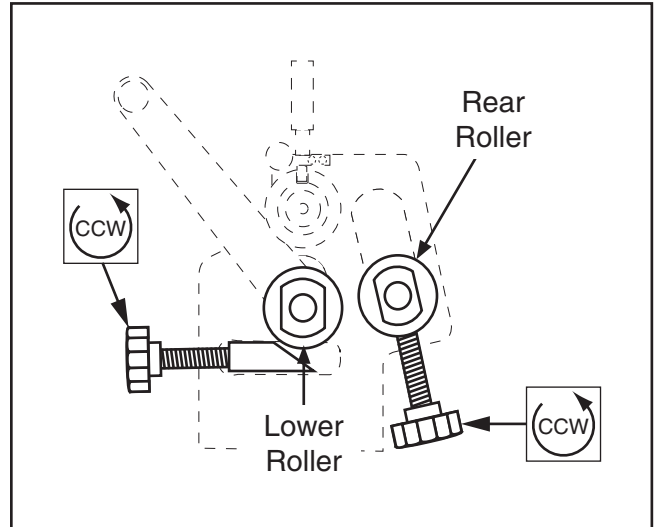


Figure 15. Slip roll preparation.

3. Place workpiece between upper and lower rollers, as shown in **Figure 16**. Turn thickness adjustment knobs to raise lower roller until workpiece is held snugly between upper and lower rollers. Make sure to turn knobs equal amounts so lower roller is parallel with upper roller.

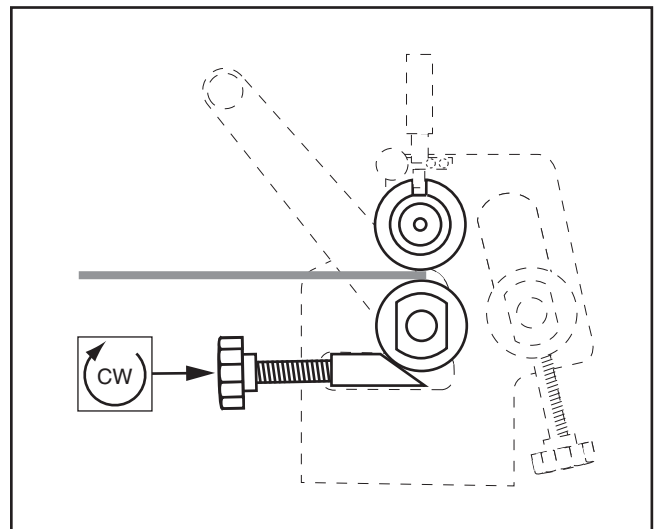


Figure 16. Raising lower roller.



- Turn crank handle clockwise to feed workpiece until its leading edge is directly above rear roller, as shown in **Figure 17**.

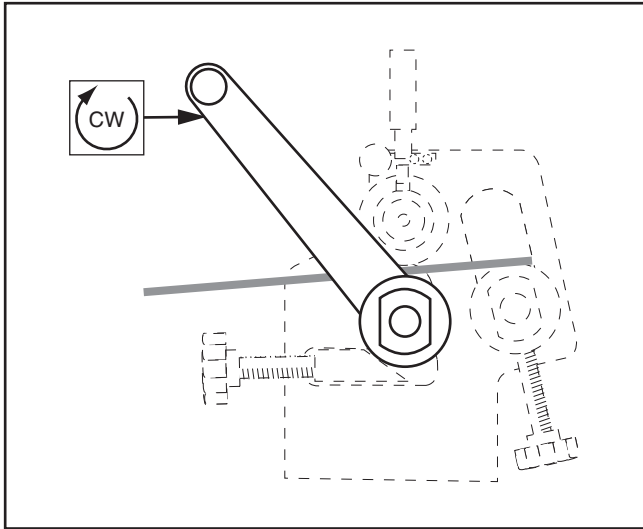


Figure 17. Feeding workpiece.

- Turn radius adjustment knobs to raise rear roller until desired radius bend is reached (see **Figure 18**). Make sure to turn knobs equal amounts so rear roller is always parallel with other rollers. Failure to do so will create a larger radius on one end than the other, resulting in a cone or spiral shape.

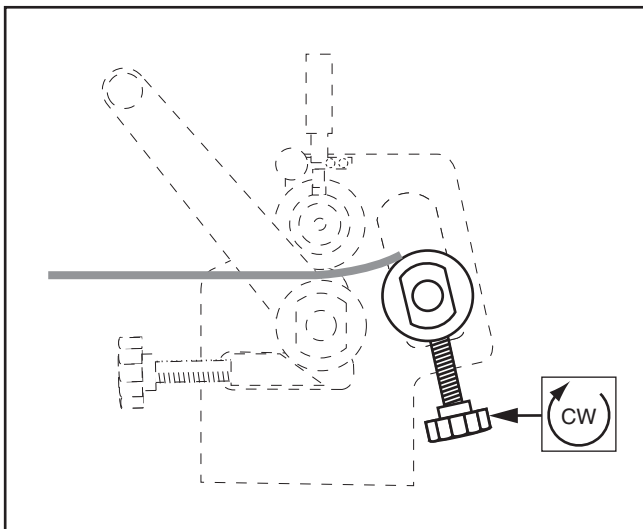


Figure 18. Setting bending radius.

| | |
|--|---|
| | <p>! WARNING Machine poses a cutting hazard if workpieces are not properly handled. If necessary, get assistance to support workpiece. Make sure all helpers are wearing leather gloves and safety glasses when assisting in use of machine.</p> |
| | |

| |
|--|
| <p>! CAUTION Depending on size and shape of workpiece, you may need assistance to support workpiece as it exits machine. Failure to adequately support workpiece may result in workpiece falling, causing injuries.</p> |
|--|

- Turn crank handle clockwise to feed workpiece through machine. Continue turning until workpiece is completely through upper and lower rollers (see **Figure 19**).

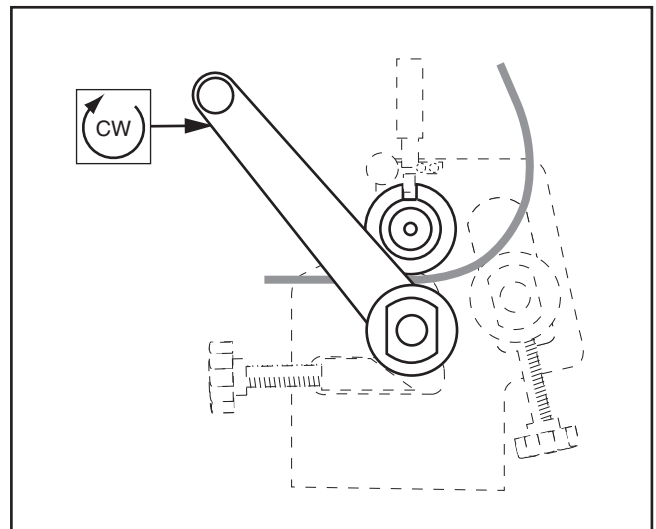


Figure 19. Feeding workpiece through machine.



Creating Cylinders

This 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 3.14)

D=Diameter

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

$$C = \pi D$$

$$C = 3.14 \times 6"$$

$$C = 18\frac{7}{8}"$$

The result of 18⁷/₈" indicates that a piece of sheet metal that is approximately 18⁷/₈" in length is needed 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 (see **Figure 20**).

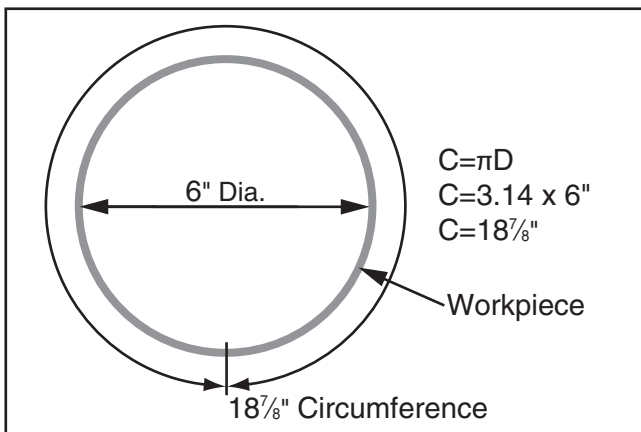


Figure 20. Example of calculating circumference and needed workpiece length.

Once you have a workpiece the necessary length, follow the following steps to create the cylinder.

Note: The method for creating a specific radius is a trial-and-error process. Due to the many variations among metal workpieces, no single positioning will create the same curve on all materials.

To create a cylinder:

1. Turn thickness adjustment knobs to adjust lower roller to approximately 1/4" below top roller (see **Figure 21**).
2. Lower rear roller to lowest position (see **Figure 21**).

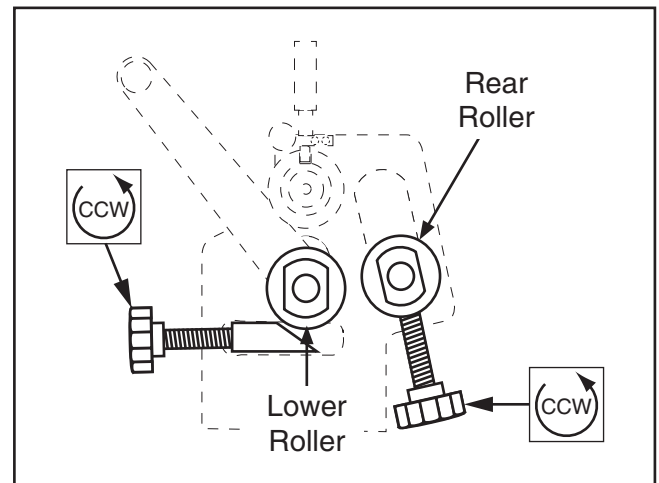


Figure 21. Slip roll preparation.

3. Place workpiece between upper and lower rollers, as shown in **Figure 22**. Turn thickness adjustment knobs to raise lower roller until workpiece is held snugly between upper and lower rollers. Make sure to turn knobs equal amounts so lower roller is parallel with upper roller.

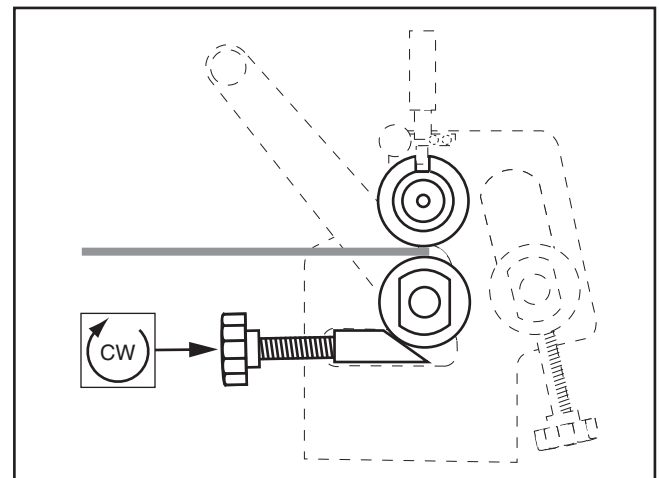


Figure 22. Raising lower roller.



4. Turn crank handle clockwise to feed workpiece until it is approximately halfway through rollers.
5. Turn radius adjustment knobs to raise rear roller until desired radius bend is reached (see **Figure 23**). Make sure to turn knobs equal amounts so rear roller is always parallel with other rollers. Failure to do so will create a larger radius on one end than the other, resulting in a cone shape.

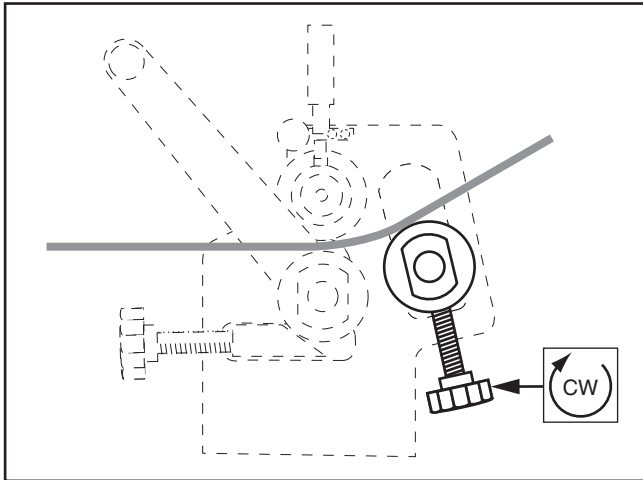


Figure 23. Setting bending radius.

Note: Always err on the side of making radius too large rather than too small. It is easy to decrease radius but very difficult to increase radius later.

6. Turn crank handle clockwise to feed workpiece through machine. Continue turning until workpiece is completely through upper and lower rollers (see **Figure 24**).

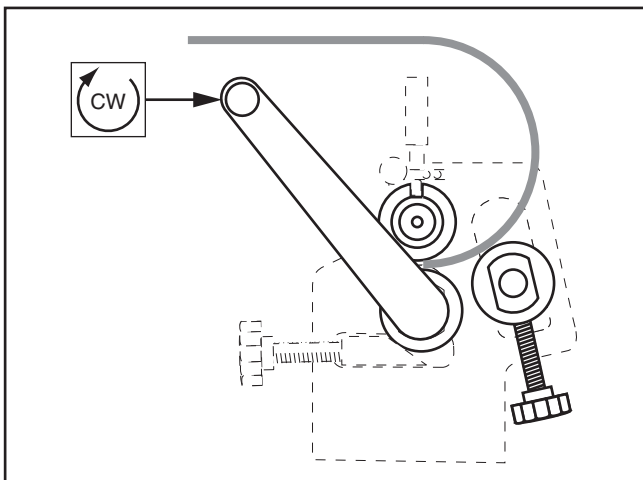


Figure 24. Feeding workpiece through machine.

7. Rotate workpiece 180°, insert curved end into slip roll, then feed workpiece through again (see **Figures 25–26**).

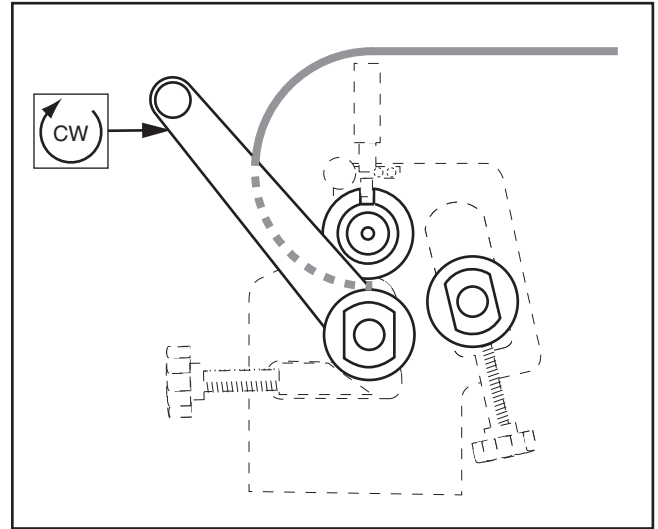


Figure 25. Re-inserting workpiece.

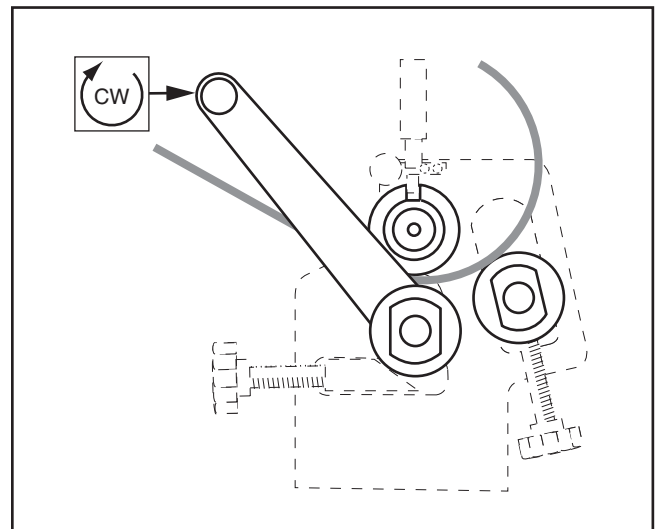


Figure 26. Creating a cylinder.



- Continue to feed workpiece until cylinder is formed, as shown in **Figure 27**.

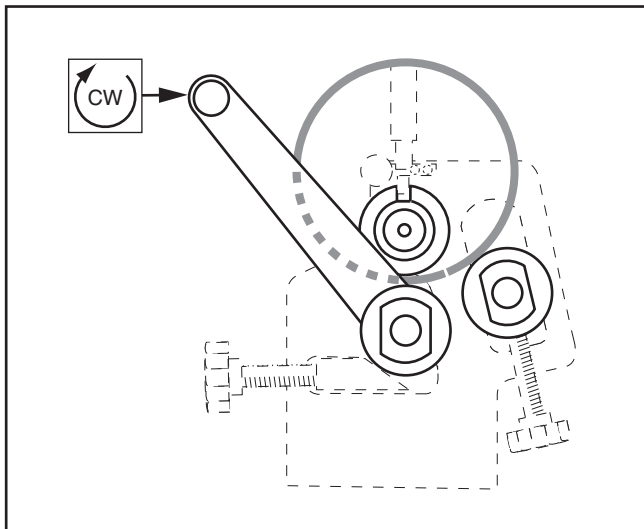


Figure 27. Finishing cylinder.

— If ends of cylinder *do not* meet, raise rear roller equally at both ends, then feed entire cylinder through machine again. Repeat as necessary.

- Rotate release lever lock knob counterclockwise until upper roller release lever can be pulled down, and flat edges of upper roller bracket are parallel with slots in frame (see **Figure 28**).

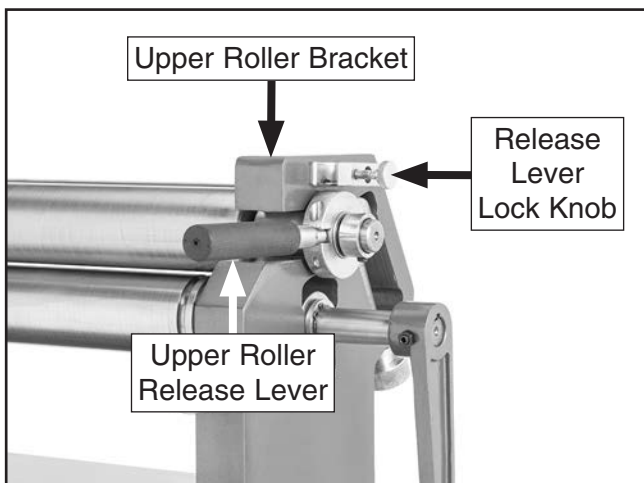


Figure 28. Upper roller release lever pulled down.

- Slide upper roller out from upper roller bracket (see **Figure 29**), remove workpiece from upper roller, then slide upper roller back into bracket.

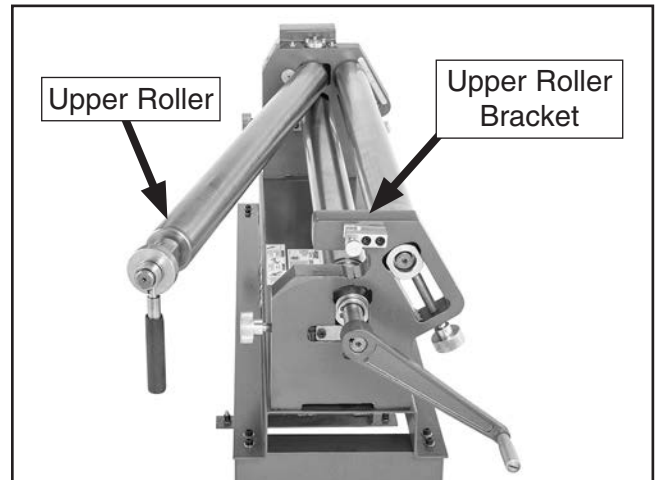


Figure 29. Upper roller released (workpiece already removed from roller for photo clarity).

- Rotate upper roller release lever upward to its vertical position, and tighten release lever lock knob to secure upper roller (see **Figure 30**).

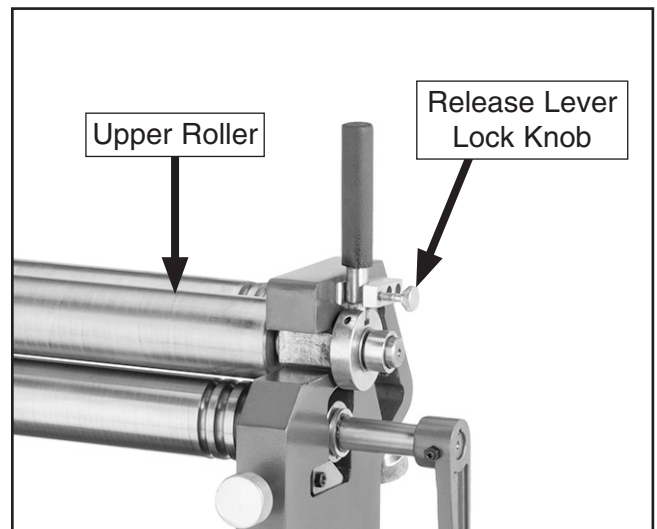


Figure 30. Upper roller secured.

— If ends of cylinder overlap, either attempt to increase radius by manually bending it, or scrap workpiece and start at **Step 1** with new workpiece.



Creating Cones

Bending cones requires more advanced equations and techniques than cylinders. The following section explains the basic principles for bending a truncated, concentric cone. If you require information for bending more complicated cones, please consult outside training, books, and other research.

Similar to the process for bending cylinders, if you know the two diameters and the height of the cone you want to create (see **Figure 31**), you can use those values to determine the dimensions of the initial, flat workpiece before bending.

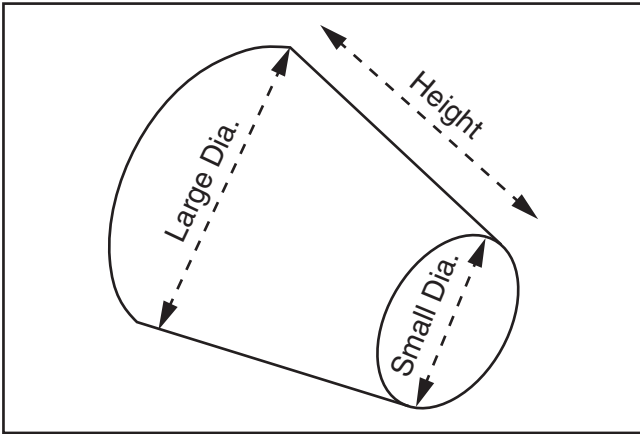


Figure 31. Example of known cone dimensions.

The Model T32718 can bend cylinder and cone diameters as small as 3" due to the roller size, so both diameters of your cone must be larger than 3" to be bent on this machine. Since a "true" cone requires one of the diameters to equal 0", figures and steps in this section refer to a "truncated cone", or a cone lacking an apex whose top is parallel to the base (see **Figure 32**).

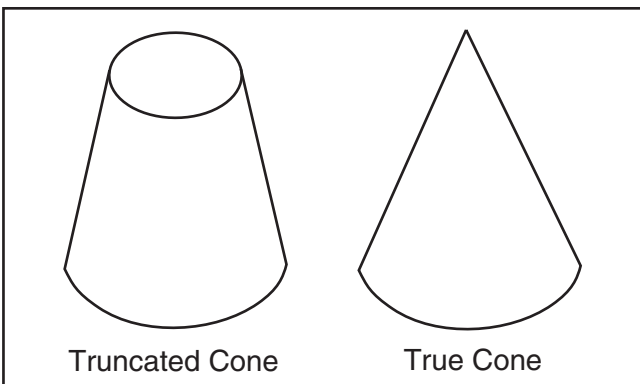


Figure 32. Example a truncated and a true cone.

There are 5 values you will need to calculate in order to cut a flat workpiece that will bend into a functional cone: LargeC, SmallC, RadiusH, TConeH, and TConeRadiusH.

LargeC and SmallC

Use the following formulas to calculate the circumference of both cone openings.

$$\text{LargeC} = \pi \text{LargeD},$$

$$\text{SmallC} = \pi \text{SmallD}$$

LargeC=Large Circumference
(Arc Length of Material Needed at Larger End)

SmallC=Small Circumference
(Arc Length of Material Needed at Smaller End)

π =Pi (Approximately 3.14)

LargeD=Large Diameter

SmallD=Small Diameter

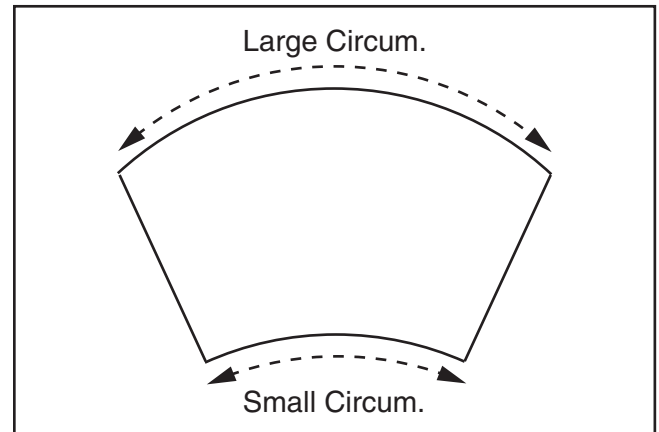


Figure 33. Location of small and large circumference of flat workpiece.

Example: Suppose you want to create a cone with a 5" diameter at one end and a 3" diameter on the other end. You would use the circumference formulas as follows:

$$\text{LargeC} = \pi \text{LargeD}$$

$$\text{LargeC} = 3.14 \times 5"$$

$$\text{LargeC} = 15\frac{11}{16}"$$

$$\text{SmallC} = \pi \text{SmallD}$$

$$\text{SmallC} = 3.14 \times 3"$$

$$\text{SmallC} = 9\frac{7}{16}"$$



The results indicate that a piece of sheet metal needs an arc on one side of approximately $15\frac{11}{16}$ " and an arc of $9\frac{7}{16}$ " on the other side (see **Figure 34**).

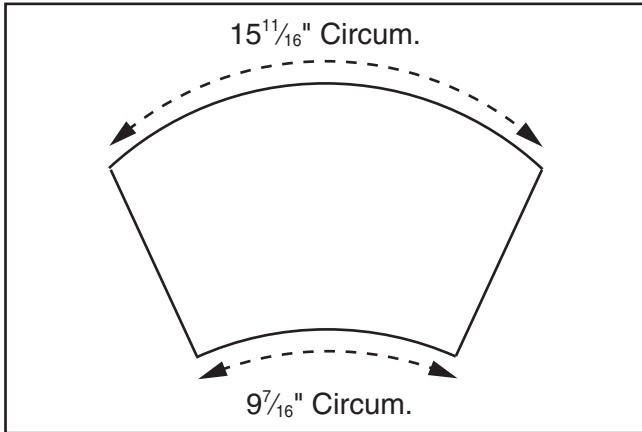


Figure 34. Example of calculated arc circumferences from known diameters.

RadiusH

Next we need to figure out the radius height.

$$\text{RadiusH} = \sqrt{(\text{ConeH})^2 + (\text{LargeD}/2 - \text{SmallD}/2)^2}$$

RadiusH=Flat Workpiece Height
(Width of Material Needed between Two Arcs)

LargeD=Large Diameter

SmallD=Small Diameter

ConeH=Finished Cone Height

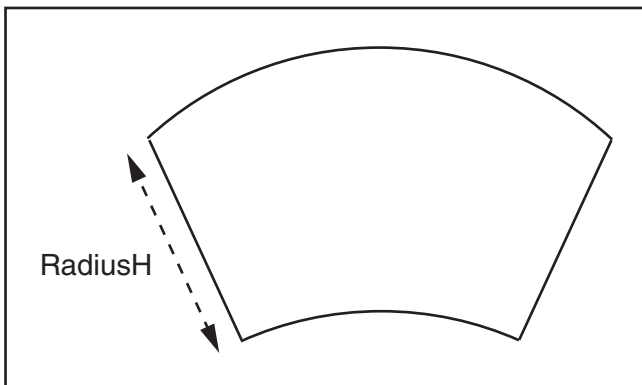


Figure 35. Radius height of flat workpiece.

Radius height differs from the actual cone height because, as you can see from **Figure 36**, the radius height is not 90° in relation to table or floor.

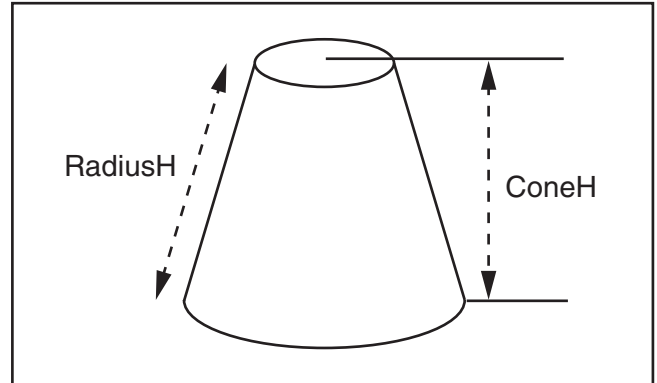


Figure 36. Difference between radius height and overall cone height.

Suppose the cone in the previous example has a height of 6". To find the radius height of the cone, you would use the radius height formula as follows:

$$\text{RadiusH} = \sqrt{(\text{ConeH})^2 + (\text{LargeD}/2 - \text{SmallD}/2)^2}$$

$$\text{RadiusH} = \sqrt{6^2 + (5/2 - 3/2)^2}$$

$$\text{RadiusH} = \sqrt{6^2 + (2.5 - 1.5)^2}$$

$$\text{RadiusH} = \sqrt{6^2 + 1^2}$$

$$\text{RadiusH} = \sqrt{37}$$

$$\text{RadiusH} = 6.083$$

$$\text{RadiusH} = 6\frac{5}{64}"$$

The results indicate that the piece of sheet metal needs a radius height on either side of approximately $6\frac{5}{64}$ " (see **Figure 37**).

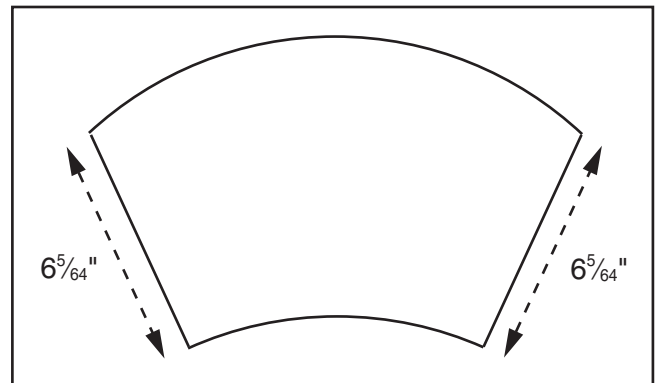


Figure 37. Example of calculated radius height from known diameters and overall cone height.



TConeH

Next, we need to calculate the finished height of the cone if it were a "true" cone:

$$\text{TConeH} = \text{ConeH} \times \frac{\text{LargeD}}{(\text{LargeD} - \text{SmallD})}$$

TConeH=Finished True Cone Height

ConeH=Finished Truncated Cone Height

LargeD=Large Diameter

SmallD=Small Diameter

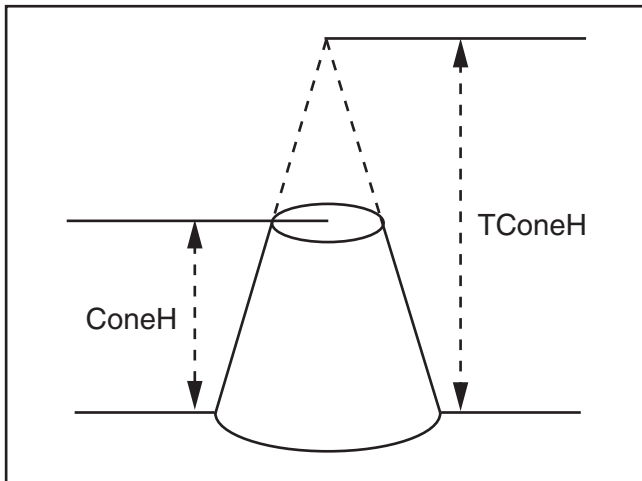


Figure 38. Finished true cone and truncated cone heights measurements.

Following along our previous example, we can plug in the values we know:

$$\text{TConeH} = \text{ConeH} \times \frac{\text{LargeD}}{\text{LargeD} - \text{SmallD}}$$

$$\text{TConeH} = 6 \times \frac{5}{5 - 3}$$

$$\text{TConeH} = 6 \times \frac{5}{2}$$

$$\text{TConeH} = 6 \times 2.5$$

$$\text{TConeH} = 15$$

The results indicate that our truncated cone with a finished height of 6, a small diameter of 3, and a large diameter of 5 would have a height of 15 if the edges continued on to meet at an apex to form a true cone (see **Figure 39**).

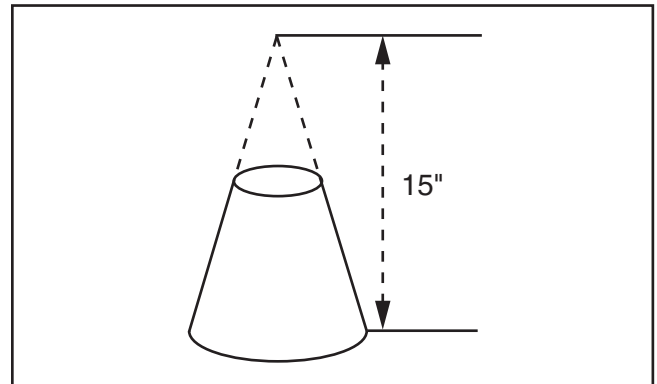


Figure 39. Example of calculated finished true cone height.

TConeRadiusH

The last value we need is the radius height of our cone if it were a true cone. Similar to calculating the radius height for the truncated cone as we did in **RadiusH**, you will use the TConeH value found in the previous section to find the radius height of the true cone.

$$\text{TConeRadiusH} = \sqrt{(\text{TConeH})^2 + (\text{LargeD}/2)^2}$$

TConeRadiusH=True Cone Flat Workpiece Height

TConeH=Finished True Cone Height

LargeD=Large Diameter

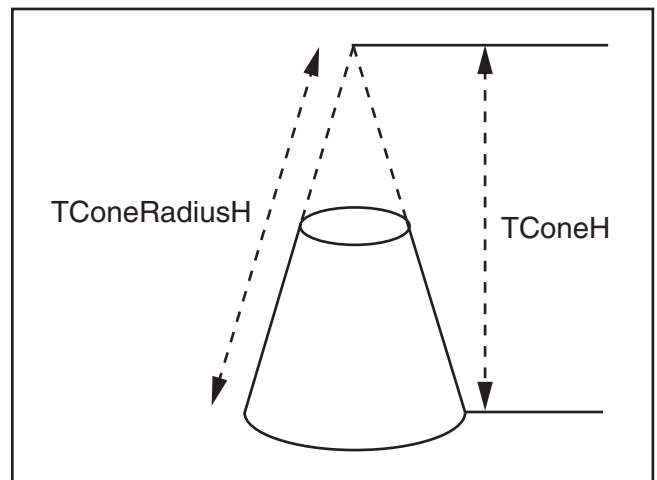


Figure 40. Location of finished and radius true cone heights.



Our example looks like this:

$$\begin{aligned} \text{TConeRadiusH} &= \sqrt{(\text{TConeH})^2 + (\text{LargeD}/2)^2} \\ \text{TConeRadiusH} &= \sqrt{(15)^2 + (5/2)^2} \\ \text{TConeRadiusH} &= \sqrt{15^2 + 2.5^2} \\ \text{TConeRadiusH} &= \sqrt{225 + 6.25} \\ \text{TConeRadiusH} &= \sqrt{231.25} \\ \text{TConeRadiusH} &= 15.207 \\ \text{TConeRadiusH} &= 15^{13/64} \end{aligned}$$

The results indicate that, if our cone extended to become a true cone, the true cone would have a radius height of approximately $15^{13/64}$.

When all the previous values have been calculated, you can use them to prepare and bend your workpiece as described in **Creating Cone**.

Creating a Cone

Once all the necessary values have been calculated, you can prepare and bend the workpiece.

| Items Needed | Qty |
|--|-----------|
| Marker/Pencil..... | 1 |
| String or Cord..... | As Needed |
| Scissors..... | 1 Pr. |
| Measuring Tape..... | 1 |
| Ruler/Straightedge..... | 1 |
| Metal Shear (or other metal-cutting tool)..... | 1 |

To create a cone:

1. Locate or cut a round or square workpiece that has a length and width at least twice as large as calculated **TConeRadiusH** (see **Figure 41**).

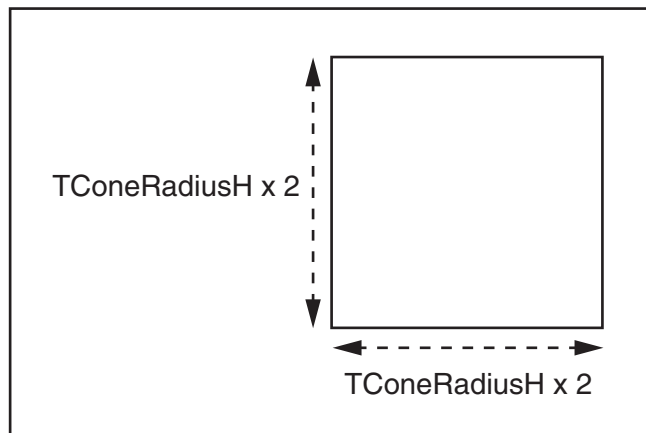


Figure 41. Workpiece with required length and width.

2. Find and mark center point on workpiece (see **Figure 42**).

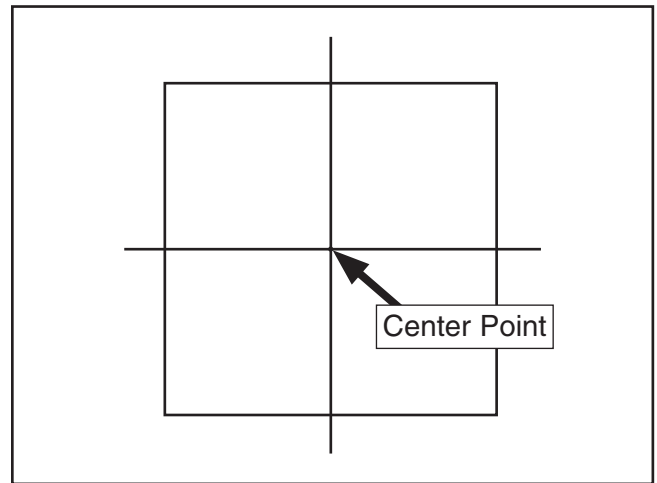


Figure 42. Center point marked on workpiece.

3. Measure and cut string or cord to length of **TConeRadiusH**.
4. Press one end of string to center point marked in **Step 2**, then use other end to draw outer circumference of cone on workpiece (see **Figure 43**).

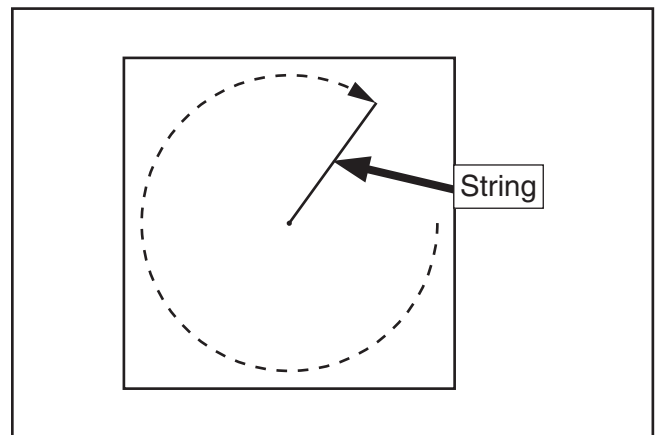


Figure 43. Using string to draw outer circumference circle.



5. Cut length of **RadiusH** off of string to repeat **Step 4** for inner circumference (see **Figure 44**).

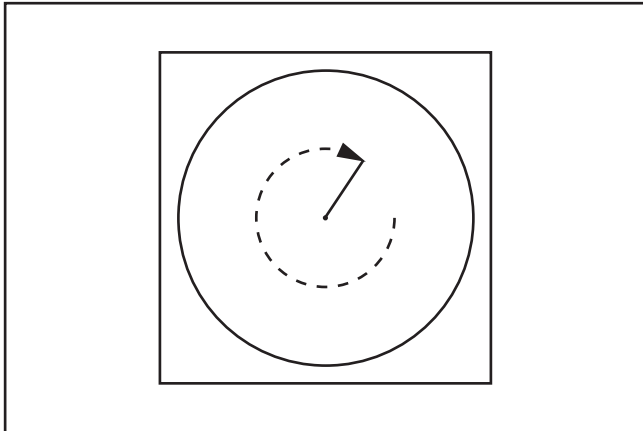


Figure 44. Using string to draw inner circumference circle.

6. Mark straight line from center point mark to outer circle (see **Figure 45**). Location of this line does not matter.

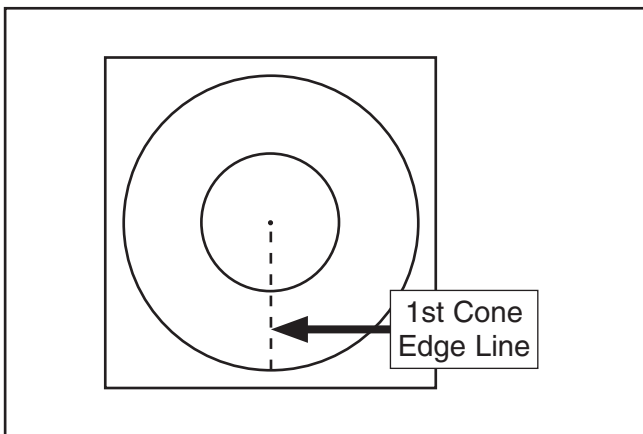


Figure 45. Straight line from center to outer circle.

7. Measure and cut fresh piece of string or cord to length of **LargeC**.

8. Lay **LargeC** string over outer circle line, beginning at line marked in **Step 6**, and mark outer circle at end of string (**Figure 46**).

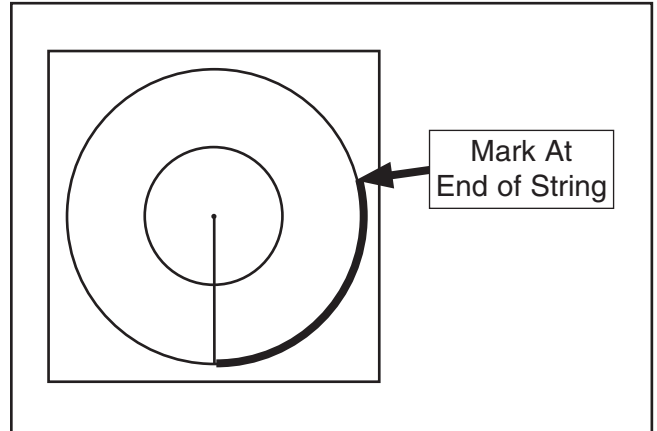


Figure 46. Using string to mark large circumference value.

9. Mark straight line from center point mark to outer circle mark from **Step 8** (see **Figure 47**).

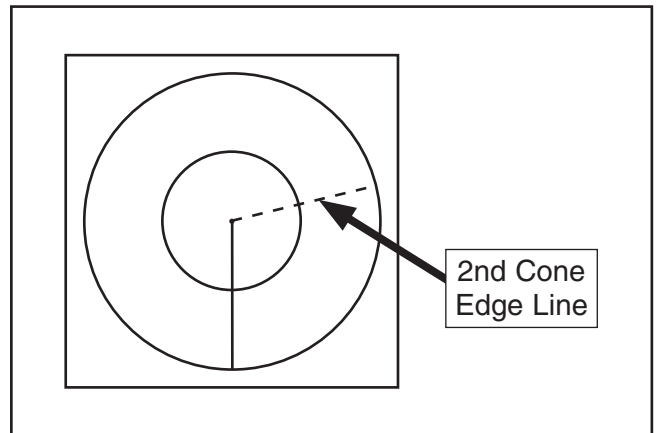


Figure 47. Straight line from center to large circumference mark.



10. Measure values shown in see **Figure 48** and compare to values calculated in previous sections.

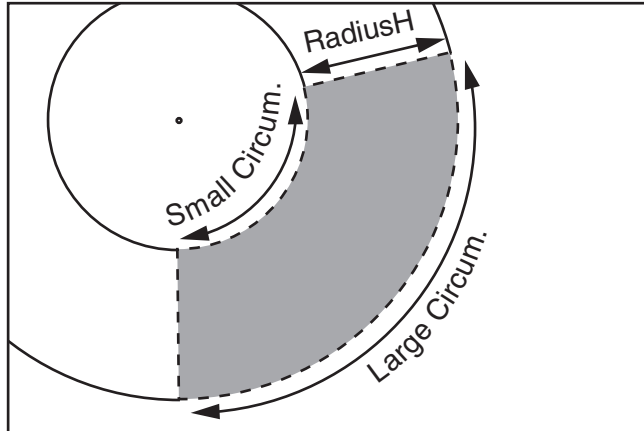


Figure 48. Dimensions to measure for accuracy.

— If values *do not* match, a calculation or measurement is incorrect. Correct calculation or measurements before proceeding.

— If values *do* match, calculations and measurements are correct. Proceed to **Step 11**.

11. Cut workpiece to measurements drawn in previous steps to prepare for bending operation.

Note: *The method for creating specific radii is a trial-and-error process. Due to the many variations among metal workpieces, no single positioning will create the same curve on all materials. We suggest practicing on scrap material of a similar size and thickness before attempting the operation on a desired workpiece.*

12. Turn thickness adjustment knobs to adjust lower roller to approximately $\frac{1}{4}$ " below top roller (see **Figure 49**).

13. Lower rear roller to lowest position (see **Figure 49**).

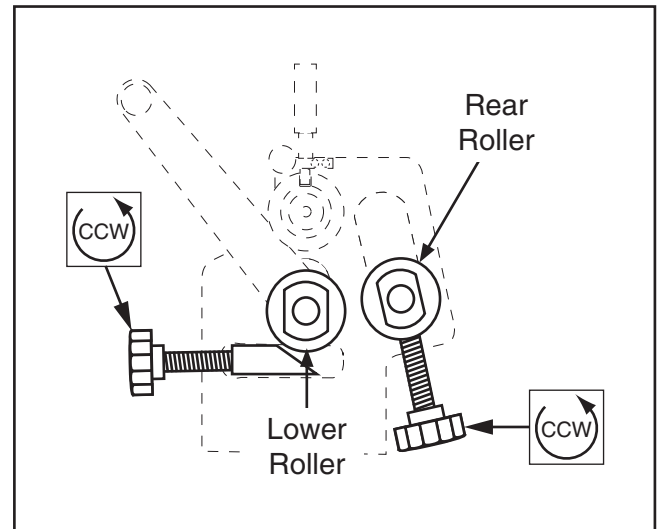


Figure 49. Slip roll preparation.

14. Place workpiece between upper and lower rollers, as shown in **Figure 50**. Turn thickness adjustment knobs to raise lower roller until workpiece is held snugly between upper and lower rollers. Make sure to turn knobs equal amounts so lower roller is parallel with upper roller.

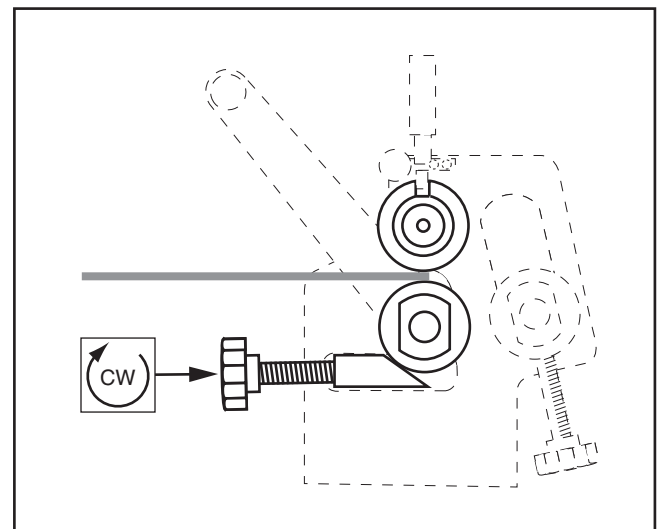


Figure 50. Raising lower roller.



Note: Front edge of workpiece should be parallel with front rollers, and large circumference side should be on the right (see **Figure 51**).

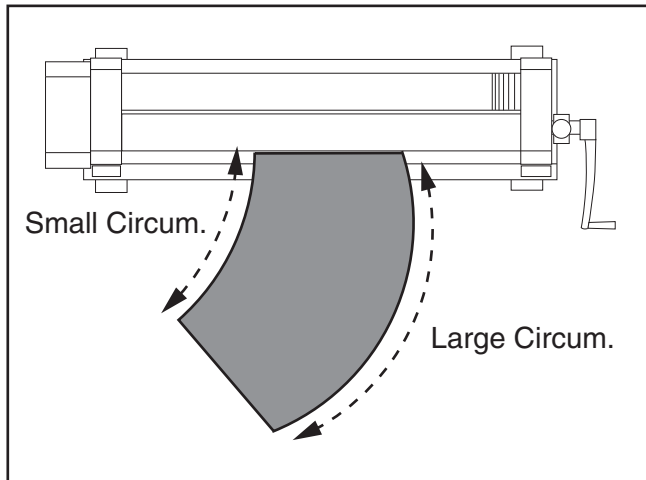


Figure 51. Inserting workpiece for cone-bending operation.

15. Turn crank handle clockwise to feed workpiece until front edge of workpiece is directly over rear roller (see **Figure 52**).

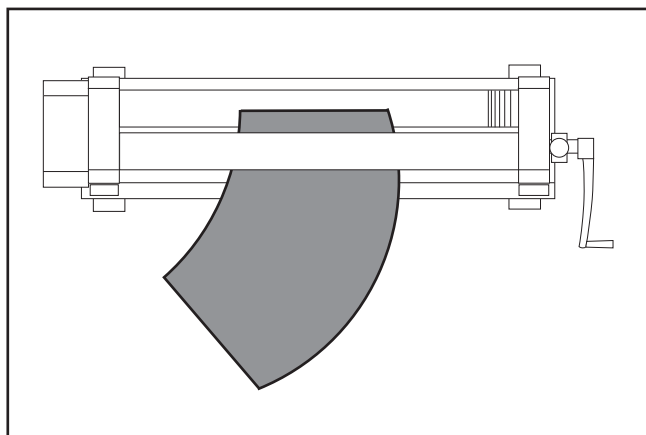


Figure 52. Workpiece fed so edge is over rear roller.

16. Turn radius adjustment knobs to raise rear roller until larger desired radius bend is reached (see **Figure 53**). For this step, turn knobs equal amounts so rear roller is parallel with other rollers.

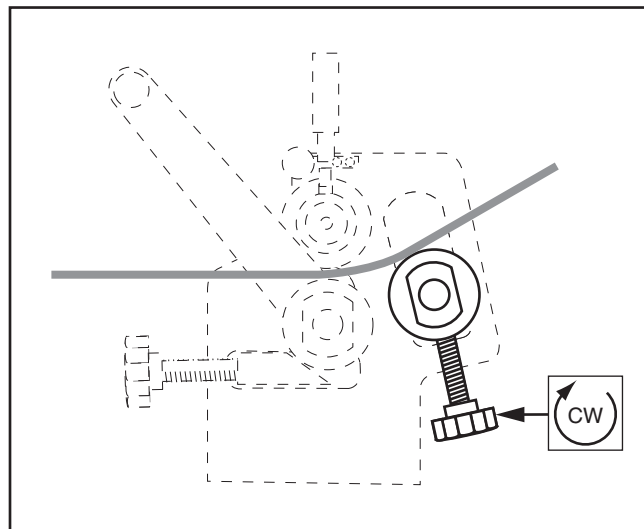


Figure 53. Setting larger bending radius.

17. Adjust left radius adjustment knob further until smaller desired radius bend is reached (see **Figure 54**). This will create a smaller radius on the left side than the right side.

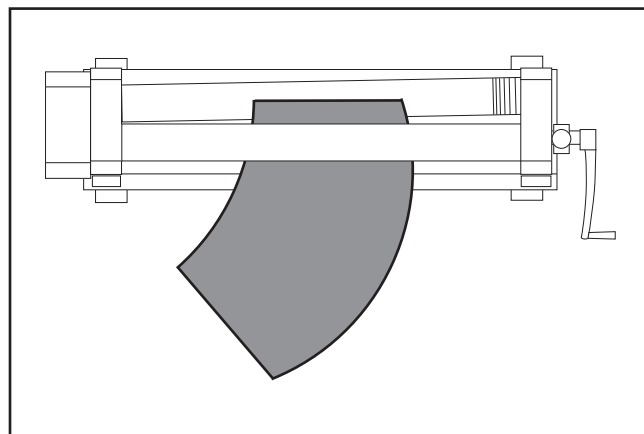


Figure 54. Example of unequal bending radii for bending a cone.

Note: Always err on the side of making radius too large rather than too small. It is easy to decrease radius but very difficult to increase radius later.

18. Turn crank handle clockwise to feed workpiece through machine. Continue turning until workpiece is completely through upper and lower rollers.



— If ends of cone *do not* meet, one or both of bending radii is too large. Adjust rear roller up on side (or sides) that need adjustment, then feed entire cylinder through machine again. Repeat as necessary.

Note: *This process can take many minor adjustments to obtain the results you want.*

19. Rotate release lever lock knob counterclockwise until upper roller release lever can be pulled down, and flat edges of upper roller bracket are parallel with slots in frame (see **Figure 55**).

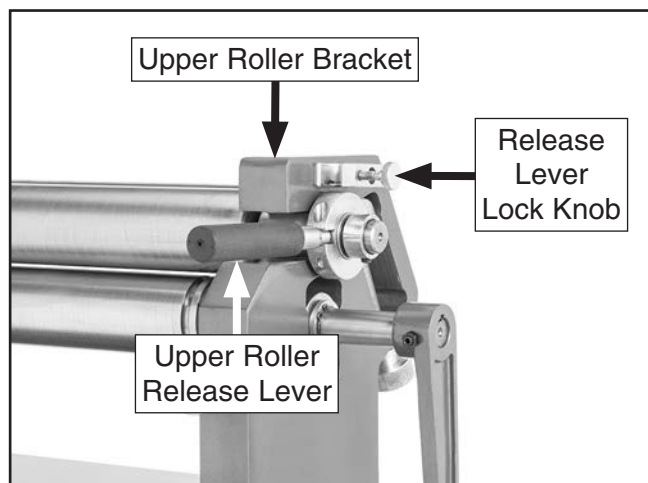


Figure 55. Upper roller release lever pulled down.

20. Slide upper roller out from upper roller bracket (see **Figure 56**), remove workpiece from upper roller, then slide upper roller back into bracket.

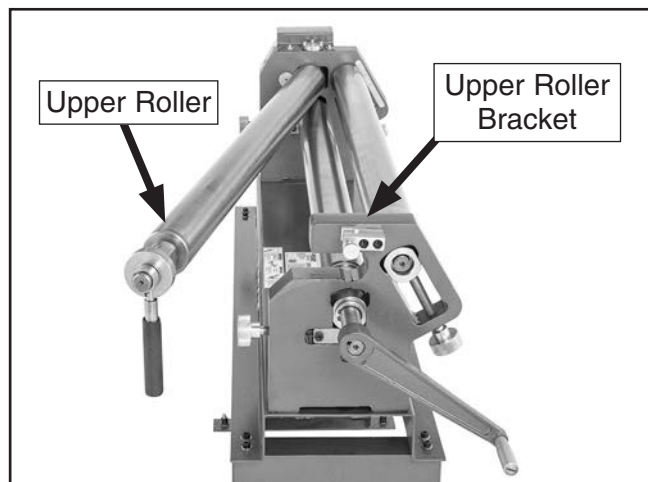


Figure 56. Upper roller released (workpiece already removed from roller for photo clarity).

21. Rotate upper roller release lever upward to its vertical position, and tighten release lever lock knob to secure upper roller (see **Figure 57**).

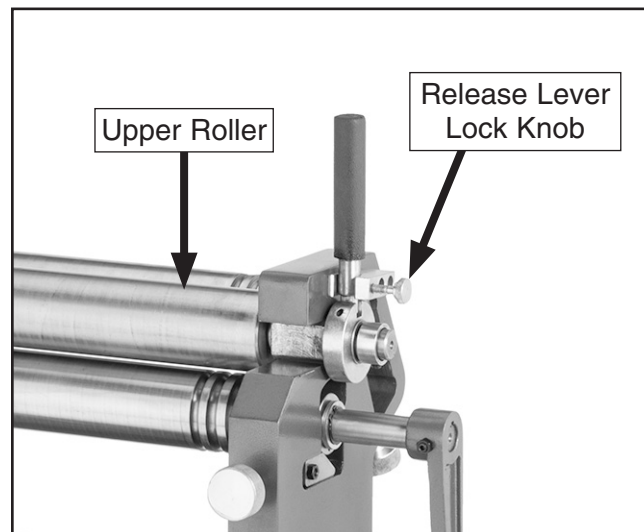


Figure 57. Upper roller secured.

— If ends of cone overlap, either attempt to increase radius (or radii) by manually bending, or scrap workpiece and start at **Step 1** with new workpiece.



Using Wire Grooves to Bend Objects

This slip roll 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 wire grooves to bend objects:

1. Turn thickness adjustment knobs to adjust lower roller to approximately $\frac{1}{4}$ " below top roller (see **Figure 58**).
2. Lower rear roller to lowest position (see **Figure 58**).

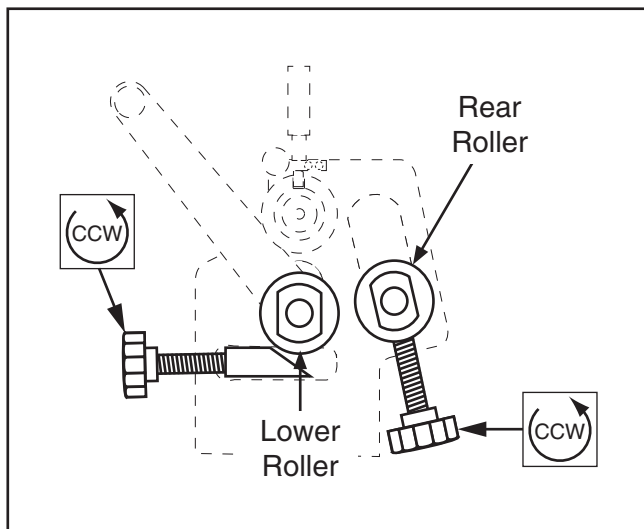


Figure 58. Slip roll preparation.

3. Place workpiece into smallest possible groove on wheel. The three sizes are $\frac{5}{16}$ ", $\frac{3}{8}$ ", and $\frac{1}{2}$ " (see **Figure 59**).

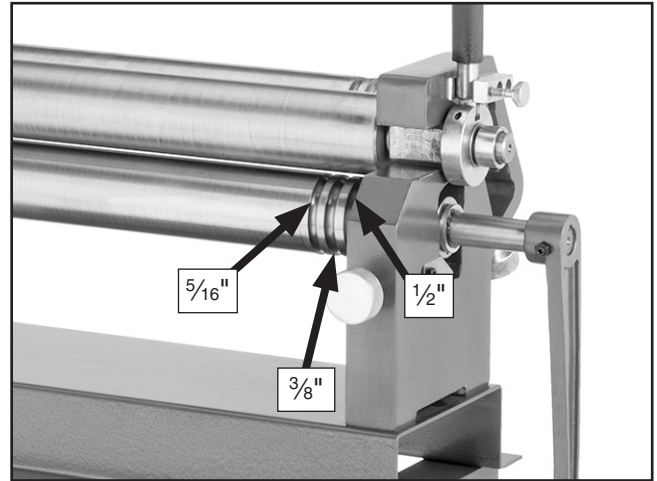


Figure 59. Location of wire grooves.

Example: Suppose you want to bend a piece of $\frac{1}{4}$ " rod. Though it would fit in any of three grooves, you would use the $\frac{5}{16}$ " groove since it is the smallest possible groove that rod will fit into.

4. Feed material through machine as described in **Creating Bends** on **Page 16**, **Creating Cylinders** on **Page 18**, or **Creating Cones** on **Page 21**, depending on your operation.



SECTION 4: ACCESSORIES

!WARNING

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

NOTICE

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

T26722—Master Hand Riveter Kit with Storage Case

The kit includes hand rivet gun for 2.4, 3.2, 4.0, and 4.8 rivets; nut rivet gun for 6-32, 8-32, 10-24, and ¼-20 nuts; and 50 pieces each of 2.4, 3.2, 4.0, and 4.8 aluminum rivets; and 25 pieces each of 6-32, 8-32, 10-24, and ¼-20 carbon steel nuts.



Figure 60. Model T26722 Master Hand Riveter Kit with Storage Case.

D3042—Double Suction Cup

Handle plate glass, glass mirrors, and sheet metal with safety and security. Cam-action levers make placement and removal quick and easy.



Figure 61. Model D3042 Double Suction Cup.

H5503—½ HP Electric Sheet Metal Shear

This electric sheet metal shear features a ½ HP, 110V, 2500 RPM, 3.8 amp motor with a 360 degree adjustable swivel head and variable speed range from 0 to 2500 SPM. Cuts up to 14 gauge in mild steel and 18 gauge in stainless, at up to 150 inches per minute.

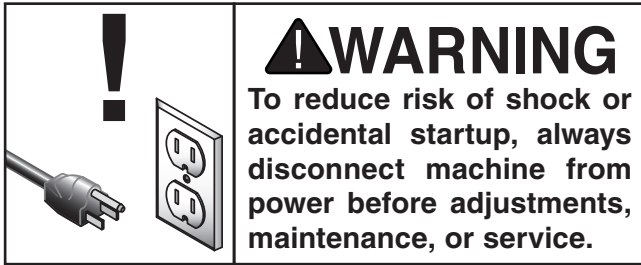


Figure 62. Model H5503 ½ HP Electric Sheet Metal Shear.

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



SECTION 5: MAINTENANCE



Schedule

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

Ongoing

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

- Loose mounting bolts.
- Damaged rollers.
- Any other unsafe condition.

Weekly Maintenance

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

Cleaning & Protecting

Cleaning the Model T32718 is relatively easy. Periodically wipe down the rollers to remove dust and debris—this ensures rust-promoting material does not remain on the bare metal surfaces.

Protect the unpainted metal surfaces with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9 (see **Figure 63** below for examples).

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



Lubrication

When lubricating this machine, first clean the components before lubricating them. This step is critical because grime and dust build up on lubricated components, which makes them hard to move. Simply adding more lubricant will not result in smooth moving parts.

T26419—Syn-O-Gen Synthetic Grease

T26685—Moly-D ISO 32 Multi-Function Oil



Figure 64. Recommended lubrication products.

Gears

Lubrication Type ... T26419 or NLGI#2 Equivalent
 Lubrication Amount 1–2 Dabs
 Lubrication Frequency Weekly

Remove the gear cover and apply a dab of NLGI#2 grease to the roller gears (see **Figure 65**). Rotate the crank handle in both directions to distribute the grease to all the gears, then wipe away any excess and install the gear cover.

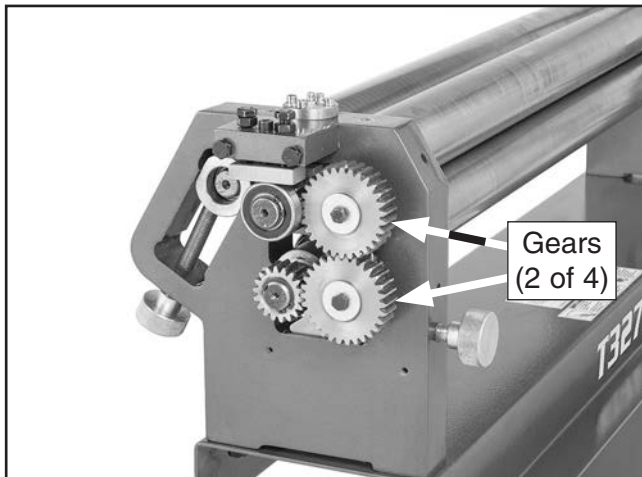


Figure 65. Location of roller gears.

Roller Bushings

Lubrication Type T26685 or ISO 32 Equivalent
 Lubrication Amount 3–5 Drops
 Lubrication Frequency Weekly

Use an oil can to apply a few drops of ISO 32 oil to the brass roller bushings on the right side and into the ball oiler on the top of the left side of the machine (see **Figures 66–67**). Rotate the crank handle in both directions to distribute the oil, then wipe away any excess.

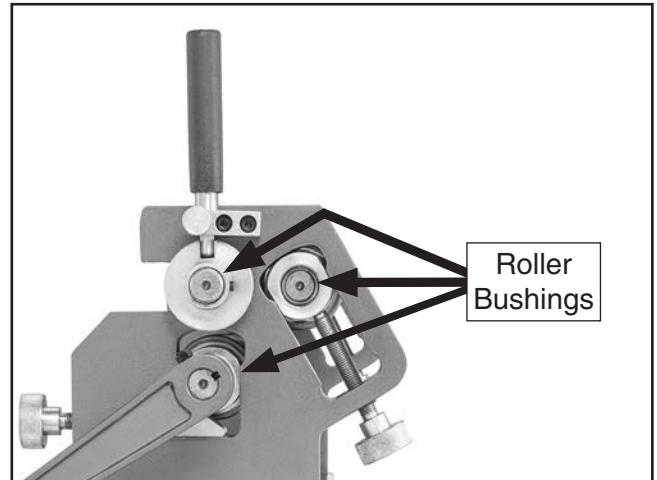


Figure 66. Location of brass roller bushings.



Figure 67. Location of ball oiler.



SECTION 6: 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

Operations

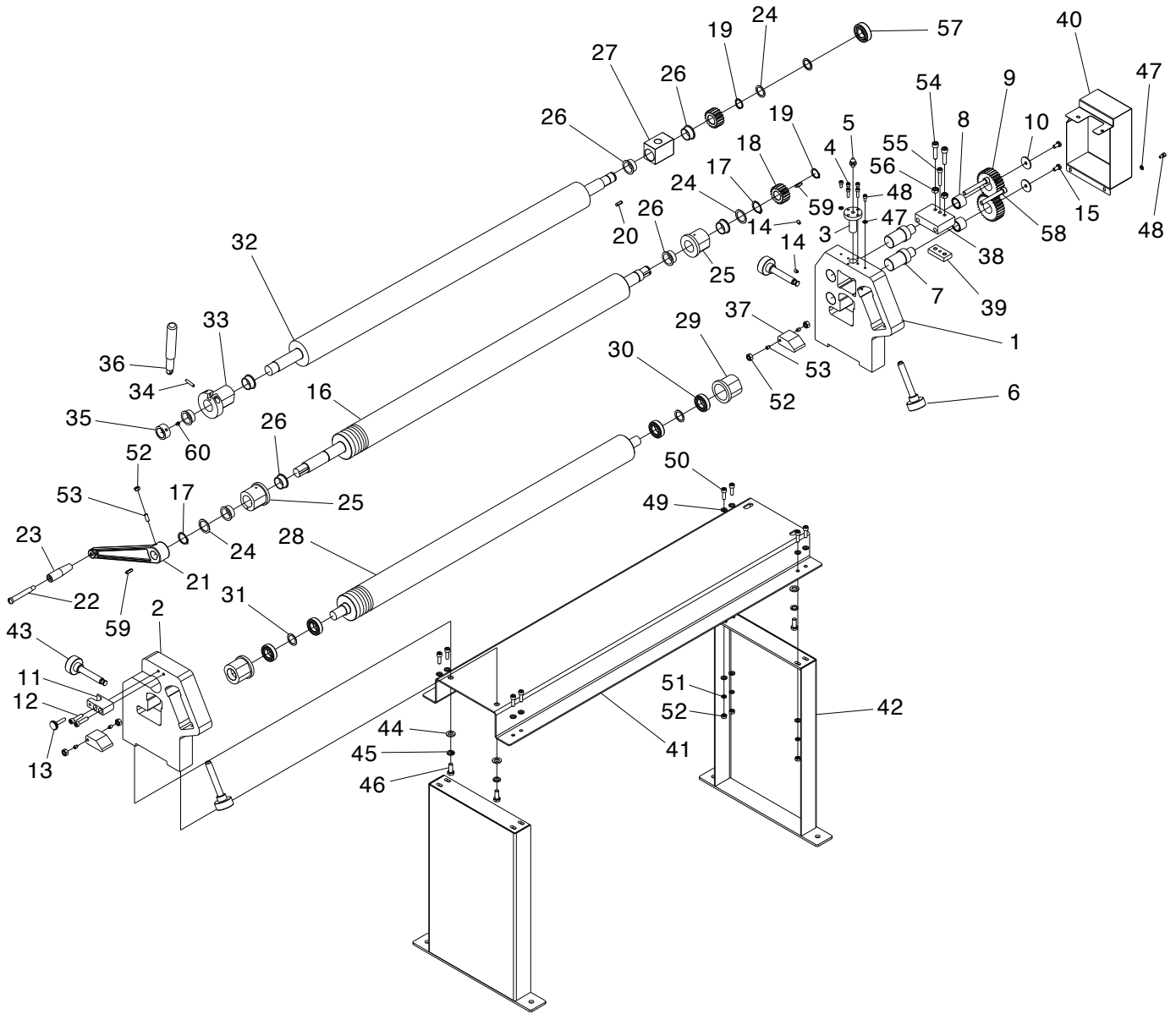
| Symptom | Possible Cause | Possible Solution |
|--|--|---|
| Machine creates cones when trying to create cylinders. | 1. Rear roller is not parallel to upper/lower rollers. | 1. Adjust radius adjustment knobs as necessary to align rear roller with upper/lower rollers. |
| A noticeable crease is formed in workpiece. | 1. Excessive pressure applied in one spot. | 1. Reduce bending radius and perform bend in several passes. |
| Crank handle does not turn upper and lower rollers. | 1. Gears are damaged or slipping. | 1. Check/replace gears. |
| Machine does not bend material. | 1. Machine capacities are exceeded. 2. Rear roller not engaged. | 1. Use materials within capacity of machine. 2. Adjust radius adjustment knobs as necessary to engage rear roller. |
| Edges of cylinder are not straight. | 1. Workpiece is not straight when inserted in machine. 2. Lower roller is not parallel to upper roller. | 1. Verify workpiece is straight when inserted in machine. 2. Adjust thickness adjustment knobs as necessary to align lower roller with upper roller. |
| Ends of cone do not meet. | 1. Both bending radii too large. | 1. Tighten radius adjustment knobs and repeat operation as necessary until cone ends meet. |
| Ends of cone do not meet on one side. | 1. One bending radii too large. | 1. Tighten radius adjustment knob of side that does not meet and repeat operation as necessary until cone ends meet. |
| Workpiece does not feed evenly through machine. | 1. Lower roller is not parallel to upper roller. | 1. Adjust thickness adjustment knobs as necessary to align lower roller with upper roller. |



SECTION 7: 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.

Main

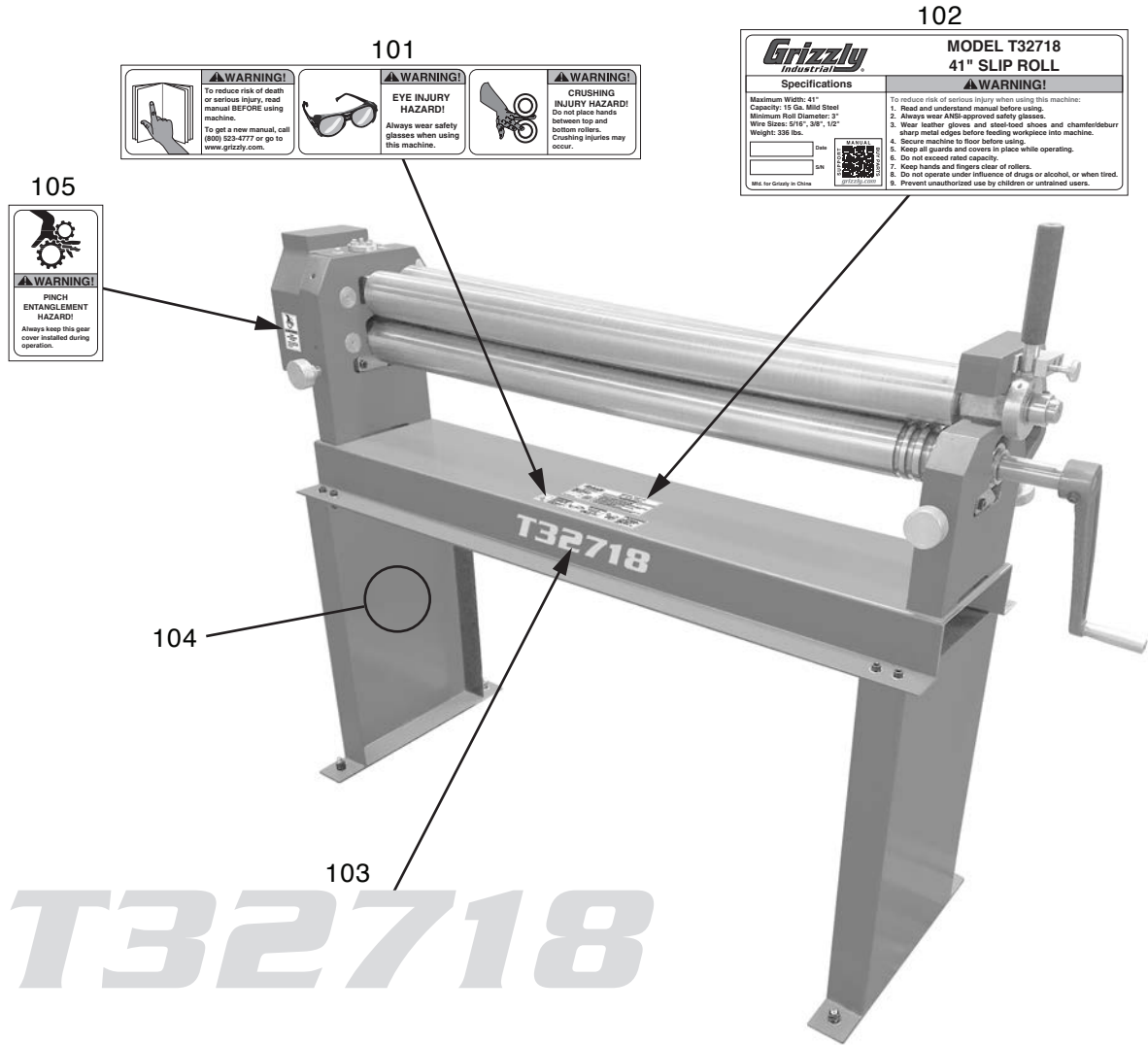


Main Parts List

| REF PART # | DESCRIPTION | REF PART # | DESCRIPTION |
|------------|--|------------|--|
| 1 | PT32718001 ROLLER SUPPORT (LEFT) | 31 | PT32718031 FLAT WASHER 25 X 34 X 1MM |
| 2 | PT32718002 ROLLER SUPPORT (RIGHT) | 32 | PT32718032 UPPER ROLLER |
| 3 | PT32718003 LOWER ROLLER HEIGHT SHAFT | 33 | PT32718033 UPPER ROLLER QUILL |
| 4 | PT32718004 CAP SCREW M6-1 X 20 | 34 | PT32718034 ROLL PIN 6 X 30 |
| 5 | PT32718005 GREASE FITTING M10-1 STRAIGHT | 35 | PT32718035 LOCK COLLAR |
| 6 | PT32718006 KNOB BOLT M16-2 X 90, D48, ROUND KD | 36 | PT32718036 UPPER ROLLER LOCK LEVER |
| 7 | PT32718007 GEAR SHAFT | 37 | PT32718037 LOWER ROLLER SUPPORT |
| 8 | PT32718008 NEEDLE BEARING HK2525 | 38 | PT32718038 UPPER ROLLER TENSION MOUNT |
| 9 | PT32718009 GEAR 30T | 39 | PT32718039 UPPER ROLLER TENSION BLOCK |
| 10 | PT32718010 FLAT WASHER 8 X 35 X 2.5MM | 40 | PT32718040 GEAR COVER |
| 11 | PT32718011 LEVER BRACKET | 41 | PT32718041 BASE |
| 12 | PT32718012 CAP SCREW M8-1.25 X 35 | 42 | PT32718042 LEG |
| 13 | PT32718013 KNOB BOLT M8-1.25 X 30, D24, ROUND KD | 43 | PT32718043 KNOB BOLT M16-2 X 80, D48, ROUND KD |
| 14 | PT32718014 SET SCREW M8-1.25 X 20 | 44 | PT32718044 FLAT WASHER 12MM |
| 15 | PT32718015 HEX BOLT M8-1.25 X 16 | 45 | PT32718045 LOCK WASHER 12MM |
| 16 | PT32718016 LOWER ROLLER | 46 | PT32718046 HEX BOLT M12-1.75 X 25 |
| 17 | PT32718017 EXT RETAINING RING 30MM | 47 | PT32718047 FLAT WASHER 6MM |
| 18 | PT32718018 GEAR 18T | 48 | PT32718048 CAP SCREW M6-1 X 12 |
| 19 | PT32718019 EXT RETAINING RING 25MM | 49 | PT32718049 FLAT WASHER 8MM |
| 20 | PT32718020 KEY 6 X 6 X 22 | 50 | PT32718050 CAP SCREW M8-1.25 X 25 |
| 21 | PT32718021 CRANK | 51 | PT32718051 LOCK WASHER 8MM |
| 22 | PT32718022 SHOULDER SCREW M10-1.5 X 14, 12 X 72 | 52 | PT32718052 HEX NUT M8-1.25 |
| 23 | PT32718023 HOLLOW HANDLE 22 X 78, 12 | 53 | PT32718053 SET SCREW M8-1.25 X 20 |
| 24 | PT32718024 FLAT WASHER 25 X 34 X 1MM | 54 | PT32718054 CAP SCREW M10-1.5 X 40 |
| 25 | PT32718025 LOWER ROLLER BUSHING | 55 | PT32718055 CAP SCREW M8-1.25 X 45 |
| 26 | PT32718026 ROLLER BUSHING (COPPER) | 56 | PT32718056 HEX NUT M10-1.5 |
| 27 | PT32718027 UPPER ROLLER BRACKET | 57 | PT32718057 BALL BEARING 6205-2RS |
| 28 | PT32718028 REAR ROLLER BUSHING | 58 | PT32718058 CAP SCREW M10-1.5 X 80 |
| 29 | PT32718029 REAR ROLLER BUSHING | 59 | PT32718059 KEY 6 X 6 X 20 RE |
| 30 | PT32718030 BALL BEARING 6005ZZ | 60 | PT32718060 SET SCREW M8-1.25 X 10 |



Labels & Cosmetics



T32718

| REF PART # | DESCRIPTION |
|------------|--------------------------------|
| 101 | PT32718101 COMBO WARNING LABEL |
| 102 | PT32718102 MACHINE ID LABEL |
| 103 | PT32718103 MODEL NUMBER LABEL |

| REF PART # | DESCRIPTION |
|------------|--|
| 104 | PT32718104 TOUCH-UP PAINT, GRIZZLY GREEN |
| 105 | PT32718105 PINCH/ENTANGLEMENT LABEL |

⚠️ WARNING

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



WARRANTY & RETURNS

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

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

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

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

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

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

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



grizzly.com[®]

TOOL WEBSITE

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

*Visit Our Website Today For
Current Specials!*

**ORDER
24 HOURS A DAY!
1-800-523-4777**

