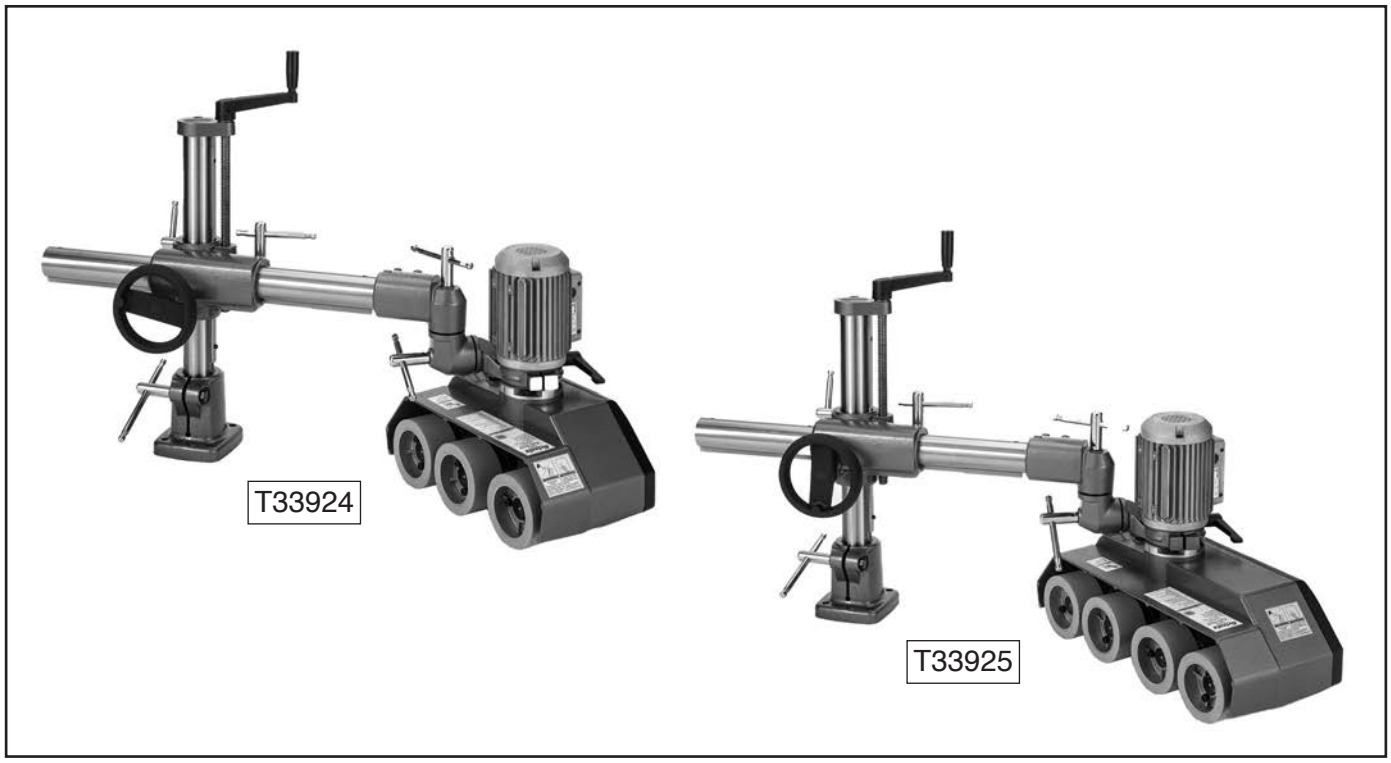
# MODEL T33924/T33925
# 1 HP VARIABLE-SPEED
# 3/4-ROLLER POWER FEEDER
## OWNER'S MANUAL
***(For models manufactured since 10/23)***





#MN22823 PRINTED IN TAIWAN V1.02.24

******Keep for Future Reference******

# ⚠ 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

## Contact Info

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

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

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

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

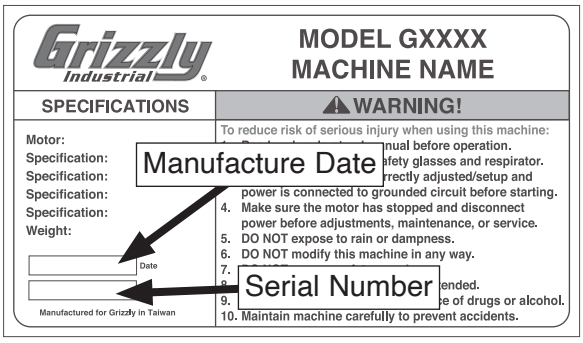
## Manual Accuracy

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

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

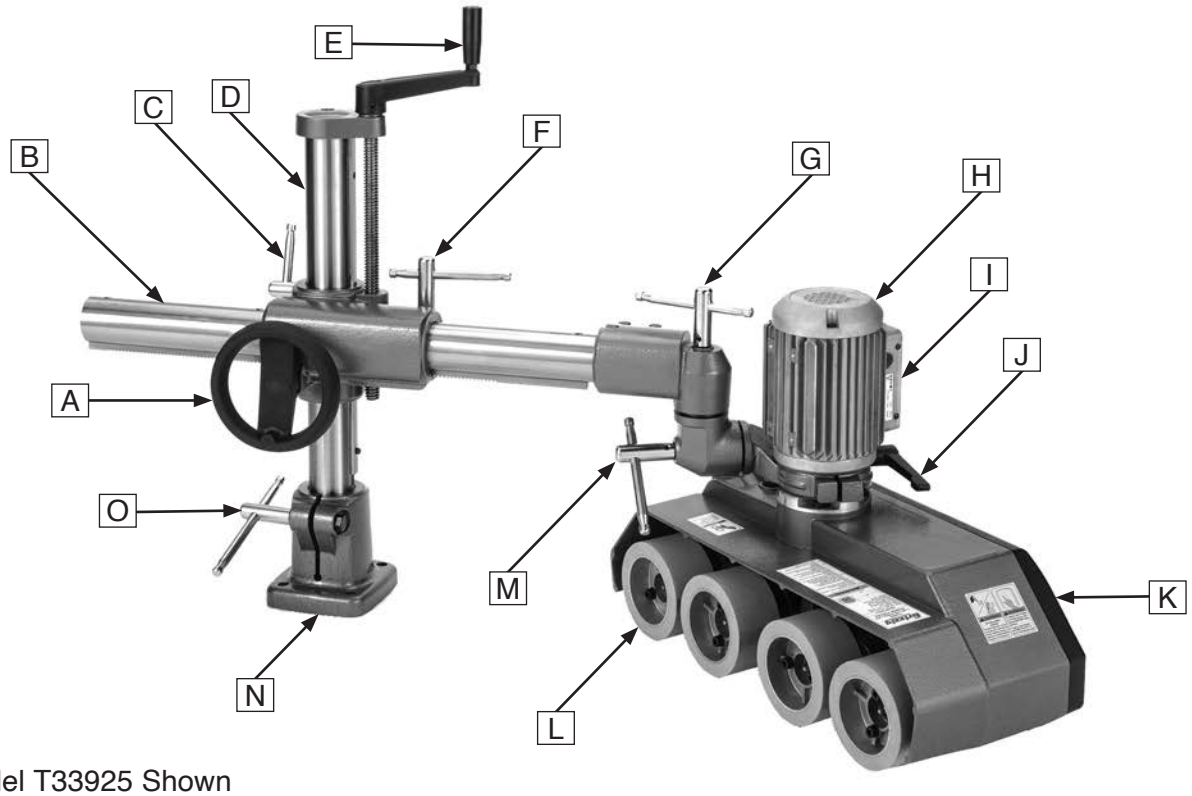
If you find this to be the case, and the difference between the manual and machine leaves you confused or unsure about something, check our website for an updated version. We post current manuals and manual updates for free on our website at **www.grizzly.com**.

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



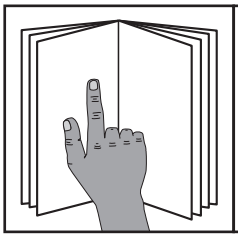
# Identification

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




Model T33925 Shown

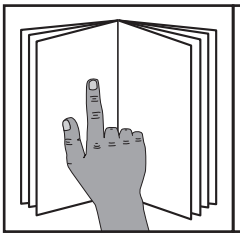
**A.** Horizontal Travel Handwheel
**B.** Overarm Shaft
**C.** Vertical Travel Lock
**D.** Vertical Column
**E.** Vertical Travel Crank Handle
**F.** Horizontal Travel Lock
**G.** Upper Elbow-Joint Lock
**H.** Motor
**I.** Control Panel
**J.** Collar Lock
**K.** Chain Cover
**L.** Rollers
**M.** Lower Elbow-Joint Lock
**N.** Base
**O.** Rotation Lock



**⚠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.

## Control Panel

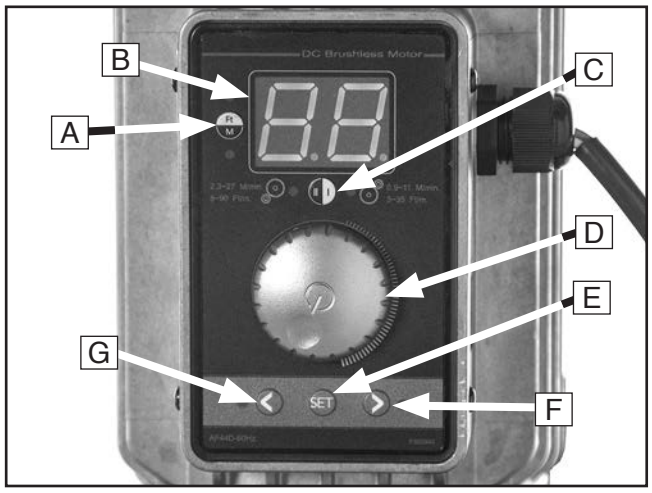



**Figure 1.** Control panel.

**A. Standard/Metric Selection Button:** Press and hold for two seconds to toggle between standard (feet) and metric (meters) per minute on feed speed digital readout.

**B. Feed Speed Digital Readout:** Displays feed rate in feet or meters per minute.

**C. Speed Range Selection Button:** Switches between Low (I) and High (II) speed ranges.

**Note:** *Gear positions must match corresponding illustration next to button for speed range to be selected.*

**D. Variable-Speed Adjustment Dial:** Starts and stops motor and controls feed rate from 3–35 FPM and 8–90 FPM. To start motor, press dial until it beeps and control panel glows red. To stop motor, press dial again. To adjust feed rate, press SET button, then rotate dial clockwise to increase feed rate or counterclockwise to decrease feed rate.

**E. SET Button:** Enables changes to feed rate. When pressed, current feed rate flashes on control panel for 10 seconds, during which time feed rate can be changed with variable-speed adjustment dial. When panel stops flashing, feed rate is locked—until SET button is pressed again.

**F. Forward Feed Direction Button ⩺:** Selects forward feed direction. When pressed, green light to side of button illuminates, indicating button is selected. To change feed direction, press feed direction button opposite of currently selected feed direction twice (2X). New feed direction will be set at lowest speed of current speed range. Press variable-speed adjustment dial twice to restore original feed rate.

**G. Reverse Feed Direction Button ⩹:** Selects reverse feed direction. Green light to left of button illuminates when button has been selected.

## Power Feeder & Column Controls

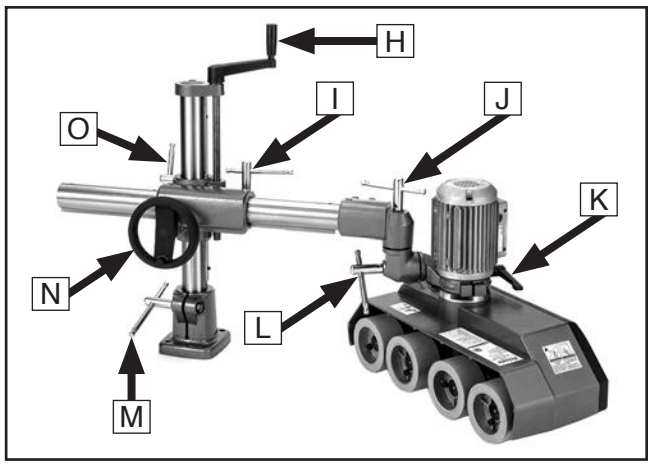



**Figure 2.** Power feeder and column controls.

**H. Vertical Travel Crank Handle:** Adjusts vertical position of overarm shaft and power feeder (when vertical travel lock is loosened).

**I. Horizontal Travel Lock:** Locks horizontal position of power feeder.

**J. Upper Elbow-Joint Lock:** Allows lower elbow and power feeder to rotate around upper elbow. Tighten to secure lower elbow.

**K. Collar Lock:** Allows power feeder to rotate inside lock collar. Tighten to secure position of power feeder inside collar.

**L. Lower Elbow-Joint Lock:** Allows power feeder to rotate. Tighten to secure power feeder swivel position.

**M. Rotation Lock:** Allows vertical column to rotate when loosened. Prevents vertical column from rotating when tightened.

**N. Horizontal Travel Handwheel:** Moves overarm shaft horizontally and adjusts lateral position of power feeder (when horizontal travel lock is loosened).

**O. Vertical Travel Lock:** Locks power feeder height setting.

# MACHINE DATA SHEET

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

## MODEL T33924 1 HP VARIABLE-SPEED 3-ROLLER POWER FEEDER

**Product Dimensions:**

Weight..... 121 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 43-1/2 x 18-1/2 x 30 in.
Footprint (Length x Width)..... 5-1/2 x 6 in.

**Shipping Dimensions:**

**Carton #1**

Type..... Cardboard Box
Content..... Machine
Weight..... 51 lbs.
Length x Width x Height..... 22 x 21 x 11 in.
Must Ship Upright..... No

**Carton #2**

Type..... Cardboard Box
Content..... Stand
Weight..... 79 lbs.
Length x Width x Height..... 30 x 12 x 12 in.
Must Ship Upright..... No

**Electrical:**

Power Requirement..... 220V, Single-Phase, 60 Hz
Full-Load Current Rating..... 3.4A
Minimum Circuit Size..... 15A
Connection Type..... Cord & Plug
Power Cord Included..... Yes
Power Cord Length..... 108 in.
Power Cord Gauge..... 18 AWG
Plug Included..... Yes
Included Plug Type..... 6-15
Switch Type..... Push Button ON/OFF

**Motors:**

**Main**

Horsepower..... 1 HP
Phase..... Single-Phase
Amps..... 3.4A
Speed..... 400 - 4800 RPM
Type..... BLDC
Power Transfer ..... Gear
Bearings..... Sealed & Permanently Lubricated

**Main Specifications:**

**Workpiece Capacities**

Minimum Workpiece Length..... 7 in.

**Operation Info**

| | |
|---|---|
| Number of Feed Speeds | Variable |
| Feed Speeds | 3 - 35, 8 - 90 FPM |
| Swing | 360 deg. |
| Vertical Movement | 9-13/16 in. |
| Horizontal Movement | 17-5/16 in. |
| Rotation | Forward/Reverse |

**Roller Info**

| | |
|---|---|
| Number of Rollers | 3 |
| Roller Width | 2-3/8 in. |
| Roller Diameter | 4-3/4 in. |
| Roller Suspension | 11/16 in. |
| Maximum Height Rollers Parallel Table Surface | 8-1/8 in. |

**Construction Info**

| | |
|---|---|
| Roller | Rubber |
| Housing | Cast Aluminum |
| Supports | Cast Iron |
| Column | Cast Iron |
| Paint Type/Finish | Enamel |

**Other**

| | |
|---|---|
| Column Diameter | 2-1/4 in. |

**Other Specifications:**

| | |
|---|---|
| Country of Origin | Taiwan |
| Warranty | 1 Year |
| Approximate Assembly & Setup Time | 45 Minutes |
| Serial Number Location | ID Label |
| ISO 9001 Factory | Yes |

**Features:**

Two Variable-Feed Speed Ranges
Large Feed Speed Digital Readout w/Imperial and Metric Display
Reversible Feed Direction
Crank Handle Vertical Adjustment
Rack-and-Pinion Horizontal Movement

# MACHINE DATA SHEET

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

## MODEL T33925 1 HP VARIABLE-SPEED 4-ROLLER POWER FEEDER

**Product Dimensions:**

Weight..... 132 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 43-1/2 x 24 x 30 in.
Footprint (Length x Width)..... 5-1/2 x 6 in.

**Shipping Dimensions:**

**Carton #1**

Type..... Cardboard Box
Content..... Machine
Weight..... 62 lbs.
Length x Width x Height..... 30 x 22 x 12 in.
Must Ship Upright..... No

**Carton #2**

Type..... Cardboard Box
Content..... Stand
Weight..... 79 lbs.
Length x Width x Height..... 30 x 12 x 12 in.
Must Ship Upright..... No

**Electrical:**

Power Requirement..... 220V, Single Phase, 60 Hz
Full-Load Current Rating..... 3.4A
Minimum Circuit Size..... 15A
Connection Type..... Cord & Plug
Power Cord Included..... Yes
Power Cord Length..... 108 in.
Power Cord Gauge..... 18 AWG
Plug Included..... Yes
Included Plug Type..... 6-15
Switch Type..... Push Button ON/OFF

**Motors:**

**Main**

Horsepower..... 1 HP
Phase..... Single-Phase
Amps..... 3.4A
Speed..... 400 - 4800 RPM
Type..... BLDC
Power Transfer ..... Gear
Bearings..... Sealed & Permanently Lubricated

**Main Specifications:**

**Workpiece Capacities**

Minimum Workpiece Length..... 7 in.

**Operation Info**

| | |
|---|---|
| Number of Feed Speeds | Variable |
| Feed Speeds | 3 - 35, 8 - 90 FPM |
| Swing | 360 deg. |
| Vertical Movement | 9-13/16 in. |
| Horizontal Movement | 17-5/16 in. |
| Rotation | Forward/Reverse |

**Roller Info**

| | |
|---|---|
| Number of Rollers | 4 |
| Roller Width | 2-3/8 in. |
| Roller Diameter | 4-3/4 in. |
| Roller Suspension | 11/16 in. |
| Maximum Height Rollers Parallel Table Surface | 8-1/8 in. |

**Construction Info**

| | |
|---|---|
| Roller | Rubber |
| Housing | Cast Aluminum |
| Supports | Cast Iron |
| Column | Cast Iron |
| Paint Type/Finish | Enamel |

**Other**

| | |
|---|---|
| Column Diameter | 2-1/4 in. |

**Other Specifications:**

| | |
|---|---|
| Country of Origin | Taiwan |
| Warranty | 1 Year |
| Approximate Assembly & Setup Time | 45 Minutes |
| Serial Number Location | ID Label |
| ISO 9001 Factory | Yes |

**Features:**

Two Variable-Feed Speed Ranges
Large Feed Speed Digital Readout w/Imperial and Metric Display
Reversible Feed Direction
Crank Handle Vertical Adjustment
Rack-and-Pinion Horizontal Movement

# 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 loose clothing, gloves, neckties, 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 Power Feeders

## ⚠WARNING

**Serious injury or death can occur from getting hands, clothing, or jewelry entangled in moving parts of power feeder or being pulled into cutting tool on attached machinery. Workpieces ejected by attached machine can strike operator or bystanders with significant force, causing impact injuries. To minimize risk of injury, anyone operating this machine MUST completely heed hazards and warnings below.**

**HAND SAFETY.** To reduce risk of accidental entanglement/pinch injuries between power feeder rollers and workpiece, or contact with blade/cutter of associated machine, keep hands away from rotating parts of power feeder. Turn power feeder and associated machine ***OFF*** before removing chips, sawdust, or cutoffs—DO NOT use your hands.

**INSTALLING GUARDS.** To reduce risk of kickback and accidental contact with blade/cutter of associated machine, always install guards, fences, and hold-downs before starting attached machine and power feeder. Repair or replace guards promptly if they become damaged.

**KICKBACK.** Occurs when workpiece is ejected from machine at a high rate of speed. To reduce risk of kickback-related injuries (blindness, broken bones, bruises, amputation, severe lacerations, and death), use quality workpieces and proper setup or maintenance of power feeder or associated machine. Never stand in path of workpiece.

**VERIFY EACH SETUP.** An improperly adjusted power feeder can increase risk of kickback, because it will continue feeding even if stock is not properly positioned for cut. Ensure that power feeder is set up correctly and firmly secured before feeding workpiece.

**FEATHERBOARD.** When cutting long or large stock that is difficult to feed properly, use a featherboard with power feeder (on the infeed side) to maintain even pressure and control of workpiece against fence, and to help reduce risk of kickback.

**FEED WORKPIECE PROPERLY.** To reduce risk of kickback, verify blade or cutter of associated machine is at full speed before feeding stock with power feeder. Avoid feeding workpiece too quickly. Always verify power feeder wheels are slightly lower than workpiece to ensure it will not slip during cutting operation. Stop power feeder BEFORE stopping cutting tool.

**WORKPIECE SUPPORT.** Loss of workpiece control while feeding can increase risk of kickback. Support workpiece continuously during operation as required. Use auxiliary stands or support tables for long or wide stock.

**ADJUSTMENTS/MAINTENANCE.** Make sure power feeder and associated machine are turned ***OFF***, disconnected from power, and all moving parts are completely stopped before doing adjustments or maintenance.

**ATTACHED MACHINERY.** Follow all warnings and safety information for attached machine doing cutting work.

## ⚠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: POWER SUPPLY

## Availability

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

**⚠WARNING**

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

## Full-Load Current Rating

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

**Full-Load Current Rating at 220V .... 3.4 Amps**

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

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

## Circuit Information

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

**⚠CAUTION**

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

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

## Circuit Requirements

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

**Nominal Voltage ..... 208V, 220V, 230V, 240V**
**Cycle ..... 60 Hz**
**Phase ..... Single-Phase**
**Power Supply Circuit ..... 15 Amps**
**Plug/Receptacle ..... NEMA 6-15**

## Grounding Requirements

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

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

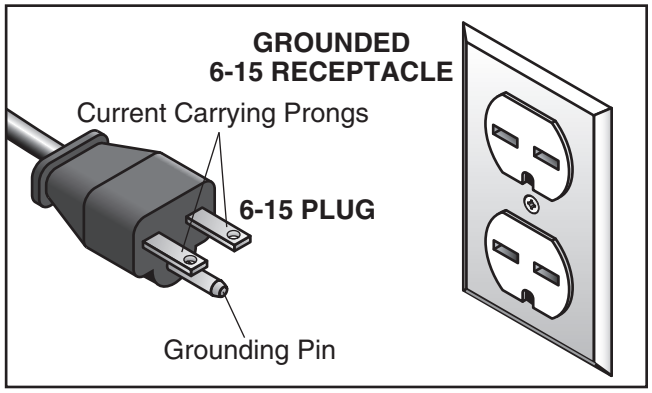
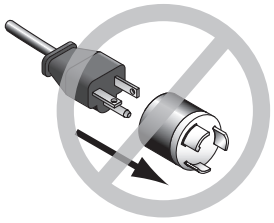



**Figure 3.** Typical 6-15 plug and receptacle.

**⚠CAUTION**



**No adapter should be used with plug. If plug does not fit available receptacle, or if machine must be reconnected for use on a different type of circuit, reconnection must be performed by an electrician or qualified service personnel, and it must comply with all local codes and ordinances.**

**⚠WARNING**

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

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

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

## Extension Cords

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

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

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

**Minimum Gauge Size.....18 AWG**
**Maximum Length (Shorter is Better).....50 ft.**

# SECTION 3: SETUP

## Unpacking

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

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

## Needed for Setup

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

| Description | Qty |
|---|---|
| • Safety Glasses (for each person) | 1 |
| • Cleaner/Degreaser | As Needed |
| • Hex Wrench 4mm | 1 |
| • C-Clamps | 2 |
| • 12" 2x4 Wood Block | 1 |
| • Open-End Wrench 12, 14, 22mm | 1 Ea. |
| • Power Drill | 1 |
| • Drill Bit & Tap | 1 |
| • Thread Locking Fluid | As Needed |
| • Gear Oil (80-90W) | 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 4) | Qty |
|---|---|
| **A.** Power Feeder Assembly (T33924 Shown) | 1 |
| **B.** Grease Gun | 1 |

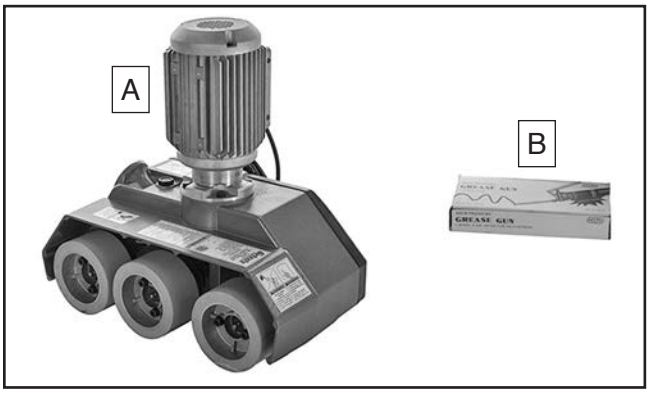



**Figure 4.** Box 1 inventory.

| Box 2 (Figure 5) | Qty |
|---|---|
| **C.** Vertical Column Assembly | 1 |
| **D.** Elbow-Joint Assembly | 1 |
| **E.** Base Bolt Pattern Template | 1 |
| **F.** Overarm Shaft | 1 |
| **G.** Hex Bolts M12-1.75 x 50 (Mounting) | 4 |
| **H.** Lock Washers 12mm (Mounting) | 4 |
| **I.** Collar Lock Handle | 1 |
| **J.** Crank Handle | 1 |

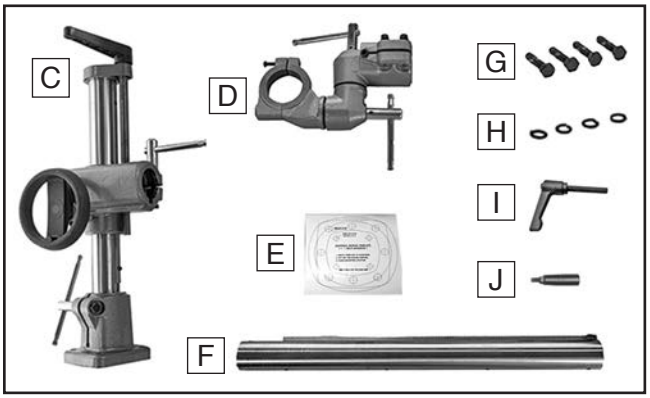


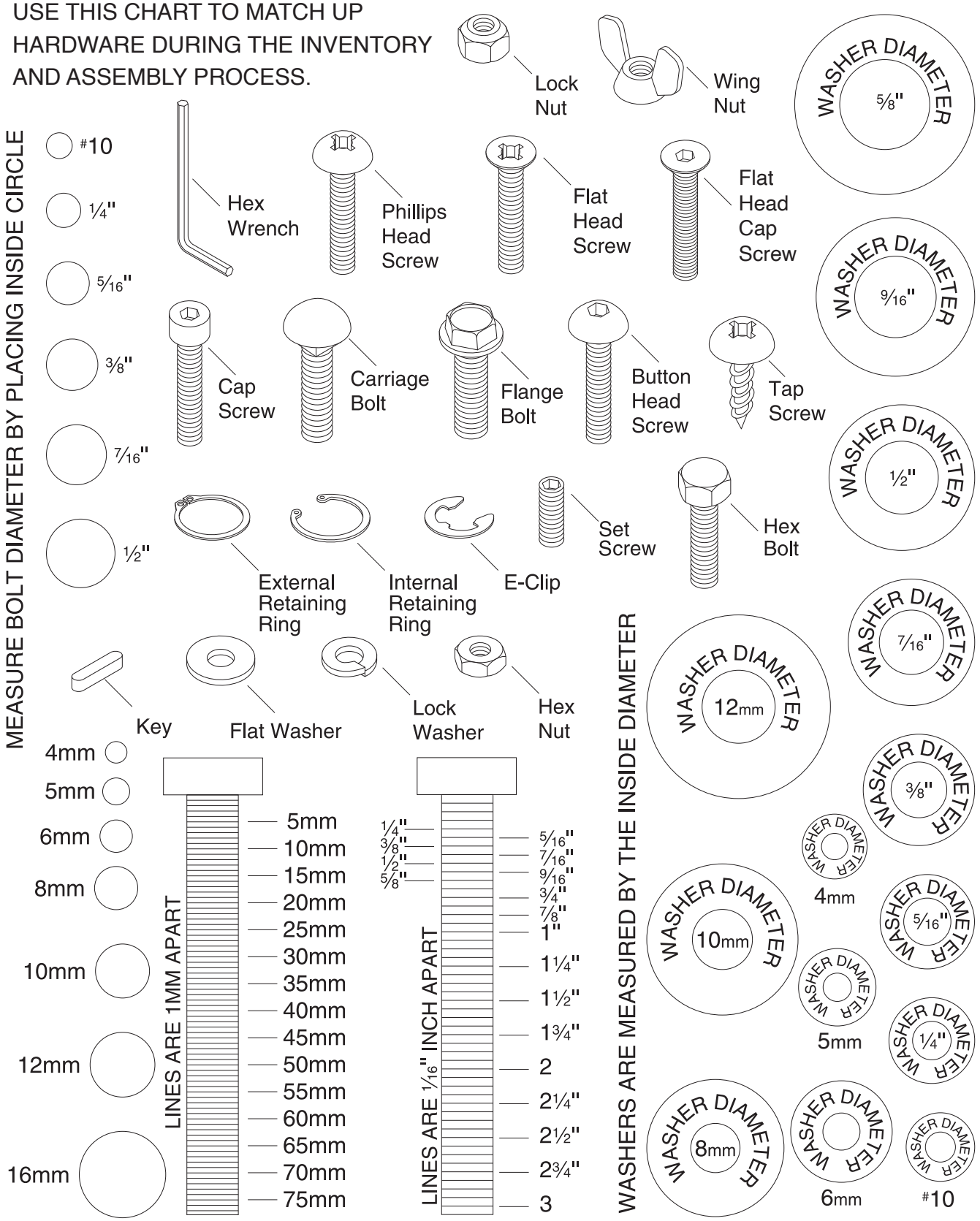

**Figure 5.** Box 2 inventory.

### *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.**

# Hardware Recognition Chart

USE THIS CHART TO MATCH UP HARDWARE DURING THE INVENTORY AND ASSEMBLY PROCESS.



# 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.

## *NOTICE*

**Avoid harsh solvents like acetone or brake parts cleaner that may damage painted surfaces. Always test on a small, inconspicuous location first.**

# Site Considerations

## Workbench Load

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

## Placement Location

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

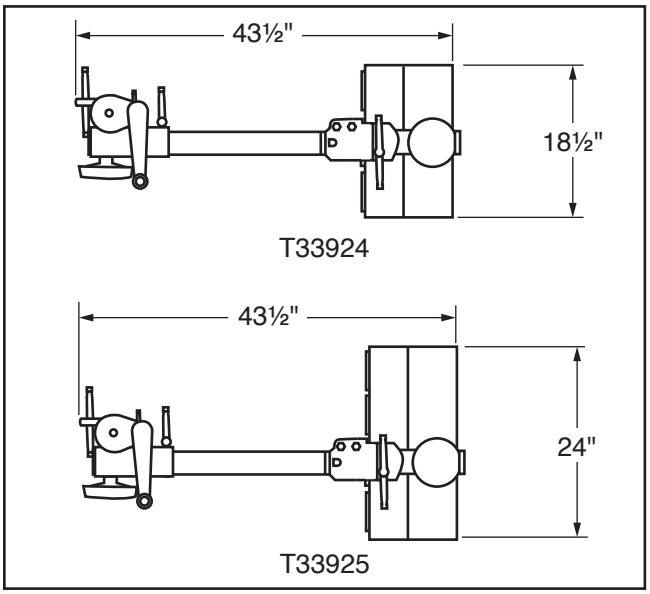
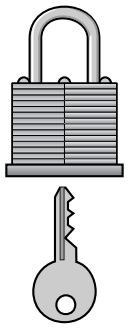



**Figure 6.** Minimum working clearances.

**Note:** *Power feeder can rotate 360° around the vertical column, so be sure to situate machine so it can freely rotate. The machine is shown here with the overarm shaft fully extended.*



## ⚠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.**

# 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).

**Tip:** *We recommend using a set of C-clamps to temporarily secure the base while assembling the power feeder to prevent it from tipping. You will mount the power feeder to the machine table after completing the assembly process. Refer to* ***Base Mounting*** *on* ***Page 20*** *for specific details.*

**To assemble machine:**

1. Place vertical column assembly onto machine table top, then attach crank handle to vertical crank shown in **Figure 7**.

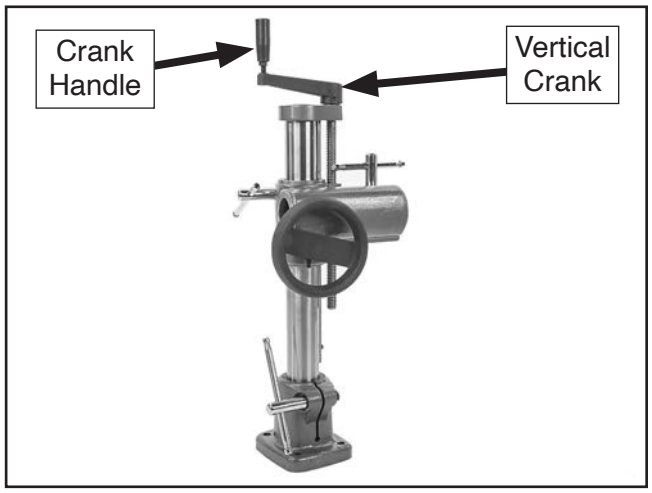



**Figure 7.** Vertical travel crank handle installed.

2. Loosen hex nut and set screw under horizontal handwheel shown in **Figure 8**, then remove horizontal handwheel.

3. Feed overarm shaft into sleeve of vertical column (see **Figure 8**). Re-install handwheel and engage gears with overarm shaft teeth. Tighten set screw and hex nut just enough to secure handwheel.

   **Note:** *Do not overtighten set screw or handwheel will not rotate.*

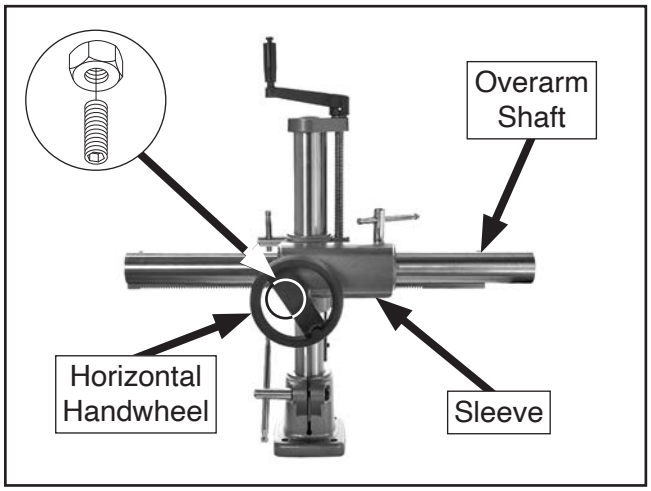



**Figure 8.** Overarm shaft installed in vertical column.

4. Slide elbow-joint assembly onto overarm shaft, then secure temporarily by tightening one hex bolt shown in **Figure 9**.

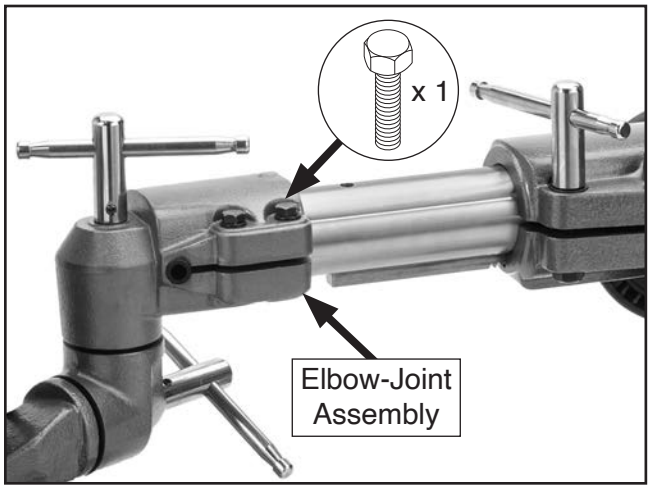



**Figure 9.** Elbow-joint assembly installed on overarm shaft.

5. Loosen travel locks and rotation lock, then use horizontal handwheel and vertical travel handle to align elbow-joint lock collar with motor base (see **Figure 10**).

   **Tip:** *Place a short (approx. 12" long) 2x4 under power feeder to make it level with table top and make it easier to connect lock collar to motor base.*

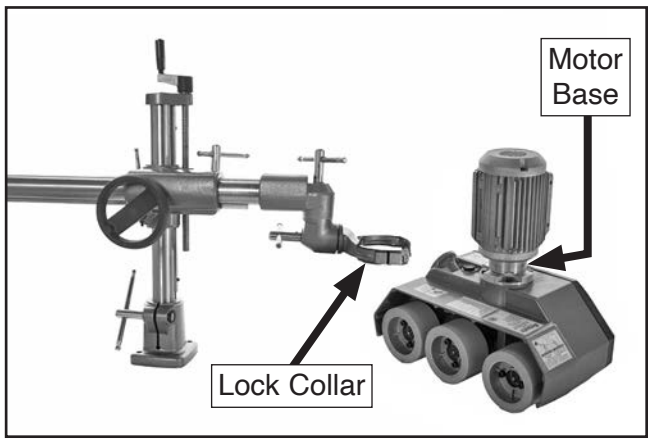



**Figure 10.** Lock collar aligned with motor base.

6. Remove hex bolt and outer half of lock collar (see **Figure 11**) from elbow-joint assembly.

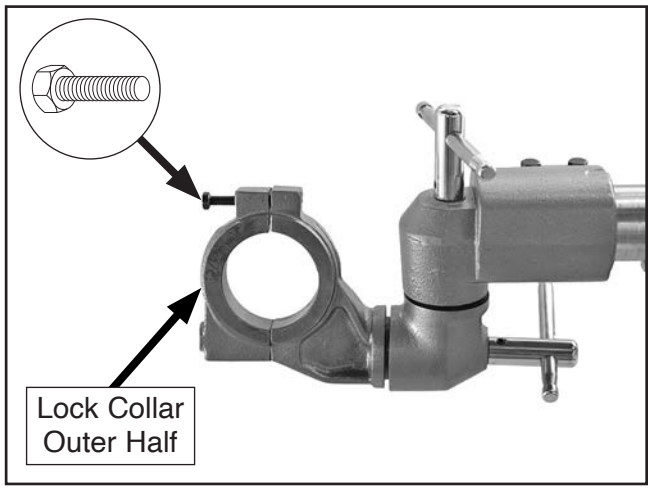



**Figure 11.** Location of hex bolt and lock collar.

7. Loosen lower elbow-joint lock, and position inner collar half against motor base (see **Figure 12**).

8. Position outer half of lock collar against inner half of collar (see **Figure 12**), and secure with collar lock handle and hex bolt removed in **Step 6**.

9. Adjust rollers parallel to table top, then tighten (2) hex bolts (see **Figure 12**) securing elbow-joint to overarm shaft.

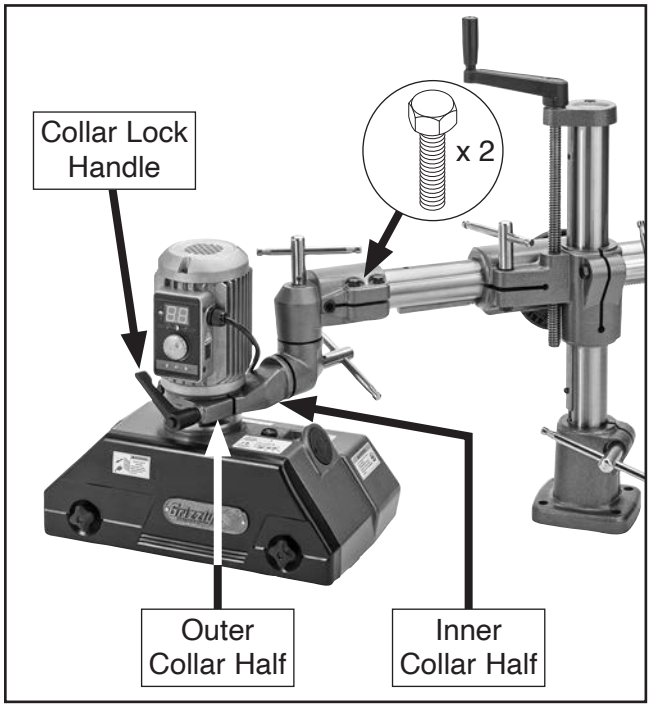



**Figure 12.** Lock collar secured around motor base.

10. Tighten travel locks and elbow-joint locks.

# Base Mounting

Position the power feeder on the table top to determine where to drill the base mounting holes in order to maximize power feeder swing and adjustment options.

Use the included base bolt pattern template to align the mounting holes. Consider the available mounting choices for your needs: **Through-Bolt Mounting** and **Direct Mounting** (discussed on **Page 21**).

With either mounting choice, leave room to operate the hand cranks and lock levers to position the rubber rollers parallel with the table surface and approximately ⅛" lower than the thickness of the workpiece.

Also, aim the front of the power feeder slightly towards the machine fence (see **Figure 13**) with approximately 1° to 1.5° toe-in toward the machine fence, so the rubber rollers lightly push the workpiece against the fence during cutting operations.

If cutting long or large stock that is difficult to feed properly, use a featherboard *before* the power feeder (on the infeed side) to maintain even pressure and control of the workpiece against the fence.

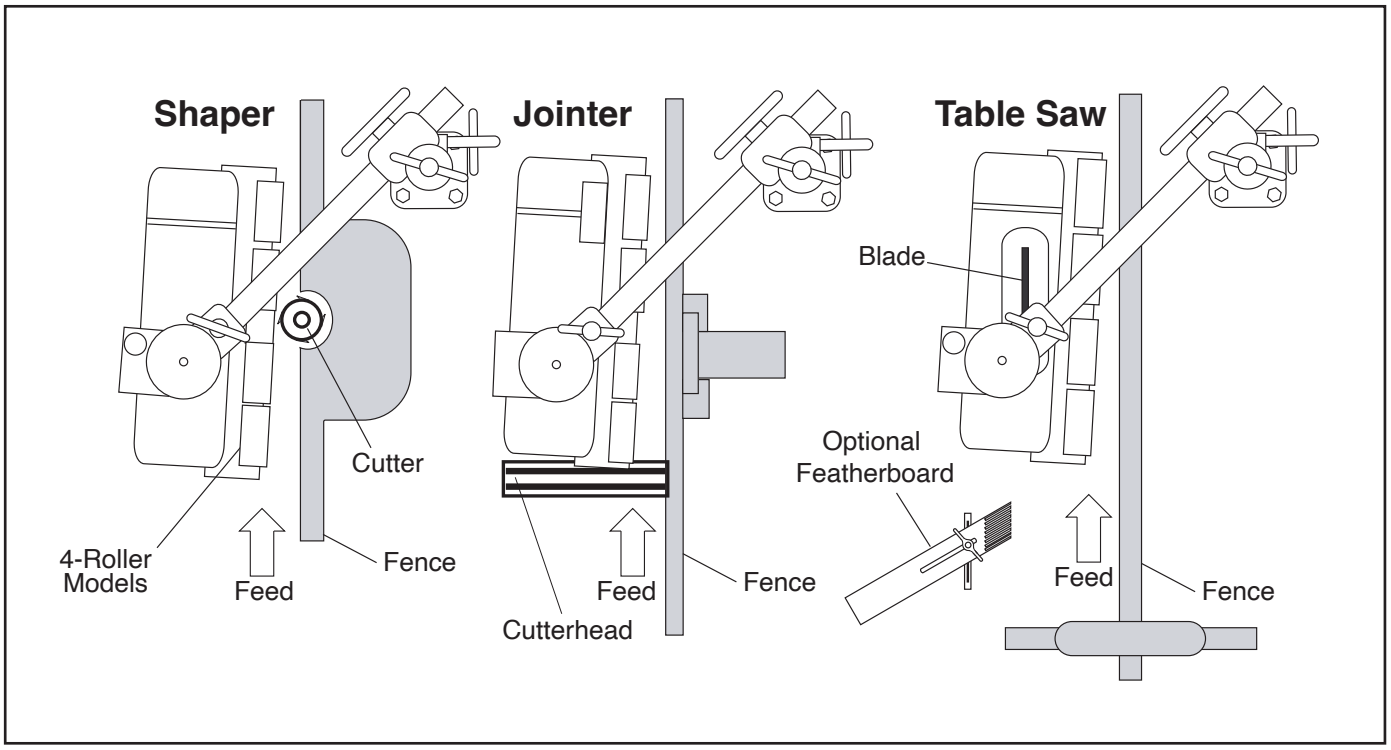



**Figure 13.** Typical power feed mounting on a shaper, jointer, and table saw.

## Through-Bolt Mounting

We recommend mounting the power feeder to the machine table with through bolts, nuts, and washers (see **Figure 14**). This provides the most rigidity and clamping strength to prevent the feeder base from twisting out of alignment during use. However, if under-table support webs interfere with washer or nut locations, drill and thread holes directly into the table (**Direct Mounting**). Use the included mounting template as a guide.

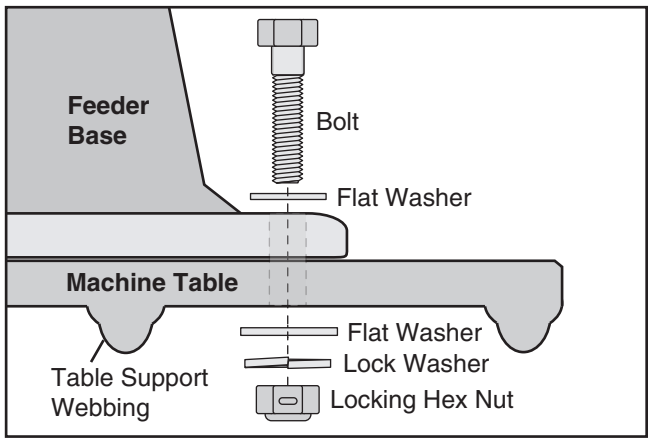



**Figure 14.** Through-bolt mounting.

## Direct Mounting

Use the included mounting template to drill and tap the table so the power feeder base can be directly mounted to the table surface (see **Figure 15**). Use medium-grade liquid thread-locking compound on all threads. If the table is less than 3/8" thick where the holes will be drilled and tapped, or if support webbing interferes, the threads may strip or loosen during power feeder use. Thread-locking compound is *not* a permanent solution. Revert to the **Through-Bolt Mounting** or clamping kit options.

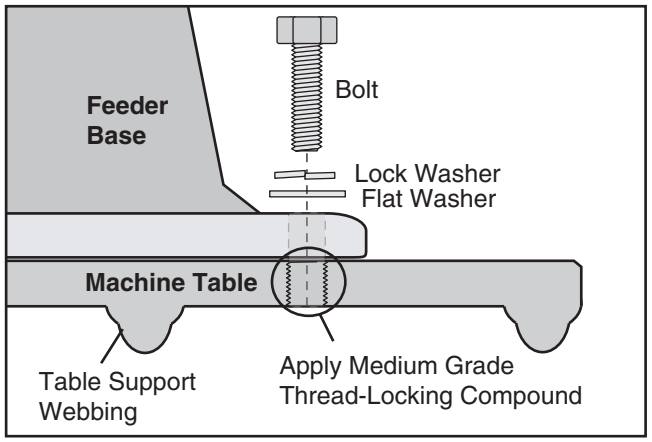



**Figure 15.** Direct mounting.

# Checking Gearbox Oil Level

Before starting the machine for the first time, check the oil level in the gearbox. The gearbox has the proper amount of oil when the oil level is within 1" of the oil plug. DO NOT mix oil types.

| Items Needed | Qty |
|---|---|
| Hex Wrench 4mm | 1 |
| Gear Oil 80-90W | As Needed |

**To check gearbox oil level:**

1. Rotate machine so oil plug is upright (see **Figure 16**).

2. Remove gearbox oil plug (see **Figure 16**).


**Figure 16.** Oil plug location.

— If gearbox *is* filled to within 1" of oil fill port, then gearbox oil level is okay. Replace oil plug.

— If sight glass *is not* filled to within 1" of oil fill port, then you need to add more oil. Proceed to **Step 3**.

3. Add gear oil until it is within 1" of oil port, then replace oil plug.

# Test Run

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

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

The Test Run consists of verifying the following: 1) The motor powers up and runs correctly, and 2) the control panel works correctly.

**⚠WARNING**

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

**⚠WARNING**

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

For the following Test Run steps, refer to **Figure 17**.

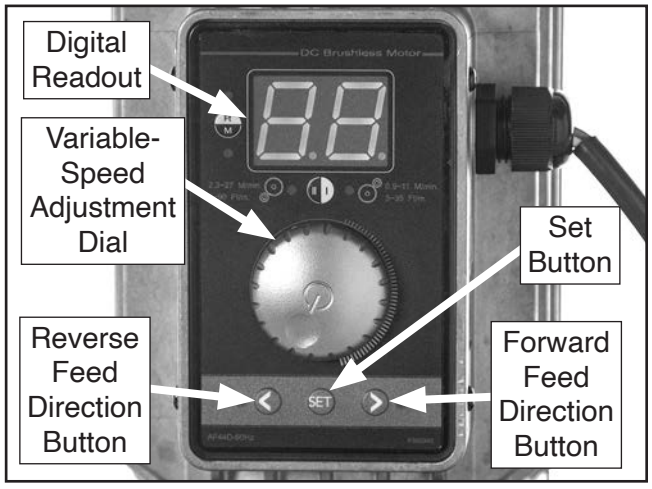



**Figure 17.** Location of Test Run controls.

**To test run machine:**

1. Clear all setup tools away from machine.
2. Adjust and lock power feeder so rollers are held approximately 1" above machine table and nothing will interfere with roller rotation.
3. Connect power feeder to power supply.
4. Press variable-speed adjustment dial button. Digital readout will illuminate.
5. Press SET button, and use variable-speed adjustment dial to select 10 FPM on readout. Number will flash for 10 seconds, then glow steadily.
6. Press forward feed direction button (⩥), then press and hold variable-speed adjustment dial until you hear a beeping sound and outside edge of panel glows red. Motor should run smoothly and without unusual problems or noises. Rollers should rotate in a counterclockwise direction (when viewed from top).

   — If motor or rollers do not function correctly, disconnect from power and refer to **Troubleshooting** on **Page 32** before completing Test Run.

7. Press variable-speed adjustment dial. Rollers should stop rotating.

   — If rollers stop rotating, variable-speed adjustment dial is functioning correctly. Proceed to **Step 8**.

   — If rollers *do not* stop rotating, variable-speed adjustment dial is NOT functioning correctly. Contact Grizzly Technical Support before proceeding with Test Run.

8. Press reverse feed direction button (⩤), then press and hold variable-speed adjustment dial until you hear a beep and control panel glows red. Rollers should rotate in clockwise direction (when viewed from top).
9. Press variable-speed adjustment dial to stop rollers.

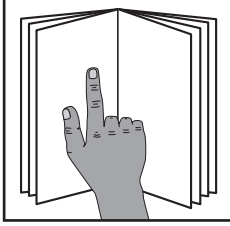
   Test Run is complete.

# SECTION 4: OPERATIONS

## Operation Overview

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

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

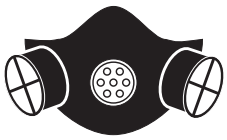


**⚠WARNING**

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

**⚠WARNING**

**To reduce risk of eye injury from flying chips or lung damage from breathing dust, always wear safety glasses and a respirator when operating this machine.**



***NOTICE***

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

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

1. Examines workpiece to make sure it is suitable for cutting operation.
2. Adjusts machine cutter/blade and fence for desired operation.
3. Checks outfeed side of machine for proper support and to make sure workpiece can safely pass all the way through cutter/blade without interference.
4. Changes power feed speed range if necessary for operation.
5. Loosens upper elbow-joint lock and points power feeder 1° to 1.5° toward machine fence, so rollers will lightly push workpiece against fence during cutting operations, then tightens elbow-joint lock.
6. Loosens vertical travel lock and lower elbow-joint lock, then adjusts position of power feeder so rollers are parallel with table surface and ⅛" lower than thickness of workpiece, then tightens all locks.
7. Checks to make sure rollers are clear of cutter or blade.
8. (Optional) positions featherboard on infeed side for cutting long or large stock that is difficult to feed properly.
9. Sets feed speed, unit of measurements, and irection using control panel.
10. Puts on safety glasses and a respirator.
11. Starts machine, then starts power feeder. Feeds stock into power feeder, maintaining firm pressure on workpiece against table and fence.
12. Stops power feeder, then stops machine.

# Basic Use & Care

**⚠WARNING**

**You MUST assemble all guards, fences, and hold-downs before starting your machine or power feeder. Failure to heed this warning could result in amputation or death!**

Power feeders reduce kickback hazards and improve cutting results by feeding in a consistent and stable manner. Remember, DO NOT stand in the path of potential kickback. When not in use, support the power feeder with a wooden block so the rollers are raised above the table and do not compress from the weight of the power feeder.

The lock levers and hand cranks allow you to adjust the power feeder tracking and height to accommodate many workpiece sizes. Before loosening any lock lever, always support the power feeder with a block of wood so the power feeder does not drop and cause damage.

Adjust the power feeder so it is toed-in approximately 1° to 1.5° towards the machine fence, as shown in **Figure 18**. This adjustment will ensure that the power feeder rollers slightly push the workpiece against the fence during cutting operations. Use a featherboard on the infeed side to assist with feeding long or large stock.

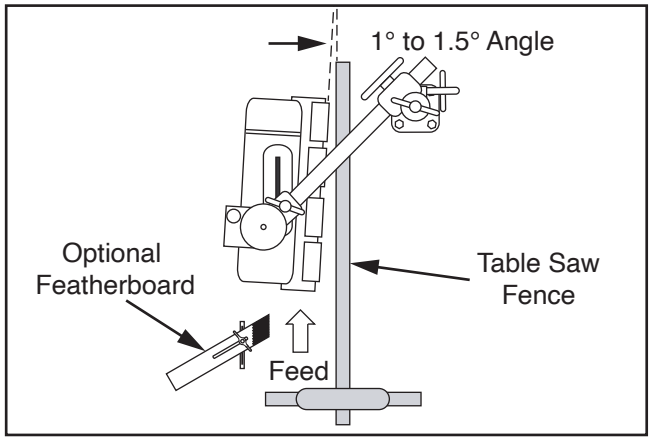



**Figure 18.** Example of power feeder toe-in on table saw.

Next, adjust power feeder so the rollers are parallel with the table surface and approximately ⅛" lower than the thickness of the workpiece, as shown in **Figure 19**. This ensures that the workpiece will not slip or hang during a cut. Always double check that the power feeder rollers are always slightly lower than the workpiece before you begin feeding operations. Otherwise, the workpiece may slip and kick back.

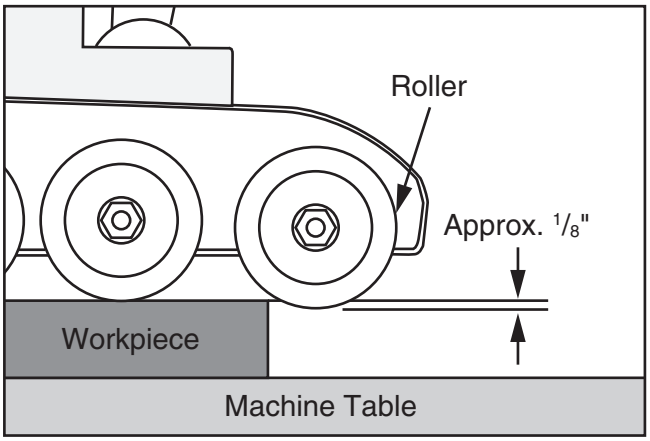



**Figure 19.** Rollers adjusted approximately ⅛" below workpiece.

# Changing Feed Speed

**Feed Speed Range (Low):** 3–35 FPM (0.9–10.7 m/min)
**Feed Speed Range (High):** 8–90 FPM (2.4–27 m/min.)

Models T33924 and T33925 have two feed speed ranges: Low and High. Each range is selected by repositioning the change gears to match the corresponding illustration on the control panel and pressing the speed change selection button.

The precise feed rate within each range can then be selected by using the variable-speed adjustment dial on the control panel.

| Tool Needed | Qty |
|---|---|
| Wrench or Socket 19mm | 1 |

## Changing Feed Speed Range

1. DISCONNECT MACHINE FROM POWER!

2. Refer to illustrations (see **Figure 20**) on control panel to see which gear configuration is required for desired speed range.

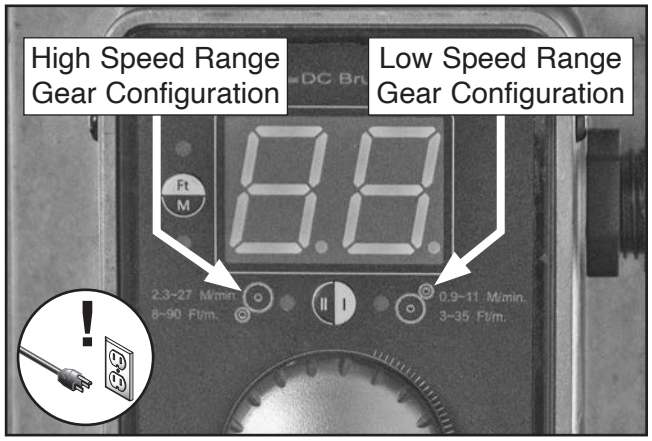



**Figure 20.** Gear configurations.

3. Remove (2) chain cover knobs and chain cover (see **Figure 21**).

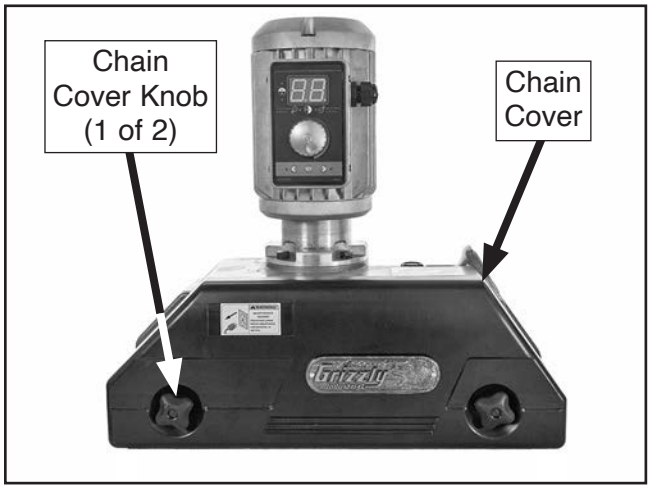



**Figure 21.** Chain cover and knobs.

4. Remove (2) hex nuts securing change gears to shafts (see **Figure 22**).

5. **For high speed range:** Configure gears as shown in **Figure 22**.

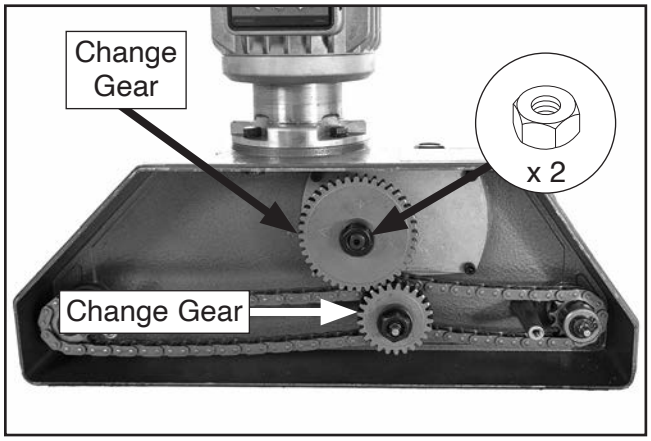



**Figure 22.** Change gears configured for high speed range.

**For low speed range:** Configure gears as shown in **Figure 23**.

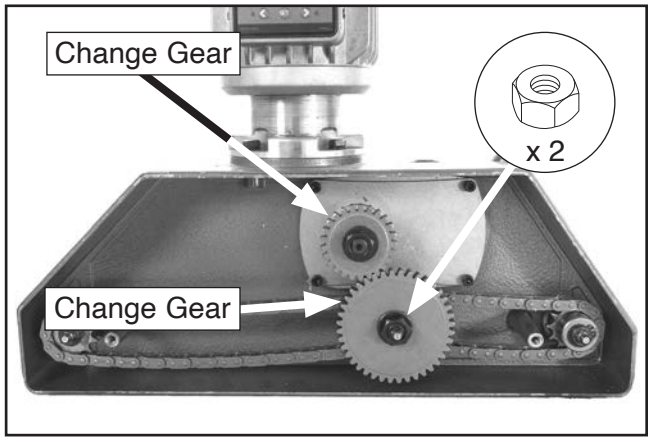



**Figure 23.** Change gears configured for low speed range.

**Note:** *Gears must be installed with hubs facing inward toward power feeder. Gears installed incorrectly can cause chain damage and affect machine performance.*

6. Tighten hex nuts, and install chain cover.

7. Connect machine to power and press variable-speed dial to turn machine ***ON***.

8. Press speed range selection button.

## Changing Feed Speed

1. Press SET button on control panel, as shown in **Figure 24**.

   **Note:** *Current feed rate will flash for up to 10 seconds, after which SET button must be pressed again to adjust feed rate.*

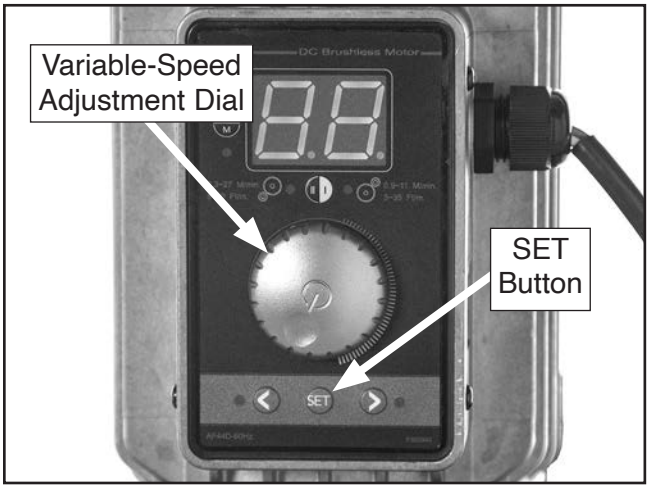



**Figure 24.** Location of SET button and variable-speed adjustment dial on control panel.

2. Rotate variable-speed adjustment dial to desired feed rate.

# SECTION 5: 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.**

**T28172—14" x 39" Heavy-Duty Roller Table**
**T28369—14" x 78" Heavy-Duty Roller Table**
**T28370—14" x 118" Heavy-Duty Roller Table**
Increase material handling and processing efficiency with one or more of these Heavy-Duty Roller Tables. Ideal for easily positioning material for cross cutting or cutting to length using a chop saw or metal cutting bandsaw. Simply place a roller table on one or both sides of your saw and production time is automatically improved!

**Figure 25.** Heavy-duty roller tables.

**T26419—Syn-O-Gen Synthetic Grease**
Formulated with 100% pure synthesized hydrocarbon basestocks that are compounded with special thickeners and additives to make Syn-O-Gen non-melt, tacky, and water resistant. Extremely low pour point, extremely high temperature oxidation, and thermal stability produce a grease that is unmatched in performance.


**Figure 26.** Recommended product for machine lubrication.

**T33984—Replacement Roller**
Over time, rubber rollers will wear down or become damaged. These 2⅜" wide x 4¾" diameter rollers are made from synthetic rubber, and are a direction replacement for the T33924/25.

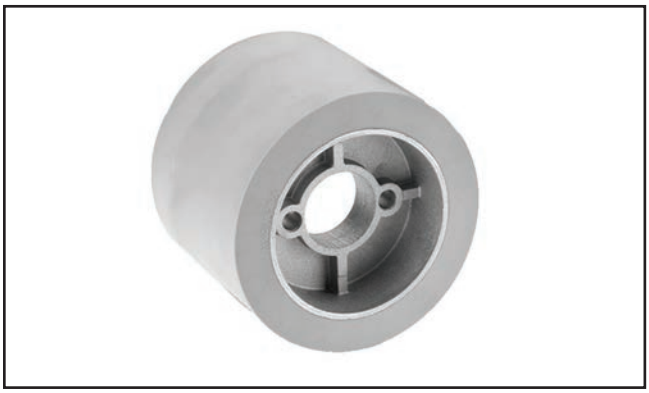
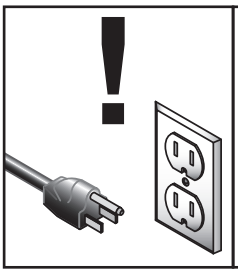


**Figure 27.** Replacement roller.

# SECTION 6: MAINTENANCE



**⚠WARNING**
**To reduce risk of shock or accidental startup, always disconnect machine from power before adjustments, maintenance, or service.**

## Schedule

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

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

- Loose mounting bolts.
- Damaged rollers.
- Worn or damaged switch, cord, and plug.
- Any other unsafe condition.

**Every 8 Hours of Operation**
- Check gearbox oil level (**Page 21**).
- Lubricate chains, gears, and sprockets (**Page 30**).
- Lubricate vertical travel leadscrew (**Page 30**).
- Lubricate lock levers (**Page 30**).
- Lubricate overarm rack (**Page 31**).

**Monthly Maintenance**
- Lubricate roller and chain grease fittings (**Page 29**).
- Change gearbox oil—after first month (**Page 29**).

**Every 6 Months**
- Change gearbox oil (**Page 29**).

## Cleaning & Protecting

Cleaning Models T33924 and T33925 is relatively easy. Frequently blow off sawdust with compressed air. This is especially important for internal working parts and the motor. Dust build-up around the motor will decrease its lifespan. If rollers become loaded up with pitch, oil, or other residue, wipe with a clean rag and soap and water. Keep mineral spirits away from plastic parts or painted surfaces to avoid damage.

## Lubrication

Other than the lubrication points covered in this section, all other bearings are internally lubricated and sealed at the factory. Simply leave them alone unless they need to be replaced.

Before performing any lubrication task, DISCONNECT MACHINE FROM POWER!

**IMPORTANT:** Before adding lubricant, clean any debris and grime from fill hole/grease fitting and immediate area to prevent contamination of new lubricant.

Use the schedule below and the following instructions to properly lubricate the other components that require lubrication.

| Lubrication Task | Frequency (Hours of Operation) | Page Ref. |
|---|---|---|
| Roller & Chain Grease Fittings | 200 Hrs. | **29** |
| Gearbox | 1000 Hrs. | **29** |
| Chains, Gears & Sprockets | 8 Hrs. | **30** |
| Lock Levers | 8 Hrs. | **30** |
| Vertical Travel Leadscrew | 8 Hrs. | **31** |
| Overarm Rack | 8 Hrs. | **31** |

| Items Needed | Qty |
|---|---|
| NLGI#2 Grease or Equivalent | As Needed |
| ISO 32 Oil or Equivalent | As Needed |
| 80-90W Gear Oil | 12.8 Oz. |
| Clean Shop Rags | As Needed |
| Mineral Spirits | As Needed |
| Brushes | As Needed |
| 1-Gallon Catch Pan | 1 |
| Funnel | 1 |
| Grease Gun ⅛" NPT | 1 |
| Hex Wrench 4mm | 1 |

## Roller & Chain Grease Fittings

Lube Type..... T26419 or NLGI#2 Equivalent
Amount ..... 1 Pump
Lubrication Frequency ..... 200 Hrs. of Operation
Grease Gun ..... 1

Disconnect the machine from power, then remove the chain cover to access the chain grease fittings. Wipe the roller and chain grease fittings clean and lubricate with one pump each from a grease gun filled with NLGI#2 grease (see **Figure 28**).

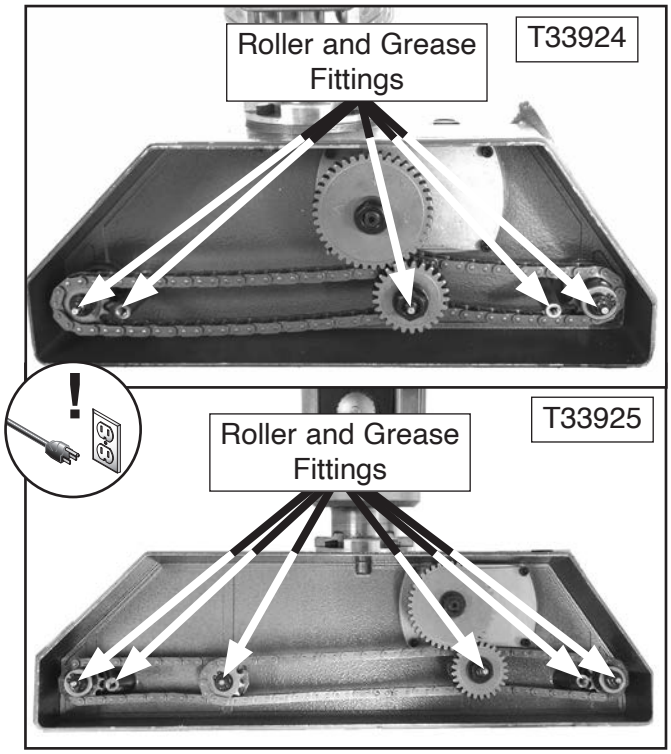



**Figure 28.** Location of chain grease fittings.

## Gearbox

Lube Type..... 80-90W Gear Oil
Amount ..... 12.8 Oz.
Lubrication Frequency:
- 200 Hrs./First Month of Operation
- 1000 Hrs./6 Months of Operation

The gearbox should be drained and refilled after the first month or 200 hours of use. For the remaining life of the power feeder, change the oil every six months or 1000 hours of use.

**To change gearbox oil:**

1. DISCONNECT MACHINE FROM POWER!

2. Place drain pan in position.

3. Remove oil plug (see **Figure 29**), remove (2) cap screws from oil cap, then remove cap.

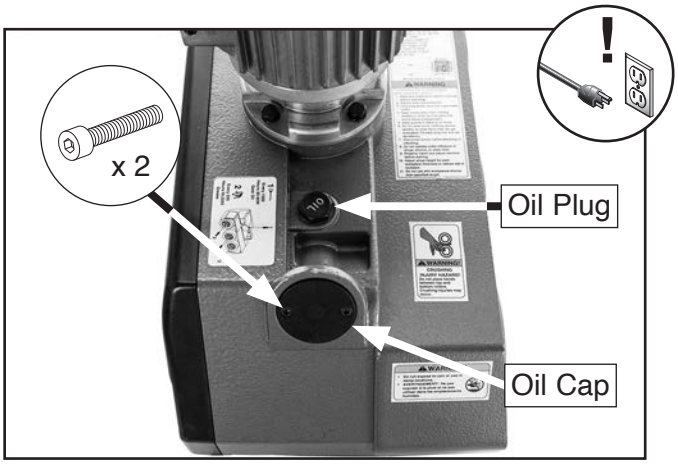



**Figure 29.** Location of oil plug, oil cap, and cap screws.

4. Tilt power feeder and allow oil to drain completely into drain pan.

5. Place power feeder on level surface, and install oil cap and cap screws removed in **Step 3**.

6. Fill gearbox with 12.8 ounces of oil, then install oil plug.

7. Move power feeder back into position for operation.

## Chains, Gears & Sprockets

Lube Type..... T26419 or NLGI#2 Equivalent
Amount .....Thin Coat
Lubrication Frequency .....8 Hrs. of Operation

Use mineral spirits to clean any debris and built-up grime. To prevent rust and binding, brush the chains, gears, and sprockets (see **Figure 30**) with a light film of NLGI#2 grease. It will be necessary to remove the chain cover to access these components.

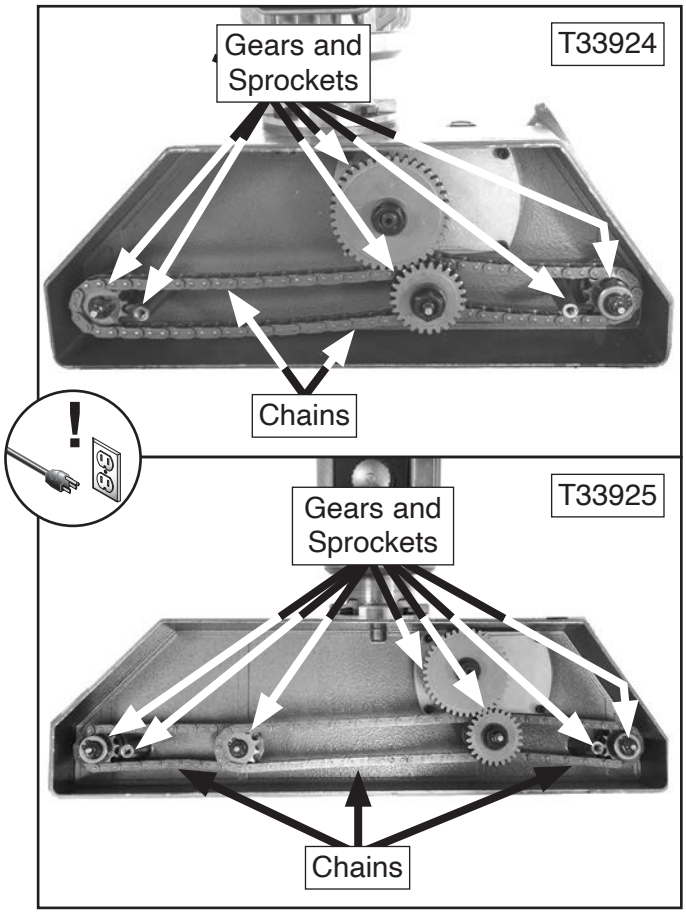



**Figure 30.** Location of chain and sprockets (chain cover removed).

## Lock Levers

Lube Type..... ISO 32 or Equivalent
Amount .....Thin Coat
Lubrication Frequency .....8 Hrs. of Operation

To prevent rust and binding, periodically clean and oil all lock levers (see **Figure 31**) with light machine oil.

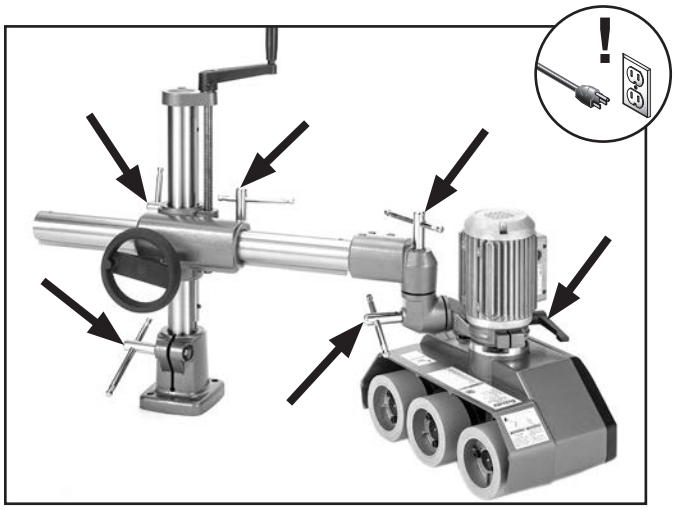


**Figure 31.** Location of levers to lubricate.

## Vertical Travel Leadscrew

Lube Type..... T26419 or NLGI#2 Equivalent
Amount .....Thin Coat
Lubrication Frequency .....8 Hrs. of Operation

Use mineral spirits to clean off any debris and built-up grime. Brush a thin coat of lubricant on the threads of the leadscrew (see **Figure 32**), then rotate leadscrew through its full path to distribute the grease.

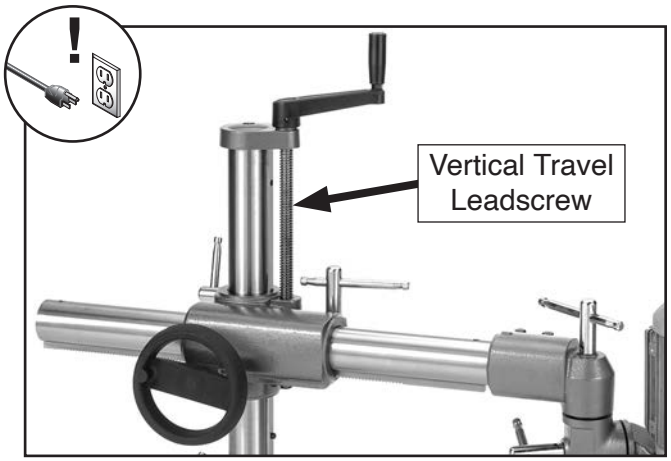



**Figure 32.** Vertical travel leadscrew.

## Overarm Rack

Lube Type..... T26419 or NLGI#2 Equivalent
Amount .....Thin Coat
Lubrication Frequency .....8 Hrs. of Operation

Clean the overarm rack teeth (see **Figure 33**) with mineral spirits, shop rags, and a brush. When dry, use a brush to apply a thin coat of grease to the teeth, then move the overarm back and forth several times to distribute the grease.

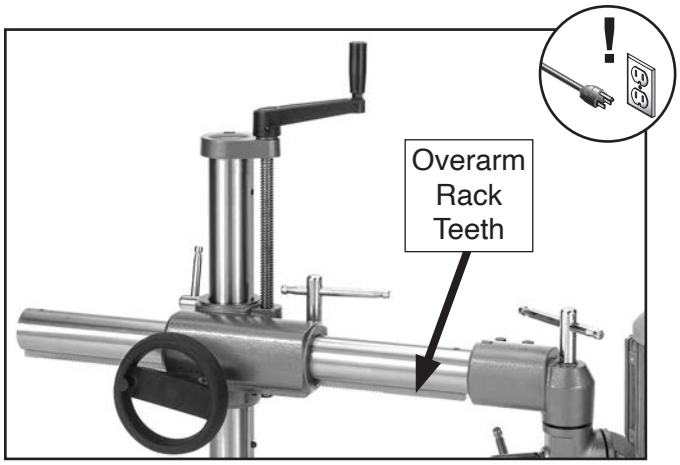
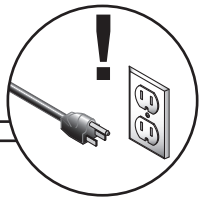



**Figure 33.** Overarm rack teeth.

# SECTION 7: SERVICE

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

## Troubleshooting



### Motor & Electrical

| Symptom | Possible Cause | Possible Solution |
|---|---|---|
| Motor does not start or power supply breaker trips immediately upon startup. | 1. Incorrect power supply voltage or circuit size.<br>2. Power supply circuit breaker tripped or fuse blown.<br>3. Wiring broken, disconnected, or corroded.<br>4. Variable-speed adjustment dial at fault.<br>5. Motor circuit board at fault.<br>6. Motor or motor bearings at fault. | 1. Ensure correct power supply voltage and circuit size (**Page 13**).<br>2. Ensure circuit is free of shorts. Reset circuit breaker or replace fuse.<br>3. Fix broken wires or disconnected/corroded connections (**Page 34**).<br>4. Inspect/replace if at fault.<br>5. Inspect/replace if at fault.<br>6. Test/repair/replace. |
| Machine stalls or is underpowered. | 1. Workpiece crooked; fence loose or misadjusted.<br>2. Motor circuit board at fault.<br>3. Gear/sprocket slipping on shaft.<br>4. Motor overheated.<br>5. Extension cord too long.<br>6. Motor or motor bearings at fault. | 1. Straighten or replace workpiece/adjust fence.<br>2. Inspect/replace if at fault.<br>3. Tighten/replace loose gear/shaft.<br>4. Clean motor, let cool, and reduce workload.<br>5. Move machine closer to power supply; use shorter extension cord (**Page 14**).<br>6. Replace motor. |
| Machine has vibration or noisy operation. | 1. Motor or component loose.<br>2. Incorrectly mounted.<br>3. Workpiece loose.<br>4. Rollers protruding unevenly.<br>5. Motor fan rubbbing on fan cover<br>6. Motor bearings at fault. | 1. Replace damaged or missing bolts/nuts or tighten if loose.<br>2. Adjust or tighten mounting hardware (**Page 20**).<br>3. Move rollers closer to workpiece (**Page 24**).<br>4. Adjust rollers.<br>5. Adjust fan.<br>6. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. |

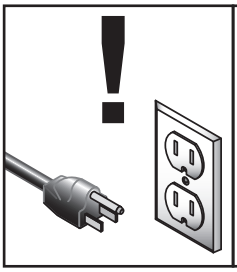
### Operations

| Symptom | Possible Cause | Possible Solution |
|---|---|---|
| Workpiece jams when feeding under rollers. | 1. Rollers positioned too low.<br>2. Feeder at wrong angle. | 1. Raise feeder (**Page 24**).<br>2. Adjust angle (**Page 24**). |
| Workpiece slips while passing beneath rollers. | 1. Rollers positioned too high.<br>2. Workpiece too dusty.<br>3. Rollers dirty or oily.<br>4. Feed speed too fast.<br>5. Worn roller(s).<br>6. Rollers loose. | 1. Lower power feeder roller 1/8" lower than height of workpiece (**Page 24**).<br>2. Wipe dust off workpiece.<br>3. Clean roller surface with soap and warm water.<br>4. Reduce feed speed (**Page 25**).<br>5. Replace roller(s) (**Page 33**).<br>6. Tighten rollers (**Page 33**). |
| Workpiece cut is burnt. | 1. Feed speed too slow.<br>2. Dull cutter or blade. | 1. Increase feed speed (**Page 25**).<br>2. Install sharp cutter or blade. |

## Operations (Cont.)

| Symptom | Possible Cause | Possible Solution |
|---|---|---|
| Rough finish or chipped grain on workpiece. | 1. Feed speed too fast.<br>2. Dull cutter or blade.<br>3. Power feeder angle not toed-in to keep workpiece against fence. | 1. Reduce feed speed (**Page 25**).<br>2. Replace with sharp cutter or blade.<br>3. Adjust power feeder so it is toed in 1° to 1.5° toward fence (**Page 24**). |
| Workpiece hangs up and does not enter the machine. | 1. Rollers positioned too high. | 1. Lower power feeder roller ⅛" lower than height of workpiece (**Page 24**). |
| Error message on control panel (E2-E9, EE). | 1. (E2) Current overload shut off.<br>2. (E3) Motor temperature too high.<br>3. (E4) Drive temperature too high.<br>4. (E5) Abnormal motor signal.<br>5. (E6) Over voltage protection.<br>6. (E7) Low voltage protection.<br>7. (E8) Abnormal signal.<br>8. (E9) Motor not running.<br>9. (EE) Motor speed not controllable. | 1. Check power cord for proper connection.<br>2. Clean motor, let cool, and reduce workload.<br>3. Adjust depth/angle of rollers (**Page 24**).<br>4. Check motor wiring connections are correct (**Page 35**).<br>5. Inspect power cord for proper connection. If problem reoccurs, consider installing upstream voltage regulator/protection.<br>6. Inspect power cord for proper connection. If problem reoccurs, consider installing upstream voltage regulator/protection.<br>7. Check wiring connections are correct (**Page 35**).<br>8. Check power cord for proper connection.<br>9. Check power cord for proper connection. |

# Replacing Rollers



**⚠WARNING**

**To reduce risk of shock or accidental startup, always disconnect machine from power before adjustments, maintenance, or service.**

Over time, the rubber rollers will wear down or become damaged. When this occurs, they can be easily replaced.

**Items Needed** **Qty**
Hex Wrench 6mm..... 1
Replacement Rollers (Model T33984). . As Needed

**To replace roller:**

**1.** DISCONNECT MACHINE FROM POWER!

**2.** Remove (2) cap screws that secure roller (see **Figure 34**).

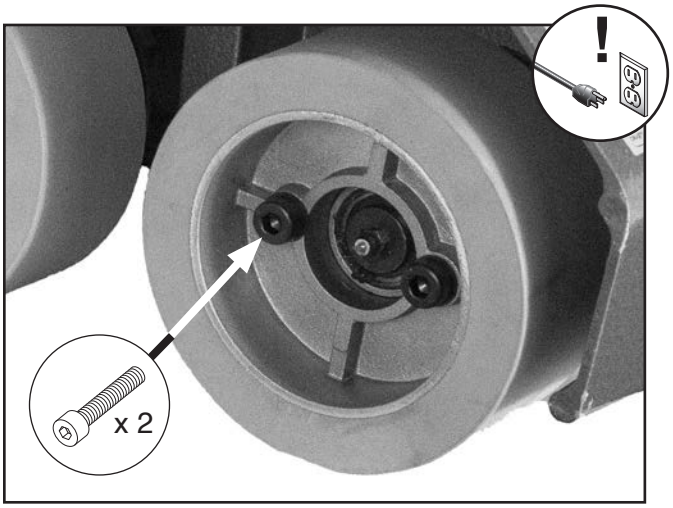



**Figure 34.** Location of roller cap screws.

**3.** Remove and replace roller.

**4.** Install cap screws.

# SECTION 8: WIRING

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

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

## ⚠WARNING
## Wiring Safety Instructions

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

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

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

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

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

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

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

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

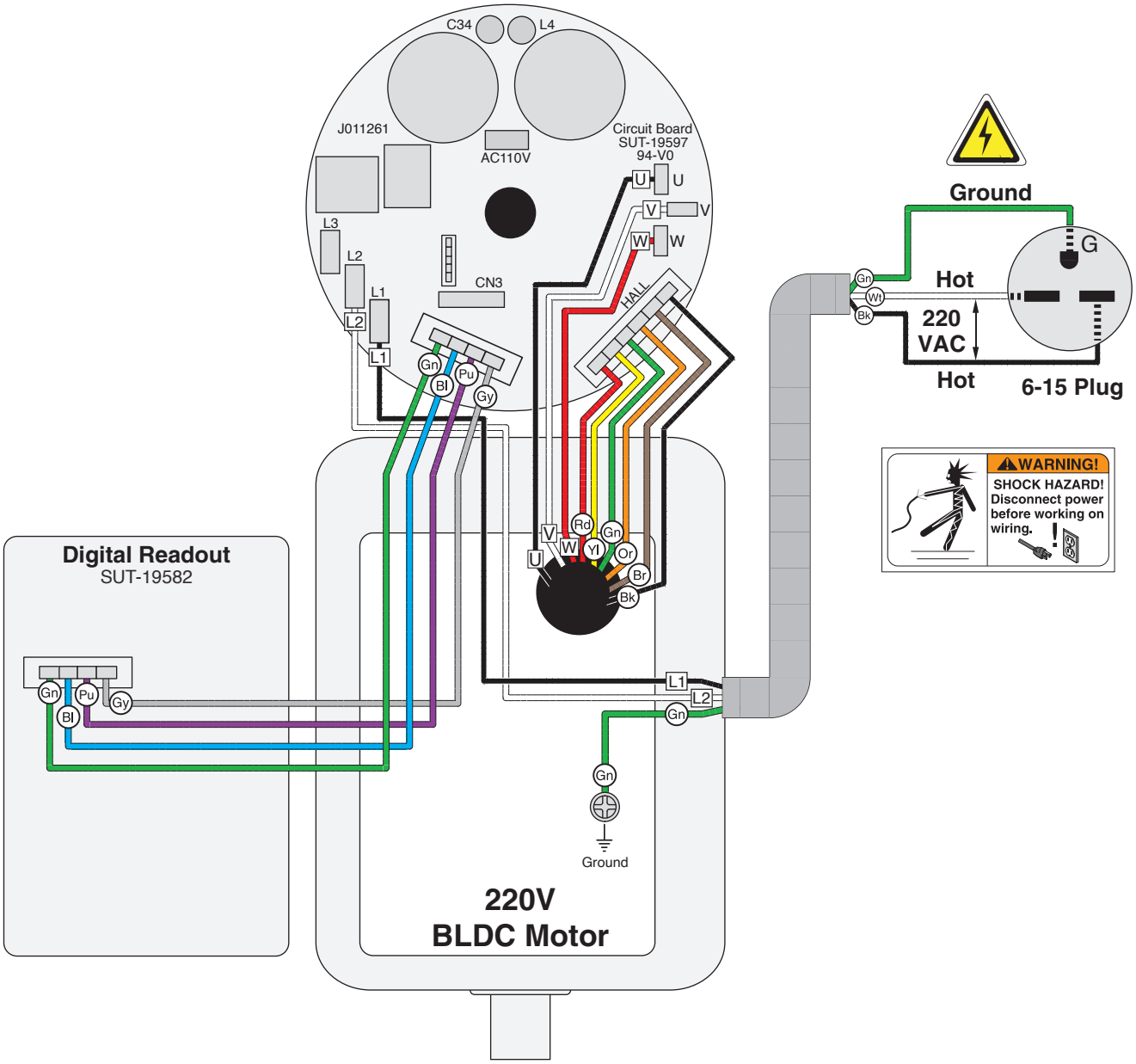
**NOTICE**

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

**COLOR KEY**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BLACK | Bk | BLUE | Bl | YELLOW | Yl | LIGHT BLUE | Lb |
| WHITE | Wt | BROWN | Br | YELLOW GREEN | Yg | BLUE WHITE | Bw |
| GREEN | Gn | GRAY | Gy | PURPLE | Pu | TURQUOISE | Tu |
| RED | Rd | ORANGE | Or | PINK | Pk | | |

# Wiring Diagram



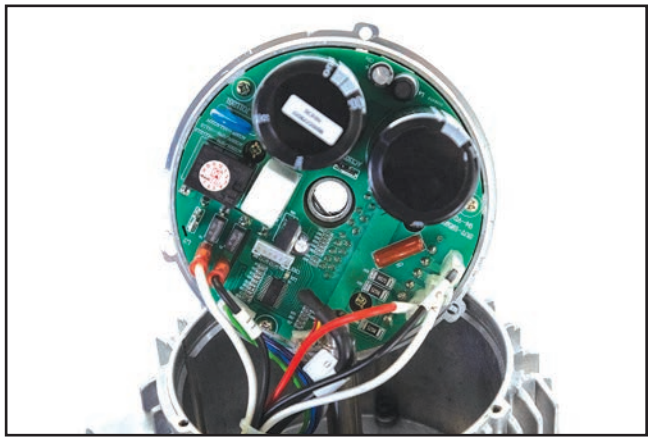



**Figure 35.** Motor circuit board.

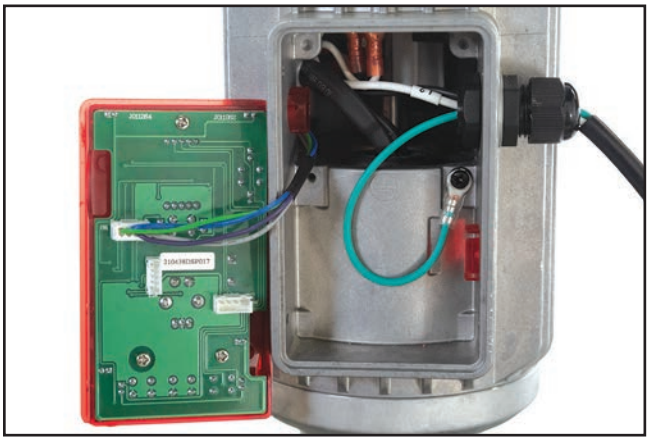
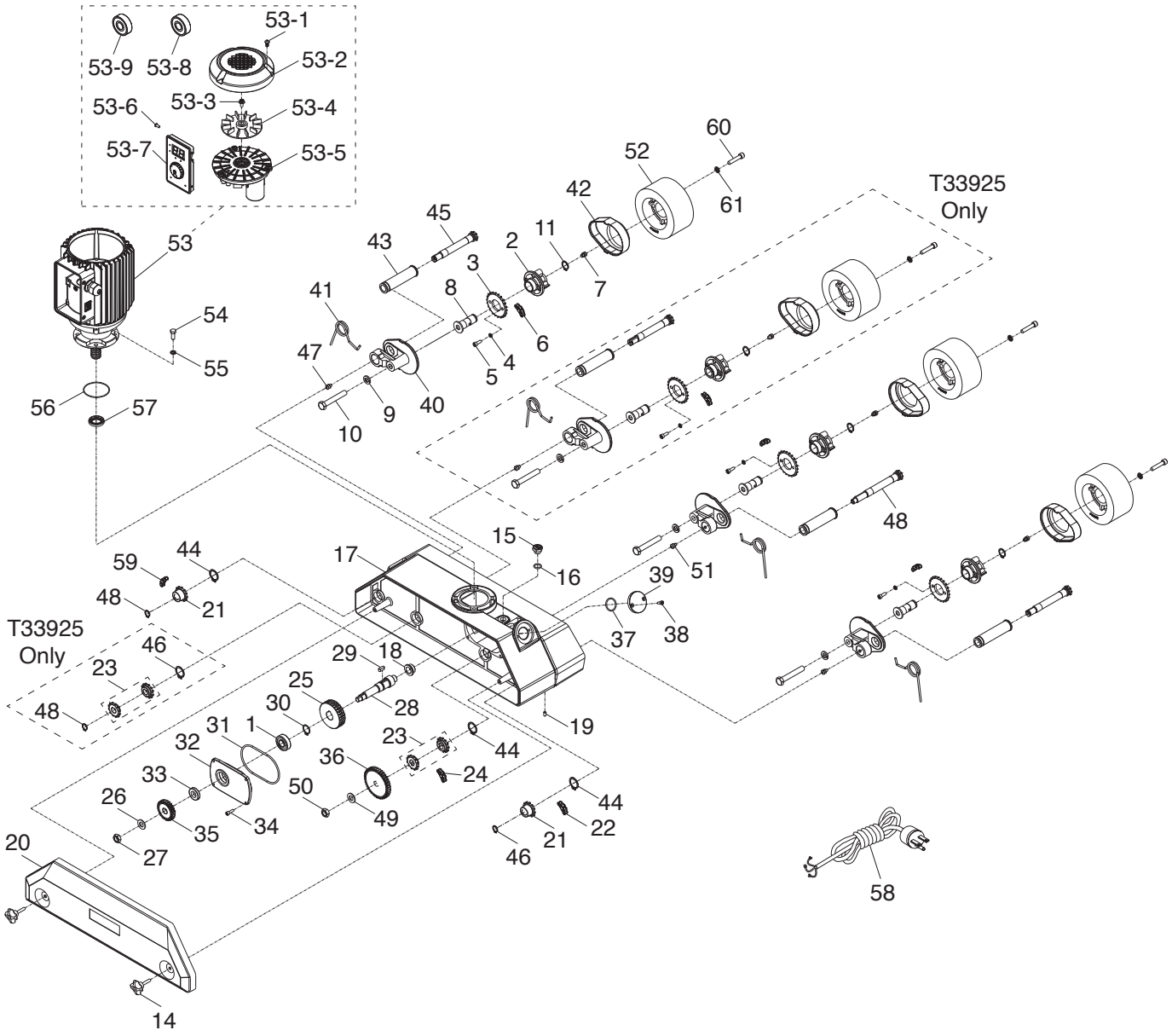


**Figure 36.** Digital readout circuit board.

# SECTION 9: PARTS

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

## Main

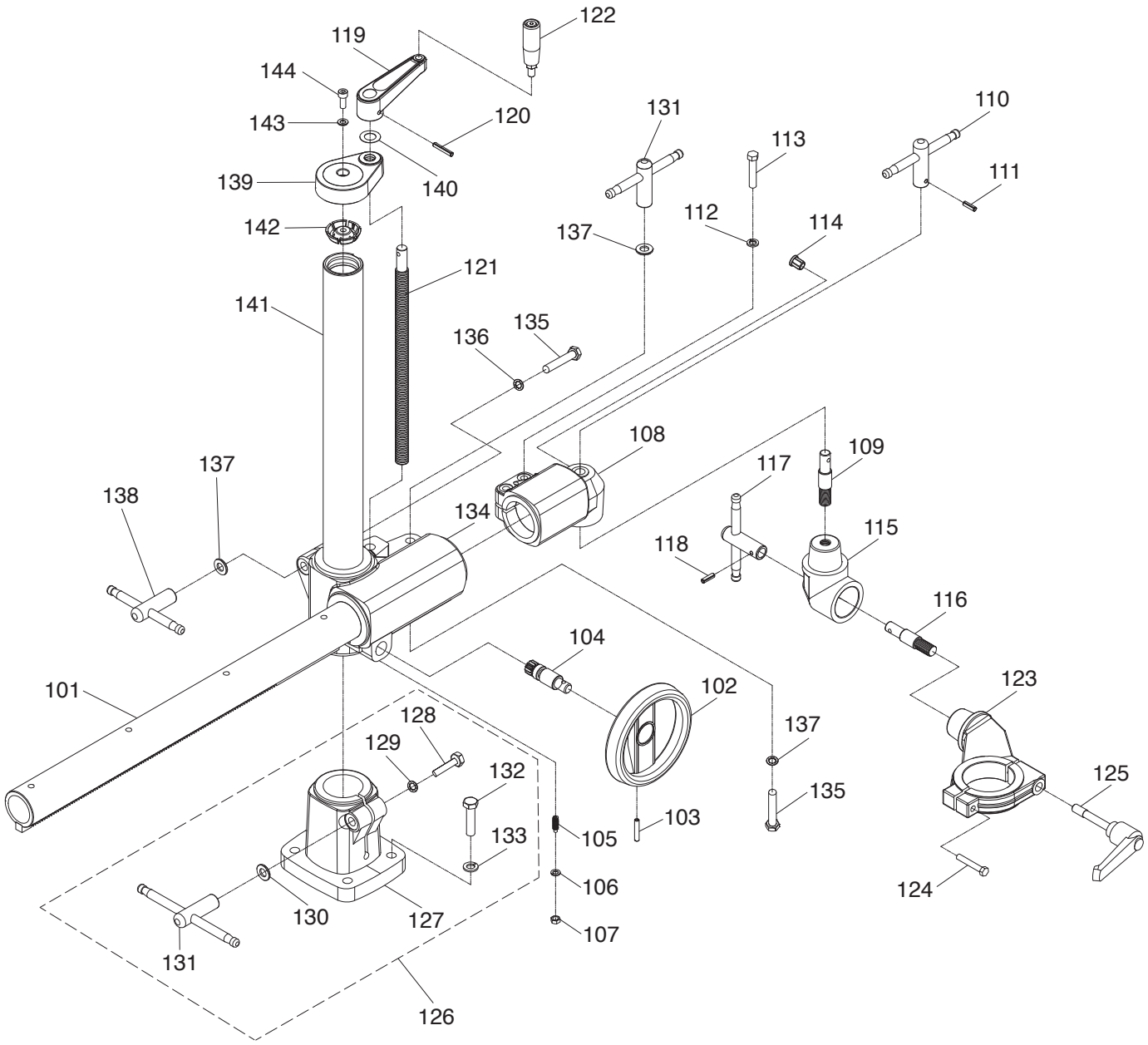


# Main Parts List

| REF | PART # | DESCRIPTION |
|---|---|---|
| 1 | PT33924001 | BALL BEARING 6203ZZ |
| 2 | PT33924002 | ROLLER SUPPORT |
| 3 | PT33924003 | SPROCKET 22T |
| 4 | PT33924004 | LOCK WASHER 6MM |
| 5 | PT33924005 | CAP SCREW M6-1 X 16 |
| 6 | PT33924006 | CHAIN 26S |
| 7 | PT33924007 | GREASE FITTING M6-1 STRAIGHT |
| 8 | PT33924008 | ROLLER SPINDLE |
| 9 | PT33924009 | LOCK WASHER 12MM |
| 10 | PT33924010 | HEX BOLT M12-1.75 X 75 |
| 11 | PT33924011 | EXT RETAINING RING 20MM |
| 14 | PT33924014 | KNOB BOLT M6-1 X 25, 4-LOBE, D38 |
| 15 | PT33924015 | OIL FILL CAP |
| 16 | PT33924016 | O-RING 14.8 X 2.4 P15 |
| 17 | PT33924017 | HOUSING (T33924) |
| 17 | PT33925017 | HOUSING (T33925) |
| 18 | PT33924018 | BUSHING |
| 19 | PT33924019 | SET SCREW M6-1 X 10 (T33924) |
| 19 | PT33925019 | SET SCREW M6-1 X 12 (T33925) |
| 20 | PT33924020 | BACK COVER (T33924) |
| 20 | PT33925020 | BACK COVER (T33925) |
| 21 | PT33924021 | SPROCKET 12T |
| 22 | PT33924022 | CHAIN 32S (T33924) |
| 22 | PT33925022 | CHAIN 30S (T33925) |
| 23 | PT33924023 | DOUBLE SPROCKET 12T |
| 24 | PT33924024 | CHAIN 20S (T33924) |
| 24 | PT33925024 | CHAIN 38S (T33925) |
| 25 | PT33924025 | WORM GEAR |
| 26 | PT33924026 | FLAT WASHER 12MM |
| 27 | PT33924027 | HEX NUT M12-1.75 |
| 28 | PT33924028 | WORM GEAR SHAFT |
| 29 | PT33924029 | KEY 18 X 6 X 6 |
| 30 | PT33924030 | EXT RETAINING RING 24MM |
| 31 | PT33924031 | O-RING 101.19 X 3.53 |
| 32 | PT33924032 | WORM GEAR BOX COVER |
| 33 | PT33924033 | OIL SEAL 69.4 X 31MM |
| 34 | PT33924034 | CAP SCREW M5-.8 X 16 |

| REF | PART # | DESCRIPTION |
|---|---|---|
| 35 | PT33924035 | GEAR 25T |
| 36 | PT33924036 | GEAR 40T |
| 37 | PT33924037 | O-RING 27.5 X 2.0 S28 |
| 38 | PT33924038 | OIL DRAIN PLATE |
| 39 | PT33924039 | CAP SCREW M5-.8 X 10 |
| 40 | PT33924040 | SPROCKET HOUSING |
| 41 | PT33924041 | TORSION SPRING 3.8 X 102 |
| 42 | PT33924042 | HOUSING COVER |
| 43 | PT33924043 | SPROCKET SHAFT SLEEVE |
| 44 | PT33924044 | EXT RETAINING RING 24MM |
| 45 | PT33924045 | SPROCKET SHAFT |
| 46 | PT33924046 | EXT RETAINING RING 13MM |
| 47 | PT33924047 | GREASE FITTING M6-1 X 1 |
| 48 | PT33924048 | SPROCKET SHAFT |
| 49 | PT33924049 | FLAT WASHER 12MM |
| 50 | PT33924050 | HEX NUT M12-1.75 |
| 51 | PT33924051 | GREASE FITTING M6-1 X 1 |
| 52 | PT33924052 | ROLLER 4-3/4" X 2-3/8" |
| 53 | PT33924053 | MOTOR 1HP 220V 1-PH |
| 53-1 | PT33924053-1 | CAP SCREW M4-.7 X 14 |
| 53-2 | PT33924053-2 | FAN COVER |
| 53-3 | PT33924053-3 | FLANGE SCREW M4-.7 X 10 |
| 53-4 | PT33924053-4 | FAN |
| 53-5 | PT33924053-5 | CONTACT PLATE |
| 53-6 | PT33924053-6 | TAP SCREW M3 X 8 |
| 53-7 | PT33924053-7 | CONTROL PANEL |
| 53-8 | PT33924053-8 | BALL BEARING 6005-2RS (FRONT) |
| 53-9 | PT33924053-9 | BALL BEARING 6001-2RS (REAR) |
| 54 | PT33924054 | HEX BOLT M8-1.25 X 20 |
| 55 | PT33924055 | LOCK WASHER 8MM |
| 56 | PT33924056 | O-RING 69.4 X 3.1 G70 |
| 57 | PT33924057 | OIL SEAL 17 X 32 X 7MM |
| 58 | PT33924058 | POWER CORD 18G 3W 108" 6-15P |
| 59 | PT33924059 | CHAIN 40S (T33924) |
| 59 | PT33925059 | CHAIN 30S (T33925) |
| 60 | PT33924060 | CAP SCREW M8-1.25 X 20 |
| 61 | PT33924061 | LOCK WASHER 8MM |

# Column & Stand

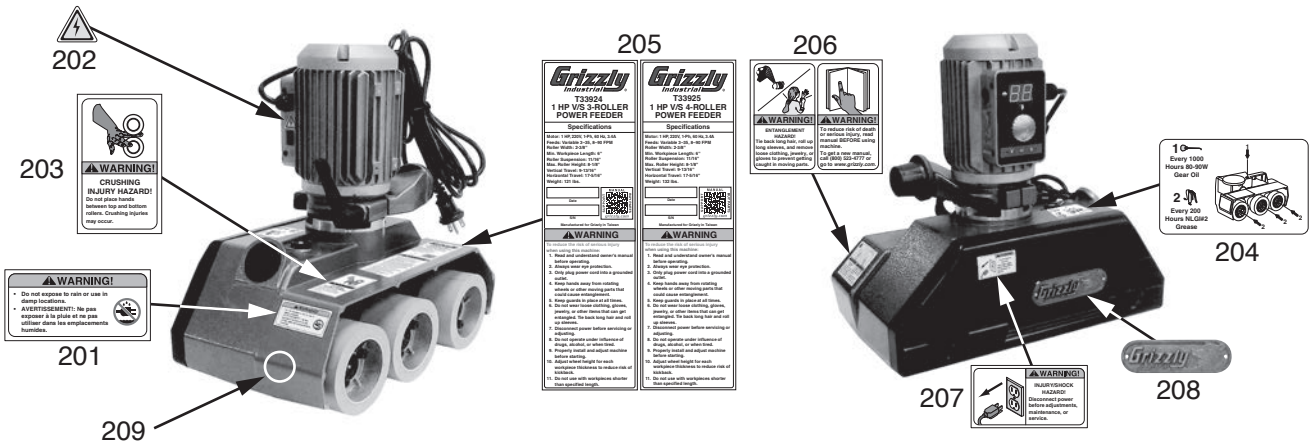


# Column & Stand Parts List

| REF | PART # | DESCRIPTION |
|---|---|---|
| 101 | PT33924101 | HORIZONTAL TUBE W/RACK |
| 102 | PT33924102 | CRANK HANDWHEEL |
| 103 | PT33924103 | ROLL PIN 6 X 36 |
| 104 | PT33924104 | PINION SHAFT |
| 105 | PT33924105 | SET SCREW M8-1.25 X 20 |
| 106 | PT33924106 | LOCK WASHER 8MM |
| 107 | PT33924107 | HEX NUT M8-1.25 |
| 108 | PT33924108 | UPPER ELBOW JOINT |
| 109 | PT33924109 | SHOULDER LOCK STUD |
| 110 | PT33924110 | T-HANDLE 150MM |
| 111 | PT33924111 | ROLL PIN 6 X 22 |
| 112 | PT33924112 | FLAT WASHER 10MM |
| 113 | PT33924113 | HEX BOLT M10-1.5 X 50 |
| 114 | PT33924114 | STRAIN RELIEF |
| 115 | PT33924115 | LOWER ELBOW JOINT |
| 116 | PT33924116 | SHOULDER LOCK STUD |
| 117 | PT33924117 | T-HANDLE 150MM |
| 118 | PT33924118 | ROLL PIN 6 X 22 |
| 119 | PT33924119 | ELEVATION HANDLE ARM 130L |
| 120 | PT33924120 | ROLL PIN 6 X 36 |
| 121 | PT33924121 | ELEVATING LEADSCREW |
| 122 | PT33924122 | ELEVATION HANDLE |

| REF | PART # | DESCRIPTION |
|---|---|---|
| 123 | PT33924123 | SWIVEL CLAMP |
| 124 | PT33924124 | HEX BOLT M8-1.25 X 50 |
| 125 | PT33924125 | ADJ HANDLE M12-1.75 X 78, 83L |
| 126 | PT33924126 | VERTICAL COLUMN BASE ASSY |
| 127 | PT33924127 | VERTICAL COLUMN BASE |
| 128 | PT33924128 | HEX BOLT M12-1.75 X 75 |
| 129 | PT33924129 | LOCK WASHER 12MM |
| 130 | PT33924130 | FLAT WASHER 12MM |
| 131 | PT33924131 | T-HANDLE 150MM |
| 132 | PT33924132 | HEX BOLT M12-1.75 X 50 |
| 133 | PT33924133 | LOCK WASHER 12MM |
| 134 | PT33924134 | ELEVATING BRACKET |
| 135 | PT33924135 | HEX BOLT M12-1.75 X 75 |
| 136 | PT33924136 | LOCK WASHER 12MM |
| 137 | PT33924137 | FLAT WASHER 12MM |
| 138 | PT33924138 | T-HANDLE 150MM |
| 139 | PT33924139 | COLUMN CAP |
| 140 | PT33924140 | FLAT WASHER 8MM |
| 141 | PT33924141 | VERTICAL COLUMN 720MM |
| 142 | PT33924142 | FINNED ANCHOR M8-1.25 |
| 143 | PT33924143 | FLAT WASHER 8MM |
| 144 | PT33924144 | CAP SCREW M8-1.25 X 25 |

# Labels & Cosmetics




| REF | PART # | DESCRIPTION |
|---|---|---|
| 201 | PT33294201 | WATER EXPOSURE WARNING LABEL |
| 202 | PT33294202 | ELECTRICITY LABEL |
| 203 | PT33294203 | SLIP ROLL WARNING |
| 204 | PT33924204 | LUBRICATION NOTICE (T33924) |
| 204 | PT33925204 | LUBRICATION NOTICE (T33925) |
| 205 | PT33924205 | MACHINE ID LABEL (T33924) |

| REF | PART # | DESCRIPTION |
|---|---|---|
| 205 | PT33925205 | MACHINE ID LABEL (T33925) |
| 206 | PT33924206 | COMBO WARNING LABEL |
| 207 | PT33924207 | DISCONNECT POWER LABEL |
| 208 | PT33924208 | GRIZZLY OBLONG NAMEPLATE-MINI |
| 209 | PT33924209 | TOUCH-UP PAINT, GRIZZLY GREEN |

## ⚠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.

For further information about the warranty, visit **https://www.grizzly.com/forms/warranty** or scan the QR code below to be automatically directed to our warranty page.

**WARRANTY**

*grizzly.com*