



MODEL G0462
WOOD LATHE w/DIGITAL READOUT
OWNER'S MANUAL
(For models manufactured since 11/14)



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**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE
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FOR MODELS MANUFACTURED SINCE 11/14 #TS12792 PRINTED IN CHINA



WARNING!

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

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

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

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



WARNING!

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

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

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

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INTRODUCTION

Machine Description

The Model G0462 Wood Lathe is designed to turn wood stock so the operator can remove material with a hand-held cutting tool or chisel.

The variable speed allows for infinite spindle speed adjustment from 600–2400 RPM, and the digital readout provides a precise reading of the current spindle speed.

The ability to rotate and move the head allows for turning workpieces with diameters larger than 12" on the outboard side of the lathe.

The heavy-duty tailstock provides substantial stability when mounting the workpiece between centers.

Contact Info

We stand behind our machines. If you have any questions or need help, use the information below to contact us. Before contacting, please get the serial number and manufacture date of your machine. This will help us help you faster.

Grizzly Technical Support
1203 Lycoming Mall Circle
Muncy, PA 17756
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:	Read manual before operation.		
Specification:	Wear safety glasses and respirator.		
Specification:	Ensure machine is properly adjusted/setup and		
Specification:	power is connected to grounded circuit before starting.		
Weight:	4. Make sure the motor has stopped and disconnect		
	power before adjustments, maintenance, or service.		
	5. DO NOT expose to rain or dampness.		
	6. DO NOT modify this machine in any way.		
	7.		
	8.		
	9. Do not use machine if intoxicated or under the influence of drugs or alcohol.		
	10. Maintain machine carefully to prevent accidents.		

Manufactured for Grizzly in Taiwan



Identification

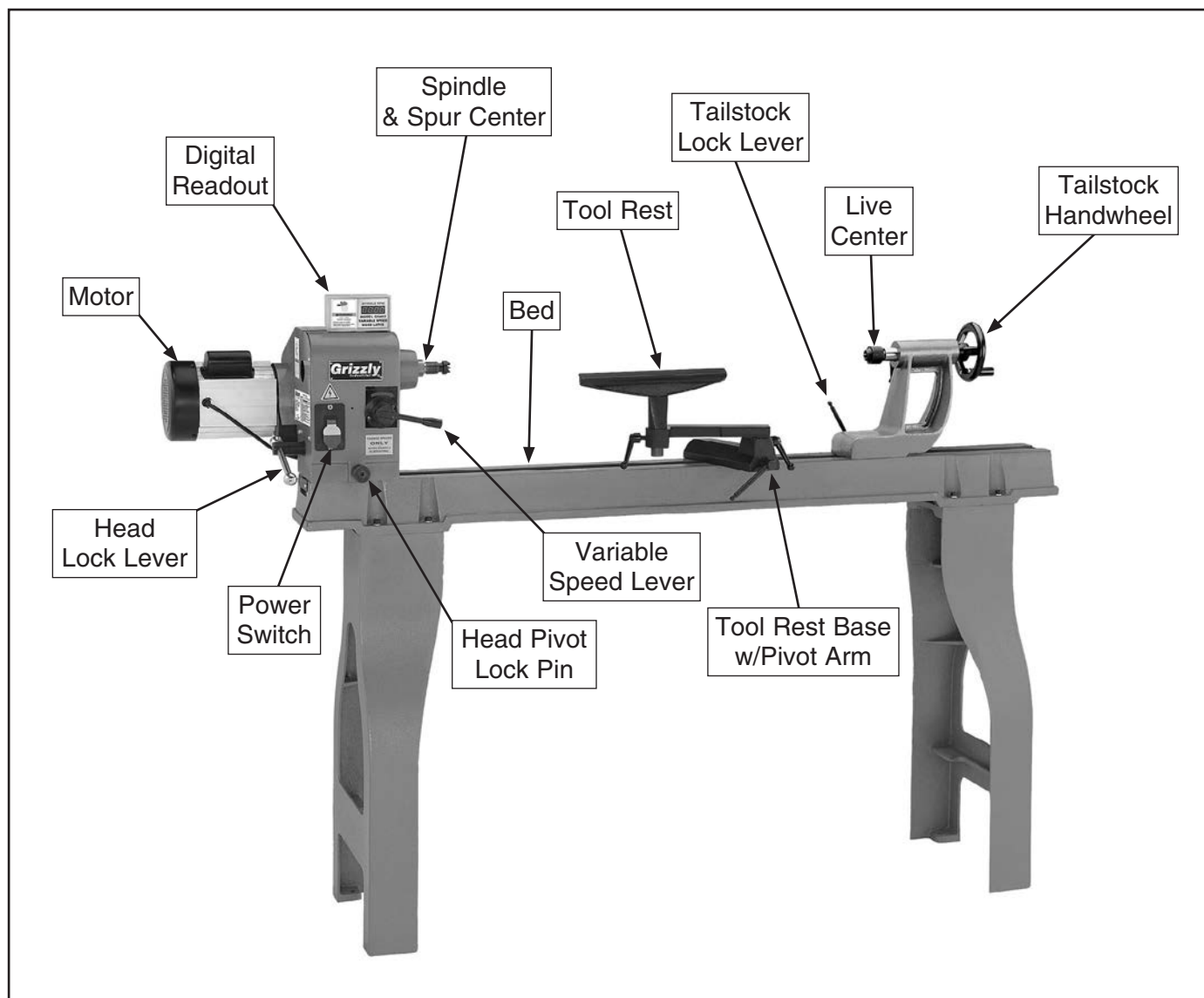


Figure 1. Model G0462 identification.





MACHINE DATA SHEET

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

MODEL G0462 WOOD LATHE WITH DIGITAL READOUT

Product Dimensions:

Weight..... 287 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 72-1/2 x 19 x 48 in.
Footprint (Length x Width)..... 54 x 13-3/4 in.

Shipping Dimensions:

Type..... Cardboard Box
Content..... Machine
Weight..... 354 lbs.
Length x Width x Height..... 18 x 64 x 20 in.
Must Ship Upright..... Yes

Electrical:

Power Requirement..... 110V, Single-Phase, 60 Hz
Prewired Voltage..... 110V
Full-Load Current Rating..... 14A
Minimum Circuit Size..... 20A
Connection Type..... Cord & Plug
Power Cord Included..... Yes
Power Cord Length..... 8 ft.
Power Cord Gauge..... 16 AWG
Plug Included..... Yes
Included Plug Type..... 5-15
Switch Type..... Paddle Safety Switch w/Removable Key

Motors:

Main

Type..... TEFC Capacitor-Start Induction
Horsepower..... 2 HP
Phase..... Single-Phase
Amps..... 14A
Speed..... 1725 RPM
Power Transfer V-Belt Drive
Bearings..... Shielded & Permanently Lubricated

Main Specifications:

Operation Information

Swing Over Bed..... 16 in.
Distance Between Centers..... 46 in.
Swing Over Tool Rest..... 13 in.
Swing Over Tool Rest Base..... 13-1/2 in.
No of Spindle Speeds..... Variable
Spindle Speed Range..... 600 – 2400 RPM
Floor to Center Height..... 43 in.
Headstock Rotation..... 0, 60, 90, 120, 180 deg.



Spindle Information

Spindle Taper..... MT#2
Spindle Thread Size..... 1" x 8 TPI
Spindle Thread Direction..... Right Hand
Spindle Bore..... 3/8 in.
Type of Included Spindle Center..... Spur

Tool Rest Information

Tool Rest Width..... 11-7/8 in.
Tool Rest Post Diameter..... 25 mm
Tool Rest Post Length..... 2-1/8 in.
Tool Rest Base Height..... 1-7/16 in.

Tailstock Information

Tailstock Taper..... MT#2
Type of Included Tailstock Center..... Live

Construction

Bed..... Precision-Ground Cast Iron
Frame..... Cast Iron
Stand..... Cast Iron
Base..... Cast Iron
Headstock..... Cast Iron
Tailstock..... Cast Iron
Paint Type/Finish..... Enamel

Other Specifications:

Country of Origin China
Warranty 1 Year
Approximate Assembly & Setup Time 1 Hour
Serial Number Location ID Label
ISO 9001 Factory Yes
CSA, ETL, or UL Certified/Listed No

Features:

Spindle Tachometer with Digital Readout
Outboard Turning is Easy with Standard Tool Rest Extension
Quick Lock/Release Levers for Tailstock and Headstock
Heavy-Duty Cast Iron Bed and Legs Ensure Stability and Minimize Vibration



SECTION 1: SAFETY

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

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



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



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



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

NOTICE

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

Safety Instructions for Machinery



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 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 avoid accidental slips, which could cause loss of workpiece control.

HAZARDOUS DUST. Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material, and 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!

INTENDED USAGE. Only use machine for its intended purpose and never make modifications not approved by Grizzly. Modifying machine or using it differently than intended may result in malfunction or mechanical failure that can lead to serious 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.

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.

CHECK DAMAGED PARTS. Regularly inspect machine for any condition that may affect safe operation. Immediately repair or replace damaged or mis-adjusted parts before operating machine.

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 Wood Lathes

WARNING

MAIN INJURY HAZARDS: Death or crushing injury from getting entangled in rotating spindle or workpiece; death, blindness, or broken bones from being struck by a workpiece that breaks apart or comes loose during rotation, turning tool kickback, or flying wood chips. To minimize your risk of these hazards, always heed the following warning information:

INTEGRITY OF STOCK. Verify each workpiece is free of knots, splits, nails, or foreign material to ensure it can safely rotate on spindle without breaking apart or causing turning tool kickback.

WORKPIECE PREPARATION. Before mounting, cut off waste portions with a bandsaw or other tool to ensure workpiece has no large edges to catch turning tool, and it will rotate without dangerous wobbling.

SECURING LOCKS. Verify tool rest, headstock, and tailstock are secure before turning lathe **ON**.

SECURING WORKPIECE. An improperly secured workpiece can fly off spindle with deadly force. Use proven setup techniques and always verify workpiece is well-secured before starting lathe. Only use high-quality fasteners with non-tapered heads for faceplate attachment.

TOOL SUPPORT. An improperly supported tool may be grabbed or ejected. Adjust tool rest approximately 1/4" away from workpiece and 1/8" above workpiece center line to provide proper support for turning tool. Firmly hold turning tool with both hands against tool rest.

TOOL KICKBACK. Occurs when turning tool is ejected from workpiece with great force, striking operator or bystanders. Commonly caused by poor workpiece selection/preparation, improper tool usage, or improper machine setup or tool rest adjustment.

ADJUSTMENT TOOLS. Remove all chuck keys, wrenches, and adjustment tools before turning lathe **ON**. A tool left on the lathe can become a deadly projectile when spindle is started.

SAFE CLEARANCES. Before starting spindle, verify workpiece has adequate clearance by hand-rotating it through its entire range of motion.

EYE/FACE PROTECTION. Always wear a face shield and safety glasses when operating lathe.

PROPER APPAREL. Do not wear gloves, necktie or loose clothing. Keep long hair away from rotating spindle.

SPEED RATES. Select correct spindle speed for workpiece size, type, shape, and condition. Use low speeds when roughing or when turning large, long, or non-concentric workpieces. Allow spindle to reach full speed before turning.

NEW SETUPS. Test each new setup by starting spindle rotation at the lowest speed and standing to the side of the lathe until workpiece reaches full speed and you can verify safe rotation.

ROUGHING. Use correct tool. Take light cuts, use low speeds, and firmly support tool with both hands.

SHARP TOOLS. Only use sharp turning tools—they cut with less resistance than dull tools. Dull turning tools can catch or grab and pull your hands into the rotating workpiece.

STOPPING SPINDLE. Always allow spindle to completely stop on its own. Never put hands or another object on spinning workpiece.

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

MEASURING WORKPIECE. Only measure workpiece after it has stopped. Trying to measure a spinning workpiece increases entanglement risk.

SANDING/POLISHING. To reduce entanglement risk, remove tool rest before sanding. Never completely wrap sandpaper around workpiece.



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, or equipment damage may occur if machine is not correctly grounded and connected to the 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 110V..... 14 Amps

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

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

WARNING

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

110V Circuit Requirements

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

Nominal Voltage 110V–120V
Cycle 60 Hz
Phase Single-Phase
Power Supply Circuit 20 Amps

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

CAUTION

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

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



Grounding & Plug Requirements

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

This machine is equipped with a power cord that has an equipment-grounding wire and a grounding plug (similar to the figure below). The plug must only be inserted into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances.

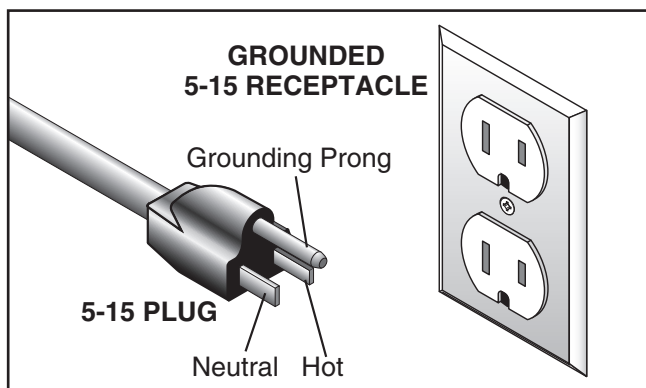
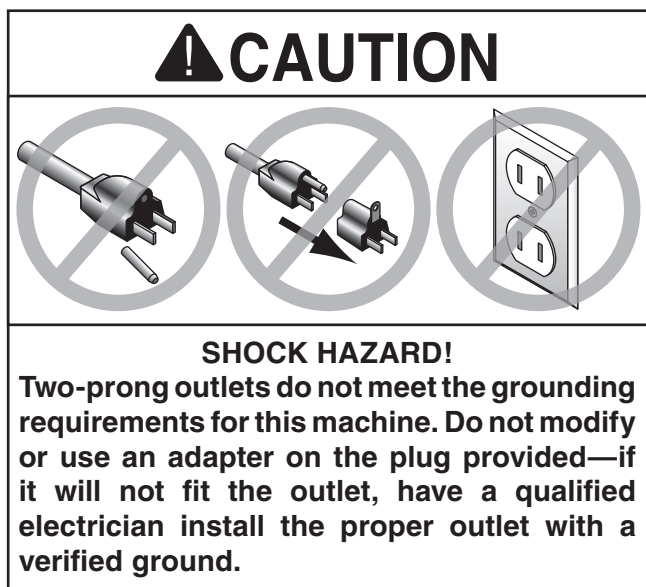


Figure 2. Typical 5-15 plug and receptacle.



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 may 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 contain a ground wire, match the required plug and receptacle, and meet the following requirements:

Minimum Gauge Size 14 AWG
Maximum Length (Shorter is Better).....50 ft.



SECTION 3: SETUP

Unpacking

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

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, inventory the contents.



Needed for Setup

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

Description	Qty
• Additional People	At Least 2
• Safety Glasses	1 For Each Person
• Cleaner/Degreaser (Page 13)	As Needed
• Disposable Shop Rags.....	As Needed
• Mounting Hardware (Page 15) ...	As Needed
• Precision Level	1
• Measuring Tape.....	1

Inventory

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

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

Box 1 Inventory (Figure 3)	Qty
A. Lathe Unit	1
B. Faceplate 6"	1
C. Hardware Bag	1
D. Knockout Tool.....	1
E. Flat Wrenches 32mm	2

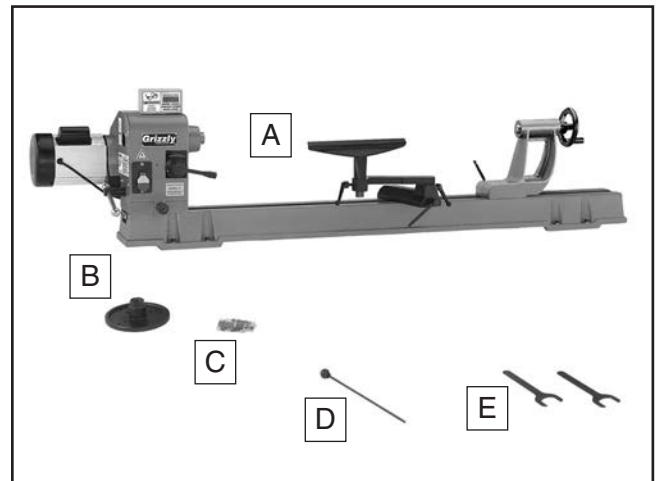


Figure 3. Box 1 inventory.



Hardware Bag Inventory (Figure 4)		Qty
F.	Spur Center	1
G.	Live Center	1
H.	Tool Rest Lock Lever.....	1
I.	Hex Wrenches 3mm, 4mm, 6mm.....	1 Each
J.	Cap Screws M8-1.25 x 35	8
K.	Lock Washers 8mm.....	8
L.	Quill Lock Lever.....	1

Box 2 Inventory (Figure 5)		Qty
M.	Stand Legs	2

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.



Figure 4. Hardware bag inventory.

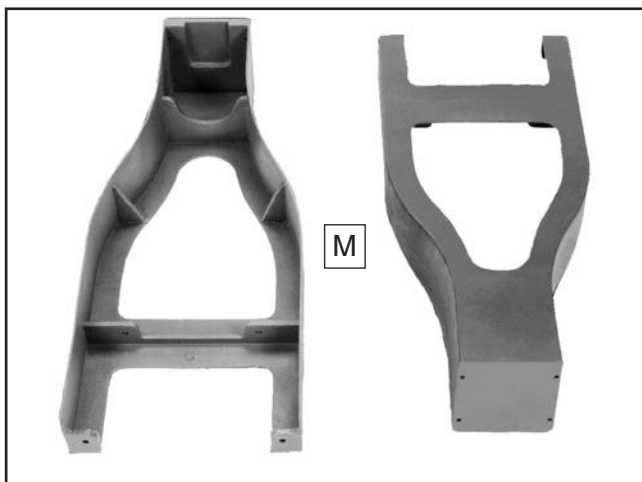


Figure 5. Box 2 inventory.



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.

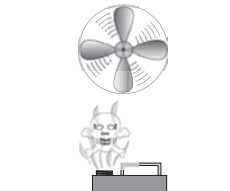
Before cleaning, gather the following:

- 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.

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

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

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

T23692—Orange Power Degreaser

A great product for removing the waxy shipping grease from your machine during clean up.



Figure 6. T23692 Orange Power Degreaser.



Site Considerations

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.

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.**



Physical Environment

The physical environment where the machine is operated is important for safe operation and longevity of machine 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 exceeds 41°–104°F; the relative humidity range exceeds 20–95% (non-condensing); or the environment is subject to vibration, shocks, or bumps.

Electrical Installation

Place this machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure to leave access to a means of disconnecting the power source or engaging a lockout/tagout device, if required.

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.

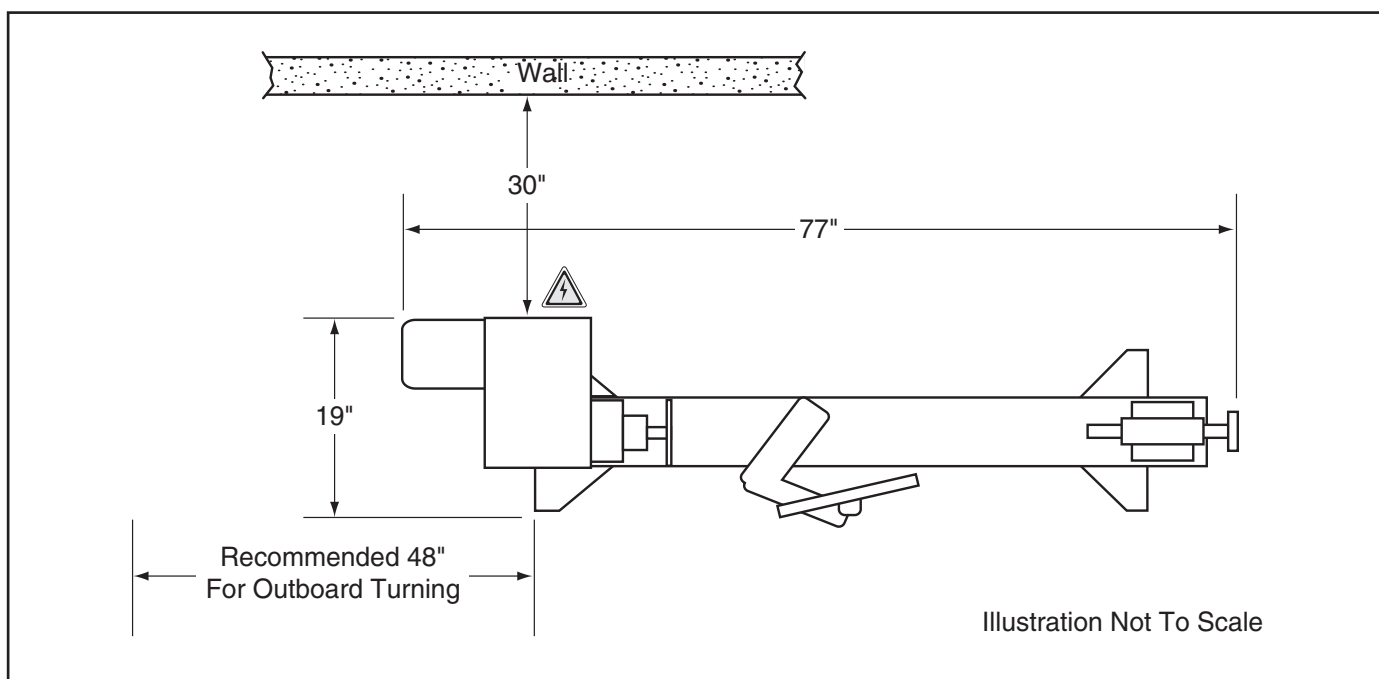


Figure 7. Minimum working clearances.



Anchoring to Floor

Anchoring machinery to the floor prevents tipping or shifting and reduces vibration that may occur during operation, resulting in a machine that runs slightly quieter and feels more solid.

If the machine will be installed in a commercial or workplace setting, or if it is permanently connected (hardwired) to the power supply, local codes may require that it be anchored to the floor.

If not required by any local codes, fastening the machine to the floor is an optional step. If you choose not to do this with your machine, we recommend placing it on machine mounts, as these provide an easy method for leveling and they have vibration-absorbing pads.

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.

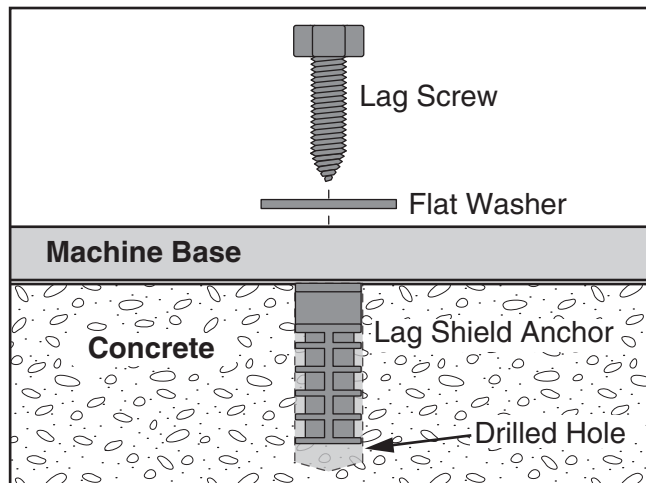


Figure 8. Popular method for anchoring machinery to a concrete floor.

Assembly

To mount the lathe to the stand:

1. Stand the legs up approximately 41" apart and get them reasonably aligned, as shown in **Figure 9**.

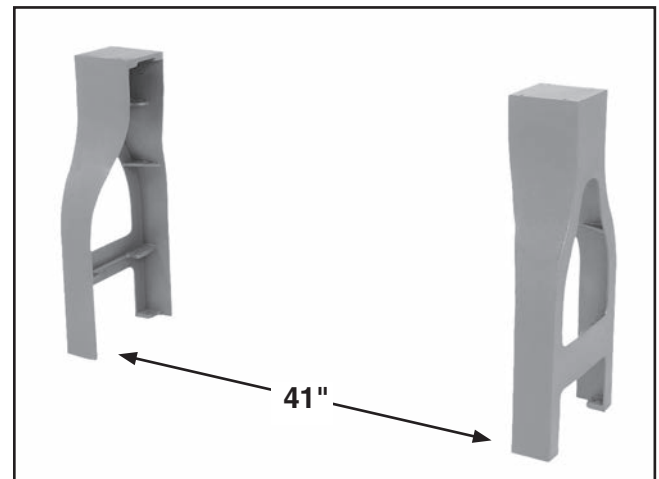


Figure 9. Stand legs approximately 41" apart to prepare for mounting the lathe.

2. Use the help of additional people to carefully lift the lathe onto the legs and align the mounting holes.

Note: The headstock end is the heaviest and usually requires two people lifting at that end.

3. Secure the lathe to the legs with the (8) M8-1.25 x 35 cap screws and 8mm lock washers, as shown in **Figure 10**.

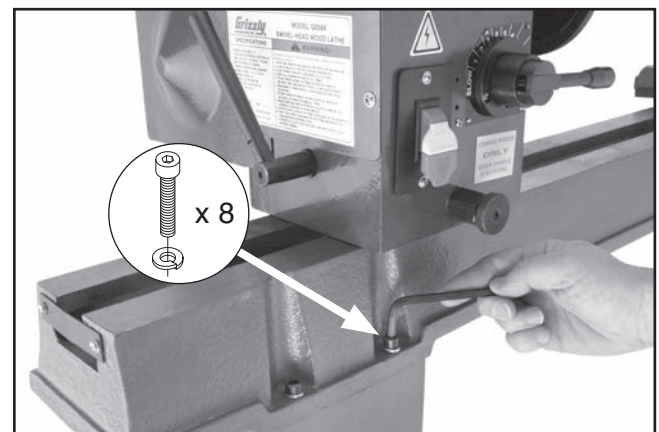


Figure 10. Securing lathe to the stand leg.



4. Install the tool rest lock lever to secure the tool rest, as shown in **Figure 11**.



Figure 11. Installing handle into tool rest.

5. Install the lever into the tailstock so that the end of it mates with the quill keyway (see **Figure 12**).

Note: Make sure the dog-point end of the lock lever fits into the quill keyway so that the quill can move in and out of the tailstock without rotating.

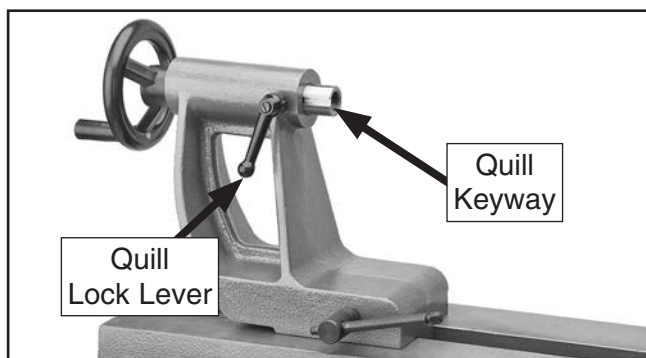


Figure 12. Quill lock lever.

6. Attach the digital readout to the top of the head with the pre-installed Phillips head screws, lock washers, and flat washers, as shown in **Figure 13**.

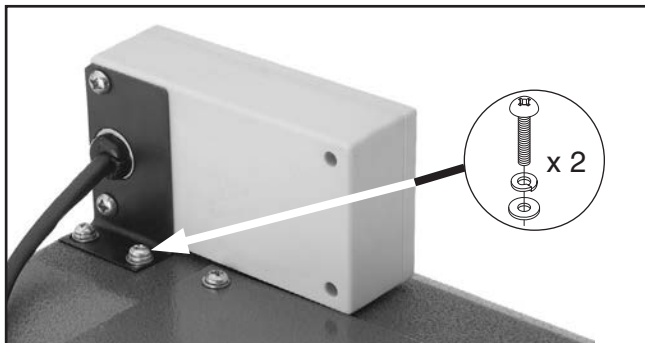
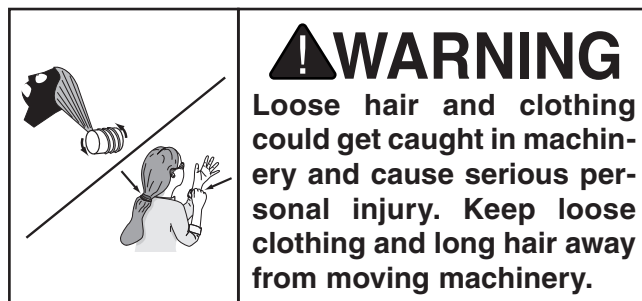


Figure 13. Digital readout installed.

Test Run



Once assembly is complete, test run your machine to make sure it runs properly and is ready for regular operation.

The test run consists of verifying the following:
1) The motor powers up and runs correctly, and
2) the safety disabling mechanism on the switch works correctly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting on Page 35**.

If you still cannot remedy a problem, contact our Tech Support at (570) 546-9663 for assistance.

To test run the machine:

1. Make sure you have read the safety instructions at the beginning of the manual and that the machine is set up properly.
2. Make sure all tools and objects used during setup are cleared away from the machine.
3. Connect the machine to the power source.
4. Verify that the machine is operating correctly by turning the machine **ON**.

—When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.

—Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.



5. Turn the machine **OFF**.
6. Remove the switch disabling key, as shown in **Figure 14**.

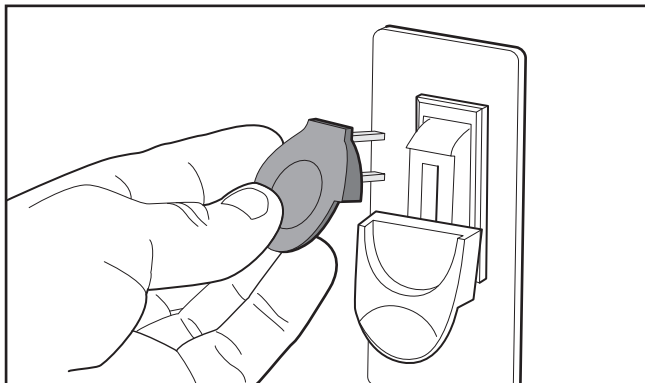


Figure 14. Example of removing switch key from paddle switch.

7. Try to start the machine with the paddle switch.
 - If the machine does not start, the switch disabling feature is working as designed.
 - If the machine starts, immediately stop the machine. The switch disabling feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

NOTICE

The spindle speed lever adjusts the pulley width to change the spindle speed. To prevent damage to this mechanism, the lathe **MUST** be running before using the variable speed lever.

8. Re-insert the switch disabling key.
9. Turn the lathe **ON**.

10. Test the variable speed by pulling the speed lever out (**Figure 15**) and slowly adjusting it left and right.



Figure 15. Variable speed lever.

- The machine should speed up and slow down as you move the lever. If this is the case, then the test run is over and your machine is ready for normal operations.
- If the lathe has problems changing speeds, turn the lathe **OFF**, disconnect it from power, and refer to the troubleshooting chart on **Page 35**, or call our Tech Support at (570) 546-9663 for additional help.

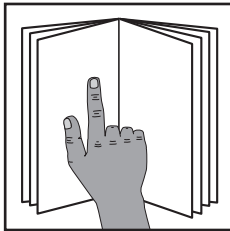


SECTION 4: OPERATIONS

Operation Overview

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

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



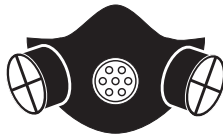
WARNING

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 the workpiece to make sure it is suitable for turning. No extreme bows, knots, or cracks should exist.
2. Prepares and trims the workpiece to make it roughly concentric.
3. Installs the workpiece between centers, or attaches it to a faceplate or chuck.
4. Adjusts the tool rest to $\frac{1}{8}$ " above the workpiece centerline, and sets the minimum clearance between the workpiece and the lip of the tool rest to $\frac{1}{4}$ ".
5. Rotates the workpiece by hand to verify that the spindle and workpiece rotate freely throughout the full range of motion.
6. Ties back loose hair and clothing, and puts on face shield and respirator. Takes all other required safety precautions.
7. Starts the lathe, adjusts the lathe speed, and carefully begins the turning operation, keeping the chisel against the tool rest the entire time it is cutting.



Stock Inspection & Requirements

Some workpieces are not safe to turn or may require modification before they are safe to turn. **Before turning a workpiece, inspect all workpieces for the following:**

- **Workpiece Type:**
This machine is intended for cutting natural and man-made wood products, and some plastics. Never attempt to cut any metal, stone, or rubber workpiece; cutting these materials can lead to machine damage or severe injury.
- **Foreign Objects:**
Nails, staples, dirt, rocks and other foreign objects are often embedded in wood. While cutting, these objects can become dislodged and hit the operator, cause tool grab, or break the turning tool, which might then fly apart. Always visually inspect your workpiece for these items. If they can't be removed, DO NOT turn the workpiece.
- **Large/Loose Knots:**
Loose knots can become dislodged during the turning operation. Large knots can cause a workpiece to completely break in half during turning and cause machine damage and personal injury. Choose workpieces that do not have large/loose knots.
- **Wet or "Green" Stock:**
Cutting wood with a moisture content over 20% causes unnecessary wear on tooling blades, increases the risk of tool grab, and yields poor results.
- **Excessive Warping:**
Workpieces with excessive bowing or twisting are unstable and unbalanced. Never turn these workpieces at high speed, or instability will be magnified and the workpiece can be ejected from the lathe causing impact injuries. Only turn concentric workpieces!

Adjusting Head

The Model G0462 headstock can be positioned anywhere along the bed and pivoted up to 180°.

To position the headstock along the length of the bed:

1. DISCONNECT LATHE FROM POWER!
2. Loosen the head lock lever shown in **Figure 16**.



Figure 16. Head lock lever.

3. Slide the headstock to the desired position, then retighten the lock lever.

Note: The large hex nut under the headstock may require occasional adjustment to ensure proper clamping pressure to the bed. Turn the hex nut in small increments to fine tune the clamping pressure, as needed.

⚠ WARNING

If the lathe head unexpectedly moves during operation, the tool and your hand could be drawn into the spinning workpiece resulting in death or crushing injuries. **ALWAYS** make sure the head lock lever is tight and the head pivot pin is seated before operation.



To pivot the headstock:

1. DISCONNECT LATHE FROM POWER!
2. Make sure the head lock lever is tight.
3. Pull the pivot lock pin out (see **Figure 17**) and pivot the headstock clockwise 90° or 180°, as shown in **Figure 18**.

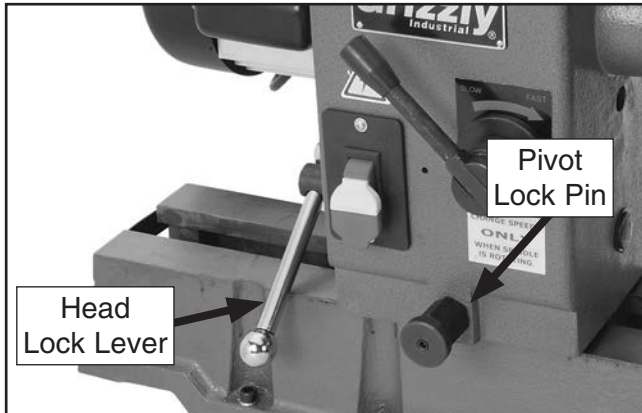


Figure 17. Pivot lock pin location.

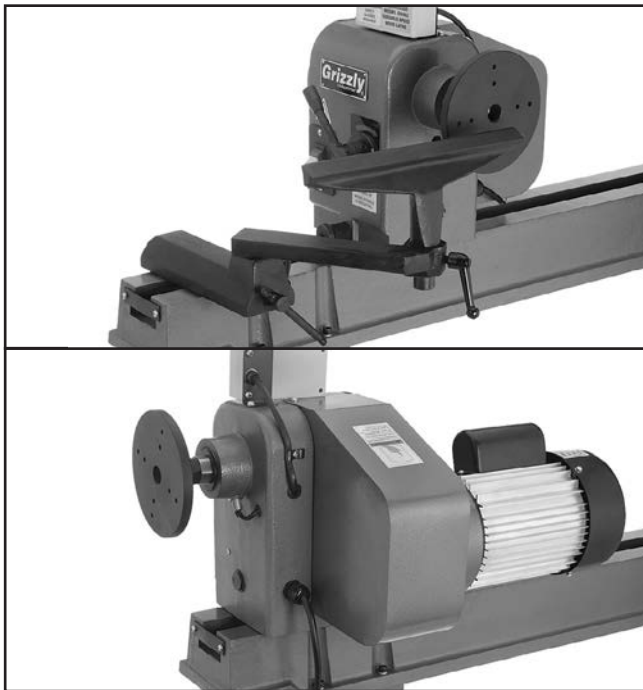


Figure 18. Head set at 90° and 180°.

4. Release the pivot lock pin. Make sure the pin has engaged in its detent by trying to rotate the headstock.

Adjusting Tailstock Position

The tailstock is equipped with a cam-action clamping system to secure it. When the lock lever is tightened, a locking plate lifts up and secures the tool rest to the bed.

To reposition the tailstock along the bed, loosen the tailstock lock lever (see **Figure 19**), move the tailstock to the desired position, then retighten the lock lever.

Note: *If the lock lever does not securely clamp the tailstock down onto the bed, loosen or tighten the hex nut located on the underside of the tailstock in small increments to achieve the proper clamping pressure.*

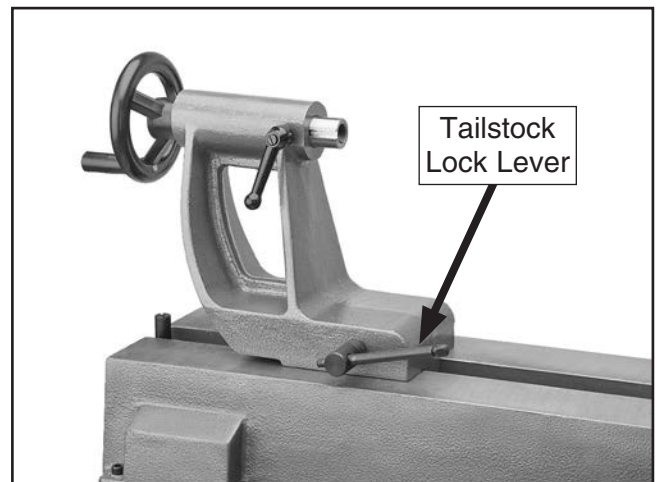


Figure 19. Tailstock lock lever.



Adjusting Tool Rest

The tool rest is equipped with a cam-action clamping system to secure it. When the base lock lever is tightened, a clamping plate lifts up and secures the tool rest to the bed.

!WARNING

If tool rest unexpectedly moves during operation, the tool and your hand could be drawn into the spinning workpiece resulting in death or crushing injuries. ALWAYS make sure all tool rest locks are tight before beginning operation.

The Model G0462 comes with a three-way adjustable tool rest (see **Figure 20**).

- Use the base lock lever to secure the tool rest along the length of the bed.
- Use the pivot arm lock lever to secure the tool rest at a working distance from the workpiece.
- Use the tool rest lock lever to adjust the height and angle of the tool rest relative to the workpiece.

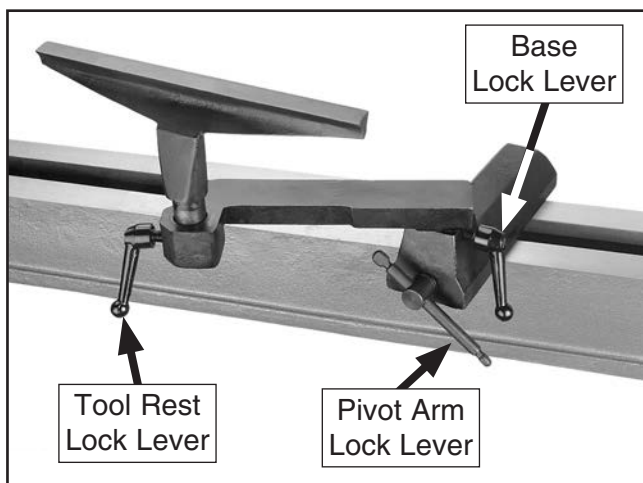


Figure 20. Tool rest controls.

For safe and good turning results, we recommend positioning the tool rest approximately $\frac{1}{4}$ " away from the workpiece, and approximately $\frac{1}{8}$ " above the workpiece center line (see **Figure 21**).

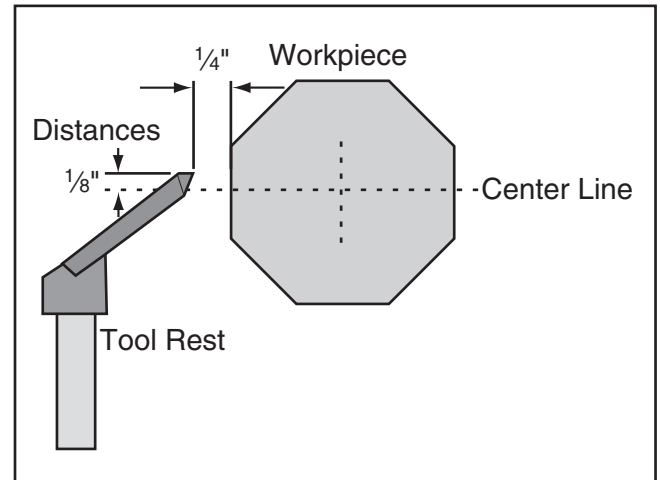


Figure 21. Tool rest position relative to the workpiece.



Installing/Removing Spur Center

The included MT#2 spur center installs in the spindle and forces the workpiece to spin with the spindle.

Typically, the spur center is driven into the workpiece (see **Spindle Turning** on **Page 27** for detailed instructions), then the center is inserted with the workpiece into the spindle.

Installing Spur Center

1. DISCONNECT LATHE FROM POWER!
2. Move the tailstock and tool rest a safe working distance from the headstock.
3. If the faceplate is installed, remove it (refer to **Page 24** for detailed instructions).
4. Make sure the spur center and the inside of the spindle are free of debris and oily substances that could interfere with proper mating of the parts.
5. Insert the tapered end of the center into the spindle, then push it in with a quick, firm motion (see **Figure 22**).

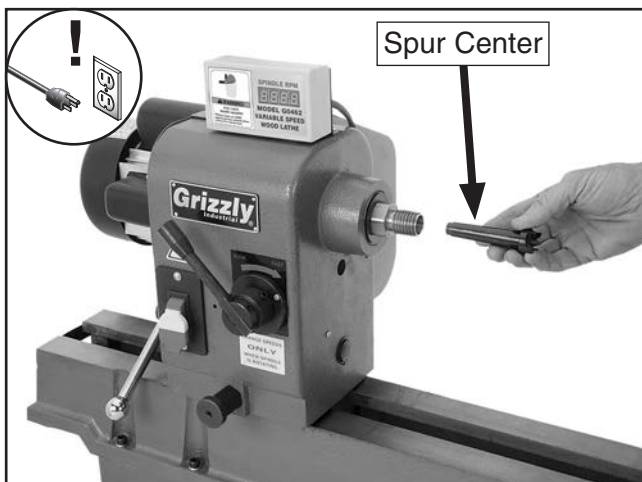


Figure 22. Inserting spur center into spindle.

6. Make sure the center is securely installed by attempting to pull it out by hand—a properly installed center will not pull out by hand.

Removing Spur Center

1. DISCONNECT LATHE FROM POWER!
2. Hold a clean rag under the spindle or wear a glove to catch the center when you remove it.
3. Insert the knockout tool through the outboard end of the spindle and firmly tap the center until it breaks loose (see **Figure 23**).

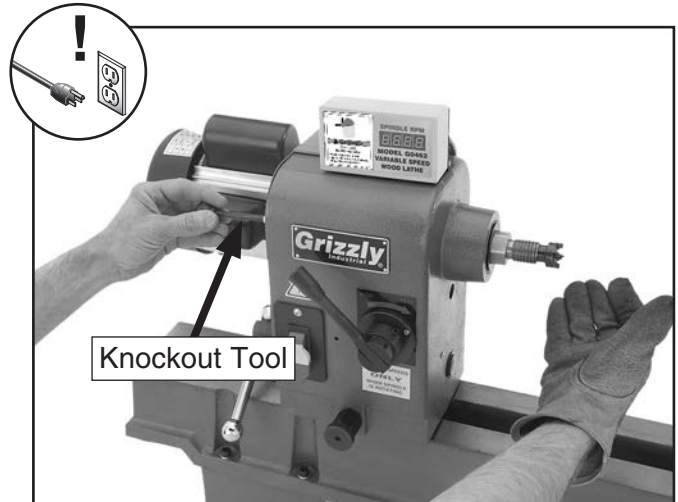


Figure 23. Removing spur center using the knockout tool.

!WARNING

Before beginning any turning operation that uses the live center installed into the tailstock quill, make sure the spur and live centers are properly aligned (refer to *Aligning Centers* on **Page 37** for detailed instructions). Failure to heed this warning could result in the workpiece being thrown from the lathe, resulting in death or serious personal injury.



Installing/Removing Live Center

The MT#2 live center installs into the tailstock quill and rotates with the workpiece.

Installing Live Center

1. Move the tailstock a safe working distance from the head and tool rest.
2. Loosen the quill lock lever, then rotate the quill handwheel clockwise until the quill extends out from the tailstock about 1", as shown in **Figure 24**.

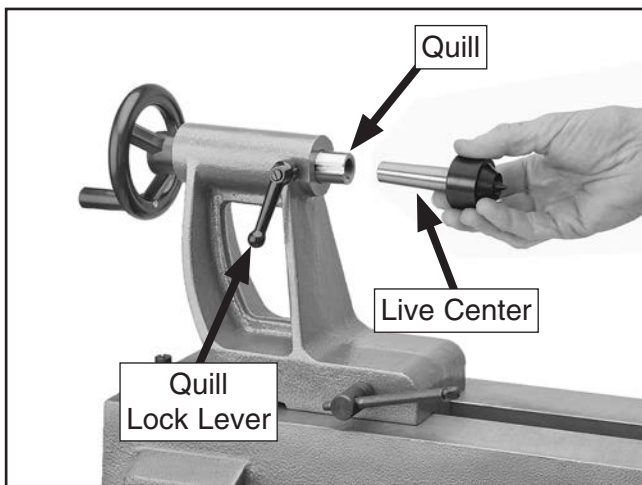


Figure 24. Installing the live center into the tailstock.

3. Make sure the live center and the inside of the quill are free of debris and oil substances that could interfere with the proper mating of these parts.
4. Insert the tapered end of the live center into the quill with a quick, firm motion.
5. Make sure the center is secure by attempting to pull it out by hand—a properly installed center will not pull out by hand.

6. Rotate the quill handwheel to draw the quill back into the tailstock as far as possible without forcing the center to release.

Note: *The more the quill is drawn back into the tailstock, the greater the workpiece support.*

7. Tighten the quill lock lever to hold the quill and center in place.

WARNING

The tailstock quill lock lever **MUST** be tight and firmly secure the quill in place before beginning operation. Also, the quill should not protrude from the tailstock more than 2" or the quill will not adequately support the workpiece. Otherwise, the workpiece could come loose and fly at the operator or bystanders resulting in death or serious personal injury.

Removing Live Center

1. Loosen the quill lock lever.
2. Hold a clean rag under the center or wear a glove to catch the center when you remove it.
3. Rotate the quill handwheel counterclockwise to retract the quill back into the tailstock until the center is forced out.



Installing/Removing Faceplate

The faceplate is used when you need to remove material from the face of the workpiece, such as during hollowing operations. The faceplate can be installed only if the spur center is removed from the spindle.

To install the faceplate:

1. DISCONNECT LATHE FROM POWER!
2. If the spur center is installed, remove it (refer to **Page 22** for detailed instructions).
3. Make sure the internal threads of the faceplate and the threads of the spindle are free of any debris, then wipe the threads with a lightly oiled rag to aid in the installation and removal.
4. Thread the faceplate onto the spindle clockwise.

5. Use the two included 32mm flat wrenches to tighten the faceplate, as shown in **Figure 25**.



Figure 25. Tightening the faceplate onto the spindle.

To remove the faceplate, perform **Steps 3–4** in reverse.

For detailed instructions on mounting a workpiece to the faceplate, refer to **Faceplate Turning** on **Page 29**.



Adjusting Spindle Speed

NOTICE

Spindle speed must be adjusted while lathe is running. Adjusting spindle speed while machine is not in operation could result in permanent damage to the machine not covered under warranty.

The Model G0462 is engineered to operate between 600 and 2400 RPM's. Due to the design of the pulley system, RPM's outside of this range cannot be attained.

Use the digital readout as a guide. Select a speed within the set range by pulling out the speed control lever and turning it to the right to increase RPM or to the left to decrease the RPM (see **Figure 26**).



Figure 26. Speed lever.

When turning a workpiece where a lot of material must be removed and a rough finish does not matter, low range, which has more torque, is best. When turning a workpiece where a clean finish is required, and only light cuts are made, high range is best. Mid range is a compromise between the two ranges. Use the speed lever to adjust the spindle speed within each range.

! WARNING

Always choose the correct spindle speed for your operation. Using the wrong speed may lead to the workpiece breaking loose or being thrown from the lathe at a high rate of speed, causing fatal or severe impact injuries.

Refer to the chart in **Figure 27** to help choose the correct spindle speed. Note that both the diameter of the workpiece and the type of cutting should be considered when determining the proper spindle speed.

Diameter of Work-piece	Roughing RPM	General Cutting RPM	Finishing RPM
Under 2"	1520	2400	Fastest available
2–4"	760	1600	Fastest available
4–6"	Slowest available	1080	1650
6–8"	Slowest available	810	1240
8–10"	Slowest available	Slowest available	1000
10–12"	Slowest available	Slowest available	830
12–14"	Slowest available	Slowest available	710

Figure 27. Typical spindle speed recommendations.



Selecting Turning Tools

Lathe tools come in a variety of shapes and sizes and usually fall into five major categories.

Refer to **Accessories** on **Page 31** for examples of recommended wood chisels from Grizzly.

- **Gouges**—Mainly used for rough cutting, detail cutting, and cove profiles. The rough gouge is a hollow, double-ground tool with a round nose, and the detail gouge is a hollow, double-ground tool with either a round or pointed nose. **Figure 28** shows an example of a gouge.

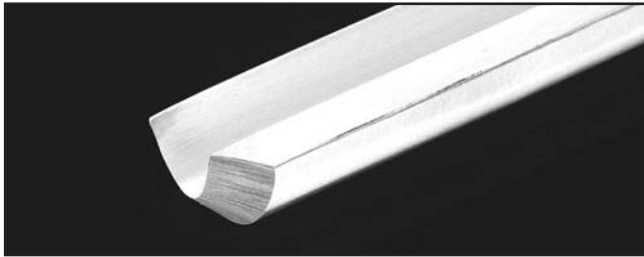


Figure 28. Gouge.

- **Skew Chisel**—A very versatile tool that can be used for planing, squaring, V-cutting, beading, and parting off. The skew chisel is flat, double-ground with one side higher than the other (usually at an angle of 20-40°). **Figure 29** shows an example of a skew chisel.

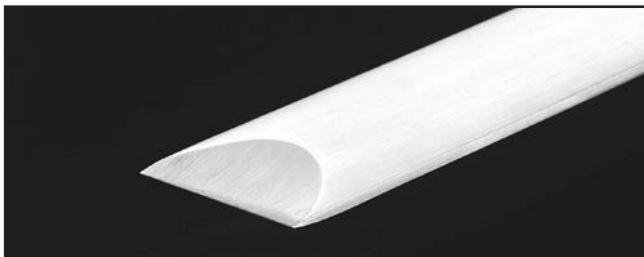


Figure 29. Skew chisel.

- **Scrapers**—Mainly used where access for other tools is limited, such as hollowing operations. This is a flat, double-ground tool that comes in a variety of profiles (Round Nose, Spear Point, Square Nose, etc.) to match many different contours. **Figure 30** shows an example of a round nose scraper.



Figure 30. Round nose scraper.

- **Parting Tools**—Used for sizing and cutting off work. This is a flat tool with a sharp pointed nose that may be single- or double-ground. **Figure 31** shows an example of a parting tool.



Figure 31. Parting tool.

- **Specialty Tools**—These are the unique, special function tools to aid in hollowing, bowl making, cutting profiles, etc.



Spindle Turning

Spindle turning, as shown in **Figure 32**, is the operation performed when a workpiece is mounted between the spindle and quill centers.

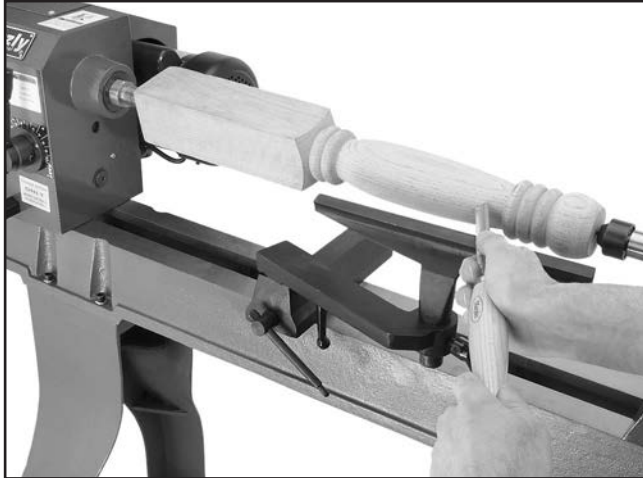


Figure 32. Typical spindle turning operation.

WARNING

Before beginning any turning operation that uses the live center installed into the tailstock quill, make sure the spur and live centers are properly aligned (refer to *Aligning Centers* on *Page 37* for detailed instructions). Failure to heed this warning could result in the workpiece being thrown from the lathe resulting in death, blindness, or broken bones.

To set up a spindle turning operation:

1. Mark both ends of your workpiece by drawing diagonal lines from corner to corner. The intersection point of these lines will show you the center of your workpiece. See the illustration in **Figure 33** for details.

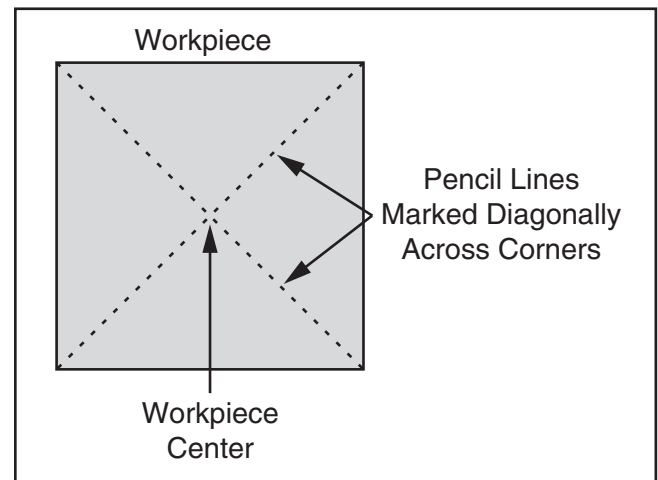


Figure 33. Workpiece marked diagonally from corner to corner to determine the center.

2. Use a wood mallet to tap the point of the spur center into the workpiece where the lines intersect so that it leaves a center mark, then remove the center. Do this to both ends of the workpiece.
3. Use a $\frac{1}{4}$ " drill bit to make a $\frac{1}{4}$ " deep hole at the center mark on the workpiece end that will be mounted on the spindle spur center.
4. To help embed the spur center into the workpiece, cut $\frac{1}{8}$ " deep saw kerfs into the same workpiece end along the diagonal lines marked in **Step 1**.
5. If your workpiece is over 2" x 2", cut the corners off the workpiece length-wise to make turning the corners safer and easier.



6. Use a wood mallet to embed the spur center at least $\frac{1}{4}$ " into the workpiece end center mark, as illustrated in **Figure 34**.

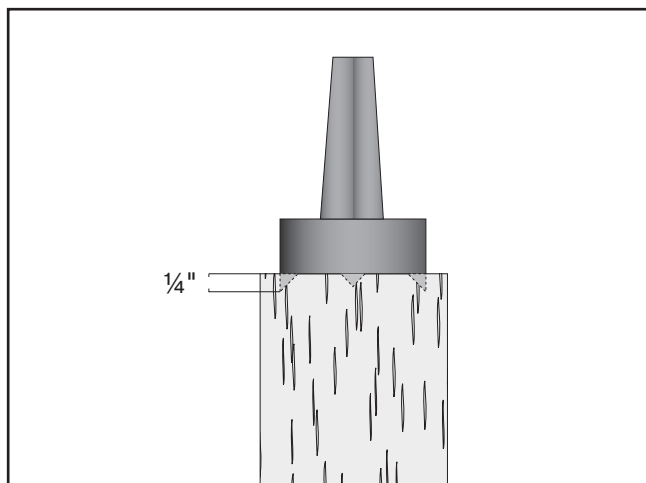


Figure 34. Spur center properly embedded.

7. With the workpiece still attached, insert the spur center into the spindle.
8. With the live center installed in the quill, draw the quill back into the spindle as far as possible without forcing the center to release.

Note: *This will give the quill and center the greatest amount of support to safely hold the workpiece during operation.*

9. Loosen the tailstock lock lever, slide the tailstock toward the workpiece until the live center touches the workpiece centerpoint, then lock the tailstock in this position.
10. Use the quill handwheel to push the live center into the workpiece at least a $\frac{1}{4}$ ", then tighten the quill lock lever to secure the center and quill.

WARNING

Do not press the live center into the workpiece too firmly or the center bearings will bind and overheat. Likewise, do not press the center too lightly or the workpiece could come loose and spin off the lathe. Use good judgement. Serious personal injury could result if care is not taken in this procedure.

11. Position the tool rest approximately $\frac{1}{4}$ " away from the workpiece and approximately $\frac{1}{8}$ " above the center line, as illustrated in **Figure 35**.

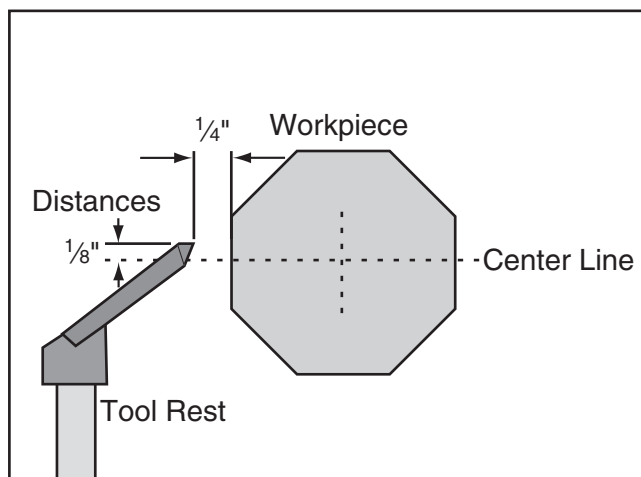


Figure 35. Tool rest set $\frac{1}{8}$ " above the center line and $\frac{1}{4}$ " away from workpiece.

12. Test the setup by hand-turning the workpiece to make sure there is enough clearance all the way around before turning the lathe **ON**.

Spindle Turning Tips

- When turning the lathe **ON**, stand outside the path of the rotating workpiece until the lathe reaches full speed and you can verify that the lathe will not throw the workpiece.
- Use the slowest speed when starting or stopping the lathe, and when rough cutting.
- Select the correct speed for the size of the workpiece you are turning. Use slower speeds for large workpieces (4" diameter and over); use the middle range speeds for medium sized workpieces (2"–4" diameter); and use faster speeds for small sized workpieces (under 2" in diameter).
- Keep the turning tool on the tool rest the ENTIRE time that it is approaching the workpiece and is in contact with it.
- Learn the correct techniques for each tool you will use. If you are unsure, read books or magazines about lathe techniques and seek training from experienced users.



Faceplate Turning

Faceplate turning, as shown in **Figure 36**, is when a workpiece is mounted to the faceplate that is then mounted to the spindle. This type of turning is usually done with open-faced workpieces like bowls or plates.

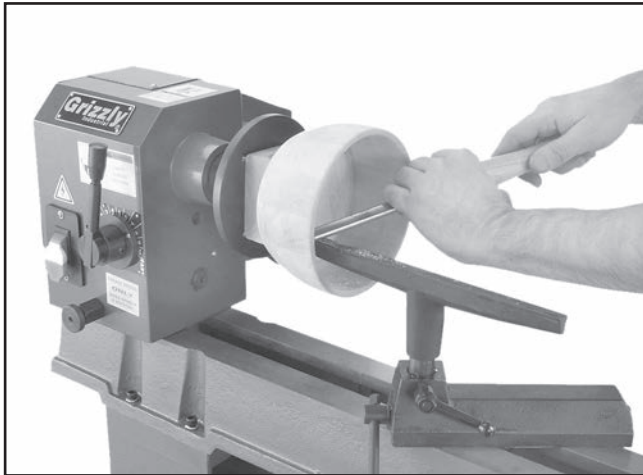


Figure 36. Typical faceplate turning operation.

Attaching Faceplate to Spindle

1. Use the procedure in **Spindle Turning** on **Page 27** to mark the center of the workpiece.

Note: Cut off the excess corners of the workpiece to make it as close to "round" as possible.

NOTICE

DO NOT use screws with tapered heads to attach the faceplate because they could split the faceplate, or the screws could snap off during operation. See the illustration in **Figure 37** for examples.

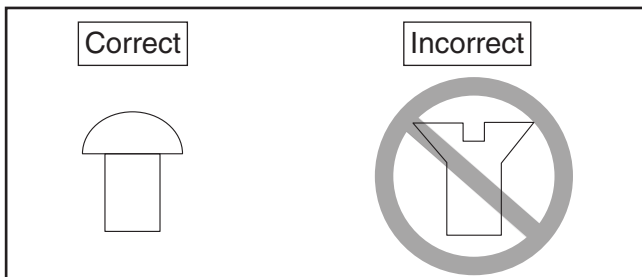


Figure 37. Correct screw type for faceplate attachment.

2. Use the mark made in **Step 1** to center the faceplate onto the workpiece back, then attach it with wood screws that do not have tapered heads as shown in **Figure 38**.

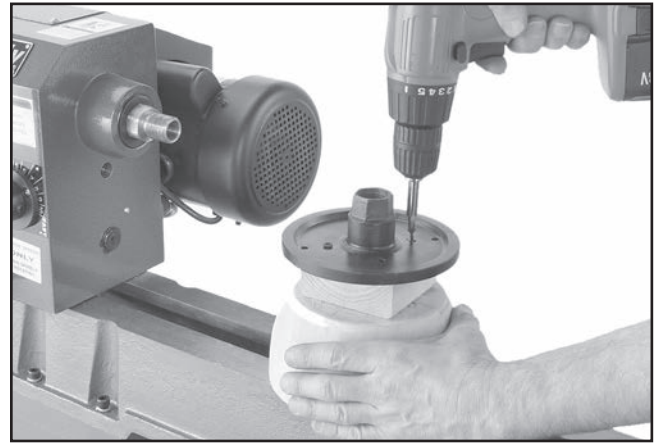


Figure 38. Attaching the faceplate to a backing block, which is glued to the workpiece.

3. Thread the faceplate onto the spindle and tighten securely.

Using a Backing Block

If wood screws cannot be used to attach the faceplate to the workpiece, then use a backing block that is securely glued to the workpiece.

To mount your workpiece to a backing block:

1. Make the backing block from a piece of scrap wood that is flat on both sides and free of knots or splits.
2. Locate and mark the center of both the workpiece and the backing block.
3. Drill a $\frac{1}{4}$ " hole completely through the center of the backing block.
4. Looking through the hole in the backing block to line it up with the center of the workpiece, glue and clamp the backing block to the workpiece.

Note: Allow the glue joint to completely cure according to the glue manufacturer's instructions.

5. Follow steps 1-2 in **Attaching Faceplate to Spindle** to attach the faceplate to the backing block.



Outboard Turning

Outboard turning is a variation of faceplate turning and is usually done when stock diameter is greater than 12". For the size of the Model G0462 and its minimum turning speed, we recommend a maximum diameter of 17" for outboard turning.

The lathe setup at 90° for outboard turning uses the tool rest with the pivot arm extended, as shown in **Figure 39**.

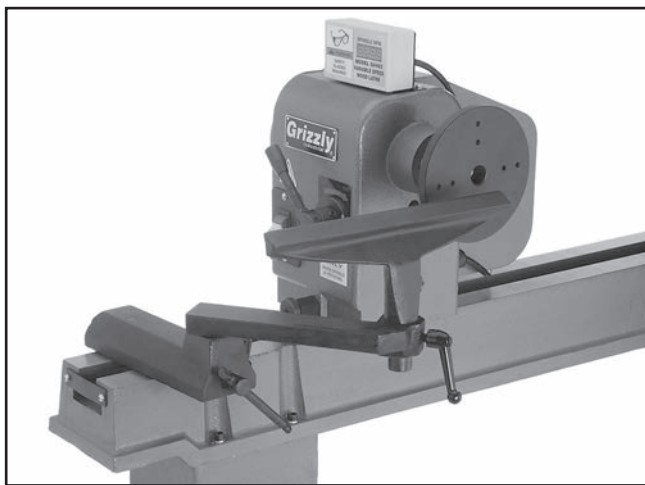


Figure 39. Headstock set at 90°.

Figure 40 depicts the lathe setup at 180° for outboard turning.

Note: When turning in this manner, you must use a free standing tool rest (not supplied).

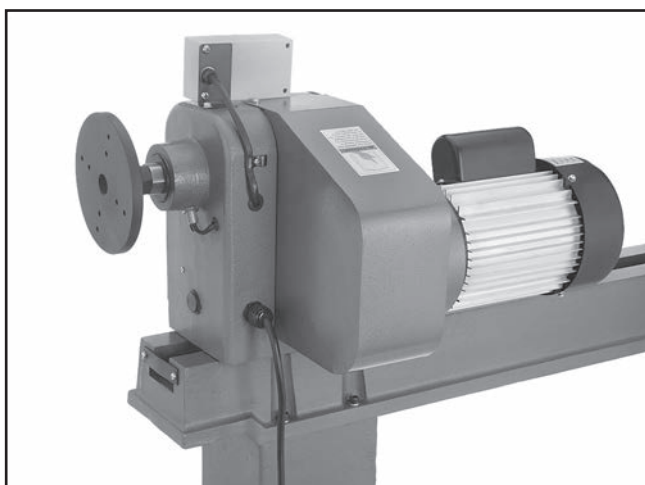


Figure 40. Headstock set at 180°.

Sanding/Finishing Using the Lathe

The lathe can be used for finishing procedures after the turning operations are complete and before removing the workpiece from the lathe, such as sanding, polishing, and applying finishes by hand (see **Figure 41** for an example).

Note: When using the lathe to sand or finish the workpiece, remove the tool rest to prevent entanglement hazards. Use the slowest speed for safer control and better results.

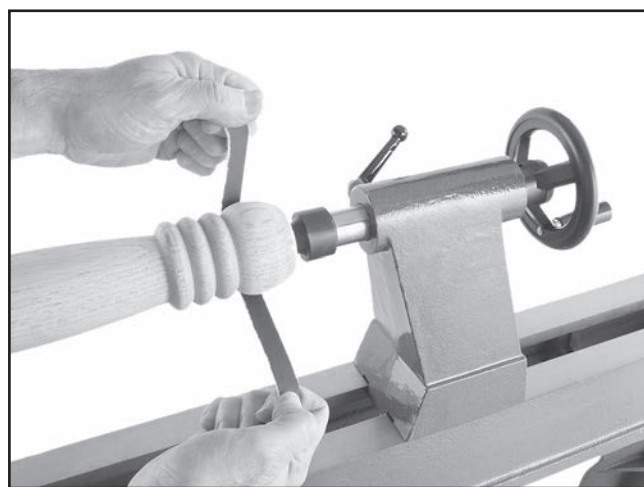
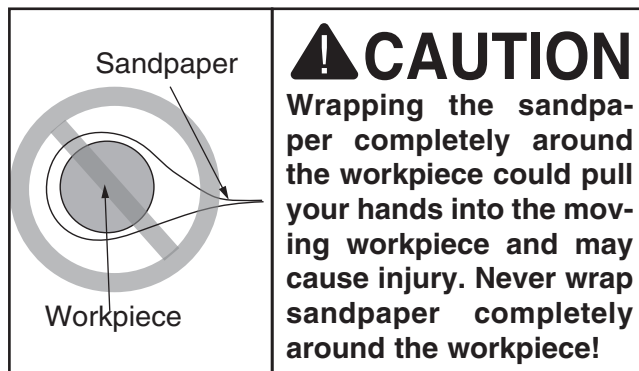


Figure 41. Typical sanding operation.



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.

H8034—3" 3-Jaw Wood Chuck - 1" x 8 TPI

H7605—3" 4-Jaw Wood Chuck - 1" x 8 TPI

These self-centering style 3- and 4-Jaw Chucks have reversible stepped jaws for holding a variety of workpiece sizes. Setup is quick and easy by twisting the knurled adjustment plate on the back of the chuck. Two 4" wrenches are included for final tightening. Fits all wood lathes with 1" x 8 TPI spindles.

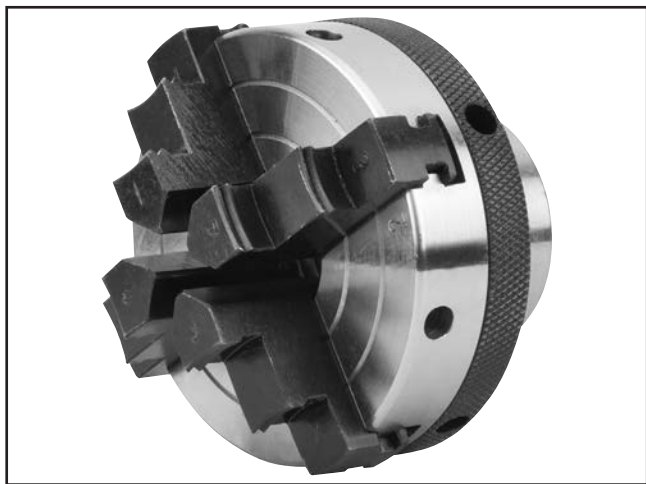


Figure 42. 3" 4-jaw chuck.

T25535—The New Turning Wood

The appeal of woodturning is simple: with only a few hand tools and a lathe, remarkable results can be quickly achieved, including beautiful bowls, boxes in the round, lamp bases, and furniture parts. For over 20 years, woodturners have been turning to Richard Raffan for expert advice and inspiration.

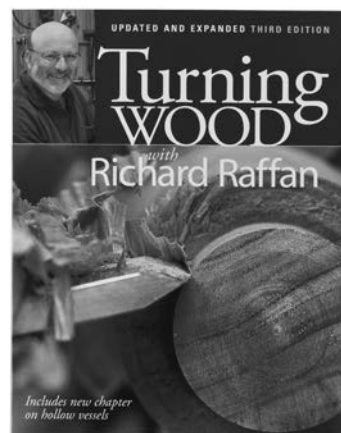


Figure 43. Instructional Text.

T10501—9 Piece Wood Lathe Center Kit

This all-in-one set features a variety of interchangeable lathe centers for every spindle turning application. Includes: MT #1 and MT #2 live centers, 3 spur centers, 3 multi-spur centers, mounting adapter, wrenches and fitted case. Fits lathes with 1" x 8 TPI RH spindles.



Figure 44. Lathe center kit with fitted case.

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



H7924—6 pc. Chisel Set In Aluminum Box

This Lathe Chisel Sets high speed steel blades and graceful ash handles provide plenty of control. Handles measure 10" long and chisels measure 15½" long overall. Set includes a ⅜" parting tool, ½" round nose, ⅞" skew, ⅜" gouge, ½" gouge, and 1" gouge. All chisels are protected in a tough aluminum case.



Figure 45. 6 pc. chisel set with aluminum case.

H0507—20" Hollowing Tool

H0508—24" Hollowing Tool

An excellent choice for blind turning or undercutting where reach is restricted. H0507 is designed for end grain use while H0508 (with a more substantial steel cross section) is designed for both end grain and side grain (bowl) use.



Figure 46. Hollowing Tools.

H5954—Robert Sorby Stebcentre MT#2

Razor sharp teeth bite into the workpiece for secure operation and the spring loaded center point controls the amount of drive or slip. This patented feature helps avoid the problem of 'dig-in'. Production turners can also load and unload their work while the lathe is still running!



Figure 47. MT#2 Stebcentre.

T10117—Big Mouth Dust Hood with Stand

Capture dust from any machine operation with this Big Mouth Dust Hood. Simply attach a 4" dust collection hose and adjust the hood right where you need it. The free standing base eliminates complicated machine set-ups and the tilting 16⅝" x 12⅞" hood adjusts from 23" to 43" high. Every shop needs one of these!



Figure 48. Dust collector with hood.



SECTION 6: MAINTENANCE



Schedule

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

Daily Check:

- Loose mounting bolts.
- Worn switch.
- Worn or damaged wires.
- Damaged V-belt.
- Any other unsafe condition.

Cleaning

Cleaning the Model G0462 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it.

Remove any debris or oily substances from inside the spindle and quill.

Lathe Bed

Protect the unpainted cast iron lathe bed by wiping it clean after every use—this ensures moisture from wood dust does not remain on the bare metal surfaces. Keep your lathe bed rust-free with regular applications of quality lubricants.

Tailstock

To remove the quill from the tailstock, loosen the set screw above the quill handwheel, then completely unthread the handwheel clockwise from the quill threads. Loosen the quill lock lever and remove the quill from the tailstock housing. Thoroughly clean all of the unpainted parts with mineral spirits. After these surfaces are dry, apply a thin coat of light machine oil.

To re-assemble the quill and handwheel, insert the quill into the casting, then thread the handwheel counterclockwise onto the quill until it moves against the casting. Tighten down the set screw that secures the handwheel, then back the set screw off one full turn so that the handwheel can freely rotate.

Lubrication

Since all the bearings for the Model G0462 are sealed and permanently lubricated, simply leave them alone unless they need to be replaced. Do not lubricate them.

Wipe a lightly oiled shop rag on the outside spindle threads. DO NOT allow any oil to get on the inside mating surface of the spindle.

Use the quill handwheel to extend the quill all the way out, then wipe the outside of the quill with a lightly oiled shop rag. DO NOT allow any oil to get on the inside quill mating surfaces.



Motor Shaft Lubrication

The motor shaft must be properly lubricated to ensure the variable-speed pulley assembly can open and close smoothly when adjusted. Any common machine oil is acceptable for this purpose, but we recommend using a "dry" type lubricant, such as Grizzly model G2545 or G4682, to avoid attracting dust and prevent a build-up of grime.

To lubricate motor shaft:

1. DISCONNECT LATHE FROM POWER!
2. Remove plastic cover shown in **Figure 49** to access motor shaft ball oiler.

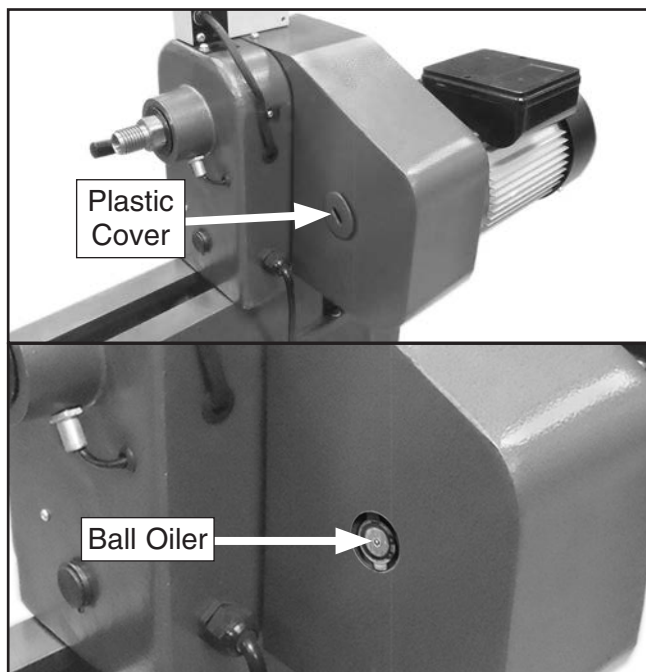


Figure 49. Location to access ball oiler.

3. Push tip of oil can nozzle against ball oiler, then pump can once or twice. Alternatively, if using a spray-type lubricant, place the end of the straw against the ball oiler and give it a quick squirt. Do not over-oil.
4. Turn lathe **ON** and run for approximately one minute. Rotate variable-speed lever back and forth to distribute oil.
5. Turn lathe **OFF** and re-install plastic cover.

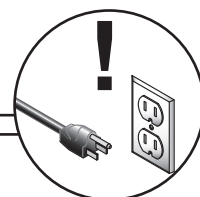


SECTION 7: SERVICE

Review the troubleshooting and 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 at (570) 546-9663.

Note: Please gather the serial number and manufacture date of your machine before calling.

Troubleshooting



Motor & Electrical

Symptom	Possible Cause	Possible Solution
Motor will not start, or it growls on start up.	<ol style="list-style-type: none">1. Switch safety key is removed.2. Power supply fuse or circuit breaker has tripped.3. Motor fan cover is dented, stopping the fan from being able to spin.4. Paddle switch is broken or at fault.5. Start capacitor is at fault.6. Motor is at fault.	<ol style="list-style-type: none">1. Replace switch safety key.2. Disconnect power, and inspect circuit for electrical shorts and repair. Replace circuit breaker if it is old or has tripped many times.3. Replace or adjust fan cover. Inspect motor fan and replace if damaged.4. Disconnect power, and use an ohmmeter to check switch terminals for continuity, and replace switch if required.5. Replace start capacitor.6. Replace motor.
Fuses or circuit breakers trip open.	<ol style="list-style-type: none">1. Short circuit in line cord or plug.2. Short circuit in motor or loose connections.3. Incorrect fuses or circuit breakers in power supply.	<ol style="list-style-type: none">1. Short circuit in line cord or plug.2. Short circuit in motor or loose connections.3. Incorrect fuses or circuit breakers in power supply.
Vibration noise while machine is running; noise changes when speed is changed.	<ol style="list-style-type: none">1. V-Belt cover loose.2. V-Belt cover bent or dented and is making contact with the motor pulley or V-belt.3. Bad spindle bearing(s).	<ol style="list-style-type: none">1. Tighten the four screws that mount the V-belt cover; if necessary, install a soft, vibration dampening material between the V-belt cover and the headstock casting.2. Remove V-belt cover and inspect the inside for dents, bends, or indications of rubbing. Tap out the dent with a rubber mallet, bend back into proper shape, or shim V-belt cover away from the motor pulley.3. Replace spindle bearing(s).
Vibration noise while machine is running; noise remains constant when speed is changed.	<ol style="list-style-type: none">1. Dented fan cover on motor.2. Bad spindle bearing(s).	<ol style="list-style-type: none">1. Replace or adjust fan cover. Inspect motor fan and replace if damaged.2. Replace spindle bearing(s).



Turning

Symptom	Possible Cause	Possible Solution
Bad surface finish.	<ol style="list-style-type: none"> 1. Wrong spindle speed. 2. Dull chisel or wrong chisel being used for the operation. 	<ol style="list-style-type: none"> 1. Use trial-and-error to find a better spindle speed. 2. Sharpen chisel or try a different chisel.
Inaccurate turning results from one end of the workpiece to the other.	<ol style="list-style-type: none"> 1. Headstock and tailstock are not properly aligned with each other. 	<ol style="list-style-type: none"> 1. Realign the tailstock to the headstock (Page 37).
Can't remove tapered tool from quill.	<ol style="list-style-type: none"> 1. Quill has not retracted all the way back into the tailstock. 2. Debris was not removed from taper before inserting into quill. 	<ol style="list-style-type: none"> 1. Turn the quill handwheel until it forces taper out of quill. 2. Always make sure that taper surfaces are clean.
Quill will not move forward into workpiece when handwheel is turned.	<ol style="list-style-type: none"> 1. Keyway not aligned with the quill lock lever. 	<ol style="list-style-type: none"> 1. Align the quill keyway with the quill lock lever as shown in Figure 12, on Page 16 and slightly tighten the lever to engage the keyway.



Aligning Centers

To ensure accurate and safe results, make sure that the spindle and quill centers are aligned before beginning operations.

To align the centers:

1. DISCONNECT LATHE FROM POWER!
2. Remove the tool rest from the bed.
3. Install the centers, then slide the tailstock up to the head so that the centers are facing each other, as illustrated in **Figure 50**.

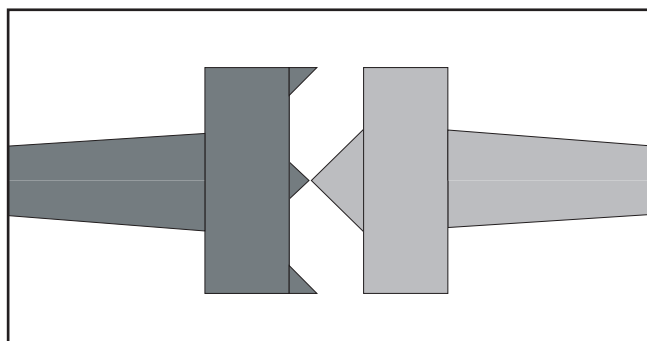


Figure 50. Center tips touching to ensure alignment.

4. Loosen the head lock lever, adjust the head position so that center tips touch, then retighten the lock lever to hold the head in place.

Note: If the spur center is lower than the live center, use shims under the head. If the live center is lower, use shims under the tailstock.

Replacing V-Belt

The pulley system that allows the Model G0462 to operate at variable speeds also keeps the V-belt properly tensioned. However, if the V-belt shows signs of cracking, splitting, or any other damage, we recommend you replace it to ensure optimum power transmission.

To replace the V-belt:

1. DISCONNECT LATHE FROM POWER!
2. Remove the V-belt safety cover from the back of the lathe.
3. Pull the motor pulley plates apart so that the V-belt slips down to the motor arbor, as shown in **Figure 51**. This will decrease the V-belt tension.

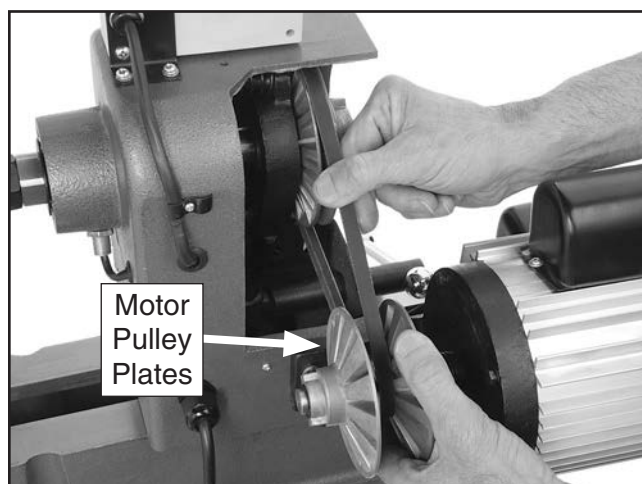


Figure 51. Replacing the V-belt.

4. While keeping the tension off the V-belt, roll it off the spindle pulley and remove it.
5. Install the new V-belt by reversing **Steps 3–4**.
6. Re-install the V-belt safety cover before connecting the lathe to power.



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 after-market parts.

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

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

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

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















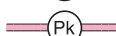
CAPACITORS/INVERTERS. Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

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

NOTICE

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

COLOR KEY

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



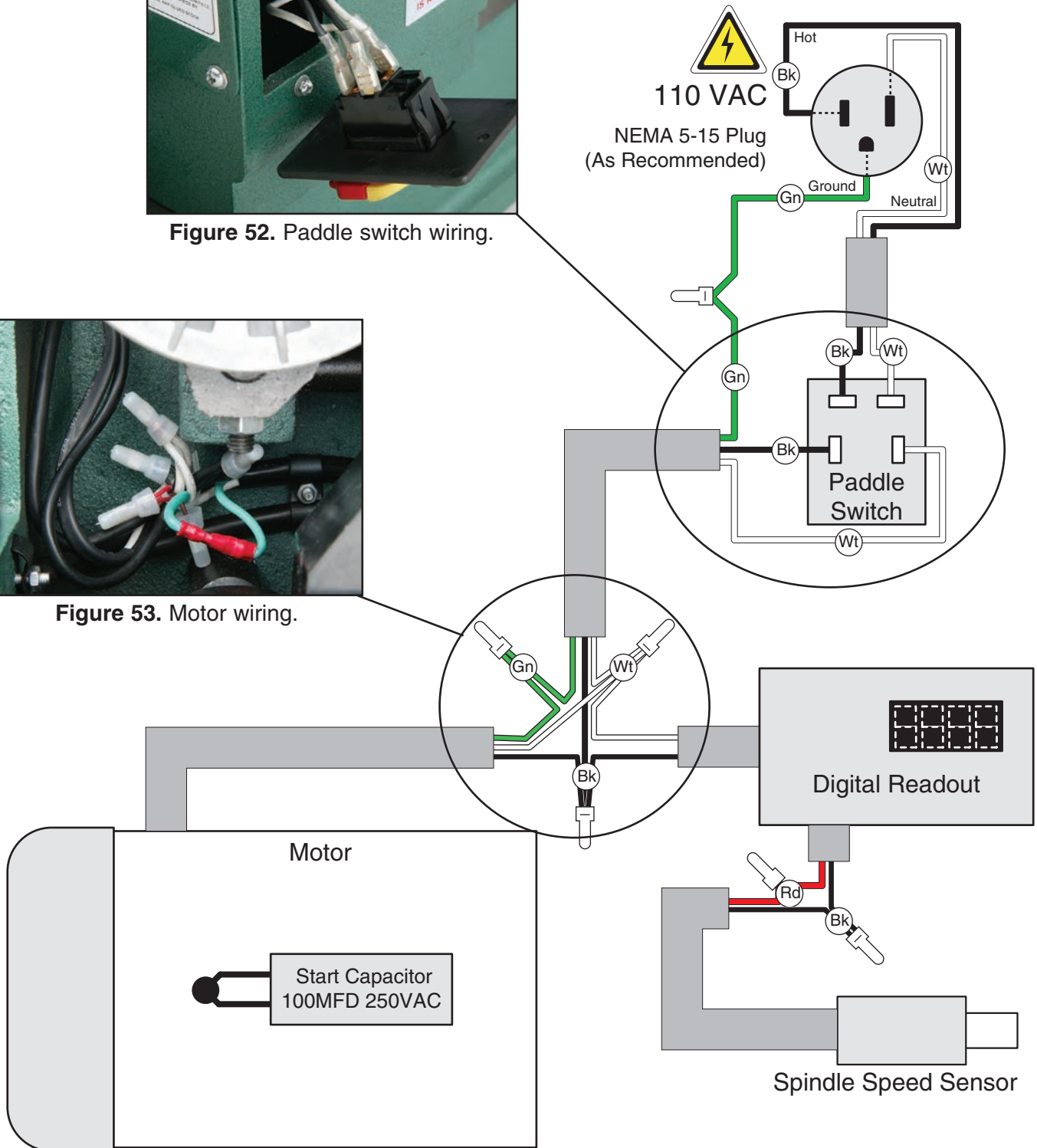
Electrical Components & Wiring Diagram



Figure 52. Paddle switch wiring.

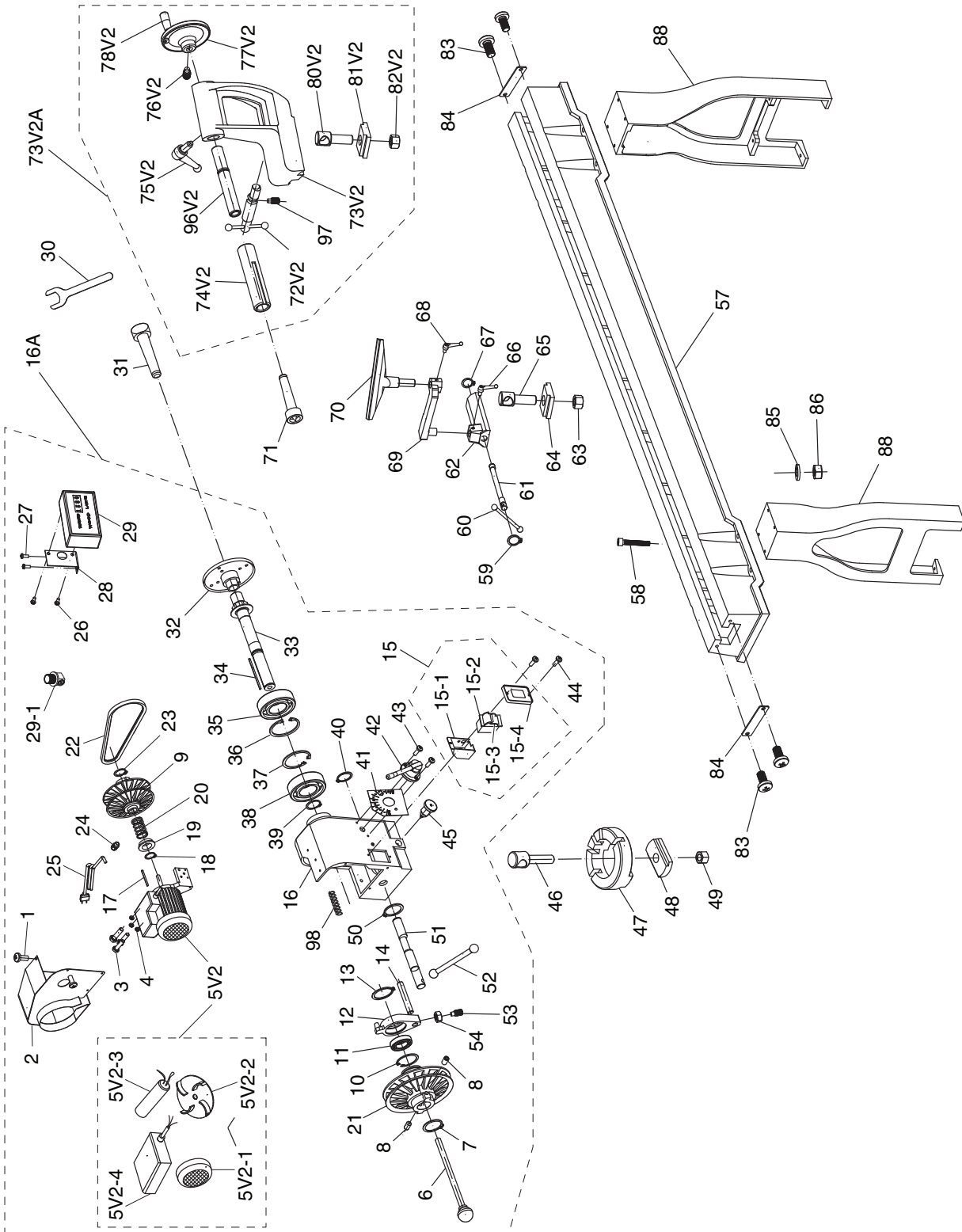


Figure 53. Motor wiring.



SECTION 9: PARTS

Main



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



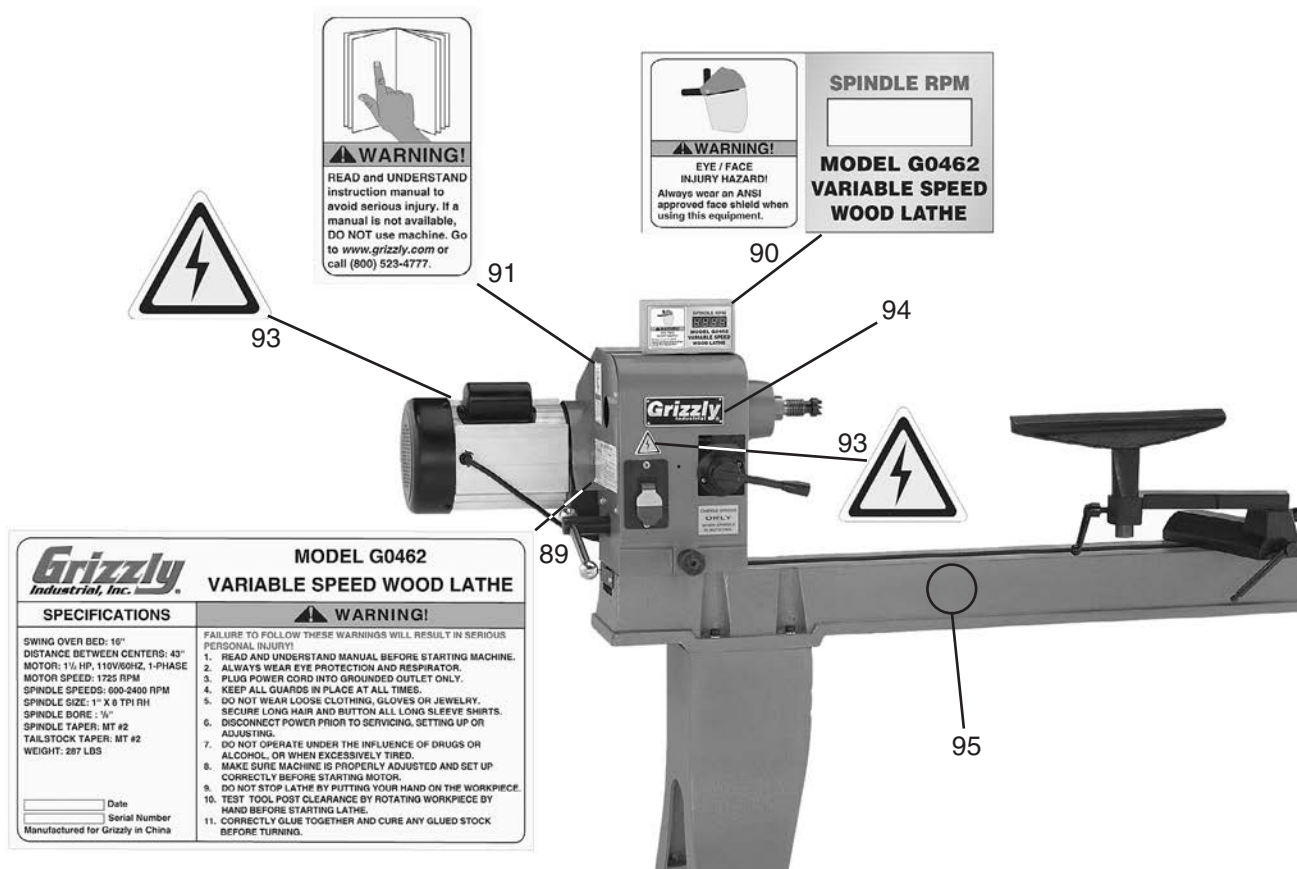
Parts List

REF	PART #	DESCRIPTION
1	P0462001	PHLP HD SCR M5-.8 X 8
2	P0462002	MOTOR COVER
3	P0462003	HEX BOLT M8-1.25 X 30
4	P0462004	LOCK WASHER 8MM
5V2	P0462005V2	MOTOR 2HP 110V 1-PH V2.01.09
5V2-1	P0462005V2-1	FAN COVER 156 X 68MM V2.01.09
5V2-2	P0462005V2-2	FAN 150 X 30MM V2.01.09
5V2-3	P0462005V2-3	S CPCTR 100M 250V V2.01.09
5V2-4	P0462005V2-4	MOTOR JUNCTION BOX V2.01.09
6	P0462006	PUSH-OUT ROD
7	P0462007	EXT RETAINING RING 24MM
8	P0462008	HOLLOW KNURL SET SCR M6 X 10
9	P0462009	MOTOR PULLEY SET
10	P0462010	INT RETAINING RING 62MM
11	P0462011	BALL BEARING 6007 ZZ
12	P0462012	SHIFTING LEVER BRACKET
13	P0462013	EXT RETAINING RING 35MM
14	P0462014	RACK
15	P0462015	SWITCH ASSEMBLY
15-1	P0462015-1	SWITCH BOX
15-2	P0462015-2	GRIZZLY PADDLE SWITCH W/KEY
15-3	P0462015-3	PADDLE SWITCH KEY
15-4	P0462015-4	SWITCH BOX PLATE
16	P0462016	HEADSTOCK CASTING
16A	P0462016A	HEADSTOCK ASSEMBLY
17	P0462017	KEY 4 X 4 X 80
18	P0462018	EXT RETAINING RING 16MM
19	P0462019	MOTOR SHAFT SLEEVE
20	P0462020	COMPRESSION SPRING
21	P0462021	SPINDLE PULLEY SET
22	P0462022	V-BELT M24.5 3L245
23	P0462023	EXT RETAINING RING 16MM
24	P0462024	STRAIN RELIEF M20-1.5
25	P0462025	POWER CORD 16G 3W 5-15 PLUG
26	P0462026	PHLP HD SCR M6-1 X 10
27	P0462027	PHLP HD SCR M6-1 X 10
28	P0462028	DIGITAL READOUT BRACKET
29	P0462029	DIGITAL READOUT ASSEMBLY
29-1	P0462029-1	RPM SENSOR
30	P0462030	FLAT WRENCH 32MM
31	P0462031	SPUR CENTER MT#2
32	P0462032	FACEPLATE 6
33	P0462033	SPINDLE 1 X 8
34	P0462034	KEY 4 X 4 X 80
35	P0462035	BALL BEARING 6205ZZ
36	P0462036	INT RETAINING RING 52MM
37	P0462037	INT RETAINING RING 52MM
38	P0462038	BALL BEARING 6205ZZ
39	P0462039	EXT RETAINING RING 25MM

REF	PART #	DESCRIPTION
40	P0462040	EXT RETAINING RING 24MM
41	P0462041	SPEED CHANGE LABEL
42	P0462042	GEAR ASSEMBLY
43	P0462043	PHLP HD SCR M5-.8 X 12
44	P0462044	PHLP HD SCR M4-.7 X 12
45	P0462045	HEAD PIVOT LOCKING PIN
46	P0462046	HEADSTOCK PIVOT BOLT
47	P0462047	HEAD PIVOT BASE
48	P0462048	BED CLAMP A
49	P0462049	HEX NUT M18-2.5
50	P0462050	EXT RETAINING RING 24MM
51	P0462051	HEADSTOCK ECCENTRIC SHAFT
52	P0462052	HEAD LOCK LEVER
53	P0462053	SET SCREW M8-1.25 X 25
54	P0462054	HEX NUT M8-1.25
57	P0462057	BED
58	P0462058	CAP SCREW M8-1.25 X 40
59	P0462059	EXT RETAINING RING 19MM
60	P0462060	BALL LEVER
61	P0462061	TOOL REST ECCENTRIC SHAFT
62	P0462062	TOOL REST BODY
63	P0462063	HEX NUT M18-2.5
64	P0462064	TOOL REST CLAMP PLATE
65	P0462065	TOOL REST PIVOT BOLT
66	P0462066	HANDLE ASSY M10-1.5 X 15
67	P0462067	EXT RETAINING RING 19MM
68	P0462068	HANDLE ASSY M10-1.5 X 15
69	P0462069	TOOL REST PIVOT ARM
70	P0462070	TOOL REST 12-1/8L X 6-1/2H
71	P0462071	TAILSTOCK LIVE CENTER MT#2
72V2	P0462072V2	TAILSTOCK LOCK LEVER V2.11.09
73V2	P0462073V2	TAILSTOCK CASTING V2.11.09
73V2A	P0462073V2A	TAILSTOCK ASSEMBLY V2.04.10
74V2	P0462074V2	TAILSTOCK QUILL V2.04.10
75V2	P0462075V2	QUILL LOCK HANDLE ASSY V2.04.10
76V2	P0462076V2	HANDWHEEL SET SCREW V2.04.10
77V2	P0462077V2	TLSTCK HNDWHL PLASTIC V2.04.10
78V2	P0462078V2	HANDWHEEL HANDLE V2.04.10
80V2	P0462080V2	TAILSTOCK PIVOT BOLT V2.04.10
81V2	P0462081V2	TAILSTOCK CLAMP PLATE V2.04.10
82V2	P0462082V2	HEX NUT M16-2
83	P0462083	PHLP HD SCR M5-.8 X 12
84	P0462084	BED END PLATE
85	P0462085	LOCK WASHER 8MM
86	P0462086	HEX NUT M8-1.25
88	P0462088	STAND LEG LEFT/RIGHT
96V2	P0462096V2	TAILSTOCK LEADSCREW V2.11.09
97	P0462097	SET SCREW M6-1 X 12
98	P0462098	SPRING



Machine Labels



REF	PART #	DESCRIPTION
89	P0462089	MACHINE ID LABEL
90	P0462090	RPM DISPLAY/FACE SHIELD LABEL
91	P0462091	READ MANUAL 2W X 3.3H V2.07.05
92	P0462092	SPEED CHANGE LABEL

REF	PART #	DESCRIPTION
93	P0462093	ELECTRICITY 1.4W X 1.2H
94	P0462094	GRIZZLY LOGO LABEL
95	P0462095	N/S GRIZZLY GREEN G1023S

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 CARD

Name _____
Street _____
City _____ State _____ Zip _____
Phone # _____ Email _____
Model # _____ Order # _____ Serial # _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. **Of course, all information is strictly confidential.**

1. How did you learn about us?

_____ Advertisement _____ Friend _____ Catalog
_____ Card Deck _____ Website _____ Other: _____

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

_____ Cabinetmaker & FDM	_____ Popular Science	_____ Wooden Boat
_____ Family Handyman	_____ Popular Woodworking	_____ Woodshop News
_____ Hand Loader	_____ Precision Shooter	_____ Woodsmith
_____ Handy	_____ Projects in Metal	_____ Woodwork
_____ Home Shop Machinist	_____ RC Modeler	_____ Woodworker West
_____ Journal of Light Cont.	_____ Rifle	_____ Woodworker's Journal
_____ Live Steam	_____ Shop Notes	_____ Other: _____
_____ Model Airplane News	_____ Shotgun News	
_____ Old House Journal	_____ Today's Homeowner	
_____ Popular Mechanics	_____ Wood	

3. What is your annual household income?

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

4. What is your age group?

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

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

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

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

_____ 0-2 _____ 3-5 _____ 6-9 _____ 10+

7. Do you think your machine represents a good value?

_____ Yes _____ No

8. Would you recommend Grizzly Industrial to a friend?

_____ Yes _____ No

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

Note: We never use names more than 3 times.

_____ Yes _____ No

10. Comments: _____

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



FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

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Street_____

City_____State_____Zip_____

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY AND RETURNS

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

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

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

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

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

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



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