

# MODEL G0733 18" X 47" WOOD LATHE

## **OWNER'S MANUAL**

(For models manufactured since 1/21)



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#KN14454 PRINTED IN CHINA



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

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

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

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



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

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

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

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# 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

# **AWARNING**

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

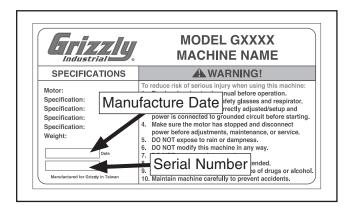
## **Manual Accuracy**

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.

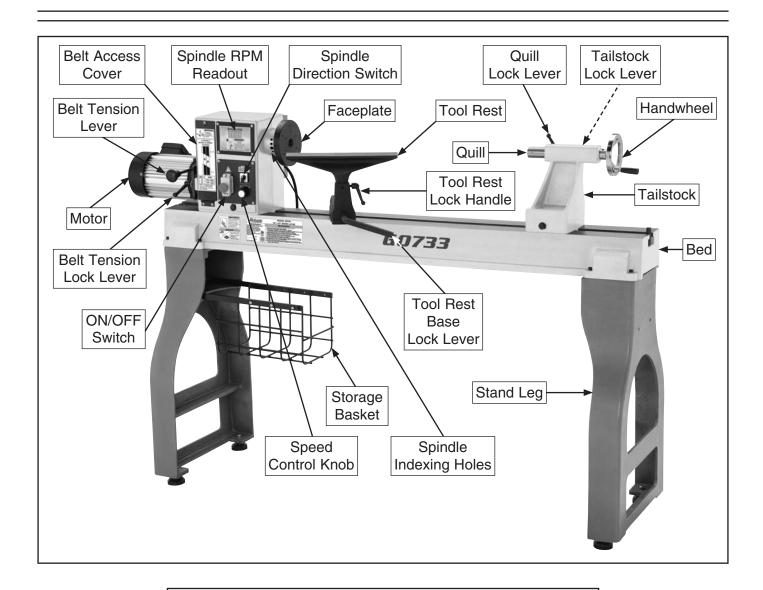
If you find this to be the case, and the difference between the manual and machine leaves you confused or unsure about something, check our website for an updated version. We post current manuals and manual updates for free on our website at www.grizzly.com.

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



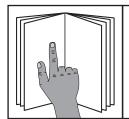
# **A**CAUTION

For Your Own Safety Read Instruction Manual Before Operating Lathe

- a) Wear eye protection.
- b) Do not wear gloves, necktie, or loose clothing.
- c) Tighten all locks before operating.
- d) Rotate workpiece by hand before applying power.
- e) Rough out workpiece before installing on faceplate.
- f) Do not mount split workpiece or one containing knot.
- g) Use lowest speed when starting new workpiece.



# Controls & Components



## **AWARNING**

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

Refer to **Figures 1–3** and the following descriptions to become familiar with the basic controls of this machine.

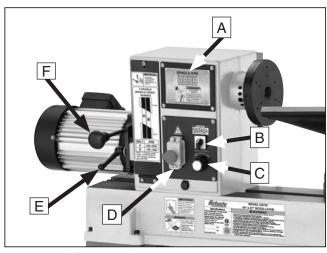


Figure 1. Headstock controls.

- **A. Spindle RPM Readout:** Indicates spindle speed in rotations per minute (RPM).
- **B. Spindle Direction Switch:** Toggles spindle direction between forward and reverse.
- C. Speed Control Knob: Adjusts spindle speed from low to high within range governed by pulley belt position.
- **D.** ON/OFF Switch w/Emergency Stop Button: Turns lathe *ON* and *OFF*.
- **E. Belt Tension Lock Lever:** Locks belt tension lever in place.
- **F. Belt Tension Lever:** Increases and decreases amount of tension on belt.

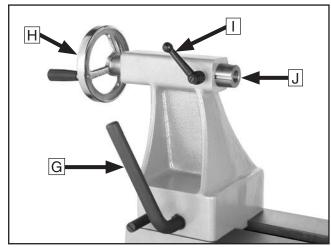


Figure 2. Tailstock controls.

- **G.** Tailstock Lock Lever: Secures tailstock in position along bed.
- H. Tailstock Handwheel: Moves quill toward or away from spindle.
- I. Quill Lock Lever: Secures quill in position.
- **J. Quill:** Holds centers or tooling. Can be moved toward and away from spindle.

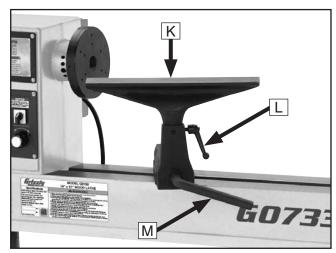


Figure 3. Tool rest controls.

- K. Tool Rest: Provides stable platform for cutting tools.
- L. Tool Rest Lock Handle: Secures tool rest in position.
- M. Tool Rest Base Lock Lever: Secures tool rest base in position.



# **Glossary Of Terms**

The following is a list of common definitions, terms and phrases used throughout this manual as they relate to this wood lathe and turning in general. Become familiar with these terms for assembling, adjusting or operating this machine. Your safety is **VERY** important to us at Grizzly!

- **Bed:** The long, rail-like metal base to which the tailstock, tool base, and headstock are attached.
- **Chuck:** A mechanical device that attaches to the spindle and holds the workpiece.
- **Faceplate:** The metal disc that threads onto the headstock spindle.
- **Faceplate Turning:** Turning situation in which the grain of the turning stock is at right angles to the lathe bed axis.
- **Backing Block:** A sacrificial piece of wood glued to the base of the workpiece and screwed to the faceplate. Often used to prevent mounting marks from appearing on the completed workpiece.
- **Headstock:** The cast metal box to which the motor is attached and contains the spindle, bearings, belts, and electrical components for operating the lathe.
- **Index head:** The mechanism that allows the headstock spindle to be locked at specific intervals for layout or other auxiliary tasks.
- **Offset Turning:** A turning situation where the center of the workpiece is offset at various stages of the work to produce different shapes.

- **Outboard Turning:** Turning of workpiece with the headstock situated at the far end of the lathe so the work done is not over the bed of the lathe.
- **Roughing Out:** Taking stock from square billet to round blank.
- **Spindle:** This term has two meanings. First, it refers to the threaded shaft in the headstock to which the faceplate is attached. Second, it refers to any work that is spindle-turned.
- **Spindle-Turning:** Work performed where the grain and length of the workpiece are parallel to the axis of the bed.
- **Swing:** The capacity of the lathe, measured by doubling the distance from the bed to the spindle center.
- **Tailstock:** The metal component at the opposite end of the bed from the headstock containing a quill and live or dead centers. It maintains pressure on the spindle-turned workpiece.
- **Tool Base:** The movable metal fixture attached to the bed upon which the tool rest is fixed.
- **Tool Rest:** The adjustable metal arm upon which the tool rest during a turning operation.
- **Way:** One of the metal rails that make up the bed of the lathe.





# MACHINE DATA SHEET

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

### **MODEL G0733 18" X 47" HEAVY-DUTY WOOD LATHE**

Product Dimensions:		
Weight		
Width (side-to-side) x Depth (front-to-back) x Height		
Footprint (Length x Width)	65-1/2 x 20 in.	
Shipping Dimensions:		
Type	Wood Crate	
Content	Machine	
Weight		
Length x Width x Height	22 x 69 x 22 in.	
Electrical:		
Power Requirement	240V, Single-Phase, 60 Hz	
Full-Load Current Rating	9.5A	
Minimum Circuit Size	15A	
Connection Type	Cord & Plug	
Power Cord Included	Yes	
Power Cord Length		
Power Cord Gauge		
Plug Included		
Included Plug Type		
Switch Type		
Inverter (VFD) TypeInverter (VFD) Size		
Motors:		
Main		
Horsepower	2 HP	
Phase	3-Phase	
Amps	5.6A	
Speed	1720 RPM	
Туре	TEFC Induction	
Power Transfer		
Bearings		
Centrifugal Switch/Contacts Type	External	
Main Specifications:		
Operation Information		
Swing Over Bed Swing Over Tool Rest Base Distance Between Centers Max. Distance Tool Rest to Spindle Center No of Spindle Speeds Spindle Speed Range Floor to Center Height.		



#### **Spindle Information** Spindle Taper......MT#2 **Tool Rest Information Tailstock Information** Tailstock Taper......MT#2 Type of Included Tailstock Center......Live Construction Paint Type/Finish...... Enamel **Other Related Information** Other Specifications:

#### Features:

Electronic variable speed control with digital spindle speed indicator

16" swing over tool rest base

Belt drive offers low speed range of 100-1200 RPM and a high speed range of 330-3200 RPM

Headstock can be rotated 180° and positioned anywhere along the bed

Single-phase frequency drive provides three-phase variable speed control without three-phase power

10° spindle indexing

Tailstock, headstock, and tool rest support have lever action cam locks for quick positioning

Emergency stop switch

Forward/reverse switch

#### **Accessories Included:**

Spur center Cupped live center Knock-out tool Tool rest 6" Faceplate Indexing pin



Hex wrenches

# **SECTION 1: SAFETY**

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

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



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

**AWARNING** 

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

**A**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**

## **AWARNING**

**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.



# **AWARNING**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



# **Additional Safety for Wood Lathes**

## **AWARNING**

Serious injury or death can occur from getting entangled in, crushed between, or struck by rotating parts on a lathe! Rotating workpieces can come loose and strike operator or bystanders with deadly force if they are improperly secured, rotated too fast, or are not strong enough for the rotational forces required for turning. Improper tool setup or usage can cause tool kickback or grabbing, resulting in impact injury or entanglement. To reduce the risk of operator (or bystander) injury or death, anyone operating this machine MUST completely heed the hazards and warnings below.

**VERIFY WORKPIECE INTEGRITY.** 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 tool kickback.

**PROPERLY PREPARE WORKPIECE.**Before mounting, cut off waste portions to balance workpiece for safe rotation and removal of large edges that can catch on tooling.

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

**SECURE WORKPIECE.** Use proven setup techniques and always verify workpiece (and centers/tooling holding workpiece) are well-secured before starting lathe. Only use high-quality fasteners with non-tapered heads for faceplate attachment.

**ADJUST TOOL SUPPORT.** An improperly supported tool may be grabbed or ejected. Adjust tool rest approximately ½" away from workpiece and ½" above workpiece center line to provide proper support for turning tool. Firmly hold turning tool with both hands against tool rest.

**REMOVE ADJUSTMENT TOOLS.** Remove all chuck keys, wrenches, and adjustment tools before turning lathe *ON*. These items can become deadly projectiles when spindle is started.

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

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

**WEAR PROPER PPE**. Always wear a face shield and safety glasses when operating lathe. Do not wear gloves, necktie or loose clothing. Keep long hair away from rotating spindle.

**USE CORRECT SPEEDS.** 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.

**AVOID TOOL KICKBACK.** This occurs when turning tool is grabbed or ejected from workpiece with great force. Commonly caused by poor workpiece selection/preparation, improper tool usage, or improper machine setup or tool rest adjustment.

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

**USE SHARP TOOLS.** Sharp tools cut with less resistance than dull tools. Using dull tools increases the risk of tool kickback or grabbing.

**SAFELY STOPPING ROTATION.** Always allow rotating workpiece to stop on its own. Never put hands or another object on workpiece to stop it.

**SAFELY MEASURE WORKPIECE.** Only measure mounted workpiece after it has completely 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.



## **AWARNING**

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 240V .... 9.5 Amps

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

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

#### **Circuit Information**

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

# **A**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 for 240V

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
<b>Power Supply Circuit</b>	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!

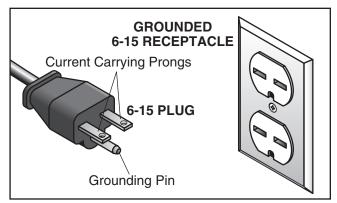


Figure 4. Typical 6-15 plug and receptacle.



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.

## **AWARNING**

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

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

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

#### **Extension Cords**

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

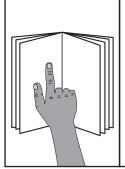
Extension cords cause voltage drop, which can damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

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

Minimum Gauge Size ......12 AWG Maximum Length (Shorter is Better)......50 ft.



# **SECTION 3: SETUP**



## **AWARNING**

This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!



## **AWARNING**

Wear safety glasses during the entire setup process!



## **AWARNING**

**HEAVY LIFT!** 

Straining or crushing injury may occur from improperly lifting machine or some of its parts. To reduce this risk, get help from other people and use a forklift (or other lifting equipment) rated for weight of this machine.

# **A**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.

## **Needed for Setup**

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

De	escription Qty
•	Safety Glasses1
•	Cleaner/Degreaser (Page 16) As Needed
•	Disposable Shop Rag As Needed
•	Additional People As Needed
•	Level1

# 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.



# **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.

Inv	Inventory (Figures 5-8)		
Α.	Lathe Assembly		
	—Headstock (mounted)	1	
	—Tool Rest Base (mounted)		
	—Tailstock (mounted)		
	-Faceplate 6" (installed)		
В.	Stand Legs		
C.	Machine Feet M16-2 x 100		
D.	Tool Rest	1	
E.	Live Center MT#2		
F.	Spur Center MT#2	1	
G.	Indexing Pin		
H.	Hex Wrenches 3, 4, 6, 8, 10mm		
I.	Knockout Tool		
J.	Storage Basket	1	
K.	Hardware (not shown)		
	—Cap Screws M8-1.25 x 35	2	
	—Lock Washers 8mm		
	—Hex Nuts M8-1.25		
	—Cap Screws M10-1.5 x 35		
	—Lock Washers 10mm		

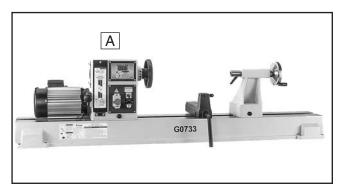


Figure 5. Lathe assembly.

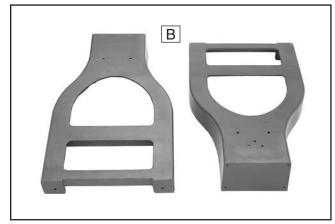


Figure 6. Stand legs.

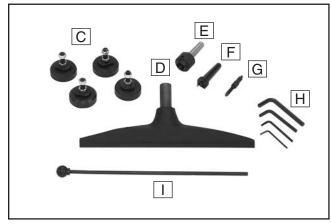


Figure 7. Loose inventory components.

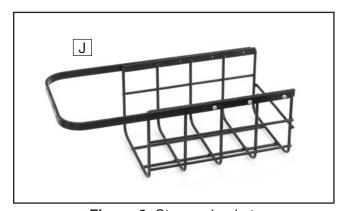


Figure 8. Storage basket.

## **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.



## **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.



# **ACAUTION**

Children or untrained people may be seriously injured by this machine. Only install in an access restricted location.

#### **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 enough space around machine to disconnect power supply or apply 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.

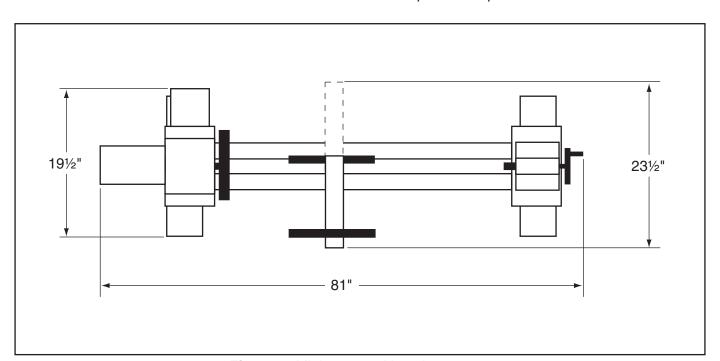


Figure 9. Minimum working clearances.



## 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.
- Coat the rust preventative with a liberal amount of cleaner/degreaser, then let it soak for 5–10 minutes.
- 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.



## AWARNING

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.



# **A**CAUTION

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

### NOTICE

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

#### T23692—Orange Power Degreaser

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



Figure 10. T23692 Orange Power Degreaser.



# **Anchoring to Floor**

Number of Mounting Holes		4
Diameter of Mounting Hardware	1/2	ı

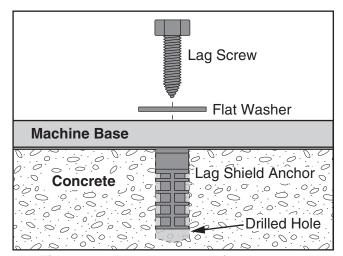
Anchoring machinery to the floor prevents tipping or shifting and reduces vibration that may occur during operation, resulting in a machine that runs slightly quieter and feels more solid.

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 11**. Popular method for anchoring machinery to a concrete floor.

## **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).

#### To assemble lathe:

1. Position right and left stand legs upright approximately 57<sup>3</sup>/<sub>4</sub>" apart, and get them reasonably aligned (see **Figure 12**).

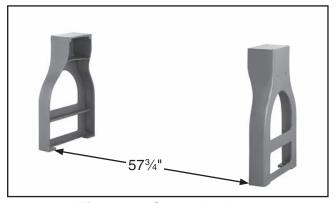


Figure 12. Supporting legs.

- **2.** Carefully position lathe on stands and align mounting holes.
- **3.** Secure lathe assembly to stand legs with (8) M10-1.5 x 35 cap screws and 10mm lock washers, as shown in **Figure 13**.



Figure 13. Securing lathe assembly.



- 4. If bolting lathe to floor, skip to Step 8. Otherwise, move tailstock, tool rest assembly, and headstock to one end of lathe bed (refer to OPERATIONS section, beginning on Page 21, for instructions for moving these components).
- Use assistants to lift one end of lathe onto support blocks and stabilize lathe in preparation for installing machine feet (see Figure 14).

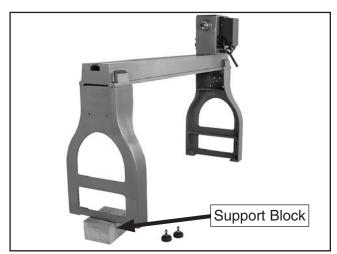
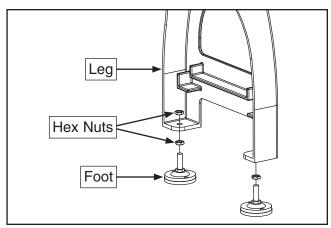


Figure 14. Legs supported for feet installation.

 Remove top hex nut from feet, insert feet in mounting holes in leg (see Figure 15), then thread top hex nut back on. Do not tighten hex nuts yet.



**Figure 15.** Machine feet positioned for installation.

7. Remove supporting block and repeat Steps5–6 on other leg.

**TIP:** If you plan to install shelves using the brackets on the inside of the leg castings, this would be the opportune time to do so—before the final tightening of all the fasteners or bolting the lathe to the floor. See **Installing Storage Shelves** for details.

- **8.** Place level on lathe bed and adjust so bed is level side-to-side and front-to-back.
  - —If using machine feet, adjust top and bottom hex nuts on each leg to level bed, then tighten hex nuts to secure position.
  - —If bolting lathe to floor, use shims under legs to level bed, then tighten mounting fasteners.
- Insert tool rest into tool rest base and tighten tool rest lock handle, as shown in Figure 16.

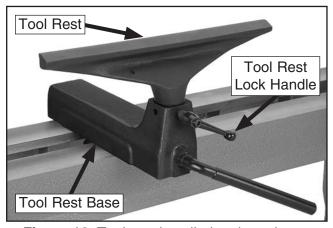


Figure 16. Tool rest installed tool rest base.

Attach storage basket to leg using (2) M8-1.25 x 35 cap screws, (2) 8mm lock washers, and (2) M8-1.25 hex nuts, as shown in Figure 17.

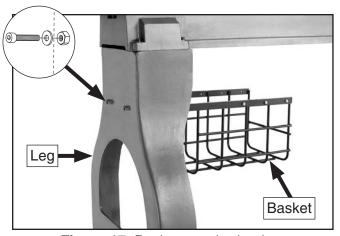


Figure 17. Basket attached to leg.



# Installing Storage Shelves

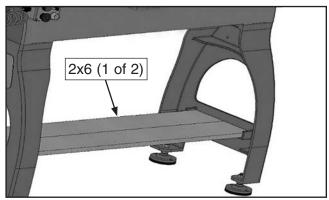
The leg castings on the Model G0733 feature dual mounting brackets that provide support for a variety of shelving options.

#### **Shelving Option One**

Items Needed	Qty
2x6s 49½" Long	2

#### To install shelving option one:

1. Set two 2x6s side by side in upper brackets of leg castings (see **Figure 18**).



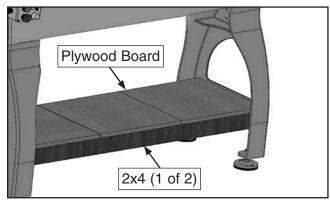
**Figure 18.** 2x6s positioned in brackets in shelving option one.

### **Shelving Option Two**

Items Needed	Qty
2x4s (or 2x6s) 49½" Long	2
Plywood Board	1
Wood Screws	As Needed

#### To install shelving option two:

- 1. Set two 2x4s (or 2x6s) on edge in lower brackets of leg castings (see **Figure 19**).
- Cut plywood board (see Figure 19) to fit flush with outside edges of 2x4s and secure with wood screws.



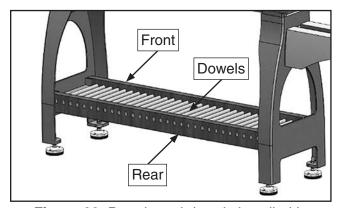
**Figure 19.** Boards installed and secured in shelving option two.

#### **Shelving Option Three**

Items Needed	Qty
2x6s 49½" Long	2
Wood Dowels 5/8" x 4'	8
Drill Bit 5/8"	1

#### To install shelving option three:

- 1. Mark 2" centers along length of both 2x6s. Holes should be positioned so tops of dowels are even with base of upper brackets.
- 2. In one 2x6, drill <sup>5</sup>/<sub>8</sub>" holes all the way through board. This board will be installed on rear of lathe (see **Figure 20**). On other 2x6, drill holes only deep enough to secure dowel rods. This board will be installed on front of lathe.



**Figure 20.** Boards and dowels installed in shelving option three.

- 3. Place 2x6s on edge in lower shelf brackets.
- 4. Cut dowel rods to length so that after insertion dowels will be flush with back of rear 2x6.
- 5. Insert a dowel in each hole in rear 2x6, then screw a strip of wood over holes to secure.



## **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 safety disabling mechanism on the switch works correctly.

## **AWARNING**

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.

# **AWARNING**

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

#### To test run machine:

- 1. Clear all setup tools away from machine.
- 2. Connect machine to power supply.
- Set spindle direction switch to neutral or "O" position and turn speed control knob all the way counterclockwise.

- **4.** Squeeze tab on bottom of Emergency Stop button, lift button to open switch cover, and press green ON button to start machine.
- Verify machine is operating correctly by turning spindle direction switch to "R" position, then slowly turn speed control knob to right.
  - —When operating correctly, machine runs smoothly with little or no vibration or rubbing noises.
  - —Investigate and correct strange or unusual noises or vibrations before operating machine further. Always disconnect machine from power when investigating or correcting potential problems.
- 6. Turn speed control knob all the way left.
- Turn spindle direction switch to "F" position, and slowly turn speed control knob to right.
  - —When operating correctly, machine runs smoothly with little or no vibration or rubbing noises.
- **8.** Move spindle direction switch to "O" position, and push in Emergency Stop button.
- Without opening Emergency Stop button, turn spindle direction switch to "F" and "R" positions. Machine should not start at either position.
  - —If machine does not start, Emergency Stop button safety feature is working correctly. Test run is complete.
  - —If machine does start (with Emergency Stop button pushed in), immediately disconnect power to machine. Emergency Stop button safety feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

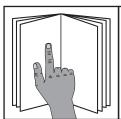


# **SECTION 4: OPERATIONS**

# **Operation Overview**

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

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



## **AWARNING**

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

## **AWARNING**

Eye injuries or respiratory problems can occur while operating this tool. Wear personal protective equipment to reduce your risk from these hazards.







## **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:

- Examines workpiece to make sure it is suitable for turning. No extreme bows, knots, or cracks should exist.
- 2. Prepares and trims up workpiece with a bandsaw or table saw to make it roughly concentric.
- **3.** Installs workpiece between centers, or attaches it to faceplate or chuck.
- 4. Adjusts tool rest to 1/8" above workpiece centerline, and sets minimum clearance between workpiece and lip of tool rest to 1/4" gap.
- **5.** Rotates workpiece by hand to verify spindle and workpiece rotate freely throughout full range of motion.
- **6.** Verifies pulley ratio is set for type of wood and size of workpiece installed.
- **7.** Verifies spindle speed dial is turned all the way counterclockwise so spindle does not start in high speed.
- Verifies spindle direction switch is set for correct direction.
- **9.** Puts on safety glasses, face shield, and respirator.
- Turns lathe ON, adjusts lathe speed, and carefully begins turning operation, keeping chisel against tool rest entire time it is cutting.
- **11.** Turns lathe *OFF* when cutting operation is complete.



# 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 turning natural wood products. Never attempt to turn any composite wood materials, plastics, metal, stone, or rubber workpieces; turning these materials can lead to machine damage or severe injury.

#### • Foreign Objects:

Nails, staples, dirt, rocks, tramp metal, 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 injury. Choose workpieces that do not have large/loose knots.

#### • 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 injury. Only turn concentric workpieces!

# **Adjusting Headstock**

The Model G0733 headstock is equipped with a cam-action clamping system to secure it to the lathe bed. When the lever is tightened, a locking plate lifts up underneath the bed and secures the tailstock in place. The headstock can be positioned anywhere along the lathe bed.

# To position headstock along length of lathe bed:

- DISCONNECT MACHINE FROM POWER!
- 2. Loosen the headstock lock lever (see Figure 21).

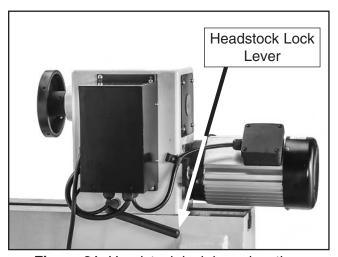


Figure 21. Headstock lock lever location.

3. Slide the headstock to the desired location on the bed, and use the headstock lock handle to secure the headstock in position.

**Note:** The large clamping hex nut underneath the headstock will require occasional adjusting to ensure proper clamping pressure of the headstock to the bed. Turn this hex nut in small increments to fine tune the clamping pressure as needed.

## **AWARNING**

Always operate the lathe with the headstock firmly locked to the bed. Otherwise, serious personal injury may occur as the workpiece or faceplate could shift during operation or be ejected from the lathe.



# **Adjusting Tailstock**

The tailstock adjusts in the same manner as the headstock.

#### To position tailstock along length of bed:

1. Loosen the tailstock lock lever and move the tailstock to the desired position along the bed, as shown in **Figure 22**.

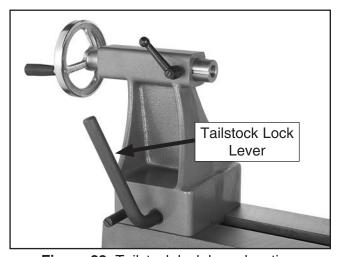


Figure 22. Tailstock lock lever location.

2. Re-engage the tailstock lock lever to secure the tailstock to the bed.

**Note:** The large clamping hex nut underneath the tailstock will require occasional adjusting to ensure proper clamping pressure of the tailstock to the bed. Turn this hex nut in small increments to fine tune the clamping pressure as needed.

## WARNING

Always operate the lathe with the tailstock firmly locked to the bed. Otherwise, serious personal injury may occur by the tailstock moving during operation and the workpiece being ejected at high speed.

# **Adjusting Tool Rest**

The tool rest assembly consists of two components: the tool rest base (or banjo) and the tool rest. The tool rest base moves forward/backward and along the length of the lathe bed. The tool rest rotates and moves up and down in the tool rest base. Locks for both components allow you to secure the tool rest in position as needed after making these adjustments.

When adjusting the tool rest, position it as close as possible to the workpiece without actually touching it. This maximizes support where the cutting occurs and minimizes leverage, reducing the risk of injury if a "catch" occurs.

Many woodturners typically set the height of the tool rest ½" above or below the centerline of the workpiece, depending on their height, the type of tool they're using, and the type of operation they're performing. As a rule of thumb: For most (spindle) turning operations, the cutting tool should contact the workpiece slightly above centerline. For most inside (bowl) turning operations, the cutting tool should contact the workpiece slightly below centerline.

Keeping all these factors in mind, your main goal when adjusting the tool rest should be providing maximum support for the type of tool being used, in a position that is safe and comfortable for you.

## WARNING

Improperly supported or positioned cutting tools can "catch" on workpiece, ejecting tool from your hands with great force. To reduce this risk, always ensure tool rest is properly positioned for each type of operation, cutting tool is firmly supported against tool rest BEFORE cutting, and cutting tool is properly positioned to cut at the correct angle for tool and operation type.



# To position the tool rest assembly along the length of the lathe bed:

 Loosen the tool rest base lock handle and move the tool rest assembly to the desired position on the lathe bed, as shown in Figure 23.

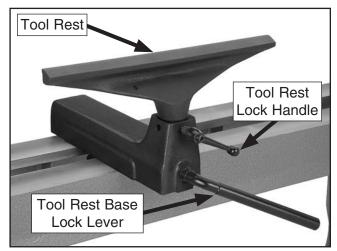


Figure 23. Tool rest controls.

2. Re-engage the tool rest base lock lever to secure the tool rest assembly in position.

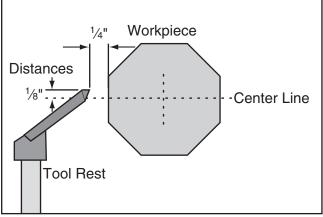
**Note:** The large clamping hex nut underneath the tool rest base will require occasional adjusting to ensure proper clamping pressure of the tool rest assembly to the bed. Turn this hex nut in small increments to fine tune the clamping pressure as needed.

## **AWARNING**

Always operate the lathe with the tool rest assembly firmly locked in position. Otherwise, serious personal injury may occur by the tool being pulled from the operator's hands.

#### To adjust the angle or height of the tool rest:

- Loosen the tool rest base lock lever and the tool rest lock handle to adjust the position of the tool rest.
- 2. Position the tool rest approximately ½" away from the workpiece and approximately ½" above the workpiece center line, as shown in Figure 24.



**Figure 24.** Tool rest position relative to workpiece.

3. Re-tighten the tool rest lock handle and the tool rest base lock lever to secure the tool rest in position.

## Installing/Removing Headstock Center

The included spur center installs into the headstock spindle with an MT#2 tapered fit.

### **Installing Headstock Center**

DISCONNECT MACHINE FROM POWER!



- 2. Make sure the mating surfaces of the center and spindle are free of debris and oily substances before inserting the center to ensure a good fit and reduce runout.
- 3. Insert the tapered end of the center into the spindle, and push it in with a quick, firm motion, as shown in **Figure 25**.



**Figure 25.** Installing center into the headstock spindle.

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

#### **Removing Headstock Center**

- 1. DISCONNECT MACHINE FROM POWER!
- Hold a clean rag under the spindle or wear a glove to catch the center when you remove it.
- Insert the knockout tool through the outbound end of the spindle and firmly tap the back of the center, catching it as it falls, as shown in Figure 26.

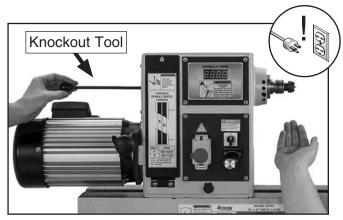


Figure 26. Removing the headstock center.

## Installing/Removing Tailstock Center

The included live center installs into the tailstock quill with an MT#2 tapered fit.

#### **Installing Tailstock Center**

 On the tailstock, loosen the quill lock handle and rotate the handwheel until the quill extends out about 1", as shown in Figure 27.

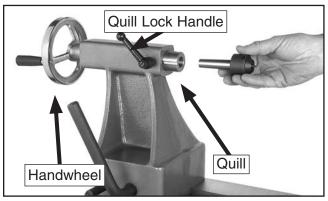
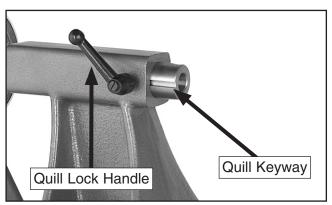


Figure 27. Installing center into tailstock guill.

- 2. Make sure the mating surfaces of the center and quill are free of debris and oily substances before inserting the center to ensure a good fit reduce runout.
- Firmly insert the tapered end of the center into the tailstock quill, as shown in Figure 27.
- 4. 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.



5. Make sure the center of the quill lock handle is aligned with the quill keyway to ensure that the tailstock center and quill will not freely rotate under load (see Figure 28).



**Figure 28.** Quill lock handle aligned with quill keyway.

**6.** Secure the quill in place by re-tightening the quill lock handle.

#### **Removing Tailstock Center**

- 1. Loosen the quill lock handle.
- Hold a clean rag under the spindle or wear a glove to catch the center when you remove it
- Rotate the handwheel counterclockwise—the tailstock quill will retract back into the quill, causing the center to be forced out of the quill.

## WARNING

The tailstock quill must always be locked in place during lathe operation. Before tightening the quill lock handle, it must be properly aligned with the quill keyway. Otherwise, the workpiece can be thrown from the lathe causing serious personal injury or death.

# **Installing Faceplate**

#### To install the faceplate:

- DISCONNECT MACHINE FROM POWER!
- Insert the indexing pin into one of the indexing holes and rotate the spindle until the pin engages to prevent the spindle from turning while you tighten the faceplate, as shown in Figure 29.



**Figure 29.** Locking spindle with indexing pin and faceplate set screw location.

- Thread the faceplate onto the spindle until it is snug.
- 4. Using the included 4mm hex wrench, tighten the two set screws along the inside diameter of the faceplate to secure it to the spindle (see Figure 29).

# **AWARNING**

To prevent the faceplate and workpiece separating from the spindle during operation, the headstock faceplate MUST be firmly threaded onto the spindle and secured in place by fully tightening the two faceplate set screws. If these instructions are not properly performed, serious personal injury could occur.

**Note:** To remove the faceplate, disconnect the lathe from the power source and perform the steps above in reverse.



# Changing Speed Ranges

The Model G0733 has pulley belt configuration provided two speed ranges (see **Figure 30**).

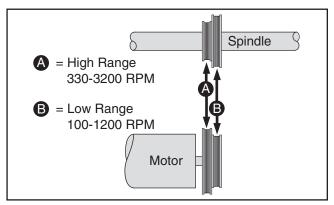


Figure 30. Speed range belt positions.

**Note:** To maximize spindle torque, use the low spindle speed range for spindle speeds of 1200 RPM or less.

Refer to the speed recommendations chart in **Figure 31** to choose the appropriate RPM for your operation. Then choose the speed range that will include the selected RPM.

Diameter of Work- piece	Roughing RPM	General Cutting RPM	Finishing RPM
Under 2"	1520	3200	3200
2–4"	760	1600	2480
4–6"	510	1080	1650
6–8"	380	810	1240
8–10"	300	650	1000
10–12"	255	540	830
12–14"	220	460	710
14–16"	190	400	620

**Figure 31.** Model G0733 speed recommendations.

#### To change speed ranges:

DISCONNECT MACHINE FROM POWER!

## WARNING

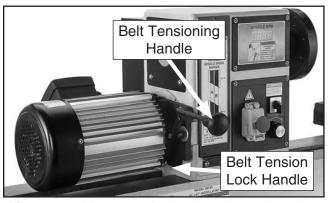
Always choose the correct spindle speed for an operation. Using the wrong speed may lead to the workpiece being thrown at high speed, causing fatal or severe impact injuries.

2. Open the front belt access panel, as shown in Figure 32.



Figure 32. Belt access panel removed.

3. Loosen the belt tension lock handle (see Figure 33).



**Figure 33.** Motor tensioning handle and tension lock handle.

4. Use the belt tensioning handle (see **Figure 33**) to lift the motor assembly all the way up, then re-tighten the belt tension lock handle—this will hold the motor in place while you change the belt position.



Reach into the belt access cavity and roll the belt onto the desired set of pulleys, as shown in Figure 34.

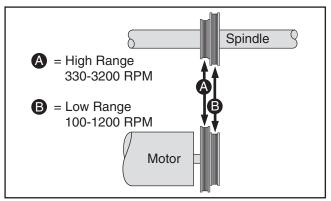


Figure 34. Speed range belt positions.

- **6.** Loosen the belt tension lock handle and lower the motor.
- Apply downward pressure on the belt tensioning handle to properly tension the drive belt, then re-tighten the belt tension lock handle.

**Note:** When properly tensioned, the belt should deflect about ½" when moderate pressure is applied to the belt mid-way between the upper and lower pulley, as shown in **Figure 35**.

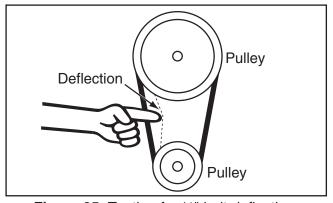


Figure 35. Testing for 1/8" belt deflection.

**8.** Replace the front belt access panel.

## Indexing

Indexing on a lathe is typically used for workpiece layout and other auxiliary operations that require equal distances around the workpiece circumference, such as clock faces or inlays.

By inserting the indexing pin into one of the four outer indexes of the Model G0733 spindle housing and engaging one of the 12 inner indexes in the spindle, the workpiece can be positioned in 10° increments, as shown in **Figures 36–37**.

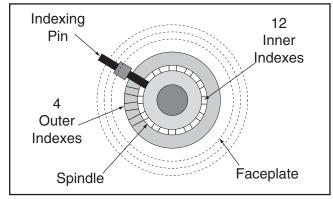


Figure 36. Model G0733 indexing configuration.



Figure 37. Indexing pin and indexing holes.

## CAUTION

Always disconnect the lathe from power before using the indexing feature. DO NOT start the lathe with the indexing pin inserted into the spindle; otherwise entanglement injury and property damage could occur.



# **Spindle Turning**

Spindle turning is the operation performed when a workpiece is mounted between the headstock and the tailstock, as shown in **Figure 38**.

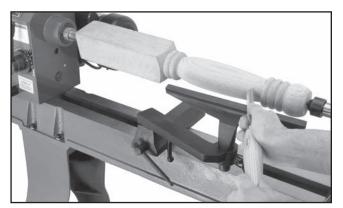


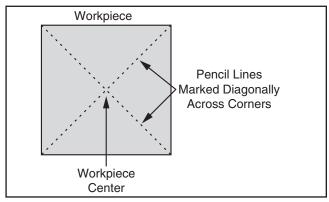
Figure 38. Typical spindle turning operation.

## WARNING

Damage to your eyes and lungs could result from using this machine without proper protective gear. Always wear a face shield and respirator when operating this machine.

#### To set up a spindle turning operation:

1. Find the center point of both ends of your workpiece by drawing diagonal lines from corner to corner across the end of the workpiece, as shown in **Figure 39**.



**Figure 39.** Workpiece marked diagonally from corner to corner to determine the center.

- 2. Make a center mark by using a wood mallet and tapping the point of the spur center into the center of the workpiece on both ends.
- 3. Using a ¼" drill bit, drill a ¼" deep hole at the center mark on the end of the workpiece to be mounted on the headstock spur center.
- 4. To help embed the spur center into the workpiece, cut ½" deep saw kerfs in the headstock end of the workpiece along the diagonal lines marked in **Step 1**.
- **5.** If your workpiece is over 2" x 2", cut the corners off the workpiece lengthwise to make turning safer and easier (see **Figure 40**).

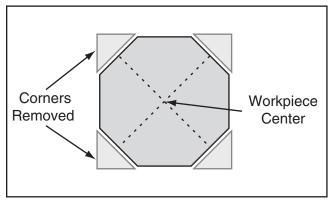


Figure 40. Corners of workpiece removed.

6. Drive the spur center into the end center mark of the workpiece with a wood mallet to embed it at least 1/4" into the workpiece, as shown in **Figure 41**.

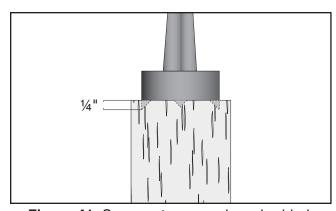


Figure 41. Spur center properly embedded.

 With the workpiece still attached, insert the spur center into the headstock spindle (refer to Installing/Removing Headstock Center on Page 24 for additional instructions).

**Note:** Use the tool rest to support the opposite end of the workpiece so that the workpiece and spur center do not separate during installation.

- 8. Install the live center into the tailstock quill and tighten the quill lock handle to lock the quill in position (refer to Page 25 for additional instructions).
- Slide the tailstock toward the workpiece until the point of the live center touches the workpiece center mark, then lock the tailstock in this position.
- **10.** Loosen the quill lock handle and rotate the tailstock handwheel to push the live center into the workpiece at least a ½".

# **AWARNING**

Do not press the workpiece too firmly with the tailstock or the bearings will bind and overheat. Do not adjust the tailstock too loosely or the workpiece will spin off the lathe. Use good judgment and care, otherwise, serious personal injury could result from the workpiece being ejected at high speeds.

- **11.** Properly adjust the tool rest to the workpiece (see **Adjusting Tool Rest** on **Page 24**).
- **12.** Before beginning lathe operation, rotate the workpiece by hand to ensure that there is safe clearance on all sides.

## **AWARNING**

Keep the lathe tool resting on the tool rest the ENTIRE time that it is in contact with workpiece or when preparing to make contact between lathe tool and workpiece. Otherwise, the spinning workpiece could force the lathe tool out of your hands or entangle your hands with the workpiece. Failure to heed this warning could result in serious personal injury.

#### **Spindle Turning Tips:**

- When turning the lathe ON, stand away from the path of the spinning workpiece until the spindle reaches full speed and you can verify that the workpiece will not come loose.
- Use the slowest speed when starting or stopping the lathe.
- Select the right speed for the size of workpiece that you are turning (refer to Figure 31 on Page 27).
- Keep the turning tool on the tool rest the ENTIRE time that it is in contact with the workpiece.
- Learn the correct techniques for each tool you will use. If you are unsure about how to use the lathe tools, read books or magazines about lathe techniques, and seek training from experienced and knowledgeable lathe users.

## **AWARNING**

Eye injuries or respiratory problems can occur while operating this tool. Wear personal protective equipment to reduce your risk from these hazards.









# **Faceplate Turning**

Faceplate turning is when a workpiece is mounted to the faceplate, which is then mounted to the headstock spindle, as shown in **Figure 42**. This type of turning is usually done with open-faced workpieces like bowls or plates.

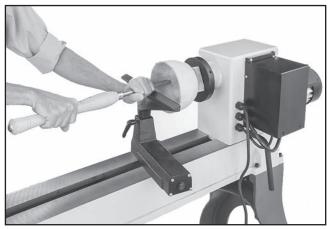


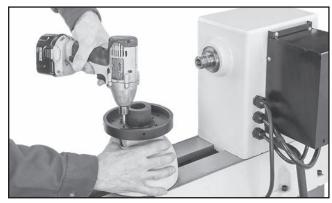
Figure 42. Typical faceplate turning operation.

#### Mounting Workpiece onto Faceplate

1. Mark the workpiece center in the same manner as described in **Spindle Turning** (see **Page 29**).

Note: Cut off corners of the workpiece to make it as close to "round" as possible as described in **Spindle Turning** (see **Page 29**).

2. Center the faceplate on the workpiece and attach it, as shown in **Figure 43**, with wood screws that do not have tapered heads (see **Figure 44**).



**Figure 43.** Typical attachment of faceplate to workpiece.

## **NOTICE**

Only use screws with non-tapered heads (see Figure 44) to attach the faceplate to the workpiece. Screws with tapered heads can split the faceplate or snap off during operation.

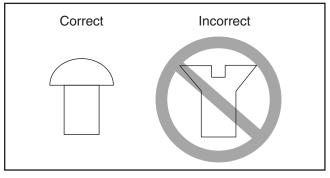


Figure 44. Correct and incorrect screw types.

- Thread and secure the faceplate onto the headstock spindle (refer to Headstock Faceplate on Page 26 for faceplate mounting instructions).
  - —If wood screws cannot be placed in the workpiece, the faceplate can be mounted to a backing block attached to the workpiece (see Mounting the Workpiece to a Backing Block).



# Mounting Workpiece to Backing Block

**1.** Make the backing block from a suitable size piece of scrap wood.

**Note:** The faces of the backing block must be flat and parallel to each other, or the uneven surfaces will cause the workpiece to spin eccentricly, causing unnecessary vibration and runout. It is best to mount the backing block to the faceplate and turn the other surface flat prior to mounting.

- **2.** Locate and mark the center of both the workpiece and backing block.
- 3. Drill a 1/4" hole through the center of the backing block.
- 4. Look through the hole in the backing block to line up the center with the workpiece and glue and clamp the backing block to the workpiece.

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

 Follow Steps 1–3 under Mounting Workpiece onto Faceplate (see Page 31) to attach the backing block to the faceplate.

# **Outboard Turning**

Outboard turning is a variation of faceplate turning and is accomplished with the headstock positioned so the faceplate is not directly over the bed, allowing a larger turning capacity than the swing specification of the lathe.

The only way to rotate the headstock on this machine is to remove it from the bed first, which can be a heavy and cumbersome task. A much simpler alternative to removing the headstock is to simply remove the tailstock and slide the headstock to the other end of the bed. This will position the spindle so it is not directly over the bed whereby outboard turning can safely be accomplished.

#### To outboard turn on the Model G0733:

- DISCONNECT MACHINE FROM POWER!
- Remove the tailstock and tool base from the machine by removing the hex nuts and clamp washers located underneath the assemblies, then lifting them from the lathe bed.
- Loosen the headstock, then move it all the way to the tail end of the lathe bed, as shown in Figure 45.



Figure 45. Lathe prepared for outboard turning.

**4.** Re-tighten the headstock to the bed.

## **AWARNING**

When outboard turning, ALWAYS use a floor mounted tool rest and keep the tool in contact with the rest during all turning operations. Failure to do so could cause the tool to be pulled out of the operator's control and ejected at high speed.



# Sanding/Finishing

After the turning operations are complete, the workpiece can be sanded and finished before removing it from the lathe, as shown in **Figure 46**.

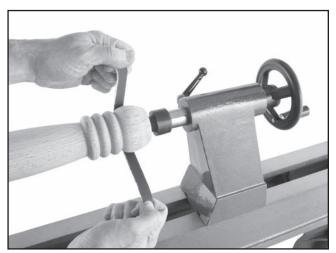
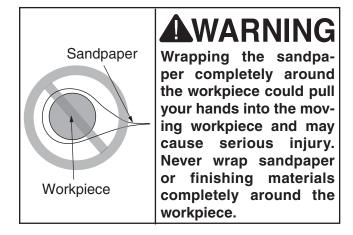


Figure 46. Typical sanding operation.

**Note:** Whenever sanding or finishing, move the tool rest holder out of the way to increase personal safety and gain adequate working room.





# Selecting Turning Tools

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

 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 47.** Example of a 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 48. Example of a skew chisel.

 Scrapers—Typically 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 49. Example of a 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 doubleground.



Figure 50. Example of a parting tool.

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



### **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.

#### **Sovereign Turning System**

Sovereign is a new handle and tool system allowing the turner to customize the tools they need for the type of turning they do. Sold with or without 3/8" and 1/2" collet options, plus the gamut of tool tips will make you wonder how you managed without a Sovereign. All tools are high speed steel construction for long life and dependable use. Below are just some of the options available with this system.

T21644—16" Sovereign System w/Collets

T21647—22" Sovereign Handle

T21648—Sovereign 3/8" Collets

T21656—3/8" Bowl Gouge

T21660—3/4" Bowl Gouge



Figure 51. Sovereign 16" and 22" handles.

#### D3788—Shop Fox 5-Pc. Lathe Chisel Set

With massive high speed steel blades and long ash handles, this set includes a 1" roughing gouge, 3/8" straight chisel, swan neck hollowing tool, 3/8" spindle gouge, and 1/8" parting tool. Also includes a fitted aluminum case.



**Figure 52.** Model T23311 Shop Fox 5-Pc. Chisel Set.

#### **Basic Eye Protection**

T20501—Face Shield Crown Protector 4"

T20502—Face Shield Crown Protector 7"

T20503—Face Shield Window

T20451—"Kirova" Clear Safety Glasses

T20452—"Kirova" Anti-Reflective S. Glasses

T20456—DAKURA Safety Glasses, Black/Clear



Figure 53. Assortment of basic eye protection.

#### D3789—Lathe Chisel Set, 6-Pc.

Beautiful black walnut handles are contoured to fit your hands in any position, and high-speed steel (HSS) blades hold their edges for producing continuous ribbons of wood. Includes all of the standard lathe tools plus a 22¾ long ½ spindle gouge for all-day leverage and control. This set also comes with a sturdy aluminum case.



**Figure 54.** Model D3789—Lathe Chisel Set, 6-Pc.

#### T25535—New Turning Wood Book

For over 20 years, woodturners have been turning to Richard Raffan for expert advice and inspiration. Revised and updated to embrace the increase and improvement in turning tools and lathes now on the market, this updated and expanded edition of his 1985 classic covers everything from the lathe - how it works and how to choose the right model - to fixings, cutting tools, safety, measuring, centerwork, and more.

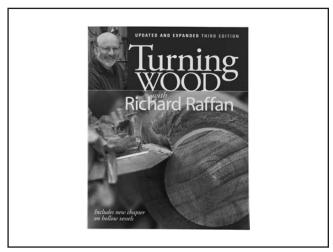


Figure 55. Model T25535 Turning Wood Book.

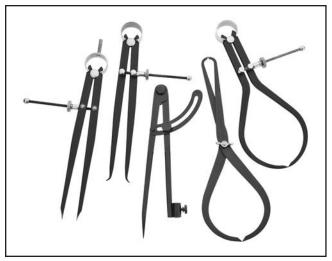
#### H6267—4-Jaw Wood Chuck 1-1/4"-8TPI

This 4-Jaw, Self-Centering Chuck with dovetailed jaws is great for small bowl and plate turning and features jaws that grip by clamping around the workpiece or expanding to fit a turned recess. The minimum diameter required for clamping around the workpiece is 1½, and the minimum diameter required for expansion is 1½. Includes T-handled wrenches, wood screw point and machined chuck lever. Compact design is ideal for smaller lathes. Works great with optional H6268 and H6269 jaws, which are available for additional clamping options.



Figure 56. Model H6267 4-Jaw Wood Chuck.

**T25802—Woodworking Calipers, 5-Pc. Set** Includes compass, straight dividers, inside calipers, outside calipers, and inside/outside calipers. Perfect for woodturning and general layout work.



**Figure 57.** Model T25802 Woodworking Calipers, 5-Pc. Set.

#### G0862—3 HP Portable Cyclone Dust Collector

The capstone of our line of affordable, high- quality cyclones, the G0862 features a 3 HP motor, a whopping 1941 CFM of airflow capacity, and a 35-gallon collection capacity. It's packed with features like a quick-release collection drum, latching system, high-efficiency, two-stage separation driven by a 15" aluminum impeller, durable powder coated finish, and a heavy-duty steel frame and housing.



**Figure 58.** Model G0862 3 HP Portable Cyclone Dust Collector.

#### T10456—Heavy-Duty Anti-Fatigue Mat 3' x 5'

This Heavy-Duty Anti-Fatigue Mat features beveled edges and no-slip tread for safety and comfort. Open-hole design allows liquid to drain through, so it's perfect for wet or oily conditions. Measures 3' wide x 5' long x  $\frac{3}{8}$ " thick.

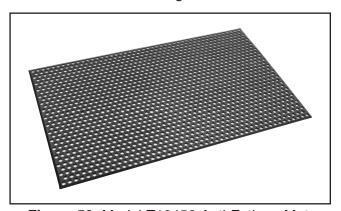


Figure 59. Model T10456 Anti-Fatigue Mat.

#### D3098—Center Finder

Find the center of round or square stock for lathe turning. One side locates a diagonal line on square stock up to 8" x 8", and the other side locates a diagonal line on round stock up to  $4\frac{1}{2}$ " in diameter. Marking two opposite diagonal lines determines the center point.



Figure 60. Model D3098 Center Finder.

### H0507—20" Swan Neck Hollowing Tool H0508—24" Swan Neck 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 61. Swan neck hollowing tools.

### **SECTION 6: MAINTENANCE**



### **AWARNING**

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

- Loose faceplate or mounting bolts.
- Damaged center or tooling.
- · Worn or damaged wires.
- Loose machine components.
- Any other unsafe condition.

#### Daily:

- Clean off dust buildup.
- Clean and lubricate lathe bed, spindle, and quill.

#### Monthly:

- Belt tension, damage, or wear.
- Clean out dust buildup from inside belt/pulley cavity.

#### Lathe Bed

Protect the unpainted cast iron lathe bed by using a lightly oiled rag and 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 products like G96 Gun Treatment, SLIPIT, or Boeshield T-9.

#### Lubrication

All bearings for the Model G0733 are lubricated and sealed at the factory, and do not need additional lubrication.

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

Use the tailstock handwheel to extend the quill out to the furthest position and apply a thin coat of white grease to the outside of the quill. DO NOT allow any oil or grease to get on the inside mating surfaces of the quill.

### Cleaning

Cleaning the Model G0733 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. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning. Remove and debris or oily substances from the inside of the spindle and quill.



## **SECTION 7: SERVICE**

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

### **Troubleshooting**

#### **Motor & Electrical**

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker	Emergency stop push-button is engaged/ faulty.	Open switch cover and press <b>ON</b> button/replace it.
l tring		Correct motor wiring connections.
	Spindle direction switch is at fault.	3. Replace faulty spindle direction switch.
	4. Circuit board or control board is at fault.	4. Replace faulty board.
	5. Speed rotary switch is at fault.	5. Replace bad speed rotary switch.
	6. Wiring is open/has high resistance.	6. Check for broken wires or disconnected/corroded
		connections, and repair/replace as necessary.
	7. Motor is at fault.	7. Test/repair/replace.
	8. Frequency inverter is at fault.	8. Replace.
Machine stalls or is underpowered.	Machine is undersized for the task.	Use sharp lathe bits and chisels; reduce the feed rate/depth of cut.
	2. Feed rate/cutting speed too fast for task.	2. Decrease feed rate/cutting speed.
	3. Belt slipping.	3. Replace bad belt and re-tension (see Page 41).
	4. Motor connection is wired incorrectly.	4. Correct motor wiring connections.
	5. Pulley slipping on shaft.	5. Replace loose pulley.
	6. Motor bearings are at fault.	6. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.
	7. Motor has overheated.	7. Clean off motor, let cool, and reduce workload.
	8. Motor is at fault.	8. Test/repair/replace.
Machine has vibration or	1. Motor or component is loose.	Inspect/replace stripped or damaged bolts/nuts, and     Administration with three distribution florid.
noisy operation	Belt worn or loose.	re-tighten with thread locking fluid.  2. Inspect/replace belts (see Page 41).
(without workpiece	3. Pulley is loose.	3. Replace shaft, pulley, setscrew, and key as
installed).	3. Fulley is loose.	required.
	4. Machine is incorrectly mounted or sits	4. Tighten/replace anchor studs in floor; relocate/shim
	unevenly on floor.	machine; adjust feet.
	Motor mount loose/broken.	5. Tighten/replace.
	Motor bearings are at fault.	Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.



#### **Wood Lathe Operation**

Symptom	Possible Cause	Corrective Action
Vibration noise while machine is running; noise changes when speed is changed.	Belt cover loose.	Tighten the screws that secure the belt cover; if necessary install a soft, vibration dampening material between the belt cover and the head-stock casting.
Excessive vibration (with workpiece installed).	<ol> <li>Workpiece mounted incorrectly.</li> <li>Headstock, tailstock, or tool rest not securely clamped to lathe bed.</li> <li>Workpiece warped, out of round, or is flawed.</li> <li>Spindle speed is set too fast for mounted workpiece.</li> <li>Lathe is resting on an uneven surface.</li> <li>Motor mount bolts are loose.</li> <li>Belt is worn or damaged.</li> </ol>	<ol> <li>Re-mount workpiece, making sure that centers are embedded in true center of workpiece.</li> <li>Check clamp levers and tighten if necessary.</li> <li>Cut workpiece to correct, or use a different workpiece.</li> <li>Reduce the spindle speed.</li> <li>Shim stand or adjust feet on stand to remove any wobbles present in the stand.</li> <li>Tighten motor mount bolts.</li> <li>Replace belt (see Page 41).</li> </ol>
Chisels grab or dig into workpiece.	<ol> <li>Spindle bearings are worn.</li> <li>Tool rest set too low.</li> <li>Tool rest set too far from workpiece.</li> <li>Wrong chisel/tool being used.</li> <li>Chisel/tool dull.</li> </ol>	<ol> <li>Replace spindle bearings.</li> <li>Set tool rest higher. See Page 23 for how to properly set the tool rest height.</li> <li>Move the tool rest closer to the workpiece. See Page 23 for the proper workpiece/tool rest clearance.</li> <li>Use the correct chisel/tool; educate yourself by reading books, trade magazines, or seeking help from an experienced lathe operator.</li> <li>Sharpen or replace the chisel/tool you are using.</li> </ol>
Bad surface finish on workpiece.	Wrong spindle speed.     Dull chisel or wrong chisel being used for the operation.	<ol> <li>Use trial-and-error to find a better spindle speed.</li> <li>Sharpen chisel or try a different chisel.</li> </ol>
Tailstock moves under load.	Tailstock mounting bolt loose.     Bed surface is oily or greasy.	Tighten.     Clean bed surface to remove excess oil/grease.
Can't remove tapered tool from tailstock barrel.	Tailstock barrel not retracted all the way back into the tailstock.     Debris was not removed from taper before inserting into barrel.	<ol> <li>Turn the barrel handwheel until it forces taper out of barrel.</li> <li>Always make sure that taper surfaces are clean.</li> </ol>



### **Changing Belt**

#### To change belt:

- 1. DISCONNECT LATHE FROM POWER!
- 2. Open the front belt access panel, as shown in Figure 62.

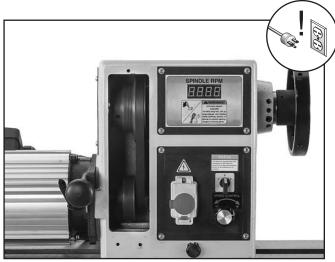
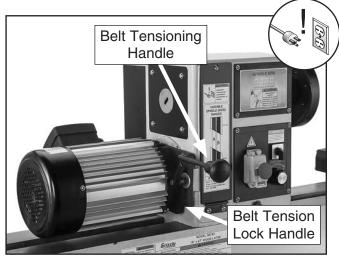


Figure 62. Belt access panel removed.

3. Loosen the belt tension lock handle shown in Figure 63.



**Figure 63.** Belt tensioning handle and tension lock handle.

- 4. Use the belt tensioning handle (see Figure 63) to lift the motor assembly all the way up, then re-tighten the motor tension lock handle—this will hold the motor in place while you change the belt position.
- Reach into the belt access cavity and roll the belt off the motor (lower) pulleys, then pull the belt off the spindle pulleys and out the side of the headstock.

**Note:** Removing the plastic cover on the left side may aid in the belt removal and installation.

- **6.** Install the new belt by reversing **Step 5.**
- Apply downward pressure on the belt tensioning handle to properly tension the drive belt, then re-tighten the belt tension lock handle.

**Note:** When properly tensioned, the belt should deflect about  $\frac{1}{8}$ " when moderate pressure is applied to the belt mid-way between the upper and lower pulley, as illustrated in **Figure 64**.

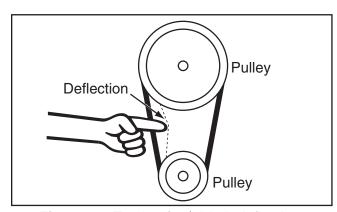


Figure 64. Testing for 1/8" belt deflection.

**8.** Ensure the belt ribs are fully seated in the pulley grooves then close the front belt access panel.

### **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. 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.

# **▲**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.

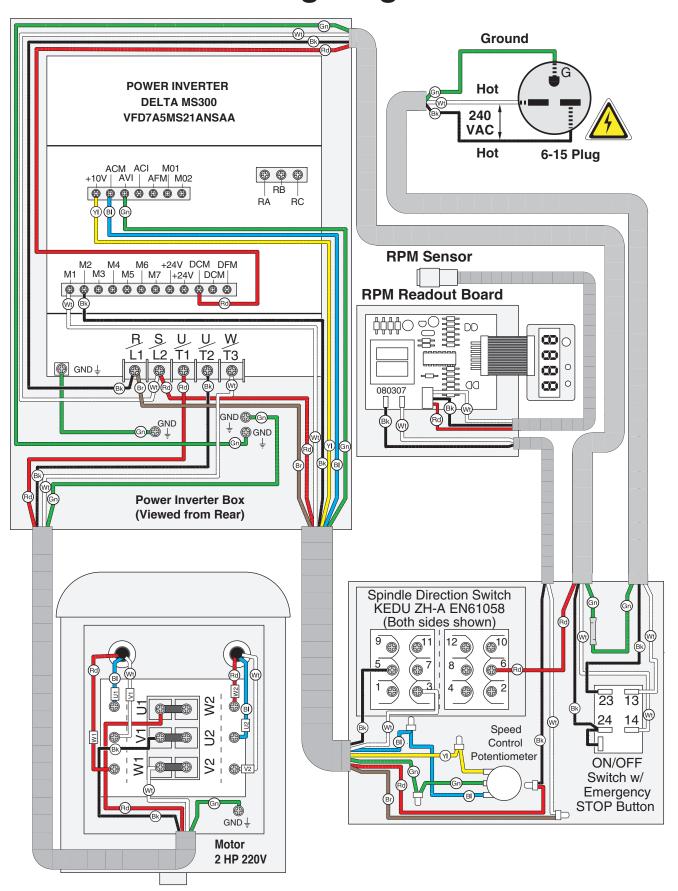
**CAPACITORS/INVERTERS.** Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

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

#### NOTICE **COLOR KEY** BLACK . LIGHT **BLUE** YELLOW : The photos and diagrams BLUE included in this section are YELLOW WHITE = BROWN GREEN best viewed in color. You WHITE GREEN : PURPLE ( GRAY can view these pages in TUR-QUOISE **PINK** RED ORANGE color at www.grizzly.com.



### **Wiring Diagram**



# **Wiring Components**



Figure 65. Inverter box and motor box locations.

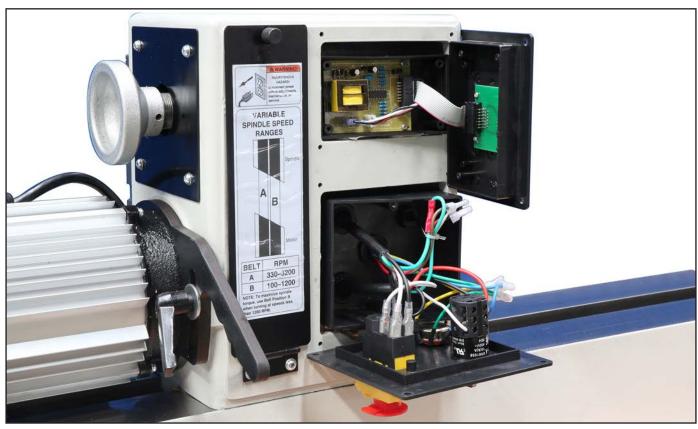
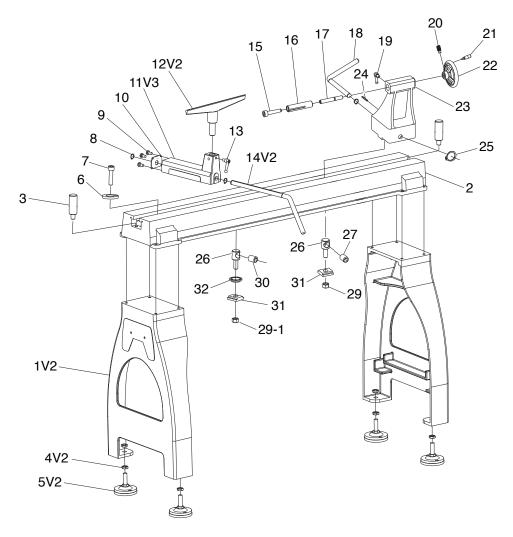


Figure 66. RPM readout display board and control panel wiring.

# **SECTION 9: PARTS**

### Stand & Bed

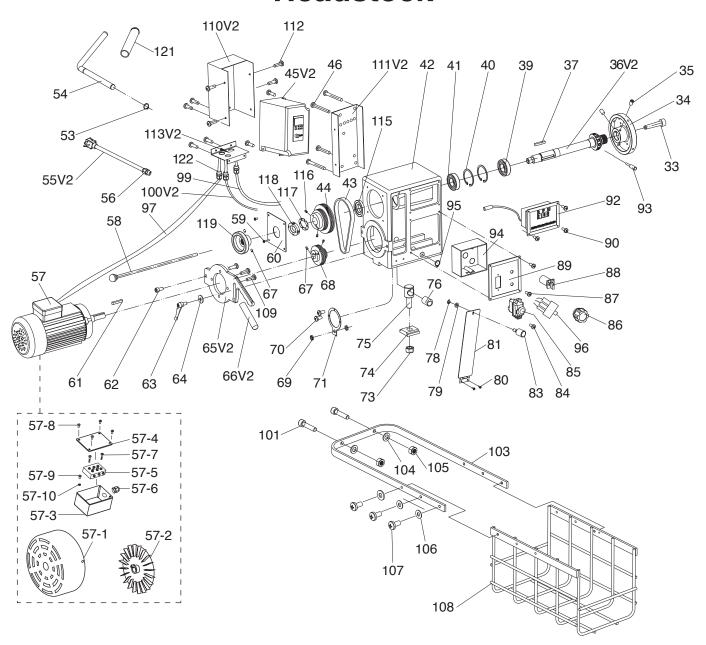


REF	PART #	DESCRIPTION
1V2	P0733001V2	STAND V2.01.21
2	P0733002	BED WHITE
3	P0733003	BED STOP
4V2	P0733004V2	HEX NUT M16-2 V2.01.21
5V2	P0733005V2	ADJ FOOT M16-2 X 100, 100D V2.01.21
6	P0733006	FLAT WASHER 10MM
7	P0733007	CAP SCREW M10-1.5 X 35
8	P0733008	EXT RETAINING RING 19MM
9	P0733009	CAP SCREW M58 X 10
10	P0733010	TOOL REST BASE PLATE
11V3	P0733011V3	TOOL REST BASE (1" HOLE) V3.05.19
12V2	P0733012V2	TOOL REST (1" POST) V2.12.17
13	P0733013	TOOL REST LOCK LEVER
14V2	P0733014V2	TOOL REST BASE LOCK LEVER V2.05.19
15	P0733015	LIVE CENTER
16	P0733016	QUILL

REF	PART#	DESCRIPTION
17	P0733017	LEADSCREW
18	P0733018	TAILSTOCK LOCK LEVER
19	P0733019	QUILL LOCK LEVER
20	P0733020	SET SCREW M8-1.25 X 12
21	P0733021	HANDWHEEL HANDLE
22	P0733022	HANDWHEEL
23	P0733023	TAILSTOCK CASTING
24	P0733024	ROLL PIN 5 X 50
25	P0733025	EXT RETAINING RING 19MM
26	P0733026	TAILSTOCK CLAMP BOLT
27	P0733027	ECCENTRIC BUSHING 19 X 26 X 33
29	P0733029	HEX NUT M18-2.5
29-1	P0733029-1	NYLON LOCK NUT M18-2.5
30	P0733030	ECCENTRIC BUSHING 19 X 26 X 33
31	P0733031	CLAMP PLATE
32	P0733032	SUPPORT BRACKET



### **Headstock**



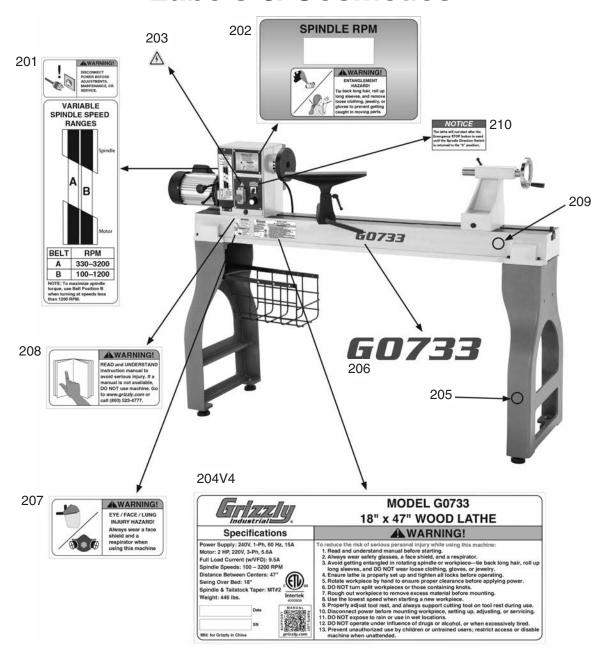
### **Headstock Parts List**

REF	PART#	DESCRIPTION
33	P0733033	SPUR CENTER
34	P0733034	FACEPLATE
35 P0733035		SET SCREW M6-1 X 12
36V2	P0733036V2	SPINDLE V2.06.18
37	P0733037	KEY 8 X 7 X 45
38	P0733038	EXT RETAINING RING 30MM
39	P0733039	BALL BEARING 6206ZZ
40	P0733040	INT RETAINING RING 62MM
41	P0733041	BALL BEARING 6206ZZ
42	P0733042	HEADSTOCK CASTING
43	P0733043	RIBBED FLAT BELT 530J6
44	P0733044	SPINDLE PULLEY
45V2	P0733045V2	INVERTER DELTA VFD7A5MS21ANSAA V2.05.19
46	P0733046	PHLP HD SCR M58 X 45
48	P0733048	SET SCREW M58 X 12
53	P0733053	EXT RETAINING RING 19MM
54	P0733054	HEADSTOCK LOCK LEVER
55V2	P0733055V2	POWER CORD 14G 3W 72" 6-15P 90-DEG V2
56	P0733056	STRAIGHT STRAIN RELIEF 3/8"
57	P0733057	MOTOR 2HP 220V 3-PH
57-1	P0733057-1	MOTOR FAN COVER
57-2	P0733057-2	MOTOR FAN
57-3	P0733057-3	MOTOR TERMINAL BOX
57-4	P0733057-4	MOTOR TERMINAL BOX COVER
57-5	P0733057-5	MOTOR TERMINAL
57-6	P0733057-6	STRAIGHT STRAIN RELIEF 3/8"
57-7	P0733057-7	PHLP HD SCR M47 X 20
57-8	P0733057-8	TAP SCREW M2 X 10
57-9	P0733057-9	PHLP HD SCR M47 X 10
57-10	P0733057-10	EXT TOOTH WASHER 4MM
58	P0733058	KNOCKOUT ROD
59	P0733059	PHLP HD SCR M58 X 12
60	P0733060	SPINDLE PULLEY COVER
61	P0733061	KEY 6 X 6 X 50
62	P0733062	CAP SCREW M10-1.5 X 30
63	P0733063	BELT TENSION LOCK LEVER
64	P0733064	FLAT WASHER 10MM
65V2	P0733065V2	MOTOR PLATE V2.06.18
66V2	P0733066V2	HANDLE SLEEVE V2.06.18
67	P0733067	SET SCREW M6-1 X 12
68	P0733068	MOTOR PULLEY
69	P0733069	HEX NUT M12-1 THIN
70	P0733070	PHLP HD SCR M47 X 8

REF	PART #	DESCRIPTION
71	P0733071	RPM SENSOR BRACKET
73	P0733073	HEX NUT M18-2.5
74	P0733074	HEADSTOCK CLAMP
75	P0733075	HEADSTOCK CLAMP BOLT
76	P0733076	ECCENTRIC BUSHING 19 X 26 X 33
80	P0733080	PHLP HD SCR M58 X 12
81	P0733081	BELT DOOR
83	P0733083	KNOB BOLT M58 X 12
84	P0733084	PHLP HD SCR M47 X 10
85	P0733085	ON/OFF SWITCH KEDU KJD17B GF
86	P0733086	VARIABLE SPEED DIAL
87	P0733087	PHLP HD SCR M47 X 10
88	P0733088	FWD/REW SWITCH KEDU ZH-A
89	P0733089	PANEL COVER
90	P0733090	PHLP HD SCR M47 X 10
92	P0733092	RPM DIGITAL READOUT W/SENSOR
93	P0733093	SPINDLE LOCK TOOL
94	P0733094	SWITCH BOX
95	P0733095	EXT RETAINING RING 19MM
96	P0733096	POTENTIOMETER WX110 (010)
97	P0733097	MOTOR CORD 16G 4W 24"
99	P0733099	SPINDLE CORD 16G 7W 18"
100V2	P0733100V2	SWITCH CORD 16G 4W 18" V2.05.19
101	P0733101	CAP SCREW M8-1.25 X 35
103	P0733103	BASKET BRACKET
104	P0733104	LOCK WASHER 8MM
105	P0733105	HEX NUT M8-1.25
106	P0733106	LOCK WASHER 6MM
107	P0733107	PHLP HD SCR M6-1 X 12
108	P0733108	STORAGE BASKET
109	P0733109	CAP SCREW M8-1.25 X 20
110V2	P0733110V2	INVERTER COVER V2.05.19
111V2	P0733111V2	INVERTER MOUNTING BRACKET V2.05.19
112	P0733112	PHLP HD SCR M47 X 10
113V2	P0733113V2	TERMINAL PLATE V2.05.19
115	P0733115	PULLEY SPACER
116	P0733116	SET SCREW M8-1.25 X 10
117	P0733117	EXT TOOTH WASHER 30MM
118	P0733118	SPANNER NUT M30-1.5 LH
119	P0733119	SPINDLE HANDWHEEL
121	P0733121	HANDLE SLEEVE
122	P0733122	STRAIN RELIEF TYPE-3 M20-1.5

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.

#### **Labels & Cosmetics**



REF	PART #	DESCRIPTION
201	P0733201	BELT COVER LABEL
202	P0733202	READOUT LABEL
203	P0733203	ELECTRICITY WARNING
204V4	P0733204V4	MACHINE ID LABEL V4.01.21
205	P0733205	TOUCH-UP PAINT, GRIZZLY GREEN

REF	PART #	DESCRIPTION
206	P0733206	MODEL NUMBER LABEL
207	P0733207	EYE/FACE/LUNG HAZARD LABEL
208	P0733208	READ MANUAL LABEL
209	P0733209	TOUCH-UP PAINT, GRIZZLY PUTTY
210	P0733210	NOTICE LABEL

### WARNING

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





### **WARRANTY & RETURNS**

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

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

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

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

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

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

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





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