MODEL G0995
24-1/2" GROWLTECH HEAVY-DUTY WOOD LATHE
OWNER'S MANUAL
(For models manufactured since 11/24)

#KS23343 PRINTED IN CHINA V1.11.24

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

⚠ WARNING!

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

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

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

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

⚠ WARNING!

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

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

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

Table of Contents

INTRODUCTION

Contact Info

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

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

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

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

⚠WARNING

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

⚠CAUTION

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

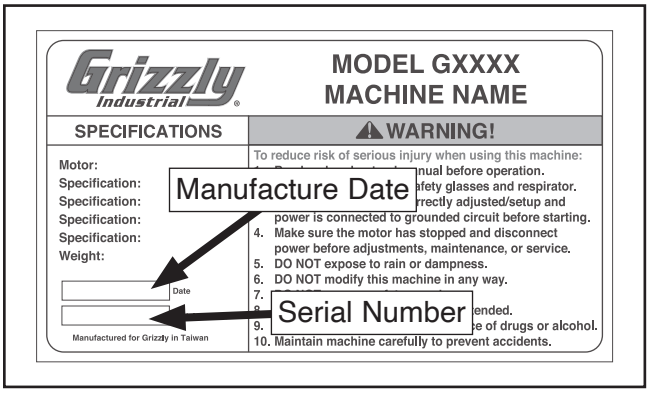
Manual Accuracy

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

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

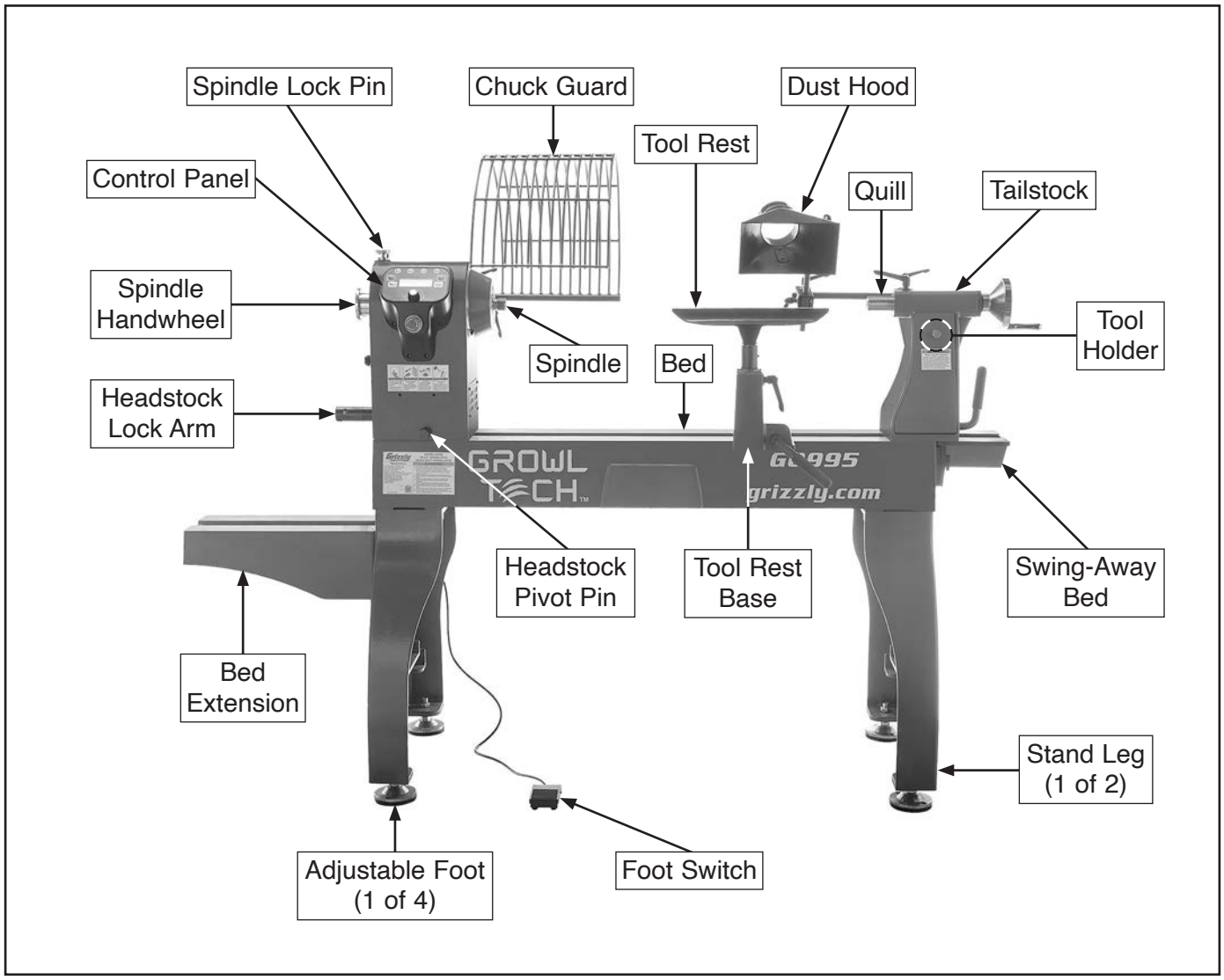
If you find this to be the case, and the difference between the manual and machine leaves you confused or unsure about something, check our website for an updated version. We post current manuals and manual updates for free on our website at **www.grizzly.com**.

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



Identification

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

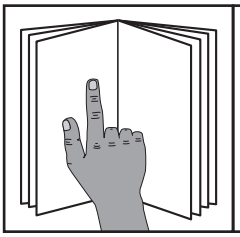


⚠CAUTION

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



⚠WARNING

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

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

Headstock

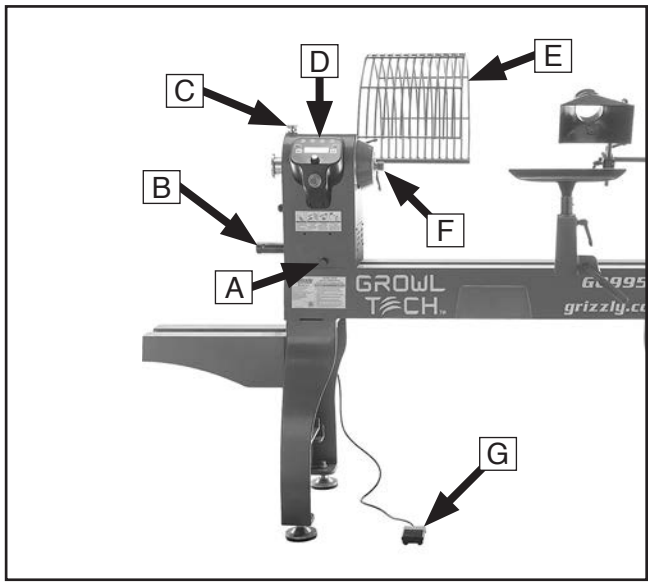


Figure 1. Headstock overview.

A. Headstock Pivot Pin: Pull pin to rotate headstock. Pin will engage when headstock is rotated to 0°, 45°, 90°, 135°, and 180°.

B. Headstock Lock Arm: Secures headstock in position along bed.

C. Spindle Lock Pin: Locks spindle in place for indexing operations. Rotate knob to UNLOCK to unlock spindle, and rotate knob to LOCK to lock spindle.

D. Control Panel: Controls machine operating functions and indicates spindle speed in revolutions per minute (RPM). See **Control Panel** on **Page 6** for detailed control descriptions, and **Command Tree** on **Page 70** for programming functions.

E. Chuck Guard: Protects operator from flying objects ejected during turning operations.

F. Spindle: Accepts MT#2 centers or 1¼" x 8 TPI (RH) tooling for mounting workpieces. Rotates clockwise or counterclockwise.

G. Foot Switch: When pressed, turns spindle motor ***ON*** after pressing ON button. When released, turns spindle motor ***OFF***.

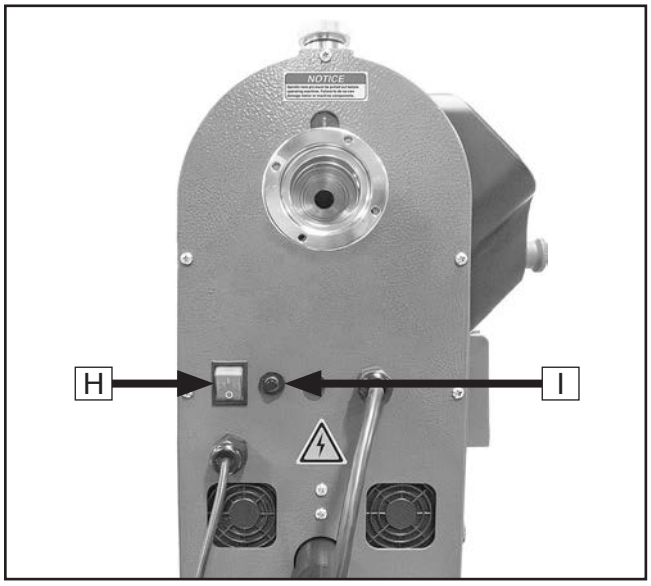


Figure 2. Headstock side panel.

H. ON/OFF Switch: Turns power to machine ***ON*** or ***OFF***.

⚠ CAUTION: Control panel will remain functional for a few seconds after machine is turned ***OFF***. During this time, the spindle can still be briefly turned ***ON***.

I. Motor Reset Button: Allows machine to be restarted after thermal overload protection has tripped. To reset, wait a few minutes for motor to cool, then press reset button. If button does not stay depressed, allow motor to cool longer, then try again.

Tool Rest

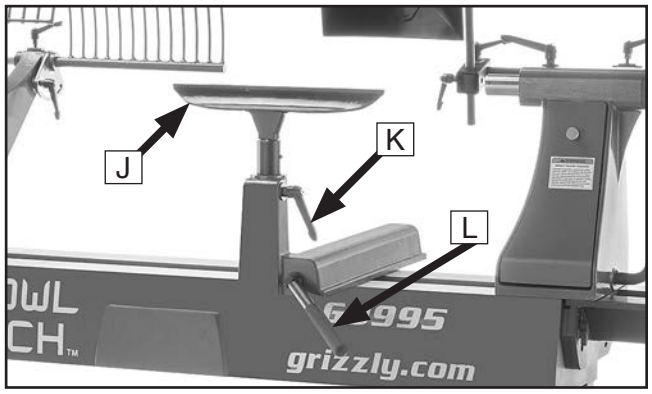


Figure 3. Tool rest controls.

J. Tool Rest: Provides stable platform for cutting tools.

K. Tool Rest Lock Handle: Secures tool rest in position.

L. Tool Rest Base Lock Lever: Secures tool rest base in position along bed.

Tailstock

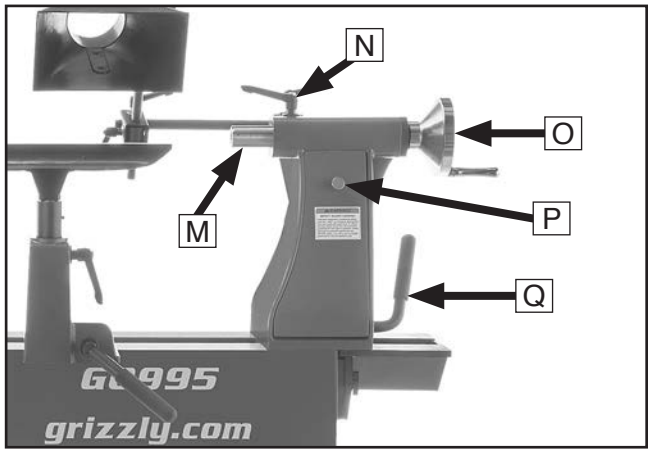


Figure 4. Tailstock controls.

M. Quill: Holds MT#2 centers or tooling.

N. Quill Lock Handle: Secures quill in position.

O. Tailstock Handwheel: Moves quill toward or away from spindle.

P. Tool Holder: Holds tooling and supporting equipment inside tailstock.

Q. Tailstock Lock Lever: Secures position of tailstock along bed.

Swing-Away Bed & Bed Extension

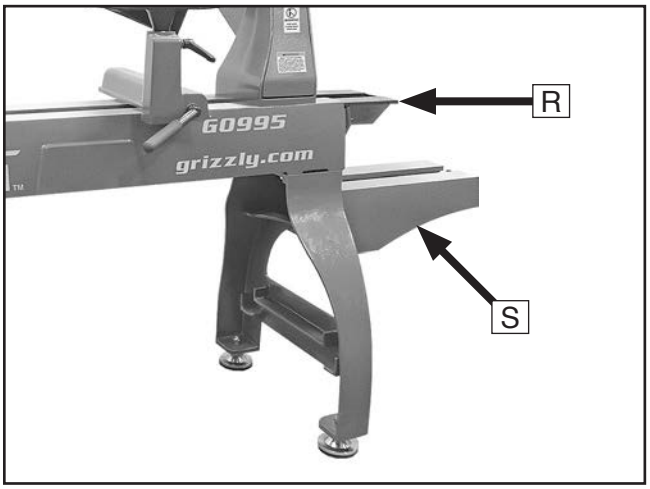


Figure 5. Swing-away bed and bed extension.

R. Swing-Away Bed: Swings around side of bed to store tailstock during outboard turning operations.

S. Bed Extension: Can be installed on outboard end of bed to extend bed length, stand legs for oversized turning operations, and center of bed to accommodate wide workpieces.

Mounting Arms

Figure 6. Mounting arms.

T. Mounting Arms: Secure chuck guard to headstock and dust hood assembly to tailstock. Chuck guard and dust hood assemblies can be replaced with comparator kit to mount a finished workpiece for visual reference while turning.

Control Panel

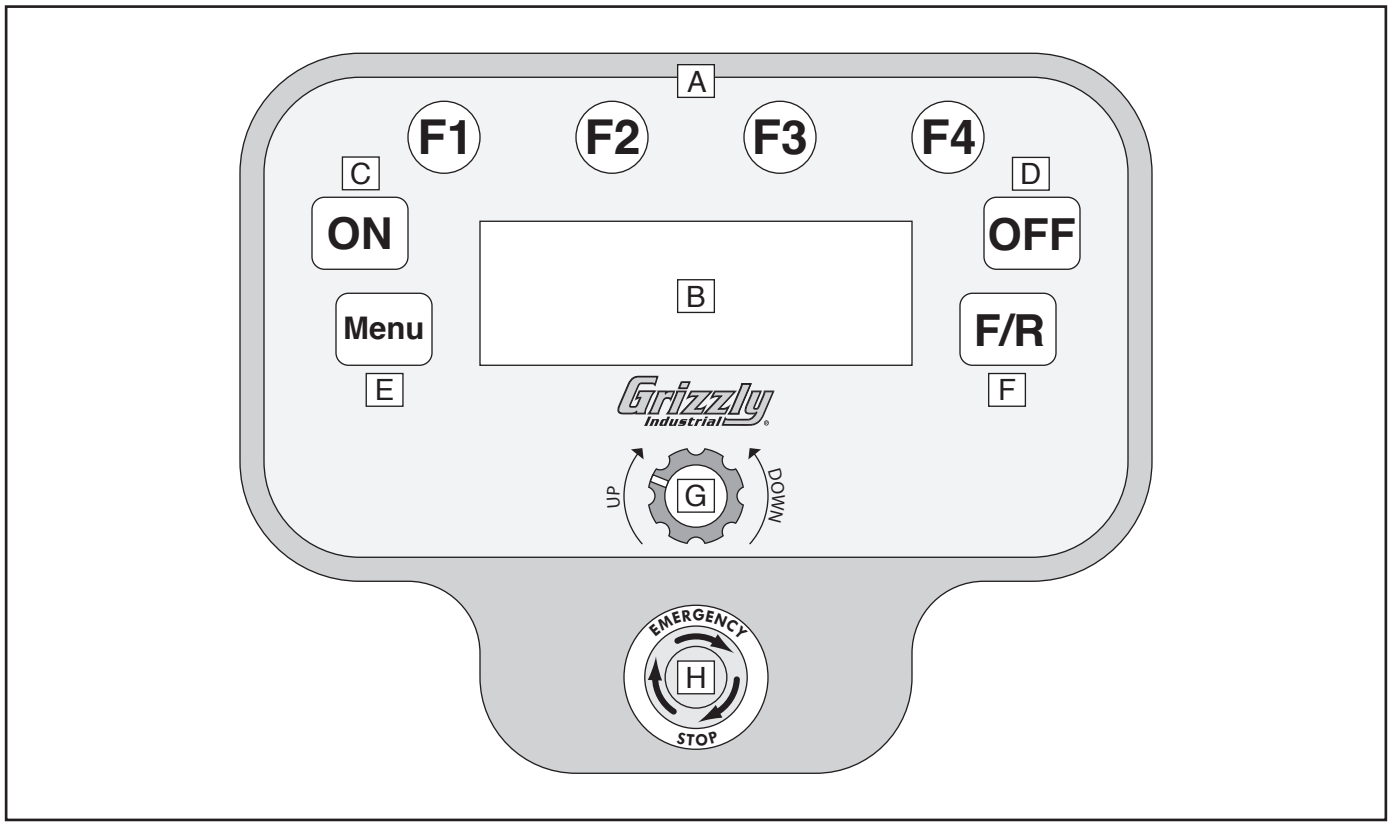


Figure 7. Control panel overview.

A. F1–F4 Function Buttons: Programmable buttons that provide shortcuts to spindle controls. By default, pressing buttons changes spindle speed according to the table below:

Default Speed Settings (RPM)		
Function Button	**Single Press**	**Double Press**
F1	250	1250
F2	500	1500
F3	750	1750
F4	1020	2000

Additional function settings can be customized depending on operation. See **Command Tree** on **Page 65** for additional programming settings.

B. Digital Display: Displays current spindle speed and menu settings.

C. ON Button: Allows spindle to start when foot pedal is pressed.

D. OFF Button: Turns motor ***OFF***.

E. Menu Button: Displays menu and functions as "Cancel/Back" when navigating through menu pages.

F. F/R Button: Alternates motor direction between forward (F) or reverse (R). Functions as "Confirm" when pressed in menu settings.

G. Spindle Speed Dial: Rotate *clockwise* to slowly increase speed and *counterclockwise* to slowly decrease speed. Press and turn dial to quickly adjust speed. In menu, rotating dial scrolls through menu pages. Dial functions as "Confirm" when pressed in menu settings.

H. EMERGENCY STOP Button: Stops motor and disables machine controls while it remains depressed. Twist clockwise to reset.

MACHINE DATA SHEET

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

MODEL G0995 24-1/2" GROWLTECH HEAVY-DUTY WOOD LATHE

Product Dimensions:

Weight	617 lbs.
Width (side-to-side) x Depth (front-to-back) x Height	81 x 41 x 59 in.
Footprint (Length x Width)	51-1/2 x 24 in.

Shipping Dimensions:

Type	Wood Crate
Content	Machine
Weight	739 lbs.
Length x Width x Height	58 x 32 x 29 in.
Must Ship Upright	Yes

Electrical:

Power Requirement	220V, Single-Phase, 60 Hz
Full-Load Current Rating	15A
Minimum Circuit Size	20A
Connection Type	Cord & Plug
Power Cord Included	Yes
Power Cord Length	90 in.
Power Cord Gauge	12 AWG
Plug Included	Yes
Included Plug Type	6-20
Switch Type	Control Panel w/Foot Pedal

Motors:

Main

Horsepower	3 HP
Phase	3-Phase
Amps	15A
Speed	100 - 5000 RPM
Type	Switched Reluctance Motor (SRM)
Power Transfer	Direct
Bearings	Sealed & Permanently Lubricated

Main Specifications:

Operation Information

Swing Over Bed	24-1/2 in.
Swing Over Tool Rest Base	19-3/4 in.
Outboard Swing Over Bed	41-1/2 in.
Outboard Swing Over Tool Rest Base	37 in.
Distance Between Centers	31-1/2 & 48-3/4 in.
Max. Distance Tool Rest to Spindle Center	12-3/4 in.
No of Spindle Speeds	Variable
Spindle Speed Range	100 - 5000 RPM
Floor to Center Height	44-11/16 - 45-1/4 in.
Headstock Rotation	0, 45, 90, 135, 180 deg.

Spindle Information

Spindle Taper	MT#2
Spindle Thread Size	1-1/4" x 8 TPI
Spindle Thread Direction	Right Hand
Spindle Bore	11/16 in.
Type of Included Spindle Center	Spur
Indexed Spindle Increments	15 deg.
No of Indexes	24

Tool Rest Information

Tool Rest Width	14 in.
Tool Rest Post Diameter	1 in.
Tool Rest Post Length	4-3/4 in.
Tool Rest Base Height	2-3/8 in.

Tailstock Information

Tailstock Quill Travel	4-1/2 in.
Tailstock Taper	MT#2
Type of Included Tailstock Center	Live

Construction

Bed	Cast Iron
Stand	Cast Iron
Headstock	Cast Iron
Tailstock	Cast Iron
Paint Type/Finish	Powder Coated

Other Related Information

Bed Width	8 in.
Faceplate Size	5-3/4 in.

Other Specifications:

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

Features:

Electronic Variable-Speed Control w/Digital Readout
Forward and Reverse Spindle Controls
Foot Pedal Spindle Control
Programmable Electronic Assisted Braking
Eight Programmable Spindle Speed Settings
Energy-Efficient 3 HP Switched Reluctance Motor
Headstock Rotates 180° and Positions Anywhere Along Bed
18" Cast-Iron Bed Extension (Attaches to Either End of Bed, Stand Legs, or Center Bed)
Bed Extension Installed for Outboard Turning Provides 41-1/2" Swing
15 Degree Spindle Indexing w/24 Indexes
31-1/2" Between Centers, 48-3/4" Between Centers w/Bed Extension
14" Cast-Iron Tool Rest with 1" Tool Post and Outboard Turning Extension
Self-Ejecting Tailstock and Swing-Away Bed for Oversized Turning
Storage Compartment w/Tooling Holder in Tailstock Body
Adjustable 9-1/4" x 5" Dust Hood w/4" Dust Port
Comparator Kit w/(2) Fixed Centers for Mounting Finished Workpiece for Visual Comparison
Chuck Guard to Protect Operator From Flying Debris
Includes Faceplate, MT#2 Live Center, and MT#2 Spur Center

SECTION 1: SAFETY

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

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

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

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

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

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

Safety Instructions for Machinery

⚠WARNING

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

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

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

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

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

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

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

⚠WARNING

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Additional Safety for Wood Lathes

⚠WARNING

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 ¼" away from workpiece and ⅛" 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.

⚠WARNING

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

Full-Load Current Rating

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

Full-Load Current Rating at 220V ..... 15 Amps

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

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

Circuit Information

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

⚠CAUTION

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

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

Circuit Requirements

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

Nominal Voltage 208V, 220V, 230V, 240V
Cycle ..... 60 Hz
Phase ..... Single-Phase
Power Supply Circuit ..... 20 Amps
Plug/Receptacle ..... NEMA 6-20

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!

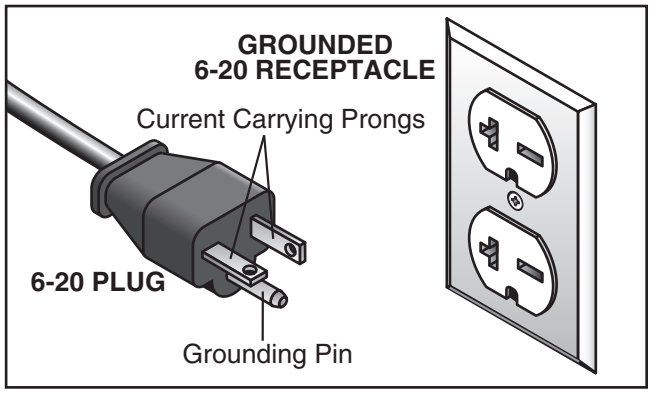
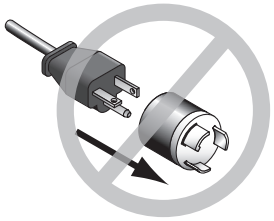


Figure 8. Typical 6-20 plug and receptacle.

⚠CAUTION



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

⚠WARNING

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

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

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

Extension Cords

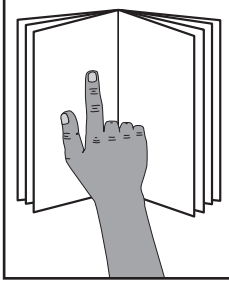
We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

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

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

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

SECTION 3: SETUP

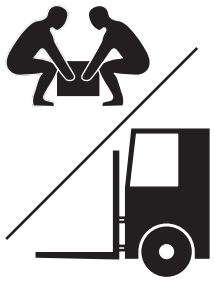


⚠WARNING

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

⚠WARNING

Wear safety glasses during the entire setup process!



⚠WARNING

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.

Needed for Setup

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

Description	Qty
• Additional People	As Needed
• Safety Glasses (for each person)	1
• Forklift or Hoist w/Lifting Straps (rated for at least 925 lbs.)	1
• Level	1
• Prybar	1
• Power Drill w/Phillips Bit #2	1
• Straightedge 12"	1
• Open-End Wrench 24mm	1
• Dust Collection System	1
• Dust Hose 4"	1
• Hose Clamps 4"	2
• Cleaner/Degreaser (**Page 17**)	As Needed
• Disposable Shop Rags	As Needed
• Disposable Gloves	As Needed

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.

Crate Inventory (Figure 9) **Qty**

A. Lathe Assembly
- —Headstock w/Foot Switch (mounted) 1
- —Tool Rest Base (mounted) 1
- —Tool Rest (mounted) 1
- —Tailstock (mounted) 1
- —Faceplate 5¾" (mounted) 1
- —Mounting Arms (mounted) 2

B. Stand Legs 2
C. Swing-Away Bed 1
D. Chuck Guard 1

Box Inventory (Figure 10) **Qty**

E. Bed Extension 1
F. Live Center MT#2 1
G. Spur Center MT#2 1
H. Fixed Centers 2
I. Spindle Wrench 46mm 1
J. Hex Wrenches 3, 4, 8mm ..... 1 Ea
K. Knockout Tool 1
L. Headstock Lock Bar 1
M. Tool Rest Collar 1
N. Tool Rest Extension 1
O. Adjustable Feet w/Hex Nut 4
P. Dust Hood 1
Q. Position Bushing 1
R. Angle Bracket 1
S. Hose Clamp 4" 1
T. Clamp Mount 1
U. Knob M8-1.25 1
V. Mounting Rod 1
W. Extension Rod 1
X. Rod Coupler 1
Y. Lock Bushings 16ID x 32OD x 30L 2
Z. Hardware (Not Shown)
- —Cap Screws M10-1.5 x 35 (Stand) 8
- —Lock Washers 10mm (Stand) 8
- —Cap Screws M10-1.5 x 30 (Bed Ext.) 4
- —Cap Screws M10-1.5 x 25 (Swing Bed) .. 3
- —Carriage Bolt M8-1.25 x 25 (Hood) 1
- —Lock Levers w/Washers (Hood) 2

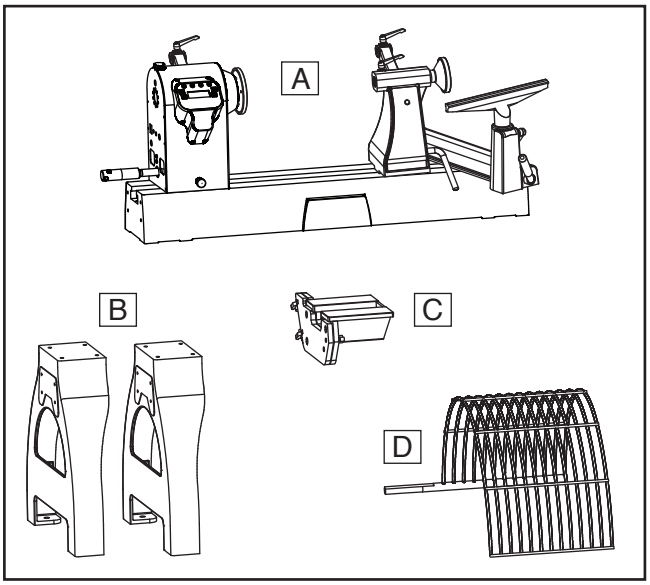


Figure 9. Crate inventory.

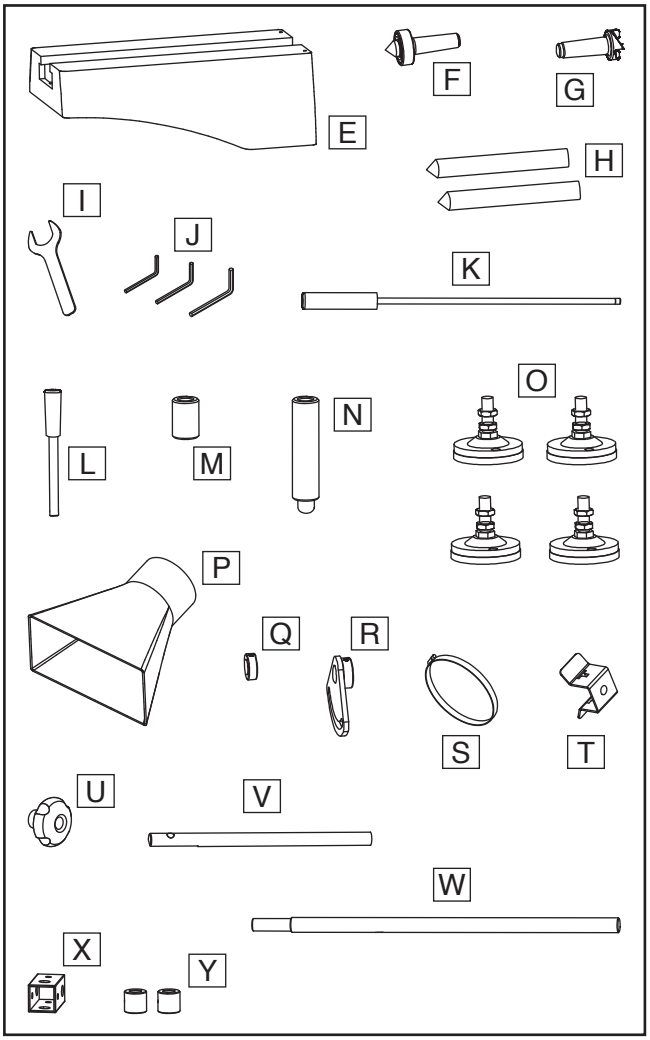
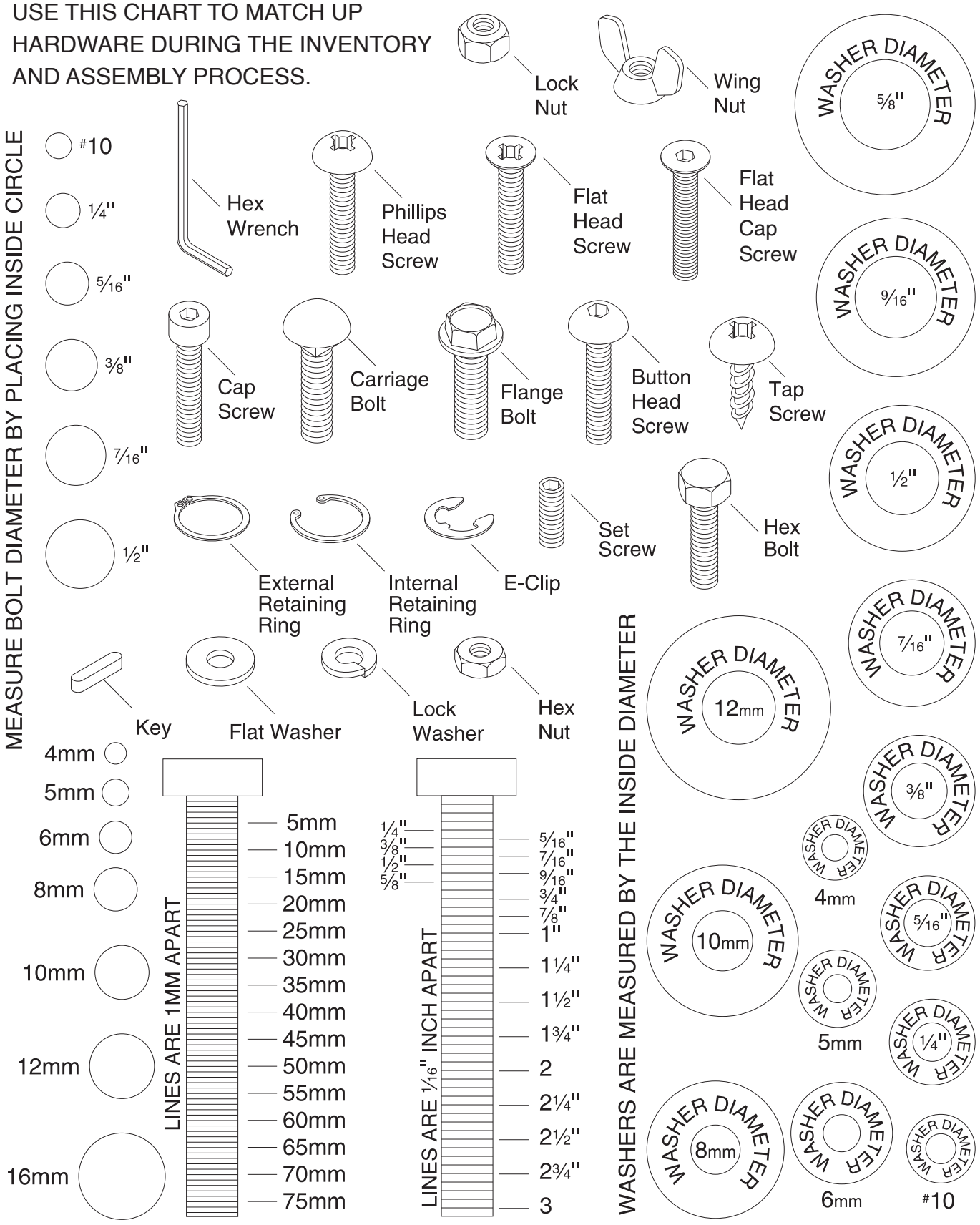


Figure 10. Box inventory.

Hardware Recognition Chart

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



Cleanup

The unpainted surfaces of your machine are coated with a heavy-duty rust preventative that prevents corrosion during shipment and storage. This rust preventative works extremely well, but it will take a little time to clean.

Be patient and do a thorough job cleaning your machine. The time you spend doing this now will give you a better appreciation for the proper care of your machine's unpainted surfaces.

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

Before cleaning, gather the following:
- Disposable rags
- Cleaner/degreaser (WD•40 works well)
- Safety glasses & disposable gloves
- Plastic paint scraper (optional)

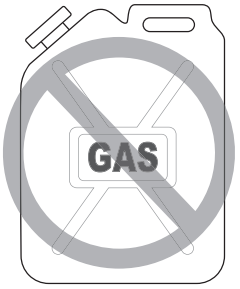
Basic steps for removing rust preventative:

1. Put on safety glasses.

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

3. Wipe off the surfaces. If your cleaner/degreaser is effective, the rust preventative will wipe off easily. If you have a plastic paint scraper, scrape off as much as you can first, then wipe off the rest with the rag.

4. Repeat **Steps 2–3** as necessary until clean, then coat all unpainted surfaces with a quality metal protectant to prevent rust.



⚠WARNING

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

⚠CAUTION

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

NOTICE

Avoid 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.

Order online at www.grizzly.com OR Call 1-800-523-4777

Figure 11. T23692 Orange Power Degreaser.

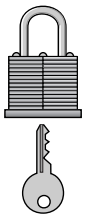
Site Considerations

Weight Load

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

Space Allocation

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



⚠CAUTION

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.

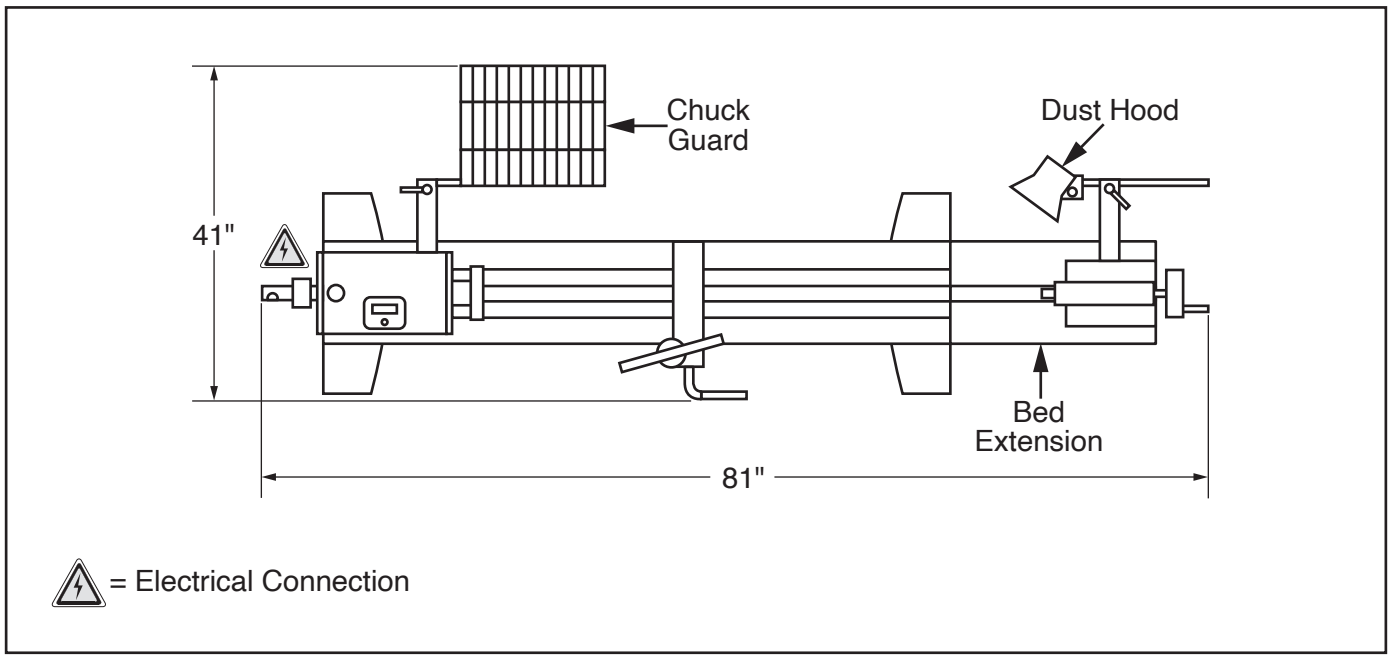


Figure 12. Minimum working clearances.

Anchoring to Floor

Number of Mounting Holes 4
Diameter of Mounting Hardware..... ½"

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

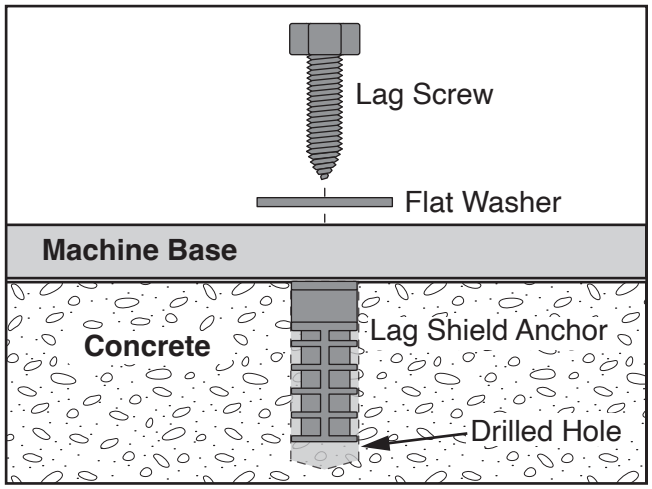


Figure 13. Popular method for anchoring machinery to a concrete floor.

Lifting & Placing

⚠WARNING

HEAVY LIFT!

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

The Model G0995 requires the use of lifting equipment such as a forklift, engine hoist, or boom crane. DO NOT attempt to lift or move machine without necessary assistance from other people. Each piece of lifting equipment must be rated for **at least 925 lbs.** to support dynamic loads that may be applied while lifting.

Review **Power Supply** section on **Page 12**, then prepare a permanent location for the lathe.

NOTICE

Position headstock towards center of bed before lifting. Headstock is heavy and may tip or roll bed over if not fully supported.

To lift and place machine:

1. Move crate to desired location.

2. Remove crate top and sides and any blocks around machine base, then unbolt machine from shipping pallet.

3. Remove any support straps, shipping brackets, loose parts, plastic wrap, and tie straps securing machine components.

   Note: *Shipping brackets securing machine components are unpainted.*

4. Loosen tool rest base lock lever and remove tool rest base from bed.

5. Loosen tailstock lock lever and remove tailstock from bed.

6. Move headstock to center of bed (see **Adjusting Headstock** on **Page 30**), then lock it in place (see **Figure 14**).

7. Route lifting straps around bed, as shown in **Figure 14**.

   Note: *Verify lifting straps are not blocking mounting holes on each end of bed, and that straps are not binding on components.*

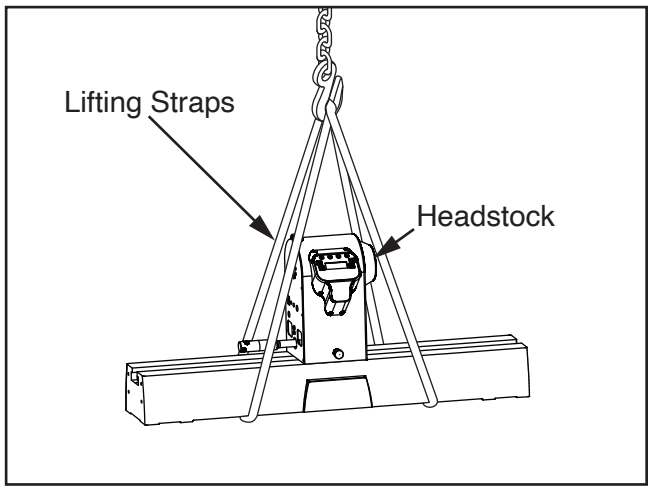


Figure 14. Headstock centered on bed.

8. With help from additional people, use lifting equipment to raise machine just enough to clear shipping pallet, then remove pallet.

9. Position stand legs upright approximately 44⅛" apart, and get them reasonably aligned (see **Figure 15**).

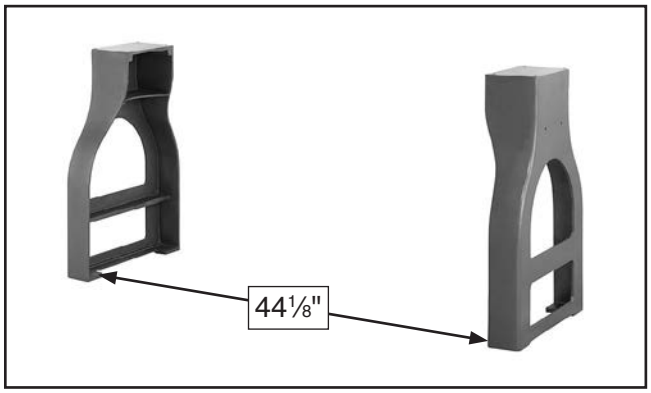


Figure 15. Example of stand legs upright.

10. Using lifting equipment, carefully position bed over top of stand legs and align mounting holes (see **Figure 16**).

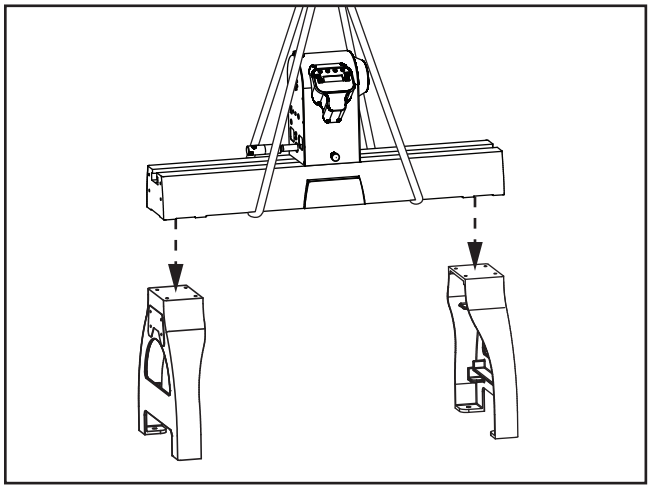


Figure 16. Bed positioned over stand legs.

11. Lower and secure bed to stand legs with (8) M10-1.5 x 35 cap screws and 10mm lock washers, as shown in **Figure 17**.

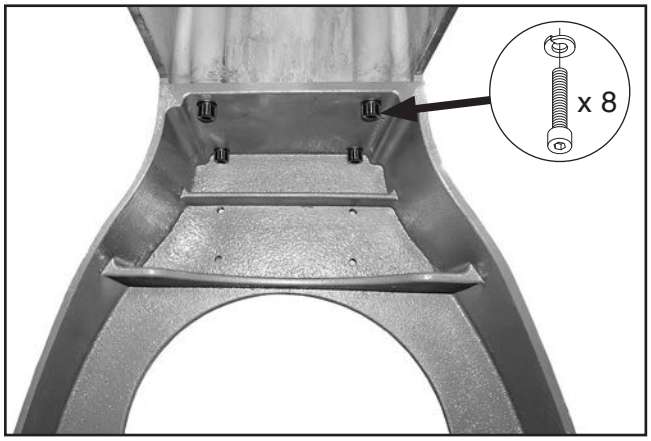


Figure 17. Bed secured to stand legs.

— If anchoring machine to floor, remove lifting equipment, then anchor machine as shown in **Anchoring to Floor** on **Page 19**. Proceed to **Assembly** once machine is anchored.

— If installing adjustable feet, proceed to **Step 12**.

12. Raise machine 4–5 inches in preparation for installing machine feet.

13. Remove top hex nut from each adjustable foot and insert feet in mounting holes in stand leg (see **Figure 18**), then thread top hex nut back on. DO NOT fully tighten hex nuts yet.

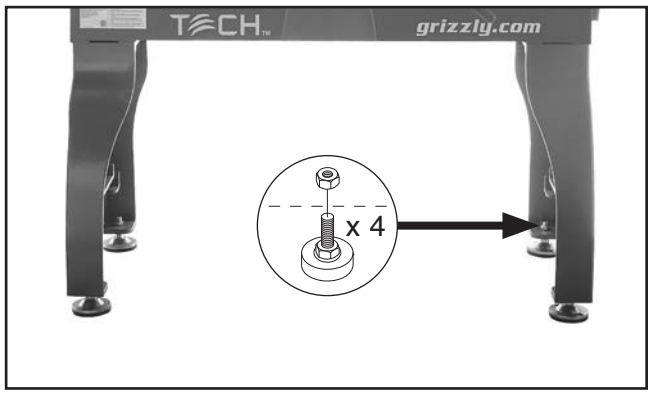


Figure 18. Adjustable feet installed in stand legs.

14. Lower machine to floor and remove lifting equipment.

15. Place level on bed, adjust bottom hex nuts on each adjustable foot to level bed, then tighten (4) top hex nuts to secure.

16. Proceed to **Assembly**.

Assembly

⚠WARNING

HEAVY LIFT!

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

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 machine:

1. Move headstock to left end of bed (see **Adjusting Headstock** on **Page 30**), then lock it in place.

2. Loosen tool rest base lock lever (see **Adjusting Tool Rest** on **Page 34**).

3. Install tool rest base on bed by aligning clamp plate with bedway (see **Figure 19**). Verify tool rest base slides smoothly along bedway, then tighten lock lever to secure.

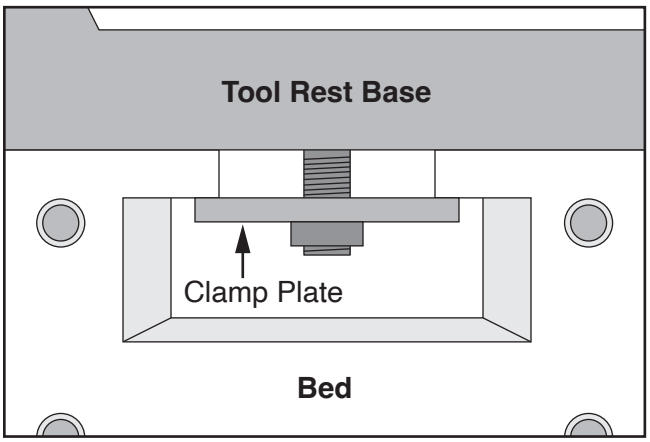


Figure 19. Clamp plate aligned with bedway.

4. Loosen tailstock lock lever (see **Adjusting Tailstock** on **Page 32**).

5. Install tailstock on bed by aligning clamp plate with bedway. Verify tailstock slides smoothly along bedway, then tighten lock lever to secure (see **Figure 20**).

Figure 20. Installing tailstock on bed.

6. Install angle bracket on chuck guard and tighten set screw against flat side of chuck guard stem to secure (see **Figure 21**).

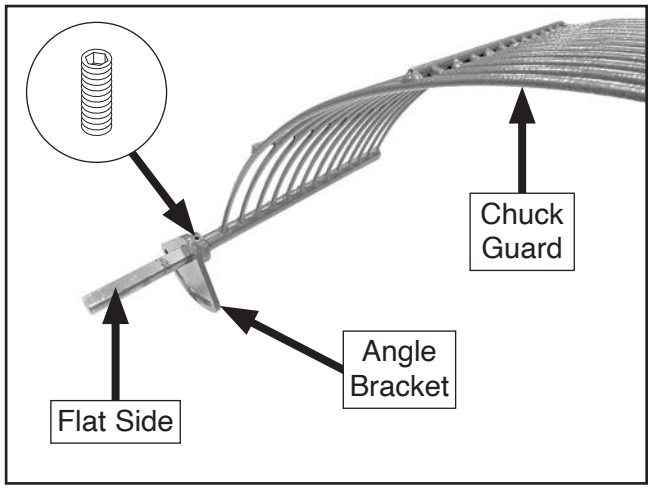


Figure 21. Angle bracket installed on chuck guard.

7. Remove lower lock lever and flat washer, loosen upper lock lever, then insert chuck guard through headstock mounting arm (see **Figure 22**).

8. Install lower lock lever and flat washer (see **Figure 22**).

9. Install position bushing on chuck guard and tighten set screw to secure (see **Figure 22**).

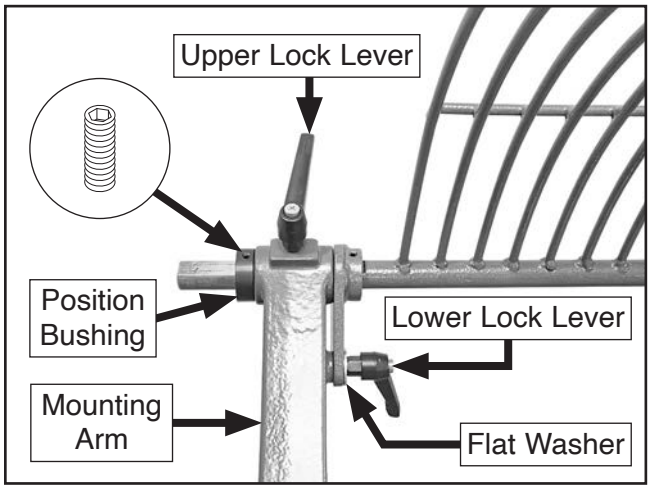


Figure 22. Location of chuck guard components.

10. Loosen upper and lower lock levers and move chuck guard through its full range of motion, then tighten levers to secure (see **Figure 23**).

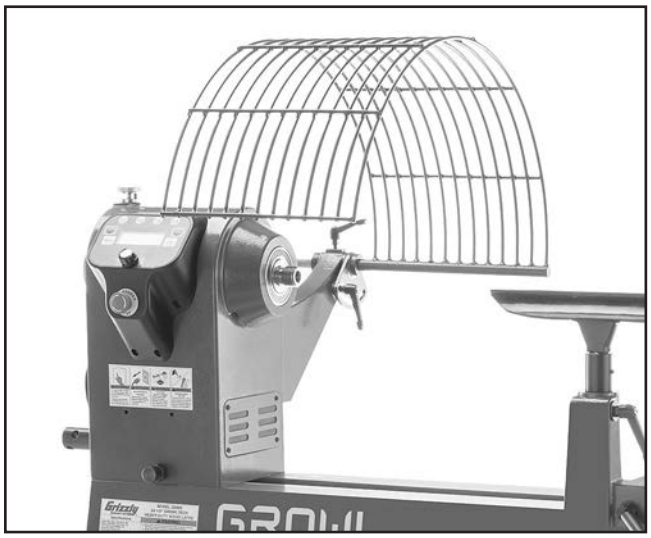


Figure 23. Chuck guard installed.

11. Fully loosen hose clamp and insert through clamp mount, then tighten hose clamp a few turns to reconnect (see **Figure 24**).

12. Insert (1) carriage bolt through clamp mount and mounting rod, then secure to knob (see **Figure 24**).

Note: *Mounting rod has a flat side at fastener hole that should be facing clamp mount.*

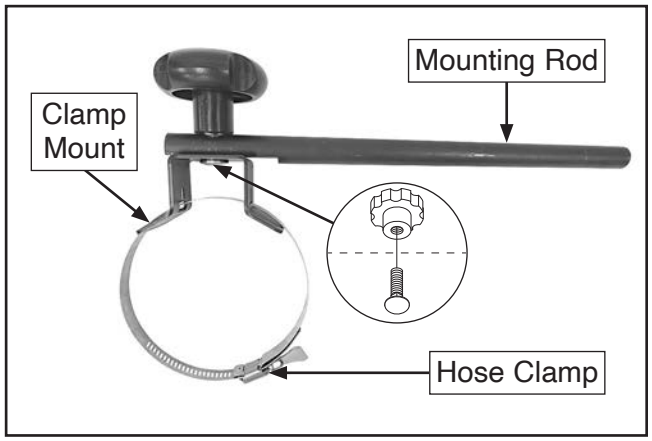


Figure 24. Mounting rod connected to clamp mount.

13. Install dust hood in hose clamp and tighten hose clamp until secure (see **Figure 25**).

14. Install (1) lock bushing into rod coupler and align bushing holes with large holes, then insert dust hood assembly through bushing (see **Figure 25**).

15. Install (1) lock lever with flat washer in small hole on rod coupler and bushing, then tighten to secure (see **Figure 25**).

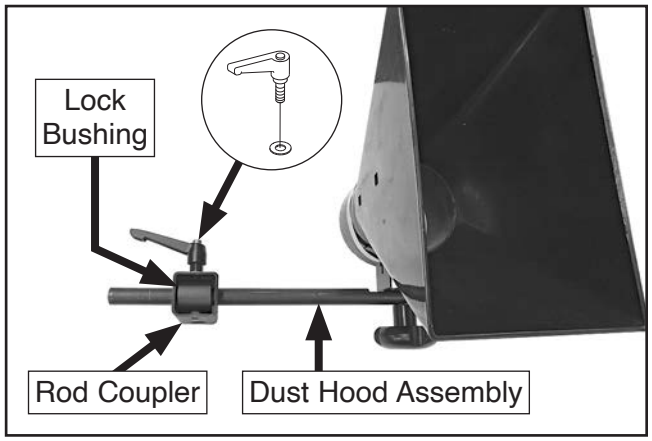


Figure 25. Dust hood assembled.

16. Loosen tailstock mounting arm lock lever and install extension rod with thin end towards headstock, then tighten lock lever to secure (see **Figure 26**).

17. Install (1) lock bushing horizontally into rod coupler and align bushing holes with large holes, then insert extension rod through bushing (see **Figure 26**).

18. Install (1) lock lever with flat washer in small hole on rod coupler and lock bushing, then tighten to secure (see **Figure 26**).

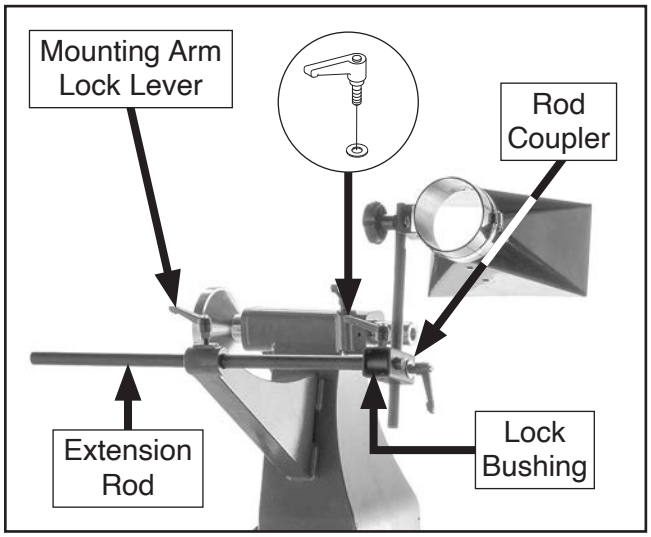


Figure 26. Attaching dust hood assembly.

19. Loosen lock levers as needed and adjust dust hood assembly as desired, then tighten levers to secure (see **Figure 27**).

Figure 27. Dust hood assembly installed.

20. Loosen swing-away bed wing knob (see **Figure 28**) to unlock and release swing-away bed.

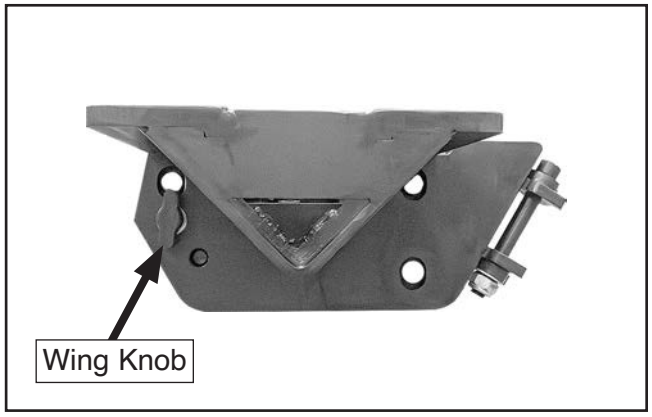


Figure 28. Location of swing-away bed wing knob.

21. Place swing-away bed on right end of bed and secure with (3) M10-1.5 x 25 cap screws (see **Figure 29**). Do not fully tighten cap screws at this time.

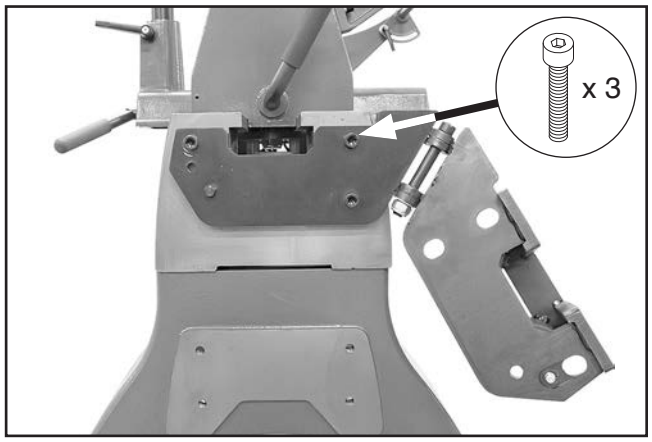


Figure 29. Swing-away bed mounted on right end of bed.

22. Place a straightedge across both bedways to check if they are flush and adjust swing-away bed as needed, then fully tighten cap screws installed in **Step 21**.

Note: *This is a process of trial-and-error. Be patient and take your time when adjusting bedways. When you are finished, tailstock should slide smoothly across seam where bedways meet.*

23. Hand thread (4) M10-1.5 x 30 cap screws halfway in bed extension mounting holes on left stand leg (see **Figure 30**).

Note: *Holes on bed extension are elongated and provide enough clearance to install extension without having to completely remove cap screws in mounting holes.*

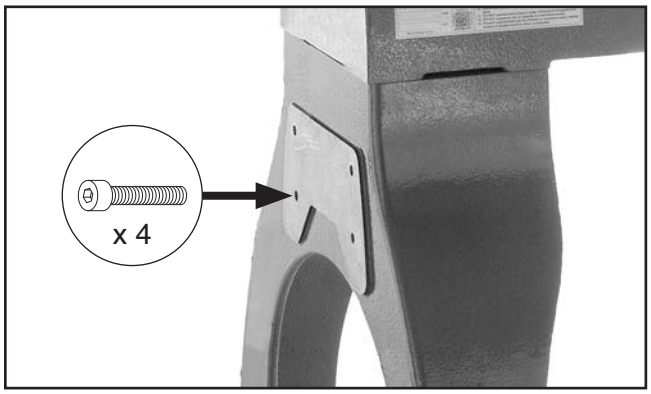


Figure 30. Outboard bed extension stand mounting holes.

24. With help from additional person, install bed extension on (4) cap screws installed in **Step 23**, then fully tighten cap screws as shown in **Figure 31**.

Figure 31. Bed extension mounted on outboard end of stand leg.

Installing Storage Shelves

The leg castings on the Model G0995 feature mounting brackets that provide support for a variety of shelving options.

Shelving Option One

Items Needed **Qty**
2x6s 51" Long..... 2

To install shelving option one:

1. Set (2) 2x6 boards side by side in upper brackets of leg castings (see **Figure 32**).

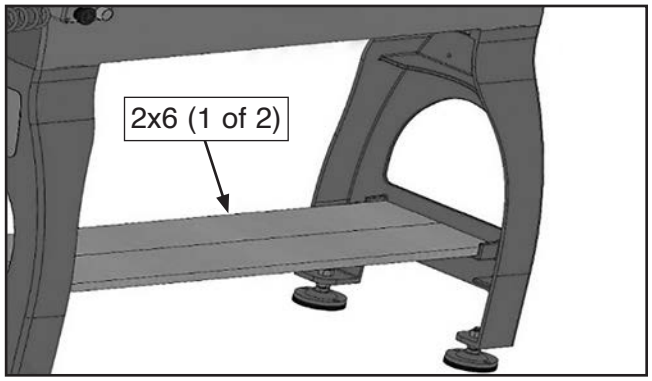


Figure 32. Boards positioned in brackets.

Shelving Option Two

Items Needed **Qty**
2x4s (or 2x6s) 51" Long..... 2
Plywood Board 1
Wood Screws ..... As Needed

To install shelving option two:

1. Set two 2x4 (or 2x6) boards on edge in lower brackets of leg castings (see **Figure 33**).

2. Cut plywood board (see **Figure 33**) to fit flush with outside edges of 2x4s and secure with wood screws.

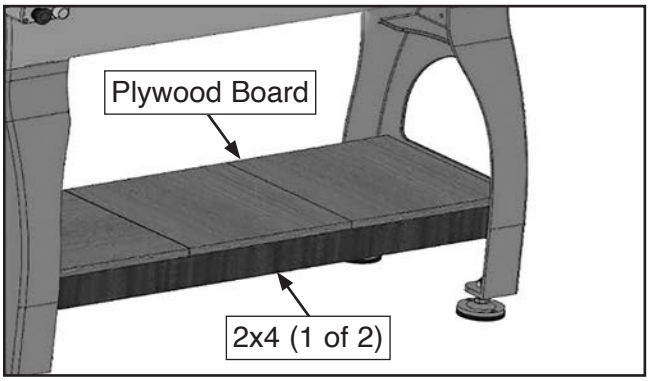


Figure 33. Boards installed and secured.

Shelving Option Three

Items Needed **Qty**
2x6s 51" Long..... 2
Wood Dowels 5/8" x 4'..... 7
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 5/8" holes all the way through board. This board will be installed on rear of lathe (see **Figure 34**). On other 2x6, drill holes only deep enough to secure dowel rods. This board will be installed in front.

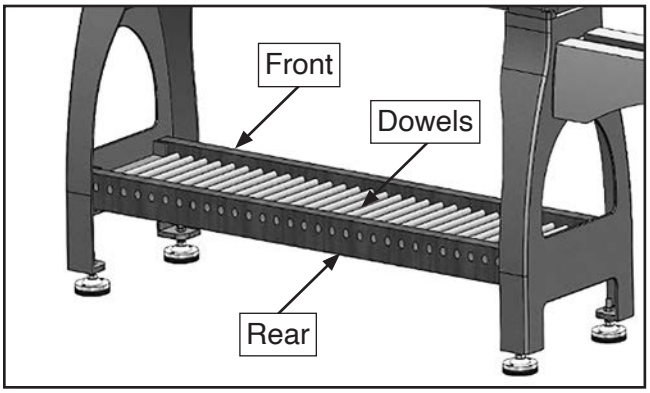


Figure 34. Boards and dowels installed.

3. Place 2x6s on edge in lower brackets of leg castings.

4. Cut dowel rods to length so that after insertion dowels will be flush with back of rear 2x6.

5. Insert (1) dowel in each hole in rear 2x6, then screw a strip of wood over holes to secure them in place.

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 EMERGENCY STOP button works correctly.

⚠WARNING

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

⚠WARNING

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

To test run machine:

1. Clear all setup tools away from machine.

2. Press EMERGENCY STOP button in, disengage spindle lock pin, and move ON/OFF switch to OFF position.

3. Connect machine to power by inserting power cord plug into a matching receptacle.

4. Place foot switch in an easily accessible area near control panel.

5. Twist EMERGENCY STOP button clockwise until it springs out (see **Figure 35**). This resets button so spindle can start.

Figure 35. Resetting EMERGENCY STOP button.

6. Move ON/OFF switch to ON position.

   — Display will show warnings for safe use, then a BRAKING ENABLED safety warning will appear as a reminder to tighten set screws on faceplate, if installed (see **Figure 36**).

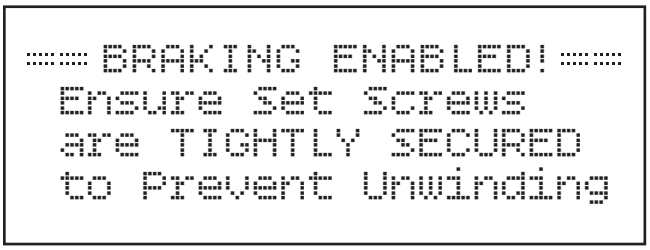


Figure 36. BRAKING ENABLED warning screen.

7. Press any control panel button to clear BRAKING ENABLED warning.

   — Display will show home screen, as shown in **Figure 37**.

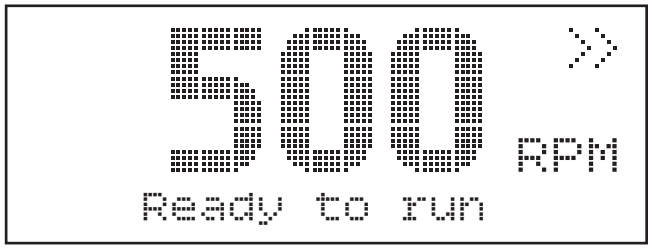


Figure 37. Home screen on digital display.

8. Press ON button to activate spindle controls.

   — Display will show current speed setting and direction of spindle rotation for 1–2 seconds (see **Figure 38**).

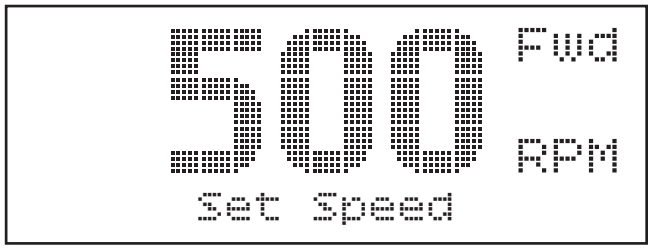


Figure 38. Spindle ON screen.

9. Press and hold foot switch down to turn spindle motor ***ON*** and begin spindle rotation. Verify motor starts up and runs smoothly without any unusual problems or noises.

   — Display will show spindle speed increasing to current speed setting (see **Figure 39**).

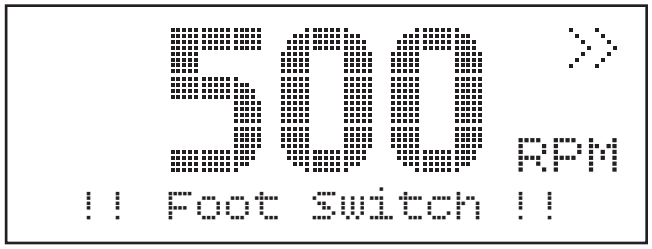


Figure 39. Spindle operating screen.

10. Verify spindle speed dial is operating correctly by slowly turning dial clockwise and counterclockwise.

    — Rotate spindle speed dial *clockwise* to increase speed.

    — Rotate spindle speed dial *counterclockwise* to decrease speed.

11. Release foot switch to turn spindle motor ***OFF***, then press OFF button to deactivate spindle controls.

12. Wait for spindle to come to a complete stop, then press F/R button to reverse spindle direction.

    — Display will show direction arrows pointing left (see **Figure 40**).

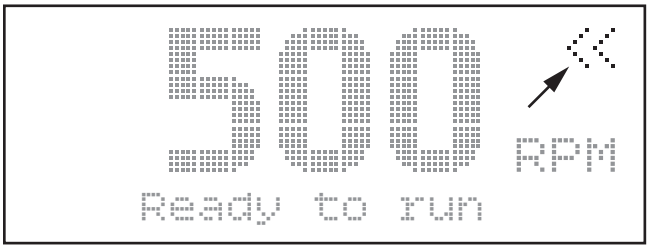


Figure 40. Spindle direction reversed.

13. Press ON button to activate spindle controls.

    — Display will show warning that spindle direction has been reversed, as shown in **Figure 41**.

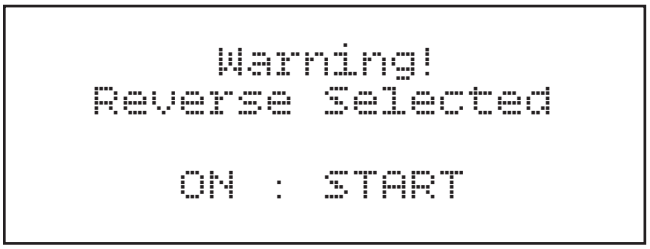


Figure 41. Spindle reversed warning screen.

14. Press ON button again to confirm direction change, then press and hold foot switch down to turn spindle motor ***ON*** and begin spindle rotation. Verify motor starts up and runs smoothly without any unusual problems or noises.

— Display will show spindle speed increasing to current speed setting (see **Figure 42**).

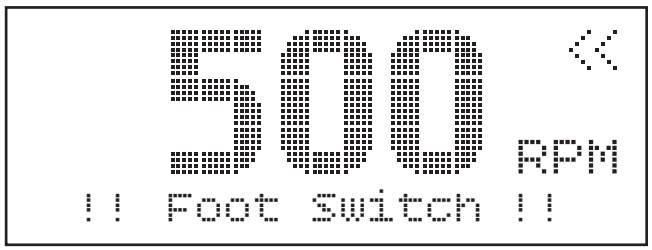


Figure 42. Spindle operating screen.

15. Release foot switch to turn spindle motor ***OFF***, then press OFF button to deactivate spindle controls.

16. WITHOUT pressing ON button, try to start spindle motor by pressing foot switch. Motor should not start.

— Display will show home screen, as shown in **Figure 43**.

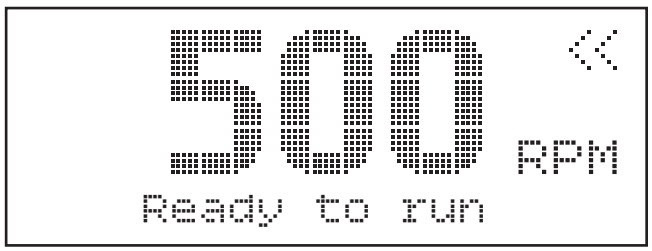


Figure 43. Home screen on digital display.

— If motor *does not* start, safety feature of foot switch control is working correctly. Proceed to **Step 17**.

— If motor *does* start, immediately turn it ***OFF*** and disconnect power. Safety feature of foot switch control is NOT working properly and must be corrected before further using machine.

17. Press ON button to activate spindle controls, then press and hold foot switch down to turn spindle motor ***ON*** and begin spindle rotation.

18. Press EMERGENCY STOP button to turn spindle motor ***OFF*** and stop spindle rotation.

19. WITHOUT resetting EMERGENCY STOP button, try to start spindle motor by pressing ON button, then pressing and holding foot switch down. Motor should not start.

— If motor *does not* start, safety feature of EMERGENCY STOP button is working correctly. Congratulations! Test Run is complete.

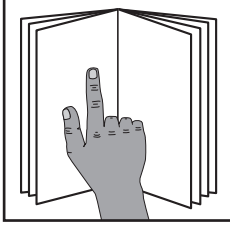
— If motor *does* start, immediately turn it ***OFF*** and disconnect power. Safety feature of EMERGENCY STOP button is NOT working properly and must be replaced before further using machine.

SECTION 4: OPERATIONS

Operation Overview

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

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

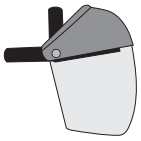


⚠WARNING

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

⚠WARNING

Eye injuries or respiratory problems can occur while operating this machine. 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:

1. Examines workpiece to make sure it is suitable for turning. No extreme bows, knots, or cracks should exist.
2. Prepares and trims 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 according to type of operation, and sets minimum clearance between workpiece and lip of tool rest to ¼" gap.
5. Ensures spindle lock pin is UNLOCKED.
6. Rotates workpiece by hand to verify spindle and workpiece rotate freely throughout full range of motion.
7. Ties back long hair and clothing, puts on safety glasses, face shield, and respirator, then lowers chuck guard.
8. Turns machine ***ON***.
9. Verifies spindle direction is set to forward (FWD) or reverse (REV), and spindle speed is correctly set for operation.
10. Turns dust collection ***ON***.
11. Turns spindle motor ***ON*** and carefully begins turning operation, keeping chisel against tool rest entire time it is cutting.
12. Turns spindle motor ***OFF*** and waits for spindle rotation to stop.
13. Turns machine ***OFF*** when operations are completed.

Workpiece Inspection

Some workpieces are not safe to turn or may require modification before they are safe to turn. **Before turning, 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 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!

- ***Wet or "Green" Stock:***
  Turning wood with a moisture content over 20% can cause increased wear on tooling.

Adjusting Headstock

The headstock on this lathe 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 headstock in place. The headstock can be positioned anywhere along the lathe bed.

The Model G0995 headstock also rotates 180º to face outboard for oversized turning operations. When the pivot pin on the front of the headstock is released, turning the headstock will engage the pivot pin at 0°, 45°, 90°, 135°, and 180°.

⚠WARNING

Always operate lathe with headstock firmly locked to bed, and headstock pivot pin engaged. If headstock unexpectedly moves during operation, your hand could be drawn into spinning workpiece, resulting in death or crushing injuries.

Positioning Headstock

1. DISCONNECT MACHINE FROM POWER!

2. Insert headstock lock bar into lock arm and turn counterclockwise to loosen headstock clamping plate (see **Figure 44**).

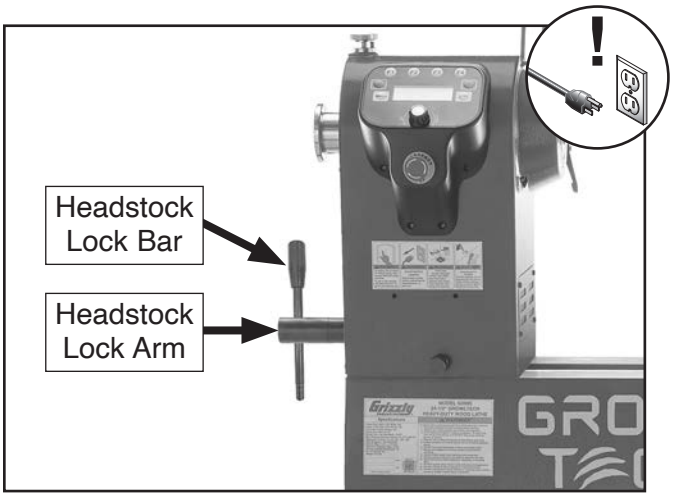


Figure 44. Location of headstock locking components.

3. Slide headstock to desired location on bed, and turn headstock lock bar clockwise to secure headstock in position.

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

Rotating Headstock

1. DISCONNECT MACHINE FROM POWER!

2. Insert headstock lock bar into lock arm and turn counterclockwise to loosen headstock clamping plate (see **Figure 45**).

3. Pull headstock pivot pin out to release pivot lock (see **Figure 45**).

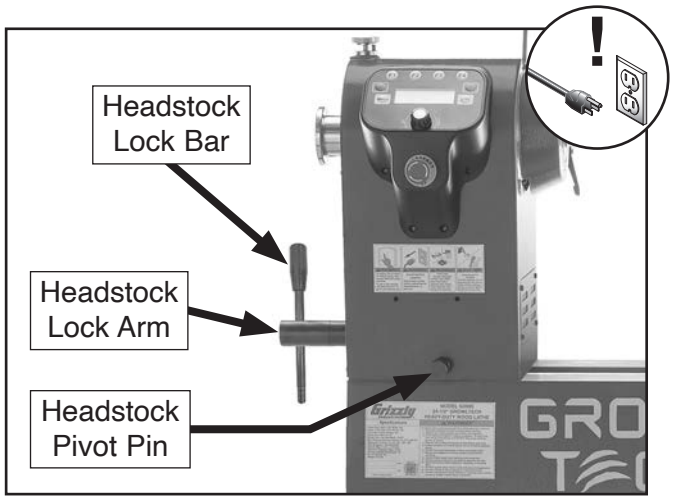
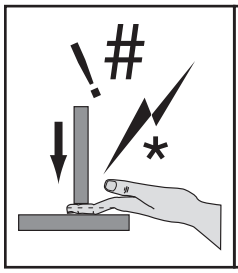


Figure 45. Location of headstock rotation components.



⚠CAUTION

DO NOT place hands or fingers between bedways when rotating headstock. Pinching or crushing injuries could occur.

4. Rotate headstock clockwise until pivot pin engages at desired rotational stop shown in **Figure 46**.

Note: *Headstock can also be positioned along length of bed during this procedure.*

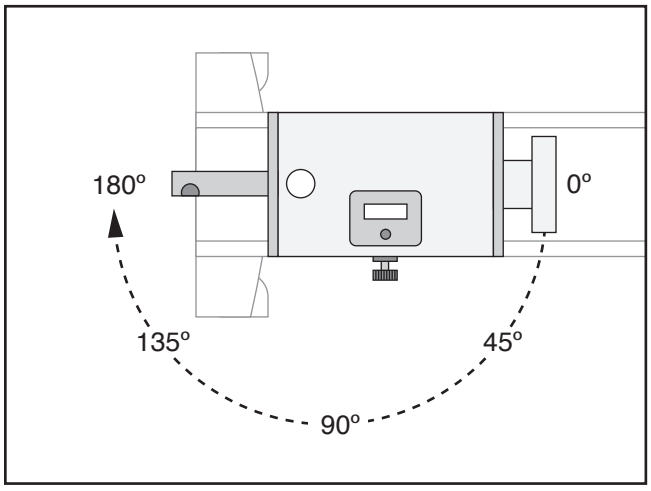


Figure 46. Headstock rotation stops.

5. Slide headstock to desired location on bed, and turn headstock lock bar clockwise to secure headstock in position.

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

Adjusting Tailstock

The Model G0995 tailstock is equipped with a cam-action clamping system to secure it to the lathe bed. When the lever is tightened, a clamping plate lifts up underneath the bed and secures the tailstock in place. The tailstock can be positioned anywhere along the lathe bed, bed extension, and swing-away bed.

⚠WARNING

If clamping plate is not tight enough for lock lever to fully secure tailstock base, it could unexpectedly slip during operation and workpiece could be ejected at high speed. Failure to heed this warning could result in serious personal injury.

⚠WARNING

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

To adjust tailstock:

1. Loosen tailstock lock lever and move tailstock to desired position (see **Figure 47**).

   Note: *For tailstock adjustments on swing-away bed, refer to* ***Using Tailstock Swing-Away Bed*** *on* ***Page 33****. For tailstock adjustments on bed extension, refer to* ***Outboard Turning*** *on* ***Page 48****.*

Figure 47. Location of tailstock lock lever.

2. Tighten tailstock lock lever to secure.

   Note: *Large clamping plate and lock nut underneath tailstock will require occasional adjusting to ensure proper clamping pressure of tailstock to bed. Turn this lock nut in small increments to fine-tune clamping pressure.*

Using Tailstock Swing-Away Bed

The swing-away bed allows the tailstock to be quickly moved away from the main bed. When released, the swing-away bed pivots down towards the rear of the machine.

Tools Needed	Qty
Hex Wrench 8mm	1
Straightedge 12"	1

Installing Swing-Away Bed

1. DISCONNECT MACHINE FROM POWER!

2. Loosen swing-away bed wing knob to unlock and release swing-away bed, as shown in **Figure 48**.

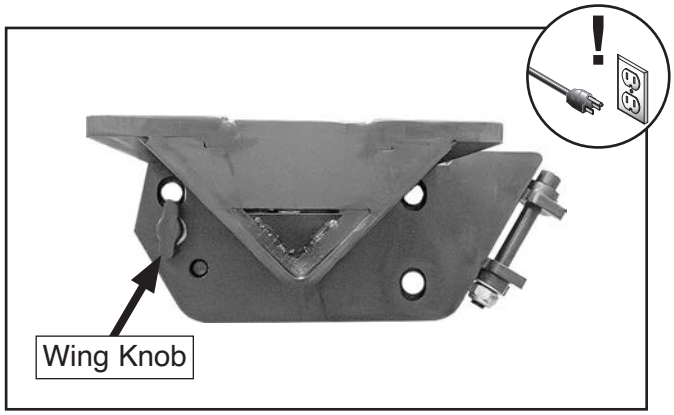


Figure 48. Location of swing-away bed wing knob.

3. Place swing-away bed on right end of bed and secure with (3) M10-1.5 x 25 cap screws (see **Figure 49**).

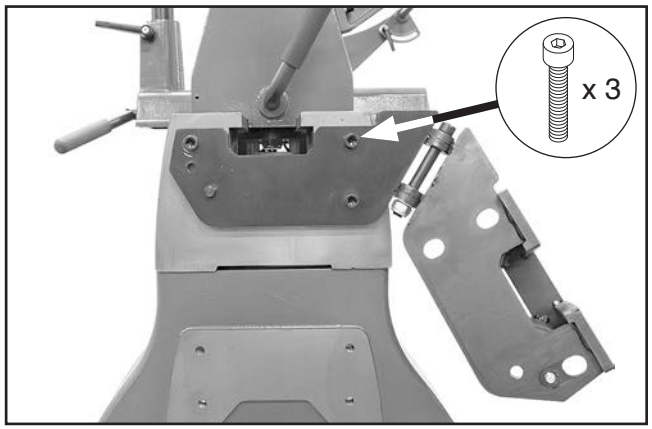


Figure 49. Mounting swing-away bed.

4. Close and secure swing-away bed, then place a straightedge across both bedways to check if they are flush. Adjust swing-away bed as needed.

   Note: *This is a process of trial-and-error. Be patient and take your time when adjusting bedways. When you are finished, tailstock should slide smoothly across seam where bedways meet.*

Locking/Unlocking Swing-Away Bed

⚠CAUTION

Damage to machine or serious personal injury could occur if swing-away bed is released too quickly. Always provide support to swing-away bed after it is unlocked to prevent damaging machine or yourself.

To lock and unlock swing-away bed:

1. Loosen tailstock lock lever, move tailstock to swing-away bed, then tighten lock lever.

2. With one hand supporting tailstock, loosen swing-away bed wing knob to unlock and release swing-away bed (see **Figure 50**).

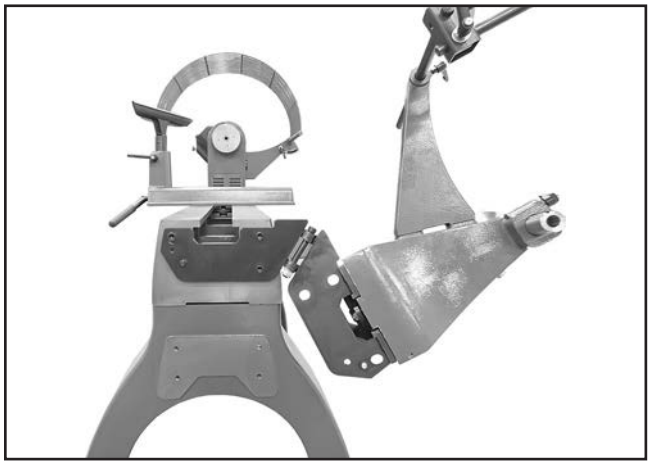


Figure 50. Swing-away bed released.

3. Carefully lower tailstock and swing-away bed, then perform desired operation.

4. Once operation is complete, carefully raise tailstock and swing-away bed, then tighten wing knob to secure.

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 left/right 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 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 ⅛" above or below the centerline of the workpiece, depending on their height, the type of tool they are using, and the type of operation they are 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 to provide 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.

⚠WARNING

If clamping plate is not tight enough for lock lever to fully secure tool rest base, or lock handle is not tight enough to fully secure tool rest, they could unexpectedly slip during operation and draw turning tool and your hand into spinning workpiece. Failure to heed this warning could result in serious personal injury.

Adjusting Tool Rest Base

1. Loosen tool rest base lock lever and move tool rest base to desired position on lathe bed, as shown in **Figure 51**.

Note: *To maximize support, tool rest base should always be locked on both sides of bed. Never pull tool rest so far back that it is only secured on one side.*

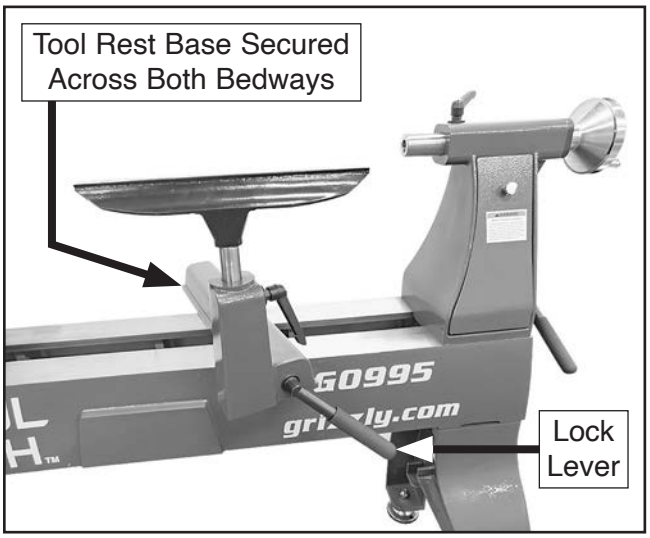


Figure 51. Tool rest base controls.

2. Rotate tool rest base lock lever until it feels tight to secure tool rest base on bed.

   Note: *Large clamping plate and lock nut underneath tool rest base will require occasional adjusting to ensure proper clamping pressure of tool rest assembly to bed. Turn this lock nut in small increments to fine tune clamping pressure as needed.*

Removing Tool Rest Base

1. DISCONNECT MACHINE FROM POWER!

2. Use tailstock swing-away bed to remove tailstock from bed (see **Using Tailstock Swing-Away Bed** on **Page 33**).

3. Loosen tool rest base lock lever and remove tool rest base from bed.

Installing Tool Rest Base

1. DISCONNECT MACHINE FROM POWER!

2. Use tailstock swing-away bed to remove tailstock from bed (see **Using Tailstock Swing-Away Bed** on **Page 33**).

3. Loosen tool rest base lock lever.

4. Install tool rest base on bed by aligning clamp plate under bedway (see **Figure 52**).

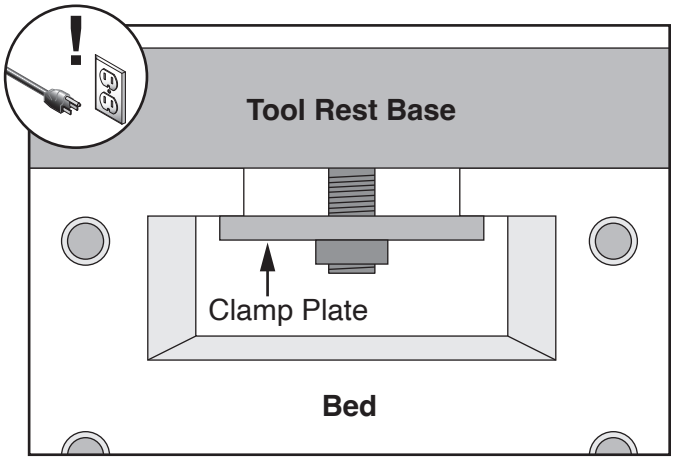


Figure 52. Clamp plate aligned under bedway.

5. Verify tool rest base slides smoothly along bedway, then tighten lock lever to secure.

Adjusting Tool Rest Height

A tool rest collar is included to provide adjustment support when the tool rest base is installed on the bed extension in the center mounting position. A tool rest extension is also included for operations involving outboard turning (see **Outboard Turning** on **Page 48**).

Tool Needed	Qty
Hex Wrench 4mm	1

To adjust tool rest height:

1. Loosen tool rest lock handle (see **Figure 53**).

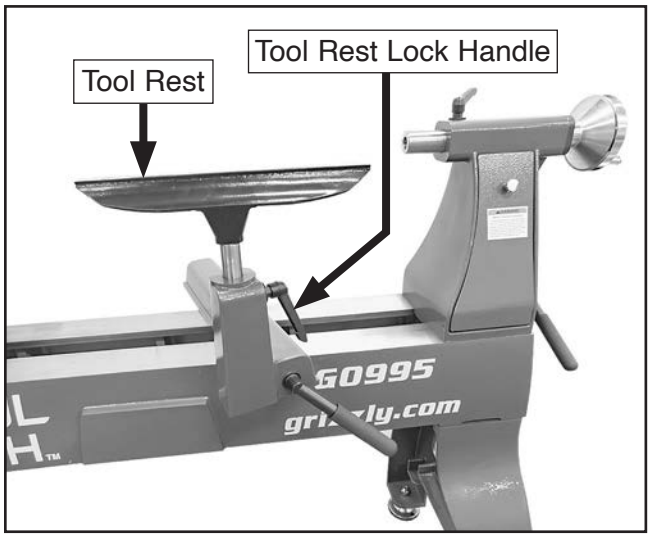


Figure 53. Tool rest controls.

2. Position tool rest at desired height.

3. Tighten tool rest lock handle to secure tool rest in position.

Using Tool Rest Collar

The tool rest collar helps maintain tool rest height when the tool rest is moved or rotated.

To use tool rest collar:

1. Loosen tool rest lock handle and remove tool rest (see **Figure 53**).

2. Loosen set screw on tool rest collar and install over tool rest stem (see **Figure 54**).

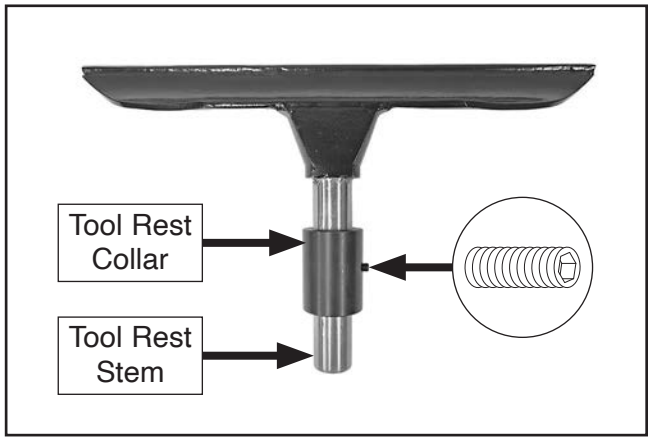


Figure 54. Tool rest collar installed on stem.

3. Install tool rest with collar in tool rest base and position as desired, then tighten set screw to secure collar.

4. Tighten tool rest lock handle to secure tool rest.

Using Tool Rest Extension

The tool rest extension increases the height of the tool rest when outboard turning. With the bed extension mounted to either stand leg, use the tool rest extension to help bring the tool rest up to the spindle centerline.

To use tool rest extension:

1. Loosen tool rest lock handle and remove tool rest.

2. Loosen set screw on tool rest extension and install extension stem, then tighten set screw to secure (see **Figure 55**).

3. Loosen tool rest extension lock handle (see **Figure 55**).

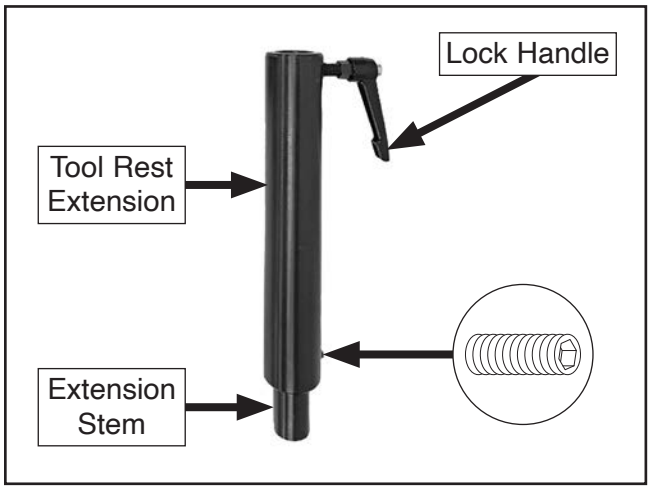


Figure 55. Tool rest extension components.

4. Install tool rest extension in tool rest base and tighten tool rest lock handle to secure (see **Figure 56**).

5. Install tool rest in extension and tighten extension lock handle to secure tool rest position (see **Figure 56**).

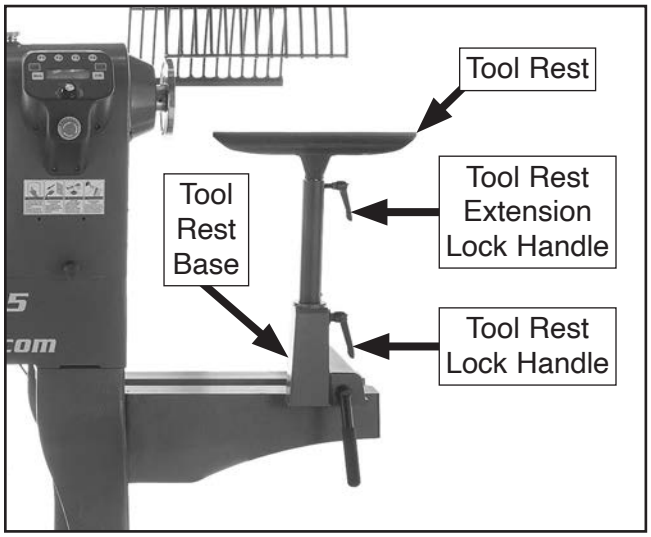


Figure 56. Tool rest extension installed.

Installing/Removing Headstock Center

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

Note: *Faceplate does not need to be removed to install center.*

Items Needed	Qty
Leather Gloves	1 Pair
Clean Rag	1
Knockout Tool	1
Acetone/Lacquer Thinner	As Needed

Installing Headstock Center

1. DISCONNECT MACHINE FROM POWER!

2. Make sure mating surfaces of center and spindle are free of debris and oily substances before inserting center to ensure a good fit and reduce runout.

3. Insert tapered end of center into spindle, and push it in with a quick, firm motion, as shown in **Figure 57**.

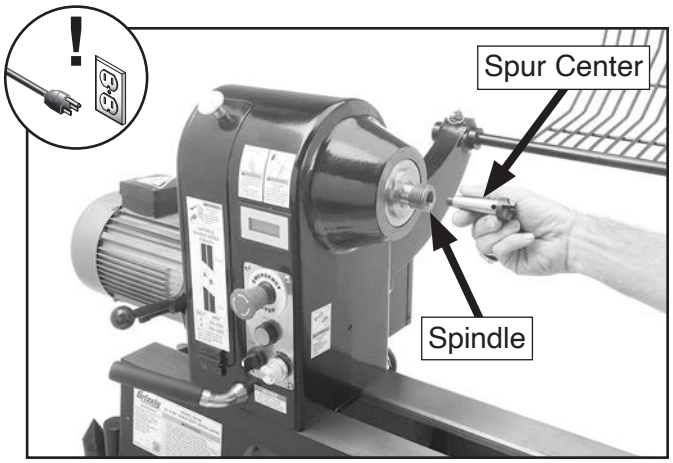


Figure 57. Example of installing center in headstock spindle.

4. Make sure 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!

2. Hold a clean rag under spindle or wear leather glove to catch center when you remove it.

3. Insert knockout tool through outbound end of spindle and firmly tap back of center, catching it as it falls (see **Figure 58**).

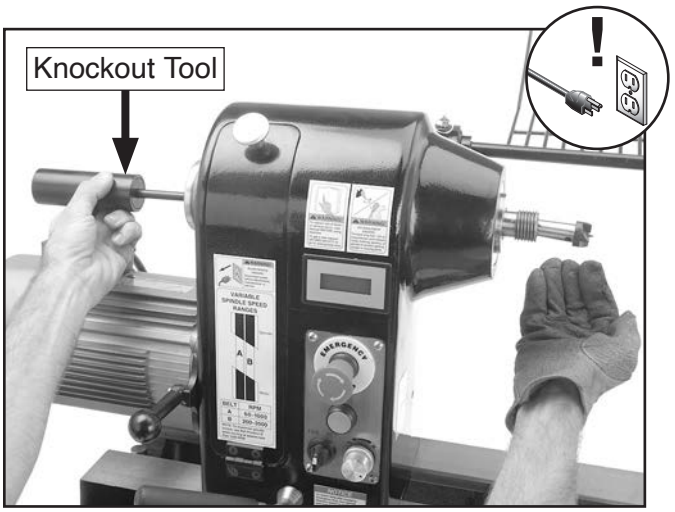


Figure 58. Example of removing headstock center with knockout tool.

Installing/Removing Tailstock Center

⚠WARNING

Tailstock quill must always be locked in place during lathe operation. Before tightening quill lock handle, quill keyway must be properly aligned. Otherwise, workpiece can be ejected from lathe at high speed causing serious personal injury or death.

The included live center installs into the tailstock quill with an MT#2 tapered fit. The Model G0995 tailstock includes a self-ejecting quill that releases the center when the tailstock handwheel is rotated counterclockwise.

Items Needed	Qty
Leather Gloves	1 Pair
Clean Rag	1
Acetone/Lacquer Thinner	As Needed

Installing Tailstock Center

1. Loosen quill lock handle and rotate tailstock handwheel until quill extends about 1", as shown in **Figure 59**.

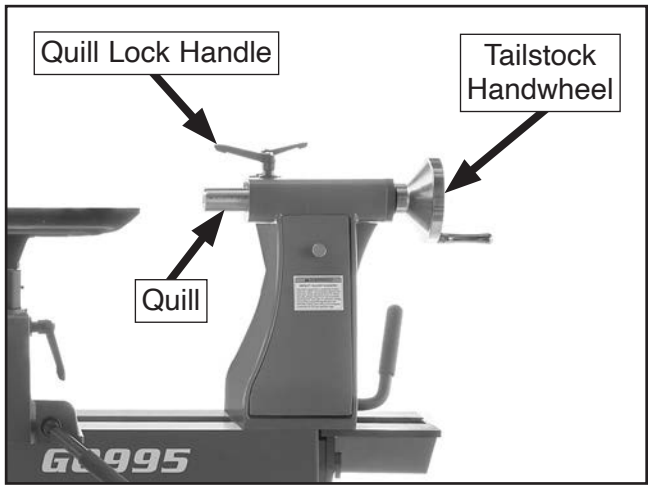


Figure 59. Location of tailstock components.

2. Make sure mating surfaces of center and quill are free of debris and oily substances before inserting center to ensure a good fit and reduce runout.

3. Firmly insert tapered end of center into tailstock quill (see **Figure 60**).

4. Verify quill set screw is aligned with quill keyway to ensure tailstock center and quill will not freely rotate under load (see **Figure 60**).

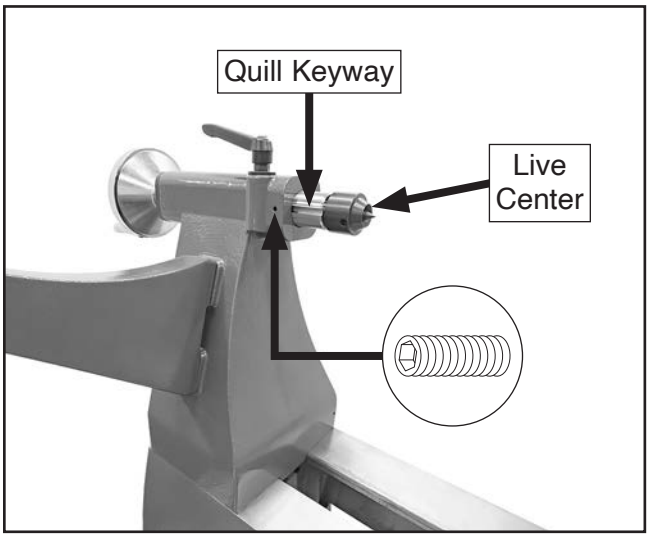


Figure 60. Center installed in tailstock.

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

6. Secure quill in place by tightening quill lock handle.

Removing Tailstock Center

1. Loosen quill lock handle.

2. Hold a clean rag under spindle or wear a glove to catch center when you remove it.

3. Rotate tailstock handwheel counterclockwise until center is forced out of quill.

Installing/Removing Faceplate

These instructions cover removing and installing the faceplate. To mount a workpiece to your faceplate, see **Faceplate Turning** on **Page 47**.

Tools Needed	Qty
Hex Wrench 4mm	1
Spindle Wrench 46mm	1

Removing Faceplate

1. DISCONNECT MACHINE FROM POWER!

2. Rotate spindle lock pin to UNLOCKED position (see **Figure 61**).

3. Loosen (2) set screws on faceplate, as shown in **Figure 61**.

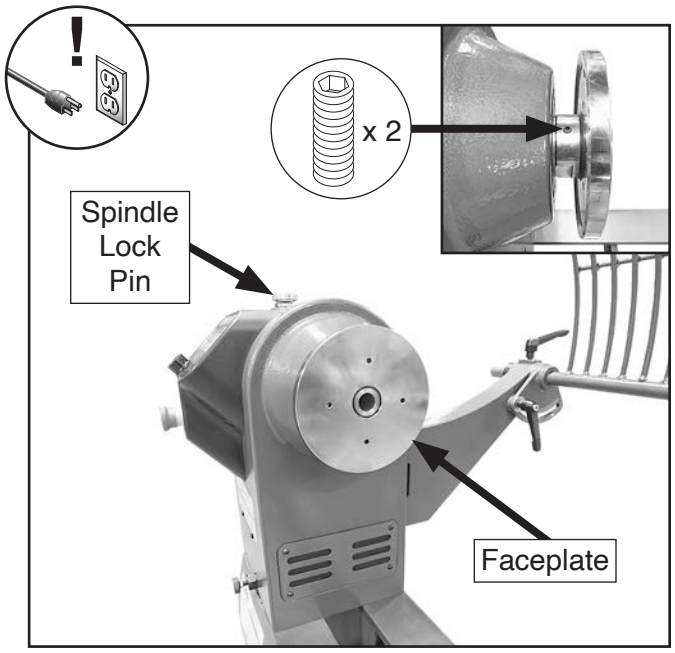


Figure 61. Faceplate installed on spindle.

4. Rotate faceplate counterclockwise until it is removed.

   Note: *If spur center is installed, it will remain in place during this process.*

5. Disengage spindle lock pin before resuming operations.

⚠WARNING

To prevent faceplate and workpiece separating from spindle during operation, headstock faceplate MUST be firmly threaded onto spindle and secured in place by fully tightening (2) faceplate set screws. If these instructions are not properly performed, serious personal injury could occur.

NOTICE

Do not start spindle rotation with spindle lock pin in LOCKED position, or machine damage could occur.

Installing Faceplate

1. DISCONNECT MACHINE FROM POWER!

2. Rotate spindle lock pin to LOCKED position (see **Figure 61**).

3. Loosen (2) set screws on faceplate, then thread faceplate clockwise onto spindle shaft until faceplate is secure against shoulder on spindle shaft (see **Figure 61**).

4. Tighten (2) set screws on faceplate to secure.

5. Rotate spindle lock pin to UNLOCKED position before resuming operations.

Indexing

NOTICE

Do not start spindle rotation with spindle lock pin in LOCKED position, or machine damage could occur.

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 spindle lock pin into one of the 24 indices of the spindle, the workpiece can be positioned in 15° increments, as shown in **Figure 62**. A clear sight gauge is included on the Model G0995 for visual confirmation of the numbered index (see **Figure 63**).

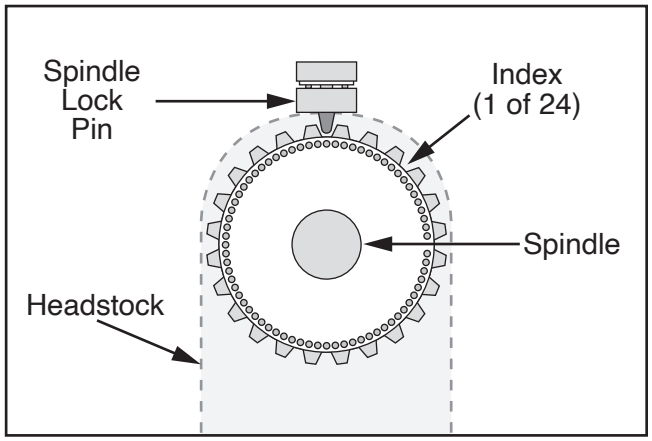


Figure 62. Indexing configuration.

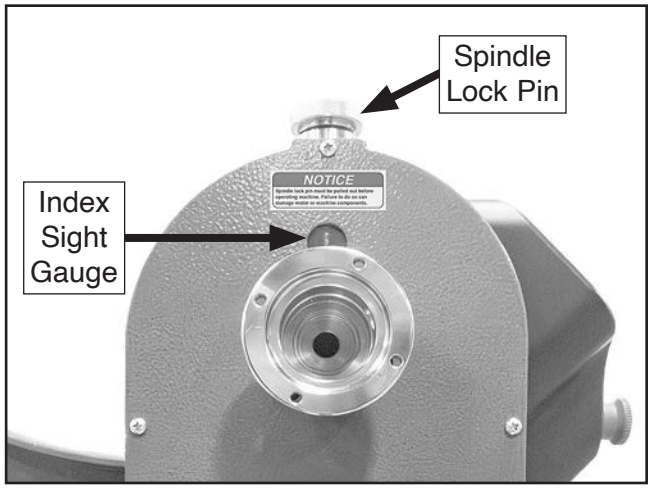


Figure 63. Spindle indexing components.

Locking Index

1. DISCONNECT MACHINE FROM POWER!

2. Lift spindle lock pin until support pin separates from support hole (see **Figure 64**).

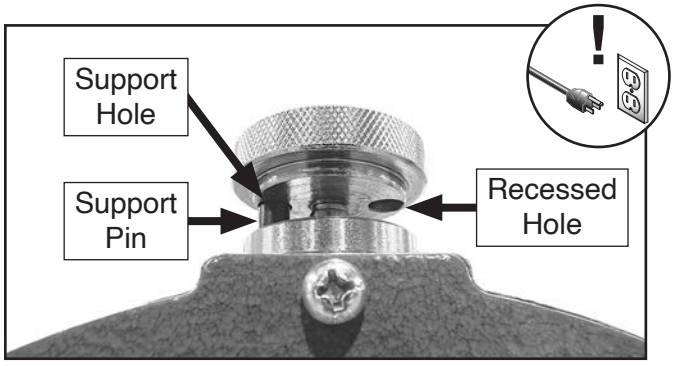


Figure 64. Spindle lock pin UNLOCKED.

3. Rotate spindle lock pin to LOCKED position and release (see **Figure 65**).

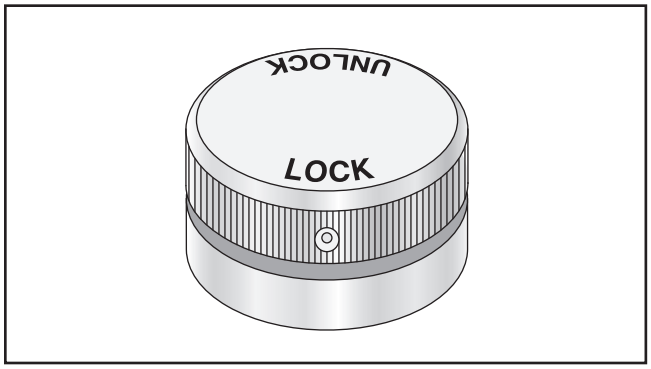


Figure 65. Spindle lock pin LOCKED.

4. Use index sight gauge to verify spindle lock pin is engaged in desired index, as shown in **Figure 63**.

Unlocking Index

1. Lift spindle lock pin until support pin separates from recessed hole.

2. Rotate spindle lock pin 180º to UNLOCKED position and release.

3. Use index sight gauge to verify spindle lock pin is disengaged from index (see **Figure 63**).

Adjusting Spindle Speed

⚠WARNING

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

Spindle Speed Range: 100–5000 RPM

Users can select one of eight default speeds within this range by pressing the function buttons on the control panel according to the table below:

Default Speed Settings (RPM)		
Function Button	**Single Press**	**Double Press**
F1	250	1250
F2	500	1500
F3	750	1750
F4	1020	2000

Figure 66. Default speed settings.

Alternatively, users can rotate the spindle speed dial at any time to adjust spindle speed. Turn the dial *clockwise* to slowly *increase* speed, and *counterclockwise* to slowly *decrease* speed.

Press the spindle speed dial in and turn to quickly increase or decrease the speed setting.

Refer to the chart in **Figure 67** to choose an appropriate RPM for your operation.

IMPORTANT: Recommended speeds should only be used as a guide and may not reflect variables required for safe operation.

Turning Diameter	Roughing RPM	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 67. Typical spindle speed recommendations.

Using Speed Chart Feature

The Model G0995 includes a speed chart feature that recommends spindle speeds based on workpiece size.

IMPORTANT: Speed recommended in speed chart should only be used as a guide and may not reflect variables required for safe operation.

To use speed chart feature:

1. Press Menu button and use spindle speed dial to scroll down to Speed Chart submenu, as shown in **Figure 68**.

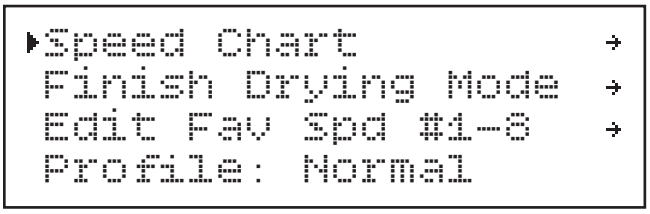


Figure 68. Speed Chart submenu selected.

2. Press spindle speed dial to enter Select Cut Type submenu (see **Figure 69**).

   — **Finish/Shape Cut:** Setting for workpieces that have already been rough cut and require shaping.

   — **Rough Cut:** Setting for new workpieces that require rough cutting.

```
— Select Cut Type —
▸Finish/Shape Cut  →
 Rough Cut         →
```

Figure 69. Select Cut Type submenu.

3. Scroll to desired cut type, then press spindle speed dial to enter Select Work Size submenu (see **Figure 70**).

```
— Select Work Size —
▸Dia:  2" / 5cm   ⬆⬇
 Speed : 3000rpm
```

Figure 70. Select Work Size submenu.

4. Rotate spindle speed dial to change value of workpiece diameter, then press spindle speed dial to enter confirmation screen (see **Figure 71**).

   Note: *Speed chart will show recommended turning speed as workpiece size changes.*

```
 → Finish/Shape Cut
 → Dia:  2" / 5cm
 → Set Spd:3000rpm?
▸Menu:NO    F/R:YES
```

Figure 71. Speed chart confirmation screen.

5. Press F/R button to confirm setting and return to home screen.

   — Spindle speed will be set to speed shown in speed chart.

Spindle Turning

Spindle turning is the operation performed when a workpiece is mounted between centers in the headstock and tailstock, as shown in **Figure 72**. Bowls, table legs, tool handles, and candlesticks are typical projects where this operation is used.

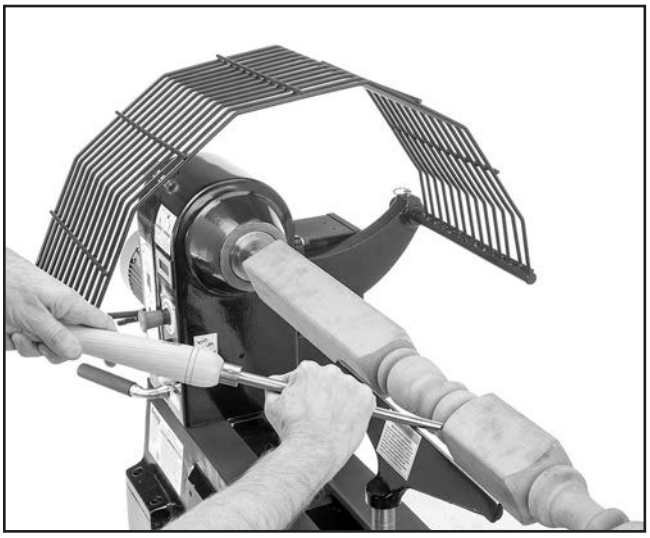
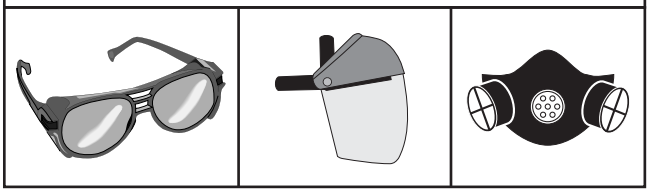


Figure 72. Typical spindle turning operation.

⚠WARNING

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



Items Needed	Qty
Precision Ruler	1
Wood Mallet	1
Power Drill	1
Drill Bit ¼"	1
Tablesaw/Bandsaw	1

To set up a spindle turning operation:

1. Find center point of both ends of your workpiece by drawing diagonal lines from corner to corner across end of workpiece, as shown in **Figure 73**.

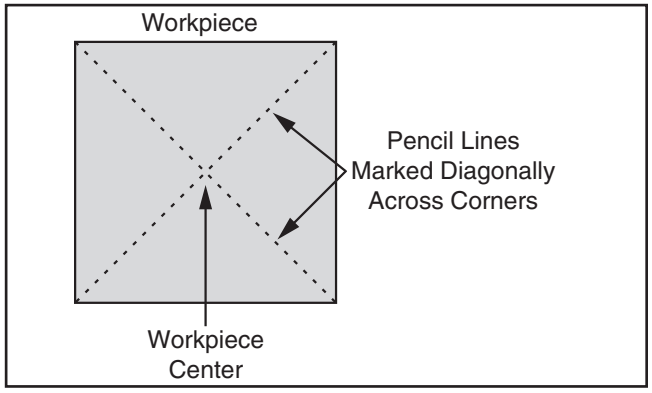


Figure 73. Workpiece marked diagonally from corner to corner to determine the center.

2. Make a center mark by using a wood mallet and tapping point of spur center into center of workpiece on both ends.

3. Using a ¼" drill bit, drill a ¼" deep hole at center mark on end of the workpiece to be mounted on headstock spur center.

4. To help embed spur center into workpiece, cut ⅛" deep saw kerfs in headstock end of workpiece along diagonal lines marked in **Step 1**.

5. If your workpiece is over 2" x 2", cut corners off workpiece lengthwise to make turning safer and easier (see **Figure 74**).

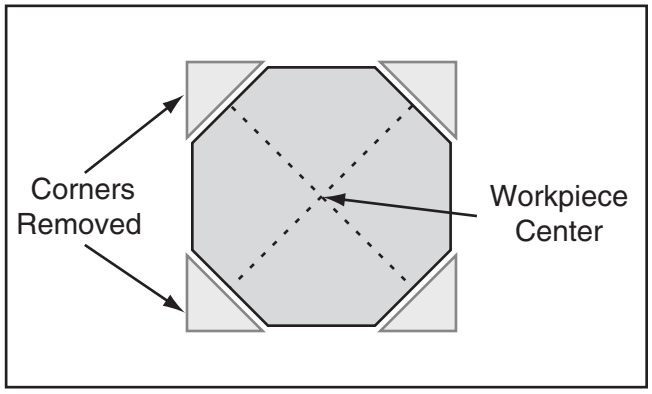


Figure 74. Corners of workpiece removed.

6. Drive spur center into end center mark of workpiece with wood mallet to embed center at least ¼" into workpiece, as shown in **Figure 75**.

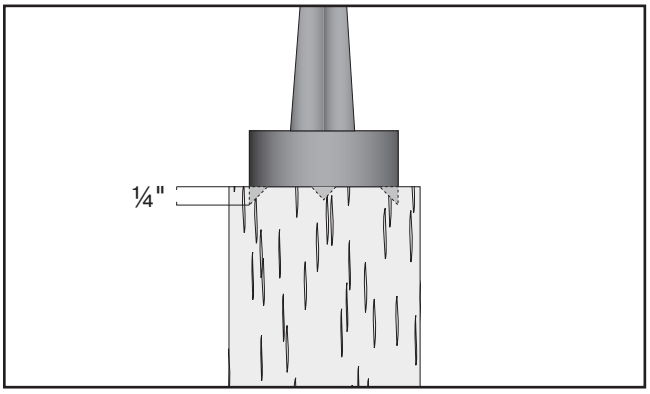


Figure 75. Spur center properly embedded.

7. With workpiece still attached, insert spur center into headstock spindle (see **Installing/ Removing Headstock Center** on **Page 37** for additional instructions).

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

8. Install live center into tailstock quill (see **Page 38**) and tighten quill lock handle to lock quill in position.

9. Slide tailstock toward workpiece until point of live center touches workpiece center mark, then lock tailstock in this position.

10. Loosen quill lock handle and rotate tailstock handwheel to push live center into workpiece at least ¼", then tighten quill lock handle.

⚠WARNING

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 tool rest to workpiece (see **Adjusting Tool Rest** on **Page 34**).

12. Rotate workpiece by hand to ensure there is safe clearance on all sides. If necessary, re-adjust tool rest until there is proper clearance on all sides of workpiece.

⚠WARNING

Keep lathe tool resting on tool rest the ENTIRE time it is in contact with workpiece or when preparing to make contact between lathe tool and workpiece. Otherwise, spinning workpiece could force lathe tool out of your hands or entangle your hands with 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 **Page 41**).
- 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.

Mounting Bed Extension for Spindle Turning

The Model G0995 includes a bed extension to extend spindle turning capacity of the main bed to 48¾" between centers.

Items Needed	Qty
Additional Person	1
Hex Wrench 8mm	1
Straightedge 12"	1
Bed Extension	1
Cap Screws M10-1.5 x 30	4

To mount bed extension for spindle turning:

1. DISCONNECT MACHINE FROM POWER!

2. Hand thread (4) M10-1.5 x 30 cap screws halfway in mounting holes on right end of bed (see **Figure 76**).

   Note: *Holes on bed extension are elongated and provide enough clearance to install extension without having to completely remove cap screws in mounting holes.*

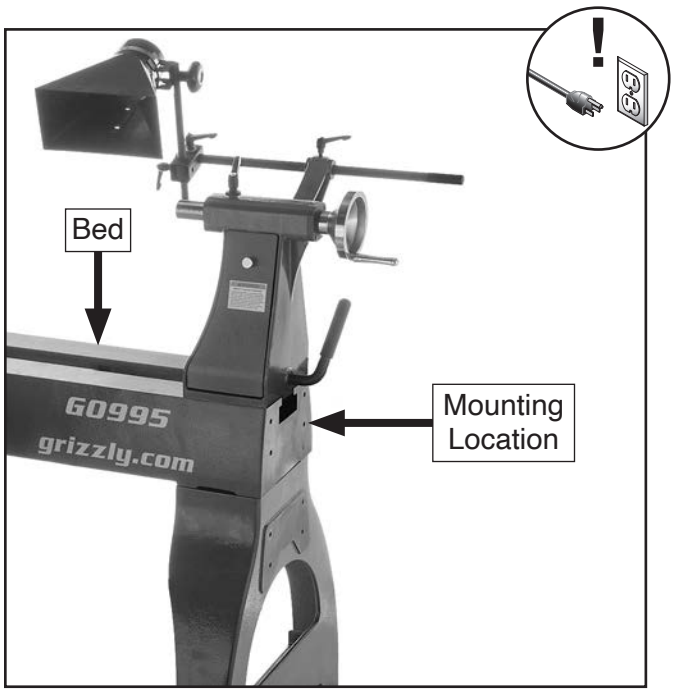


Figure 76. Bed extension mounting location.

3. With help from an additional person, mount bed extension on (4) cap screws installed in **Step 2**, then fully tighten cap screws.

4. Place a straightedge across both bedways to check if they are flush and adjust bed extension as needed.

   Note: *This is a process of trial-and-error. Be patient and take your time when adjusting bedways. When you are finished, tailstock should slide smoothly across seam where bedways meet (see **Figure 77**).*

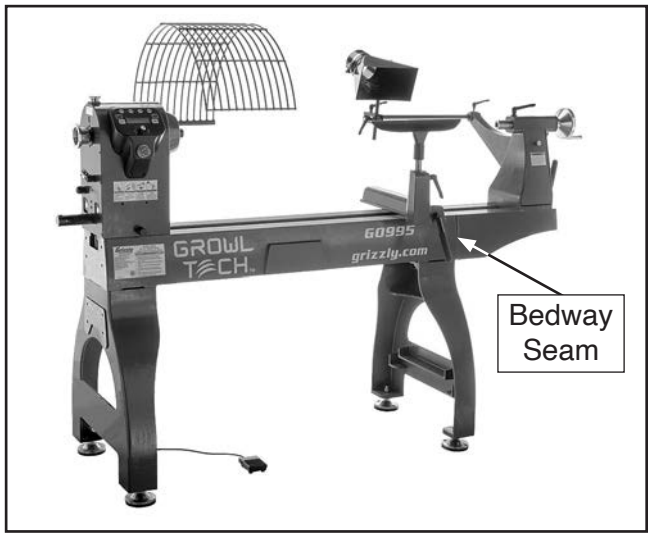


Figure 77. Bed extension mounted to bed.

NOTICE

Bed extension is not recommended as a stable mounting location for the headstock, and should only be used to support tailstock or tool rest.

Installing Comparator Kit

The Model G0995 comparator kit enables you to install a finished workpiece between the headstock and tailstock mounting arms to provide a visual reference for duplicating while spindle turning.

To install comparator kit:

1. DISCONNECT MACHINE FROM POWER!

2. Install rough workpiece between centers in headstock and tailstock, and adjust as needed in preparation for turning.

   Tip: *Save time during duplication by removing corners from all spindles you plan on creating before operating with comparator kit (see **Figure 74** on **Page 43**).*

3. Loosen upper lock lever on headstock mounting arm (see **Figure 78**).

4. Remove lower lock lever (see **Figure 78**).

5. Loosen set screw on position bushing then remove bushing (see **Figure 78**).

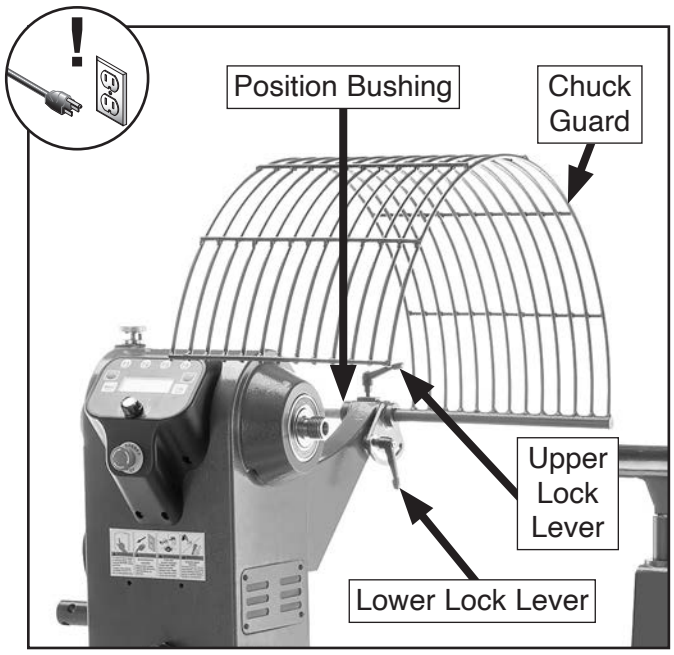


Figure 78. Chuck guard mounting components.

6. Remove chuck guard and set aside (see **Figure 78** on **Page 45**).

   Note: *Chuck guard cannot be used when comparator kit is installed.*

7. Insert (1) fixed center in headstock mounting arm with pointed end facing tailstock (see **Figure 79**).

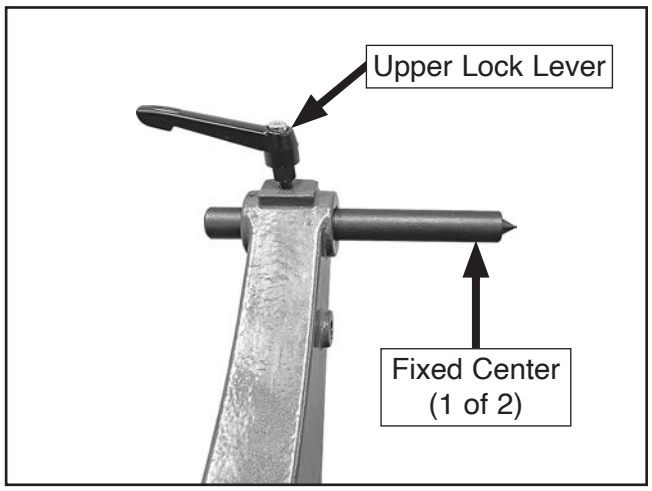


Figure 79. Fixed center installed in headstock mounting arm.

8. Loosen mounting arm lock lever on tailstock mounting arm and remove dust hood assembly (see **Figure 80**).

   Note: *Dust hood cannot be used when comparator kit is installed.*

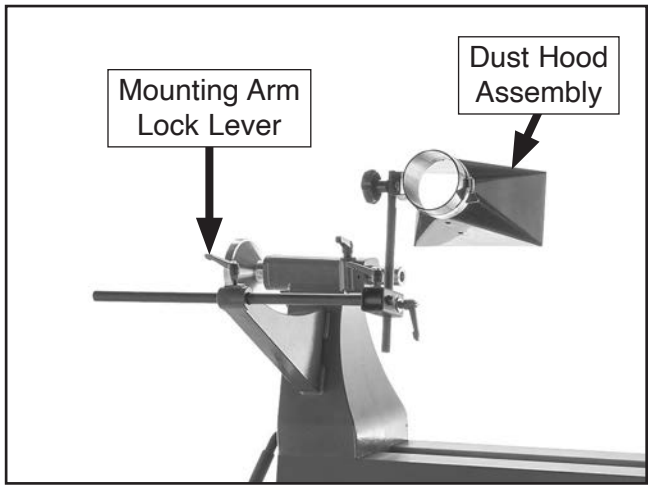


Figure 80. Dust hood mounting components.

9. Insert (1) fixed center in tailstock mounting arm with pointed end facing headstock (see **Figure 81**).

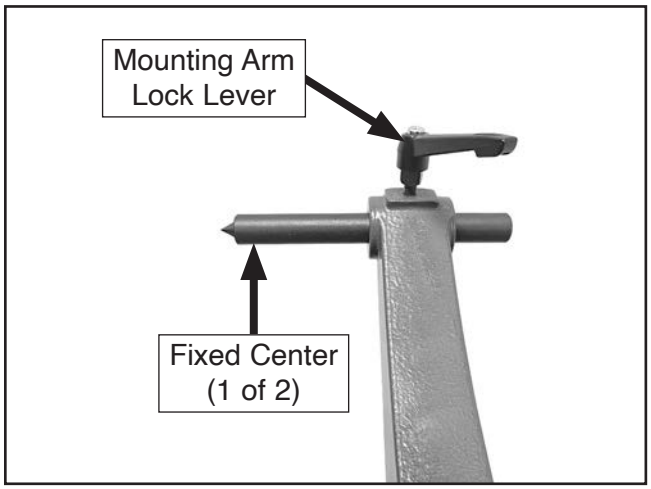


Figure 81. Fixed center installed in tailstock mounting arm.

10. Mount finished workpiece between fixed centers, then tighten lock levers to secure.

    Note: *For best results, align finished workpiece profile with desired location on rough workpiece.*

11. Adjust workpieces as needed until profiles are aligned as desired (see **Figure 82**).

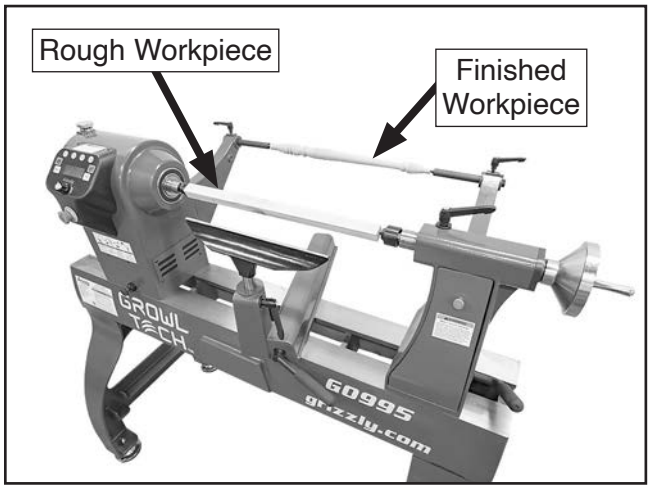


Figure 82. Workpieces properly aligned.

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 83**. This type of turning is usually done with open-faced workpieces like bowls or plates.

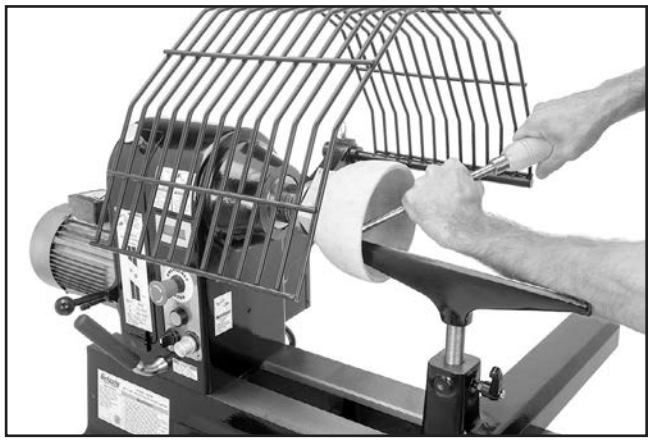


Figure 83. Typical faceplate turning operation.

Mounting Workpiece on Faceplate

Items Needed	Qty
Precision Ruler	1
Wood Screws	1
Power Drill	1
Tablesaw/Bandsaw	1

To mount workpiece on faceplate:

1. Mark workpiece center in same manner as described in **Spindle Turning** on **Page 42**.

   Note: *Cut off corners of workpiece to make it as close to "round" as possible, as described in **Spindle Turning**, **Step 5** on **Page 42**.*

2. Center faceplate on workpiece and attach it with wood screws (see **Figure 84**).

Figure 84. Typical attachment of faceplate to workpiece.

NOTICE

Only use screws with non-tapered heads (see Figure 85) to attach faceplate to the workpiece. Screws with tapered heads can split faceplate or snap off during operation.

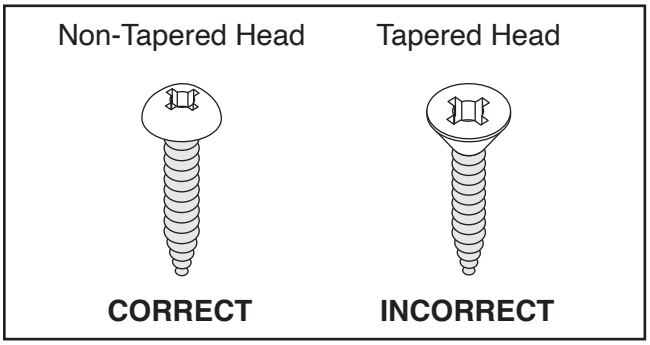


Figure 85. Correct and incorrect screw types.

3. Thread and secure faceplate onto headstock spindle (refer to **Installing/Removing Faceplate** on **Page 39**).

   — If wood screws cannot be placed in workpiece, faceplate can be mounted to a backing block attached to workpiece (see **Mounting Workpiece on Backing Block** on **Page 48**).

4. Properly adjust tool rest to workpiece (see **Adjusting Tool Rest** on **Page 34**).

5. Rotate workpiece by hand to ensure there is safe clearance on all sides. If necessary, re-adjust tool rest until there is proper clearance on all sides of workpiece.

Mounting Workpiece on Backing Block

Items Needed	Qty
Piece of Scrap Wood	1
Precision Ruler	1
Power Drill	1
Drill Bit ¼"	1
Glue	As Needed
Clamp	1

To mount workpiece on backing block:

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

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

2. Locate and mark center of workpiece and backing block.

3. Drill a ¼" hole through center of backing block.

4. Look through hole in backing block to line up center with workpiece and glue and clamp backing block to workpiece.

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

5. Follow **Steps 1–5** of **Mounting Workpiece on Faceplate** beginning on **Page 47** to attach backing block to faceplate.

Outboard Turning

⚠WARNING

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

The Model G0995 can be easily configured for outboard turning by installing the bed extension on one of three different mounting locations on the machine, and positioning the headstock as needed.

Outboard turning is a variation of faceplate turning and can be accomplished by installing the bed extension on the stand legs or at the center mounting position, allowing for a larger diameter turning capacity.

Another method would be to use a floor-mounted tool rest, which would provide the maximum possible amount of swing.

Items Needed	Qty
Additional Person	1
Hex Wrench 8mm	1
Wrench or Socket 10mm	1
Flat Head Screwdriver ¼"	1
Bed Extension	1
Tool Rest Base	1
Tool Rest	1
Tool Rest Collar	1
Tool Rest Extension	1
Cap Screws M10-1.5 x 30	4

Installing Bed Extension

1. DISCONNECT MACHINE FROM POWER!

   — If installing bed extension on center mount, proceed to **Step 2**.

   — If installing bed extension on stand legs, proceed to **Step 3**.

2. Remove (2) hex nuts, lock washers, and flat washers securing center mount cover, then remove cover (see **Figure 86**).

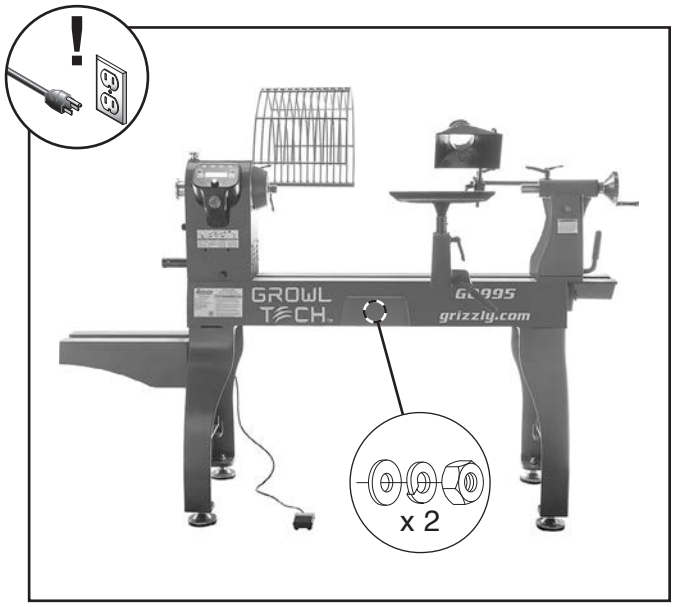


Figure 86. Location of center mount cover fasteners.

3. Hand thread (4) M10-1.5 x 30 cap screws halfway in mounting holes at desired mounting location (see **Figure 87**).

   Note: *Holes on bed extension are elongated and provide enough clearance to install extension without having to completely remove cap screws in mounting holes.*

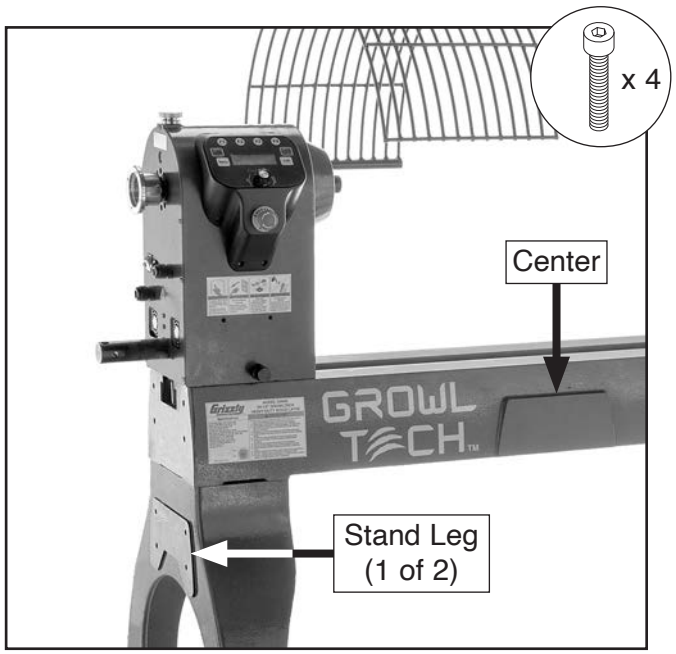


Figure 87. Bed extension mounting locations for outboard turning.

4. With help from an additional person, mount bed extension on (4) cap screws installed in **Step 3**, then fully tighten cap screws.

5. Remove bed stop on bed extension and install tool rest base, then re-install bed stop (see **Figure 88**).

   Note: *To maximize support, tool rest base should always be locked on both sides of bed. Never pull tool rest so far back that it is only secured on one side.*

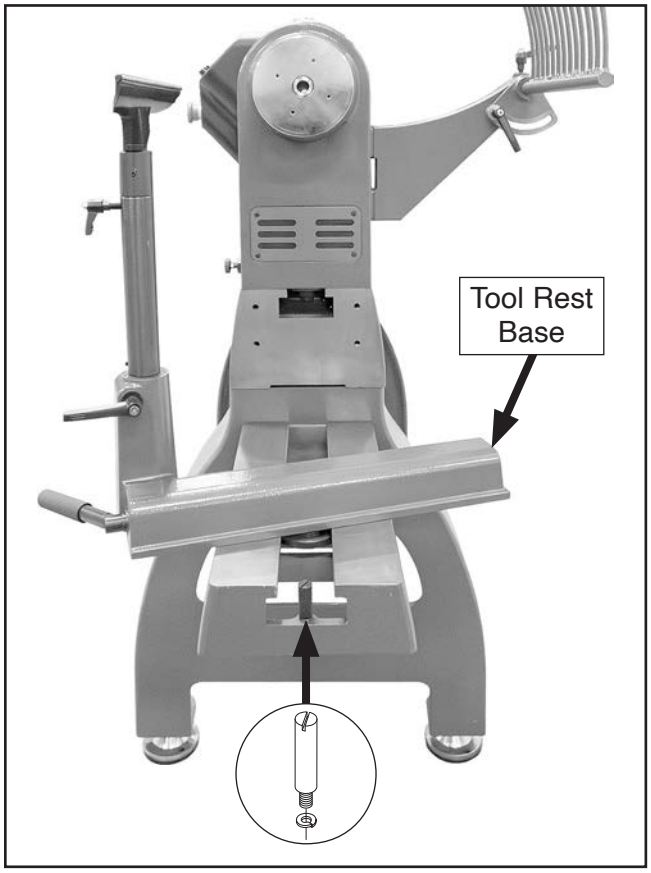


Figure 88. Location of bed extension components (bed extension mounted to stand leg).

6. Install tool rest and adjust as needed (see **Adjusting Tool Rest** on **Page 34**).

7. Rotate and position headstock as needed (see **Adjusting Headstock** on **Page 30**).

Removing Bed Extension

1. DISCONNECT MACHINE FROM POWER!

2. Loosen (4) M10-1.5 x 30 cap screws securing bed extension (see **Figure 89**). Do not fully remove cap screws at this time.

   Note: *Bed extension mounting holes are elongated to provide enough clearance to remove extension without having to completely remove cap screws.*

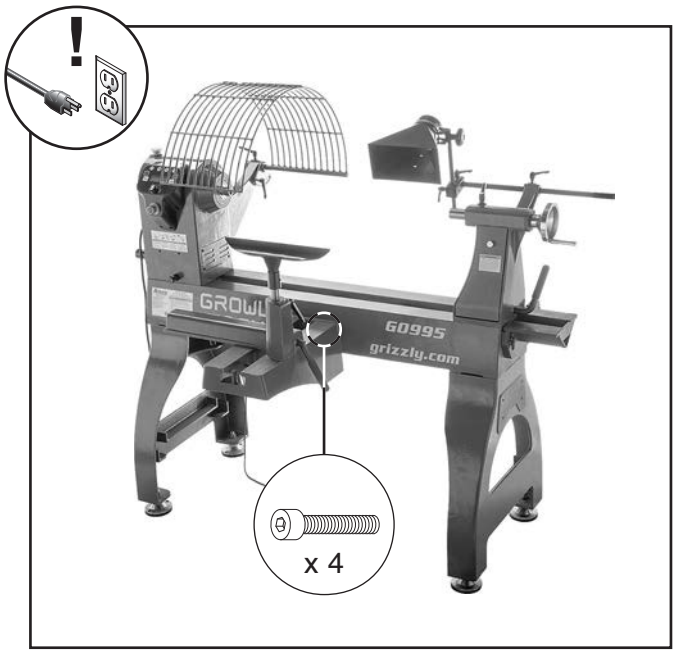


Figure 89. Location of bed extension fasteners (bed extension installed in center mounting position).

3. With help from an additional person, lift bed extension and remove.

4. Remove (4) M10-1.5 x 30 cap screws loosened in **Step 2**.

Sanding/Finishing

After the turning operations are complete, the workpiece can be sanded and finished before removing it from the lathe (see **Figure 90**).

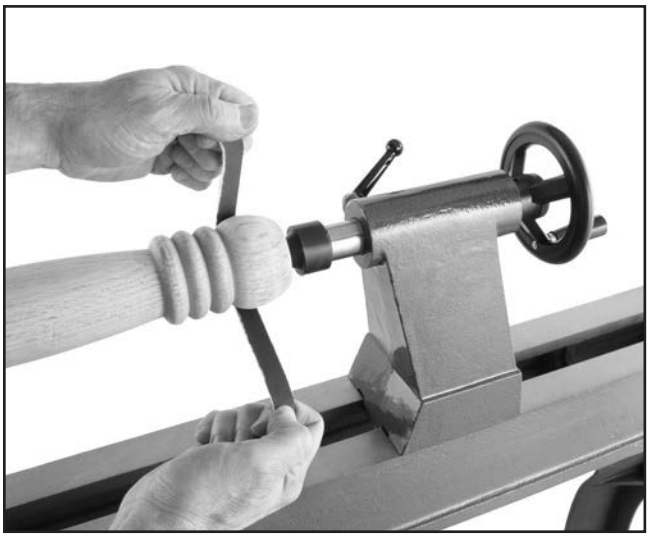
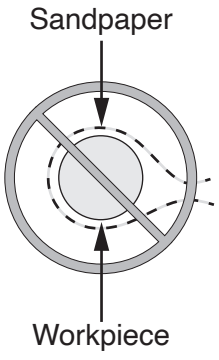


Figure 90. Typical sanding operation.

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

The Model G0995 also includes a finish drying timer that will run the lathe at a set speed for an extended duration to help dry finished workpieces (see **Finish Drying Mode** on **Page 67**).



⚠WARNING

Wrapping sandpaper completely around workpiece could pull your hands into moving workpiece and may cause serious injury. Never wrap sandpaper or finishing materials completely around workpiece.

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.

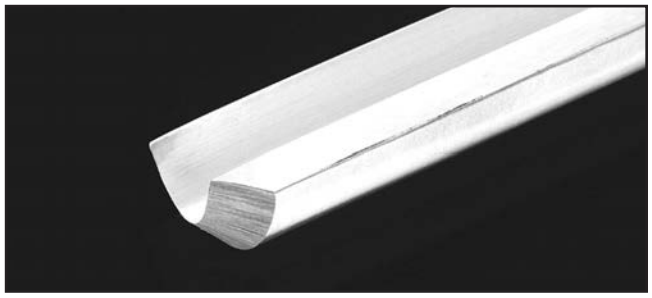


Figure 91. Example of a gouge.

- **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°).

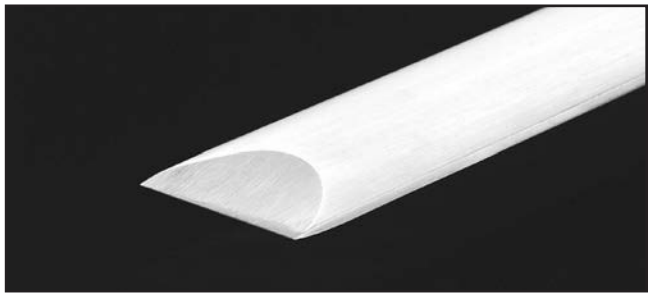


Figure 92. Example of a skew chisel.

- **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 93. 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 double-ground.

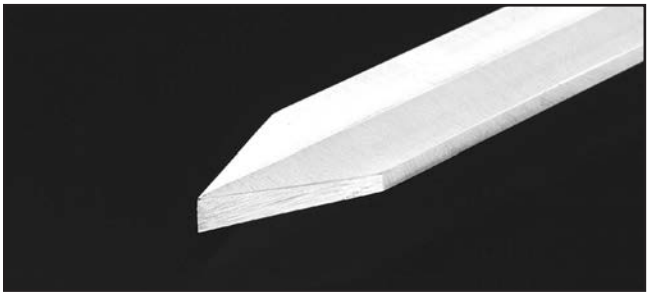


Figure 94. Example of a parting tool.

- **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 turners 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
T21655—1/4" Fingernail Bowl Gouge
T21656—3/8" Bowl Gouge
T21660—3/4" Bowl Gouge

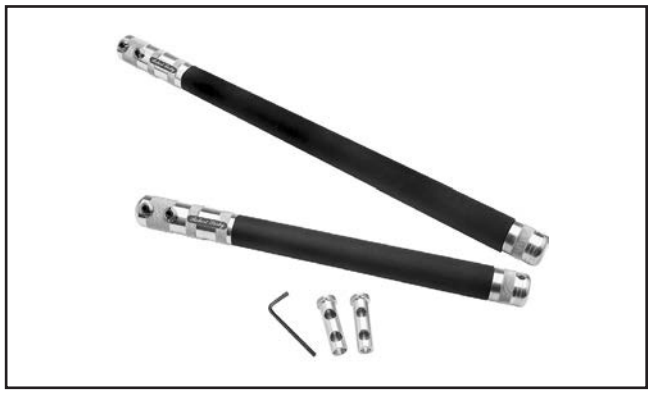


Figure 95. Sovereign 16" and 22" handles.

T10807—Adapter 1 1/4" x 8 TPI to 1" x 8 TPI (RH)
T10810—4 1/4" Wood Lathe Chuck Set
T10811—5 1/2" Wood Lathe Chuck Set
These wood lathe chuck sets each include a 4-jaw self-centering chuck and interchangeable dovetail, step, internal/external grip, and flat jaws for bowls, spindles, and hard-to-hold projects.

T10810 Chuck diameter is 4 1/4" and includes an indexed backplate with 24 positions. T10811 Chuck diameter is 5 1/2" and includes an indexed backplate with 24 positions.

Figure 96. T10810 4 1/4" Wood Lathe Chuck Set.

T25611—The Missing Shop Manual: Lathe
The Missing Shop Manual explains the basics of safety and set-up. Softcover, 152 pages.

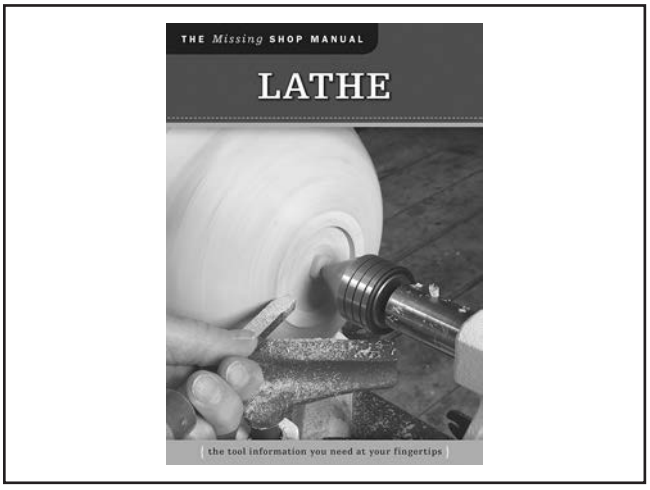


Figure 97. T25611 The Missing Shop Manual: Lathe.

T34154—6-Pc. M2 Cryo Lathe Tool Set
This woodturning tool set is part of an extensive line of Grizzly PRO® turning tools, offering cryogenically hardened steel blades, ergonomic handles, and exceptional strength for smoother, more precise woodturning results.

This multi-functional set includes an oval skew chisel, square end scraper, roughing out gouge, diamond parting tool, spindle gouge, and bowl gouge for quick and effective shaping of hardwoods and other materials.

Figure 98. T34154 6-Pc. M2 Cryo Lathe Tool Set.

T28070—MT2 Live Tailstock Chuck
This MT2 Live Tailstock Chuck supports small diameter work where a live center is not practical. Chuck capacity is 1/32"–1/2". Includes chuck key.

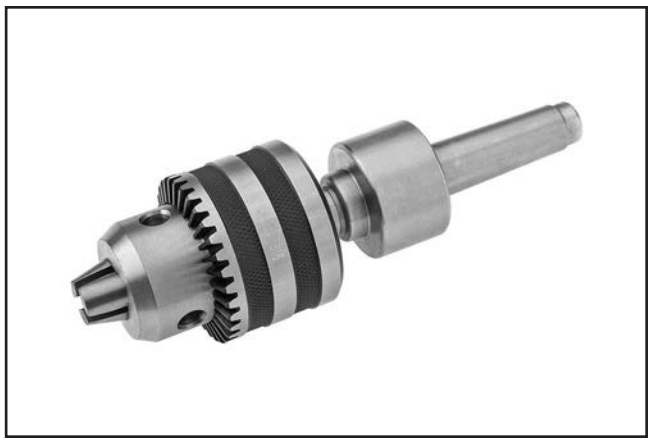


Figure 99. T28070 MT2 Live Tailstock Chuck.

G1028Z2—1½ HP Portable Dust Collector
Designed to capture dust and wood chips from woodworking machines. The air drawn in by the dust collector is filtered by a 2.5 micron upper filter top bag to capture the fine dust particles that normally end up all over your shop. The Model G1028Z2 has an air suction capacity of 1300 CFM and has a max static pressure of 9.0 in. The steel base has been fitted with casters for mobility in your garage or shop.

Figure 100. G1028Z2 1½ HP Portable Dust Collector.

T34134—Deluxe Stainless Steel Tool Rest Set
This stainless-steel tool rest set is part of an extensive line of Grizzly PRO® turning tools, offering durability and strength for smoother, more precise woodturning results. Get the leverage and stability you need when turning workpieces on your lathe with the tool rests offered in this complete set. The interchangeable stems make it easy to use these tool rests with a wide range of wood lathes, and locating sleeves keep the rests in place during use.

Figure 101. T34134 Deluxe Stainless Steel Tool Rest Set.

T33683—Wood Lathe Tool Holder
This tool holder is easy to install and accommodates up to 14 turning tools with 1¼" diameter holes. The arm swings in and out of range, while the tray spins for easy access to specific sizes. Additionally, the tray is a great spot to hold your live centers, dead centers, and used sandpaper.

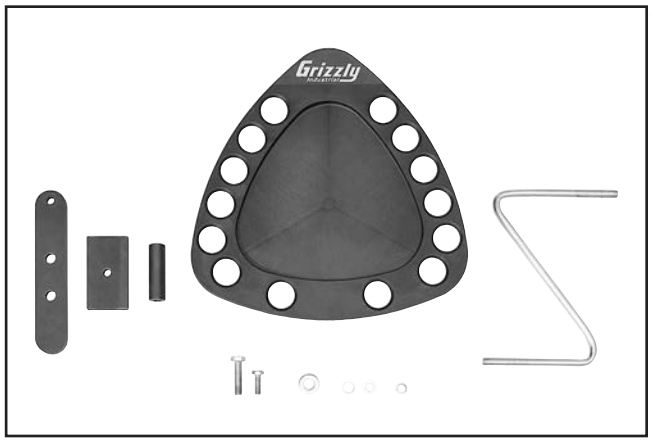


Figure 102. T33683 Wood Lathe Tool Holder.

T24515—8" Woodworking Caliper Set
The double-ended calipers of the T24515 8" Woodworking Caliper Set are necessary for gauging the wall thickness of turned bowls and measuring spindle diameters. These calipers are shaped for any turning application, and measure approximately 12" in length.

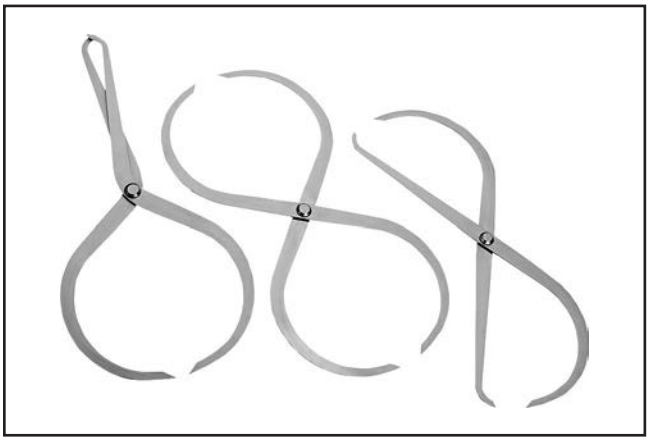


Figure 103. T24515 8" Woodworking Caliper Set.

T25802—5-Piece Woodworking Caliper Set
Includes a compass, straight dividers, inside calipers, outside calipers and inside/outside calipers. Each piece measures roughly 9" long.

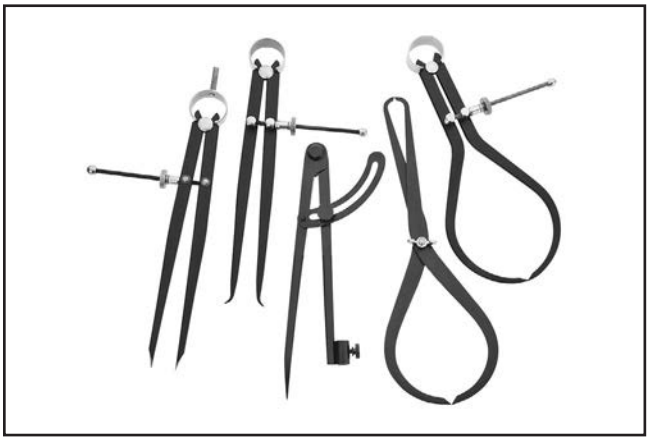
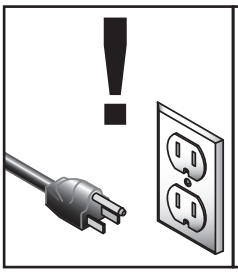


Figure 104. T25802 5-Piece Woodworking Caliper Set.

SECTION 6: MAINTENANCE



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

Schedule

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

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

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

Daily
- Clean/vacuum dust buildup off of headstock and lathe bed, and lubricate spindle and quill.

Monthly
- Clean out dust buildup from headstock.

Cleaning & Protecting

Cleaning the Model G0995 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.

Protect the unpainted cast iron surfaces on the bed by wiping the bed clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces. Keep beds rust free with regular applications of products like SLIPIT® (see **Figure 105**).

Bare metal surfaces can quickly develop surface rust if not coated. Machinery stored near windows in direct sunlight or where paints, thinners, or certain gasses are open to the air can experience bleaching, discoloring of paint or yellowing of clear plastic guards.

Recommended Metal Protectants

G5562—SLIPIT® 1 Qt. Gel
G5563—SLIPIT® 11 Oz. Spray

Figure 105. Recommended products for protecting unpainted cast iron/steel parts on machinery.

Lubrication

Since all bearings on the Model G0995 are sealed and permanently lubricated, simply leave them alone until they need to be replaced. DO NOT lubricate them.

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 lithium grease to the outside of the quill. DO NOT allow any oil or grease to get on the inside mating surfaces of the quill.

Machine Storage

All machinery will develop serious rust problems and corrosion damage if it is not properly prepared for storage. If decommissioning this machine, use the steps in this section to ensure that it remains in good condition.

Items Needed	Qty
Large Tarp or Plastic Sheet	1
Disposable Gloves	As Needed
Disposable Rags	As Needed
Desiccant Bags	As Needed
Cleaner/Degreaser	As Needed
Metal Protectant	As Needed

Preparing Machine for Storage

1. Disconnect all power sources to machine.

2. Thoroughly clean all unpainted, bare metal surfaces, then coat them with a lightweight grease or rust preventative. Take care to ensure these surfaces are completely covered but that grease or rust preventative is kept off of painted surfaces.

   Note: *If machine will be out of service for only a short period of time, use way oil or a good grade of medium-weight machine oil (not auto engine oil) in place of grease or rust preventative.*

3. Remove inlet filter cover and place generous quantities of desiccant bags inside headstock, then install inlet filter cover, as shown in **Figure 106**.

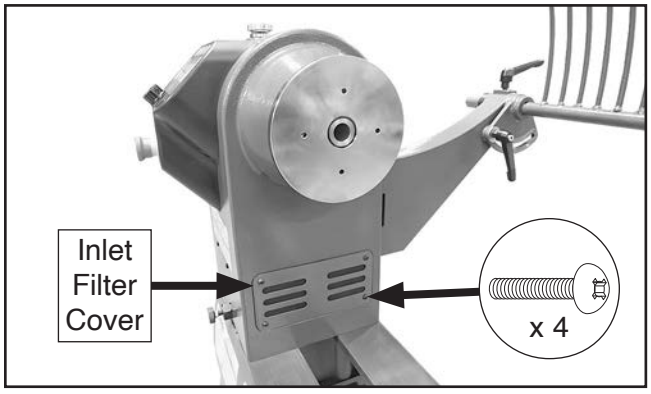


Figure 106. Location of headstock inlet filter cover.

4. Completely cover machine with a tarp or plastic sheet that will keep out dust and resist liquid or moisture. If machine will be stored in/near direct sunlight, use a cover that will block UV rays.

Removing Machine from Storage

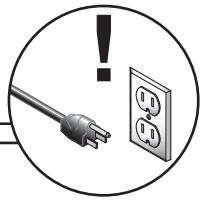
1. Remove cover from machine and any desiccant bags from headstock.

2. Follow all procedures for setup and testing as instructed in **SECTION 3: SETUP** beginning on **Page 14**.

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 power supply breaker immediately trips after startup.	1. ON/OFF switch in OFF position. 2. EMERGENCY STOP button depressed/at fault. 3. Machine circuit breaker tripped or at fault. 4. Blown fuse. 5. Incorrect power supply voltage or circuit size. 6. Power supply circuit breaker tripped or fuse blown. 7. Wiring broken, disconnected, or corroded. 8. ON/OFF switch at fault. 9. Circuit board at fault. 10. Motor or motor bearings at fault.	1. Move ON/OFF switch to ON position. 2. Rotate EMERGENCY STOP button head to reset. Replace if at fault. 3. Reset circuit breaker on switch. 4. Replace fuse/ensure no shorts. 5. Ensure correct power supply voltage and circuit size. 6. Ensure circuit is sized correctly and free of shorts. Reset circuit breaker or replace fuse. 7. Fix broken wires or disconnected/corroded connections. 8. Replace switch. 9. Inspect/replace if at fault. 10. Replace motor.
Machine stalls or is underpowered.	1. Workpiece material not suitable for machine. 2. Excessive force used with cutting tool. 3. Machine undersized for task. 4. Motor overheated. 5. Extension cord too long. 6. Motor or motor bearings at fault.	1. Only cut wood/ensure moisture content is below 20%. 2. Reduce cut depth; use sharp bits/chisels for current operation (**Page 51**). 3. Use sharp bits/chisels; reduce feed rate or depth of cut. 4. Clean motor, let cool, and reduce workload. 5. Move machine closer to power supply; use shorter extension cord. 6. Replace motor.
Machine has vibration or noisy operation.	1. Motor or component loose. 2. Stand feet not adjusted properly. 3. Spindle loose, improperly installed or damaged. 4. Workpiece, faceplate, or center at fault. 5. Motor/spindle bearings at fault.	1. Replace damaged or missing bolts/nuts or tighten if loose. 2. Adjust stand feet to stabilize machine. 3. Tighten loose spindle, re-install spindle ensuring mating surfaces are clean, replace damaged spindle. 4. Center workpiece on faceplate/center; reduce RPM; replace defective components. 5. Test by rotating spindle; rotational grinding/loose shaft requires bearing replacement.

Operations

Symptom	Possible Cause	Possible Solution
Poor surface finish quality.	1. Dull tooling or wrong tool used for task. 2. Tool height is not correctly adjusted to ⅛" above spindle centerline. 3. Spindle speed incorrect. 4. Excessive vibration.	1. Sharpen tooling, select correct tool for operation. 2. Adjust tool rest so tool is ⅛" above spindle centerline (**Page 34**). 3. Adjust for appropriate spindle speed (**Page 41**). 4. Troubleshoot possible causes/solutions using table below.
Excessive vibration upon startup (when workpiece is installed).	1. Workpiece mounted incorrectly. 2. Workpiece warped, out of round, or flawed. 3. Spindle speed too fast for workpiece. 4. Workpiece hitting stationary object. 5. Headstock, tailstock, or tool rest not securely clamped to lathe bed. 6. Lathe is resting on an uneven surface. 7. Clamp plate(s) loose. 8. Spindle bearings are worn or damaged.	1. Remount workpiece; verify centers are embedded in centerline of workpiece (**Pages 37–38**). 2. Cut workpiece to correct, or use a different workpiece. 3. Reduce spindle speed (**Page 41**). 4. Stop lathe and correct interference problem. 5. Check lock bar/levers and tighten if necessary (**Pages 30**, **32**, and **34**). 6. Shim stand or adjust feet to eliminate wobbles. 7. Tighten lock nut securing clamp plate(s). 8. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.
Turning tool grabs or digs into workpiece.	1. Wrong turning tool being used. 2. Turning tool is too dull. 3. Tool rest height not set correctly. 4. Tool rest is set too far from workpiece.	1. Use correct turning tool (**Page 51**). 2. Sharpen or replace turning tool. 3. Correct tool rest height (**Page 34**). 4. Move tool rest closer to workpiece.
Turning tool not sliding smoothly across tool rest.	1. Tool rest surface is dirty or damaged.	1. Lightly sand tool rest surface with a fine-grit sandpaper; replace damaged tool rest.
Center not holding in spindle or quill while turning.	1. Morse taper mating surfaces are dirty or damaged.	1. Verify mating surfaces of Morse taper are free of debris and oily substances (**Pages 37–38**); replace damaged components.
Tailstock moves under load.	1. Tailstock clamp plate/lock nut is loose. 2. Bed or clamping surface is excessively oily or greasy.	1. Tighten clamp plate/lock nut (**Page 32**). 2. Clean bed or clamping surface to remove excess oil/grease (**Page 55**).
Spindle lacks turning power or starts up slowly.	1. Workpiece too heavy for spindle. 2. Incorrect turning profile selected.	1. Remove excess material before remounting; use lighter workpiece. 2. Select turning profile that matches workpiece structure (**Page 66**).
Quill does not move when handwheel is turned.	1. Keyway is not aligned with quill set screw.	1. Align quill keyway and quill set screw and slightly tighten screw to engage keyway (**Page 38**).
Component binds when crossing bed extension.	1. Bed extension not flush with bed.	1. Clean bed and bed extension (**Page 55**); adjust bed extension even with bedway (**Page 44**).
DRO does not display; reading incorrect.	1. Wiring broken, disconnected, or corroded. 2. Circuit board at fault.	1. Fix broken wires or disconnected/corroded connections. 2. Inspect/replace if at fault.
DRO displays "RP State Error (0 or 1)".	1. Spindle speed sensor obstructed/at fault.	1. Rotate spindle by hand to clear obstructions and remove debris from sensor area. Replace if at fault.
DRO displays "PFC Corrector (Flashing)".	1. Motor overheated.	1. Disconnect machine from power and let cool, clean headstock area, and reduce workload.

SECTION 8: WIRING

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

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

⚠WARNING
Wiring Safety Instructions

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

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

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

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

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

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

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

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

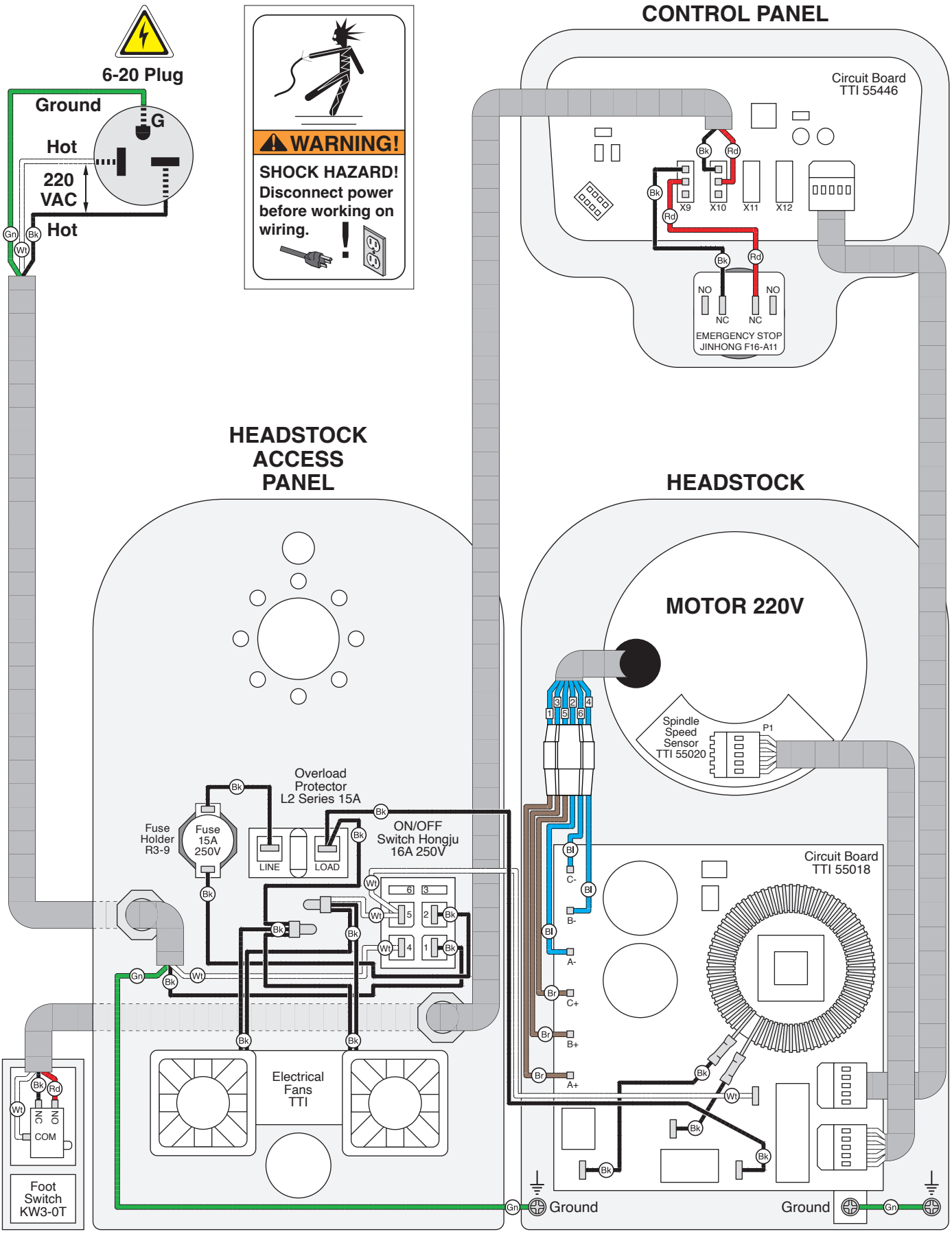
NOTICE

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

COLOR KEY

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

Wiring Diagram

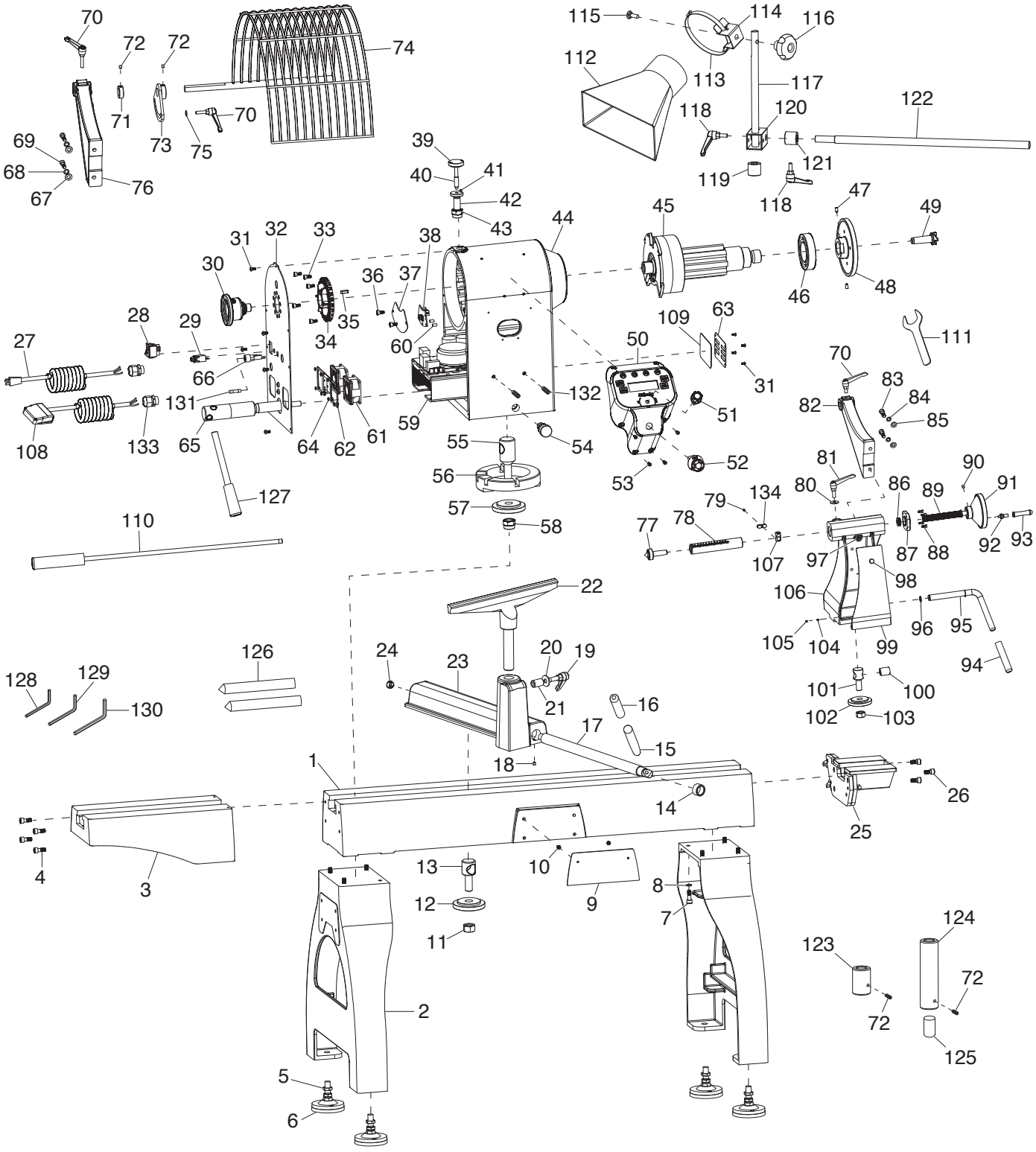


STOP *READ ELECTRICAL SAFETY ON PAGE 59!*

SECTION 9: PARTS

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

Main



Main Parts List

REF	PART #	DESCRIPTION
1	P0995001	BED
2	P0995002	STAND LEG
3	P0995003	EXTENSION BED
4	P0995004	CAP SCREW M10-1.5 X 30
5	P0995005	HEX NUT M16-2
6	P0995006	ADJUSTABLE FOOT
7	P0995007	CAP SCREW M10-1.5 X 35
8	P0995008	LOCK WASHER 10MM
9	P0995009	CENTER COVER
10	P0995010	HEX NUT M6-1
11	P0995011	HEX NUT M18-2.5
12	P0995012	TOOL REST CLAMP PLATE
13	P0995013	TOOL REST CLAMP BOLT
14	P0995014	BUSHING 22ID X 29OD X 20L
15	P0995015	TOOL REST BASE LOCK LEVER
16	P0995016	HANDLE GRIP 19ID X 106L X 3T
17	P0995017	TOOL REST BASE LOCK ROD
18	P0995018	SET SCREW M6-1 X 8
19	P0995019	ADJUSTABLE HANDLE M10-1.5 X 40
20	P0995020	FLAT WASHER 10MM
21	P0995021	TOOL REST LOCK BLOCK M10-1.5
22	P0995022	TOOL REST 14"
23	P0995023	TOOL REST BASE
24	P0995024	RUBBER CAP 20MM
25	P0995025	SWING-AWAY BED
26	P0995026	CAP SCREW M10-1.5 X 25
27	P0995027	POWER CORD 14G 3W 90" 6-20P
28	P0995028	ON/OFF SWITCH HONGJU 16A 250VAC
29	P0995029	OVERLOAD PROTECTOR L2 SERIES 15A
30	P0995030	SPINDLE HANDWHEEL
31	P0995031	PHLP HD SCR M5-.8 X 10
32	P0995032	HEADSTOCK ACCESS PANEL
33	P0995033	CAP SCREW M6-1 X 20
34	P0995034	INDEX PLATE
35	P0995035	KEY 6 X 6 X 20
36	P0995036	PHLP HD SCR M4-.7 X 12
37	P0995037	SENSOR COVER
38	P0995038	SPINDLE SPEED SENSOR TTI 55020
39	P0995039	SPINDLE LOCK KNOB
40	P0995040	SPINDLE LOCK SHAFT
41	P0995041	ROLL PIN 5 X 12
42	P0995042	SPINDLE LOCK BASE
43	P0995043	HEX NUT M16-2
44	P0995044	HEADSTOCK BODY
45	P0995045	ROTOR ASSEMBLY
46	P0995046	BALL BEARING 6210-OPEN
47	P0995047	SET SCREW M6-1 X 12
48	P0995048	FACEPLATE 5-3/4"
49	P0995049	SPUR CENTER MT#2
50	P0995050	CONTROL PANEL
51	P0995051	SPINDLE SPEED DIAL
52	P0995052	EMERGENCY STOP JINHONG F16-A11
53	P0995053	PHLP HD SCR M4-.7 X 12
54	P0995054	HEADSTOCK PIVOT PIN
55	P0995055	HEADSTOCK CLAMP BOLT

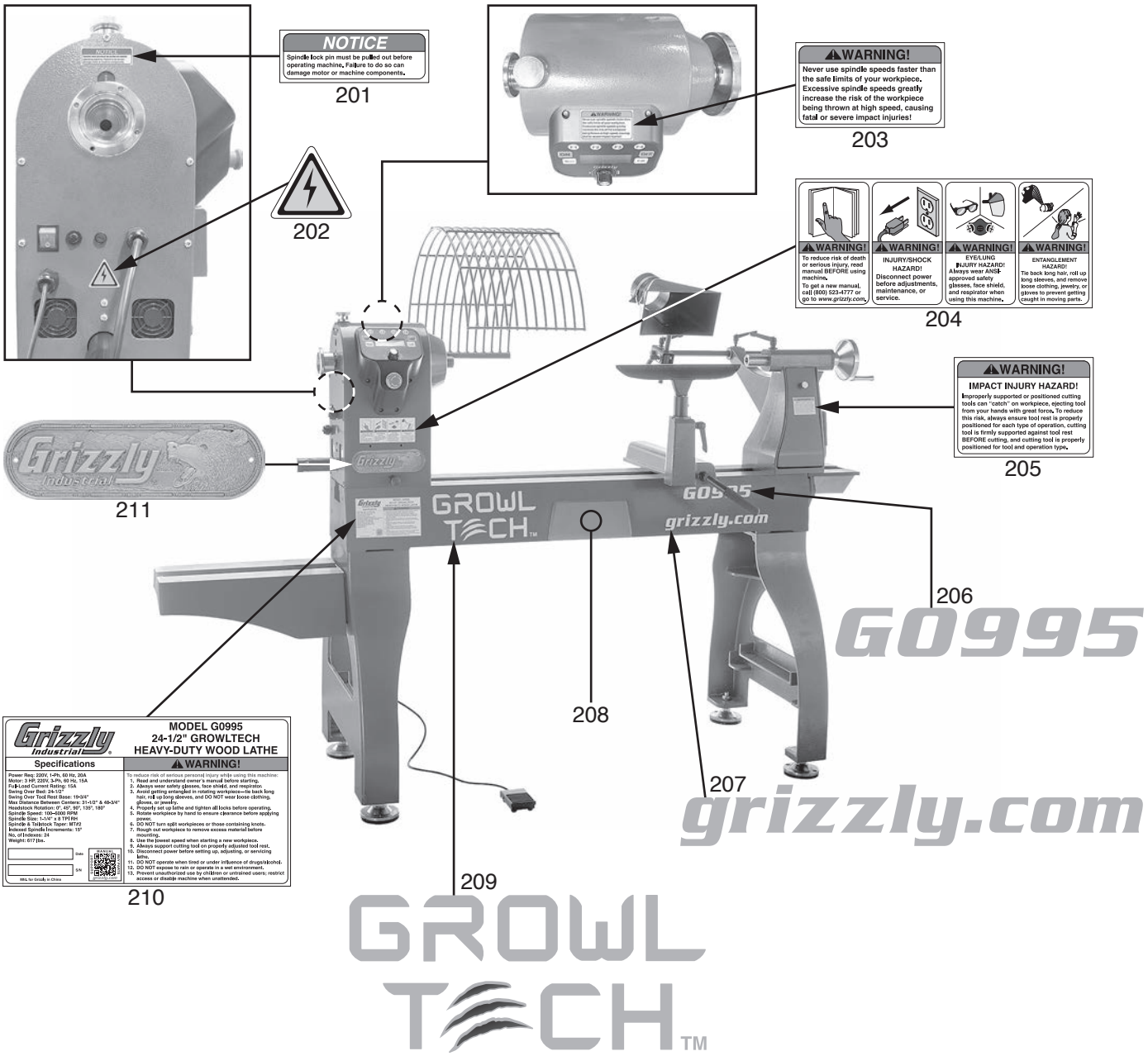
REF	PART #	DESCRIPTION
56	P0995056	HEADSTOCK ANGLE PLATE
57	P0995057	HEADSTOCK CLAMP PLATE
58	P0995058	HEX NUT M18-2.5
59	P0995059	PRINTED CIRCUIT BOARD ASSEMBLY
60	P0995060	BUSHING 4.3ID X 6OD X 6.5L
61	P0995061	ELECTRICAL FAN TTI
62	P0995062	ELECTRICAL FAN MOUNT
63	P0995063	FILTER COVER
64	P0995064	PHLP HD SCR M4-.7 X 12
65	P0995065	HEADSTOCK LOCK ARM
66	P0995066	FUSE HOLDER R3-9
67	P0995067	FLAT WASHER 10MM
68	P0995068	LOCK WASHER 10MM
69	P0995069	CAP SCREW M10-1.5 X 25
70	P0995070	ADJUSTABLE HANDLE M8-1.25 X 20
71	P0995071	POSITION BUSHING 19ID X 35OD X 12L
72	P0995072	SET SCREW M6-1 X 10
73	P0995073	ANGLE BRACKET
74	P0995074	CHUCK GUARD
75	P0995075	FLAT WASHER 8MM
76	P0995076	HEADSTOCK MOUNTING ARM
77	P0995077	LIVE CENTER MT#2
78	P0995078	TAILSTOCK QUILL
79	P0995079	SET SCREW M6-1 X 12
80	P0995080	FLAT WASHER 10MM
81	P0995081	ADJUSTABLE HANDLE M10-1.5 X 40
82	P0995082	TAILSTOCK MOUNTING ARM
83	P0995083	CAP SCREW M10-1.5 X 25
84	P0995084	LOCK WASHER 10MM
85	P0995085	FLAT WASHER 10MM
86	P0995086	THRUST BEARING 51102
87	P0995087	TAILSTOCK COVER
88	P0995088	CAP SCREW M5-.8 X 12
89	P0995089	TAILSTOCK LEADSCREW
90	P0995090	SET SCREW M8-1.25 X 12
91	P0995091	TAILSTOCK HANDWHEEL M12-1.75
92	P0995092	REVOLVING HANDLE BASE M6-1 X 6
93	P0995093	REVOLVING HANDLE
94	P0995094	HANDLE GRIP 19ID X 106L X 3T
95	P0995095	TAILSTOCK LOCK HANDLE
96	P0995096	EXT RETAINING RING 19MM
97	P0995097	MAGNET 15MM
98	P0995098	KNOB BOLT M6-1 X 8
99	P0995099	TOOL HOLDER COVER
100	P0995100	ECCENTRIC BUSHING
101	P0995101	TAILSTOCK CLAMP BOLT
102	P0995102	TAILSTOCK CLAMP PLATE
103	P0995103	HEX NUT M18-2.5
104	P0995104	SET SCREW M5-.8 X 6 DOG-PT
105	P0995105	SET SCREW M5-.8 X 6
106	P0995106	TAILSTOCK BODY
107	P0995107	QUILL LOCK SLEEVE
108	P0995108	FOOT SWITCH TTI KW3-0T
109	P0995109	HEADSTOCK FILTER
110	P0995110	KNOCKOUT TOOL

Main Parts List (Cont.)

REF	PART #	DESCRIPTION
111	P0995111	SPINDLE WRENCH 46MM
112	P0995112	DUST HOOD 9-1/4" X 5" W/4" PORT
113	P0995113	HOSE CLAMP 4"
114	P0995114	CLAMP MOUNT
115	P0995115	CARRIAGE BOLT M8-1.25 X 25
116	P0995116	KNOB M8-1.25
117	P0995117	HOOD MOUNTING ROD
118	P0995118	ADJUSTABLE HANDLE M8-1.25 X 12
119	P0995119	LOCK BUSHING 16ID X 32OD X 30L
120	P0995120	ROD COUPLER
121	P0995121	LOCK BUSHING 16ID X 32OD X 30L
122	P0995122	HOOD EXTENSION ROD

REF	PART #	DESCRIPTION
123	P0995123	TOOL REST COLLAR
124	P0995124	TOOL REST EXTENSION
125	P0995125	EXTENSION STEM
126	P0995126	FIXED CENTER
127	P0995127	HEADSTOCK LOCK BAR
128	P0995128	HEX WRENCH 3MM
129	P0995129	HEX WRENCH 4MM
130	P0995130	HEX WRENCH 8MM
131	P0995131	FUSE 15A 250V 0.25" FA, GLASS
132	P0995132	SET SCREW M8-1.25 X 16 CONE-PT
133	P0995133	STRAIN RELIEF M20-1.5
134	P0995134	KEY W/HOLE 6 X 6 X 12

Labels & Cosmetics



REF	PART #	DESCRIPTION
201	P0995201	SPINDLE LOCK NOTICE LABEL
202	P0995202	ELECTRICITY LABEL
203	P0995203	SPINDLE SPEED WARNING LABEL
204	P0995204	COMBO WARNING LABEL
205	P0995205	IMPACT INJURY HAZARD LABEL
206	P0995206	MODEL NUMBER LABEL

REF	PART #	DESCRIPTION
207	P0995207	GRIZZLY.COM LABEL
208	P0995208	TOUCH-UP PAINT, GRIZZLY GREEN
209	P0995209	GROWL TECH LABEL
210	P0995210	MACHINE ID LABEL
211	P0995211	GRIZZLY OBLONG NAMEPLATE - SMALL

⚠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.

SECTION 10: APPENDIX

Advanced Machine Functions

The Model G0995 has many customized machine functions that are easily accessed through the control panel. For a full list of functions, see **Command Tree** on **Page 70**.

Foot Switch Operation

The foot switch is enabled by default, but can be turned ***OFF*** to allow the spindle motor to be controlled by control panel buttons.

To change foot switch operation:

1. Press Menu button and use spindle speed dial to scroll down to Foot Switch submenu, as shown in **Figure 107**.

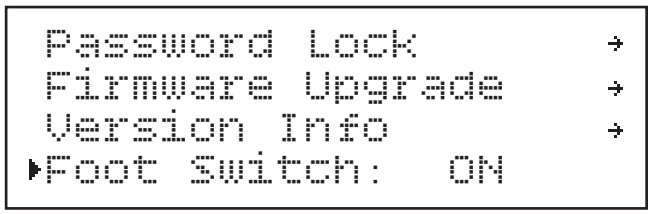


Figure 107. Foot Switch submenu.

2. Press spindle speed dial to turn foot switch ***OFF***, as shown in **Figure 108**.

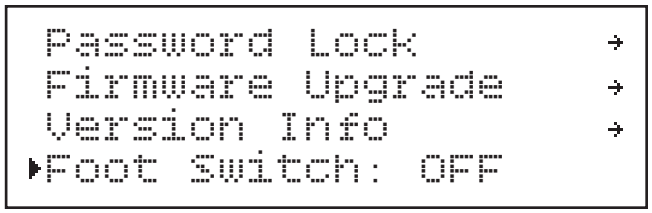


Figure 108. Foot switch set to OFF.

3. Press Menu button to return to home screen. When foot switch is disabled, ON and OFF buttons control spindle motor.

   — Press ON button to turn motor ***ON***.

   — Press OFF button to turn motor ***OFF***.

Assisted Braking Operation

The Model G0995 features power-assisted braking to help stop the spindle when operating with heavy or unbalanced workpieces.

To change assisted braking operation:

1. Press Menu button and use spindle speed dial to scroll down to Lathe Settings submenu, as shown in **Figure 109**.

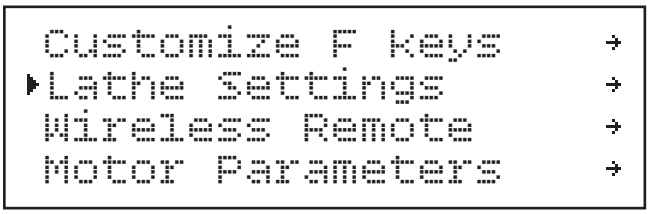


Figure 109. Lathe Settings submenu selected.

2. Press spindle speed dial to enter Lathe Settings submenu (see **Figure 110**).

3. Scroll down to Assisted Brake setting and press spindle speed dial to turn assisted braking ***ON*** or ***OFF*** (see **Figure 110**).

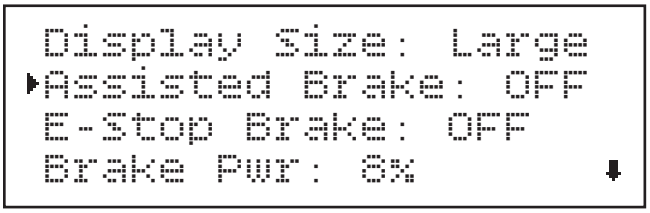


Figure 110. Lathe Settings submenu.

4. Scroll down to E-Stop Brake setting and press spindle speed dial to turn EMERGENCY STOP braking ***ON*** or ***OFF***.

   Note: *When E-Stop Brake setting is set to **ON**, assisted braking will be applied when EMERGENCY STOP button is activated.*

5. Scroll down to Brake Pwr setting (see **Figure 110**) and press spindle speed dial to enter Braking Power submenu (see **Figure 111**).

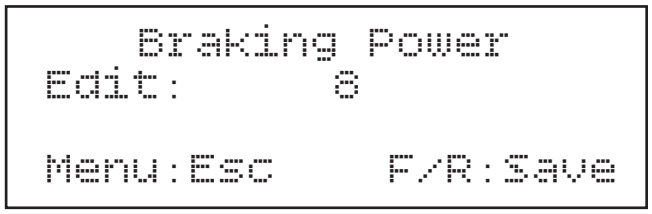


Figure 111. Braking Power submenu.

6. Use spindle speed dial to change braking power to 1–19%, then press F/R button to save setting.

   — Display will show braking enabled safety warning as a reminder to tighten set screws on faceplate, if installed (see **Figure 112**).

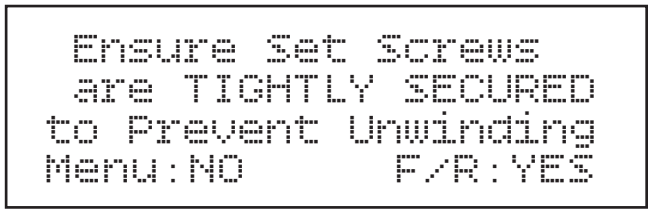


Figure 112. Braking enabled warning screen.

7. Press F/R button to confirm setting, then press Menu button to return to home screen.

Profile Settings

This lathe features performance settings tuned for different woodturning profiles. These settings are customized to accommodate the different operating requirements of small, normal, extra-large, or unbalanced workpieces.

To change profile settings:

1. Press Menu button and use spindle speed dial to scroll down to Profile setting, as shown in **Figure 113**.

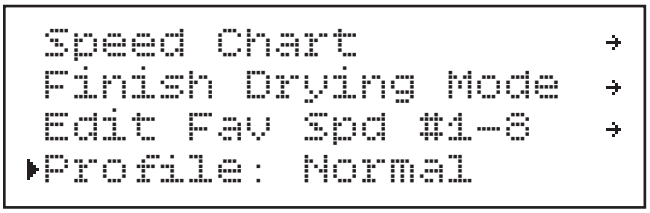


Figure 113. Profile setting selected.

2. Press spindle speed dial to cycle through desired profile settings (see **Figure 114**).

   — **Normal:** Default profile used for most woodturning operations.

   — **X-Lrg/Unbalanced:** Custom speed profile for extra-large or unbalanced workpieces that includes a soft start and soft rebound feature for recovering after chisel dig-in.

   — **Small Dia.:** Used with smaller diameter workpieces for improved speed tracking.

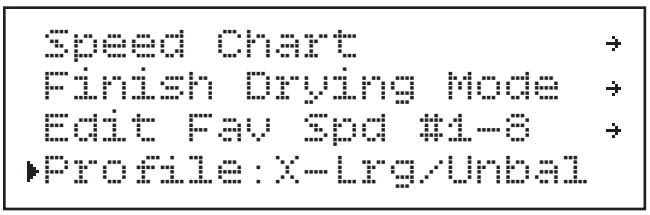


Figure 114. X-Lrg/Unbal profile setting selected.

3. With desired profile setting selected, press Menu button to return to home screen.

Finish Drying Mode

The Model G0995 includes a finish drying timer that will run the lathe at 50 RPM for an extended duration to help dry finished workpieces.

⚠CAUTION

NEVER leave machine unattended; children or untrained people may be seriously injured by this machine. Only operate in access-restricted location when using.

To use finish drying mode:

1. Press Menu button and use spindle speed dial to scroll down to Finish Drying Mode submenu, as shown in **Figure 115**.

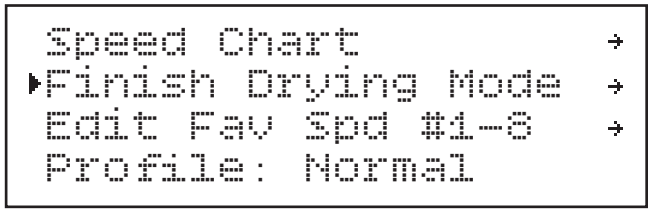


Figure 115. Finish Drying Mode submenu.

2. Press spindle speed dial to enter Finish Drying Mode submenu (see **Figure 116**).

3. Press spindle speed dial to cycle between timer options (see **Figure 116**).

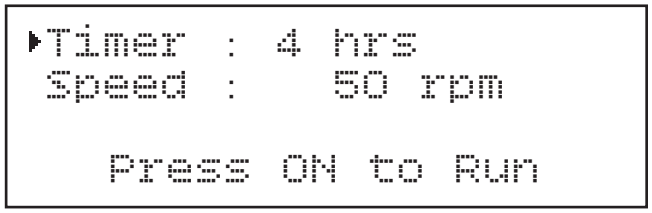


Figure 116. Editing Finish Drying Mode settings.

4. Press ON button to confirm settings and begin drying finish.

   — Spindle motor will turn ***ON*** and run at 50 RPM for allotted amount of time.

Vibration Sensor Setting

The vibration sensor automatically turns the spindle motor ***OFF*** when a potentially dangerous vibration is detected.

⚠WARNING

Vibration sensor is enabled by default and should always be used during operations. Operating without vibration sensor enabled may lead to workpiece breaking loose or being thrown from lathe, causing fatal or severe impact injuries.

To change vibration sensor setting:

1. Press Menu button and use spindle speed dial to scroll down to Lathe Settings submenu, as shown in **Figure 117**.

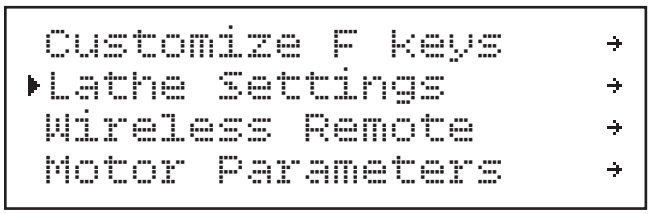


Figure 117. Lathe Settings submenu.

2. Press spindle speed dial to enter Lathe Settings submenu screen, then scroll down to Vibr. Sensor setting (see **Figure 118**).

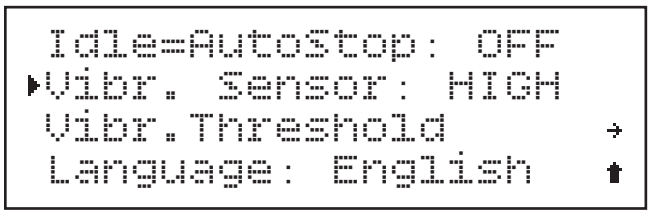


Figure 118. Vibr. Sensor setting selected.

3. Press spindle speed dial and rotate to cycle through vibration sensor threshold settings, as shown in **Figure 119**.

   — **OFF:** Turns vibration sensor ***OFF***.

   — **LOW:** Lowest threshold setting.

   — **MED:** Intermediate threshold setting.

   — **HIGH:** Default threshold setting for safest operating parameters.

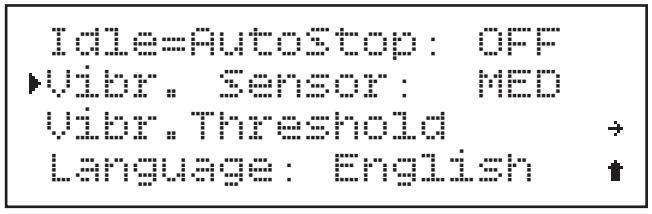


Figure 119. Vibration sensor setting.

4. Select desired setting and press Menu button to return to home screen.

Automatic Idle Shutdown Function

The automatic idle shutdown function will automatically turn the spindle motor ***OFF*** after four minutes of inactivity.

To change automatic idle shutdown function:

1. Press Menu button and use spindle speed dial to scroll down to Lathe Settings submenu, as shown in **Figure 120**.

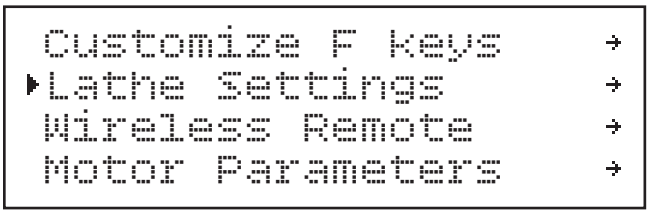


Figure 120. Lathe Settings submenu.

2. Press spindle speed dial to enter Lathe Settings submenu, then scroll down to Idle=AutoStop setting (see **Figure 121**).

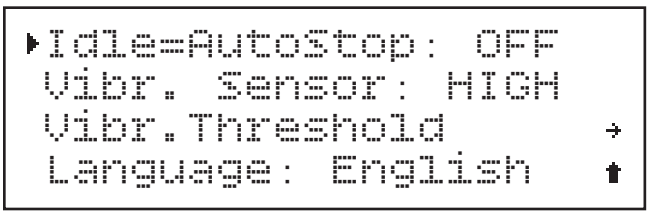


Figure 121. Idle=AutoStop setting selected.

3. Press spindle speed dial and rotate to cycle automatic idle shutdown setting ***ON*** or ***OFF*** (see **Figure 122**).

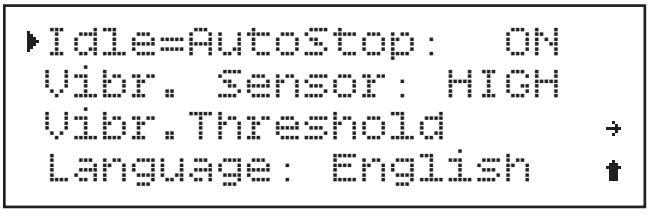


Figure 122. Idle=AutoStop setting ***ON***.

4. Press Menu button to return to home screen.

Password Lock

The Model G0995 can be password protected to help prevent unauthorized use by untrained users.

Note: *The password setting can be cleared by performing a factory reset of the machine.*

To use password lock:

1. Press Menu button and use spindle speed dial to scroll down to Set Password submenu, as shown in **Figure 123**.

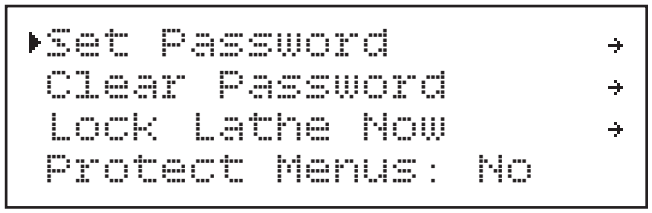


Figure 123. Set Password submenu.

2. Press spindle speed dial to enter Set Password submenu (see **Figure 124**).

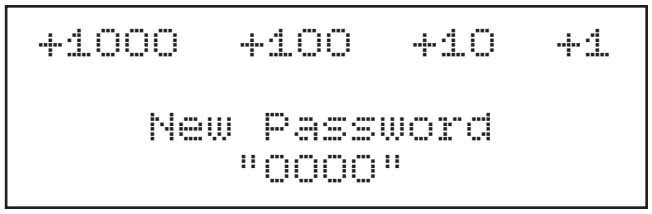


Figure 124. Editing password settings.

3. Use F1–F4 Function Buttons to modify New Password (see **Figure 124**) as follows:

   — F1: +1000 (add one thousand).

   — F2: +100 (add one hundred).

   — F3: +10 (add ten).

   — F4: +1 (add one).

4. When desired password value is set, press ON button to confirm password.

5. Press Menu button to return to home screen.

Factory Reset

Perform a factory reset to return all digital lathe settings to default values.

IMPORTANT: Performing a factory reset will clear all custom user settings!

To factory reset machine:

1. Press Menu button and use spindle speed dial to scroll down to Motor Parameters submenu, as shown in **Figure 125**.

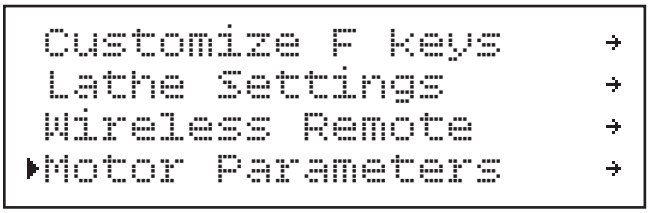


Figure 125. Motor Parameters submenu.

2. Press spindle speed dial to enter motor parameters submenu, then scroll down to Factory Reset setting (see **Figure 126**).

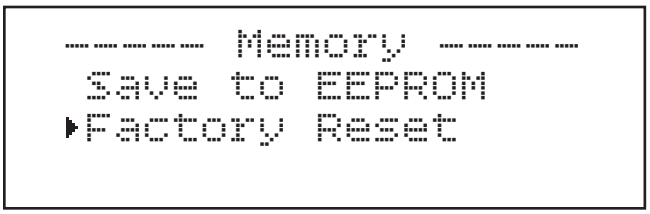


Figure 126. Factory Reset setting.

3. With Factory Reset highlighted, press spindle speed dial to enter Factory Reset warning screen (see **Figure 127**).

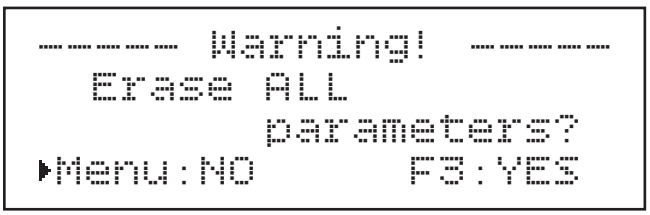
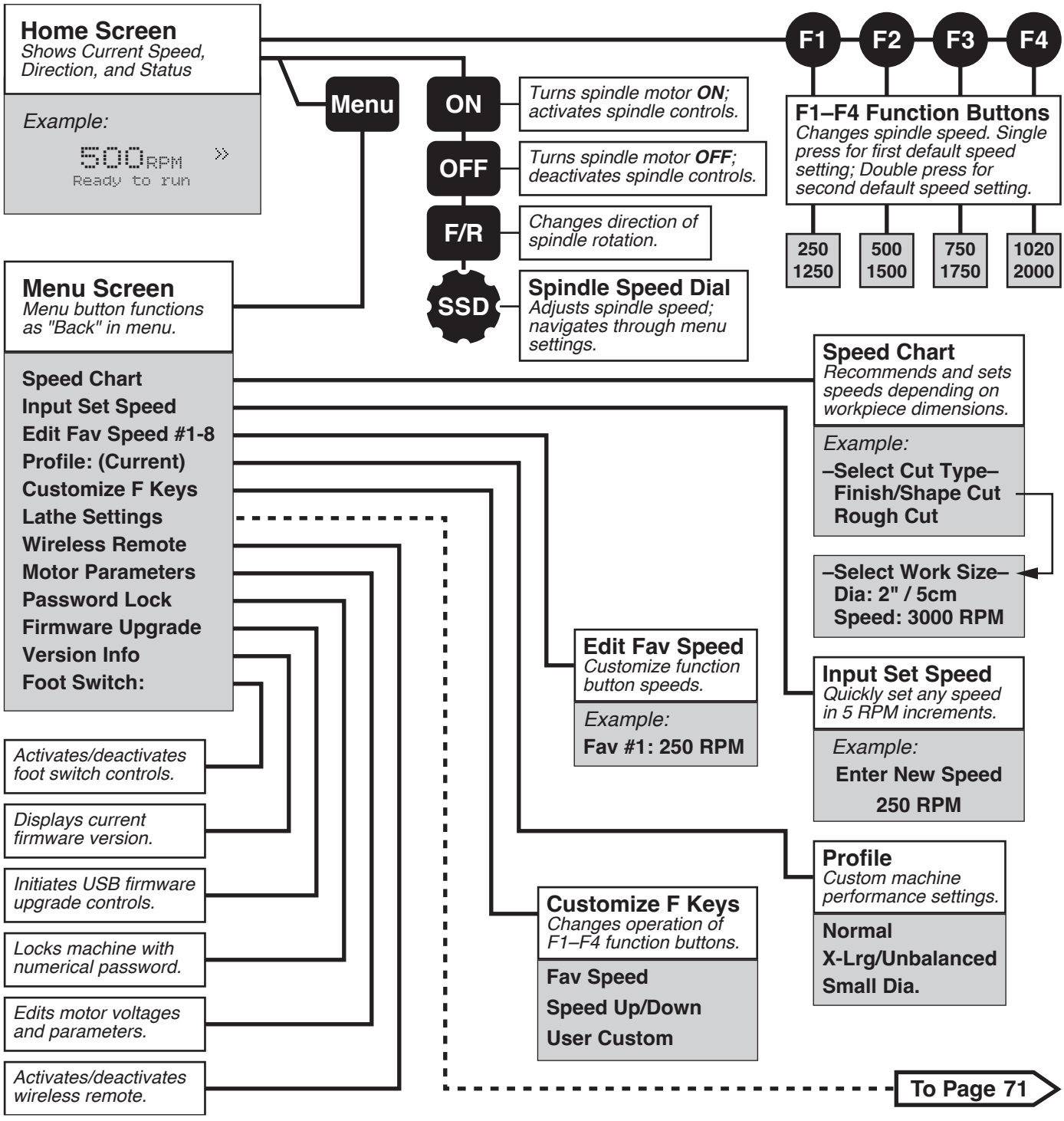


Figure 127. Factory Reset warning screen.

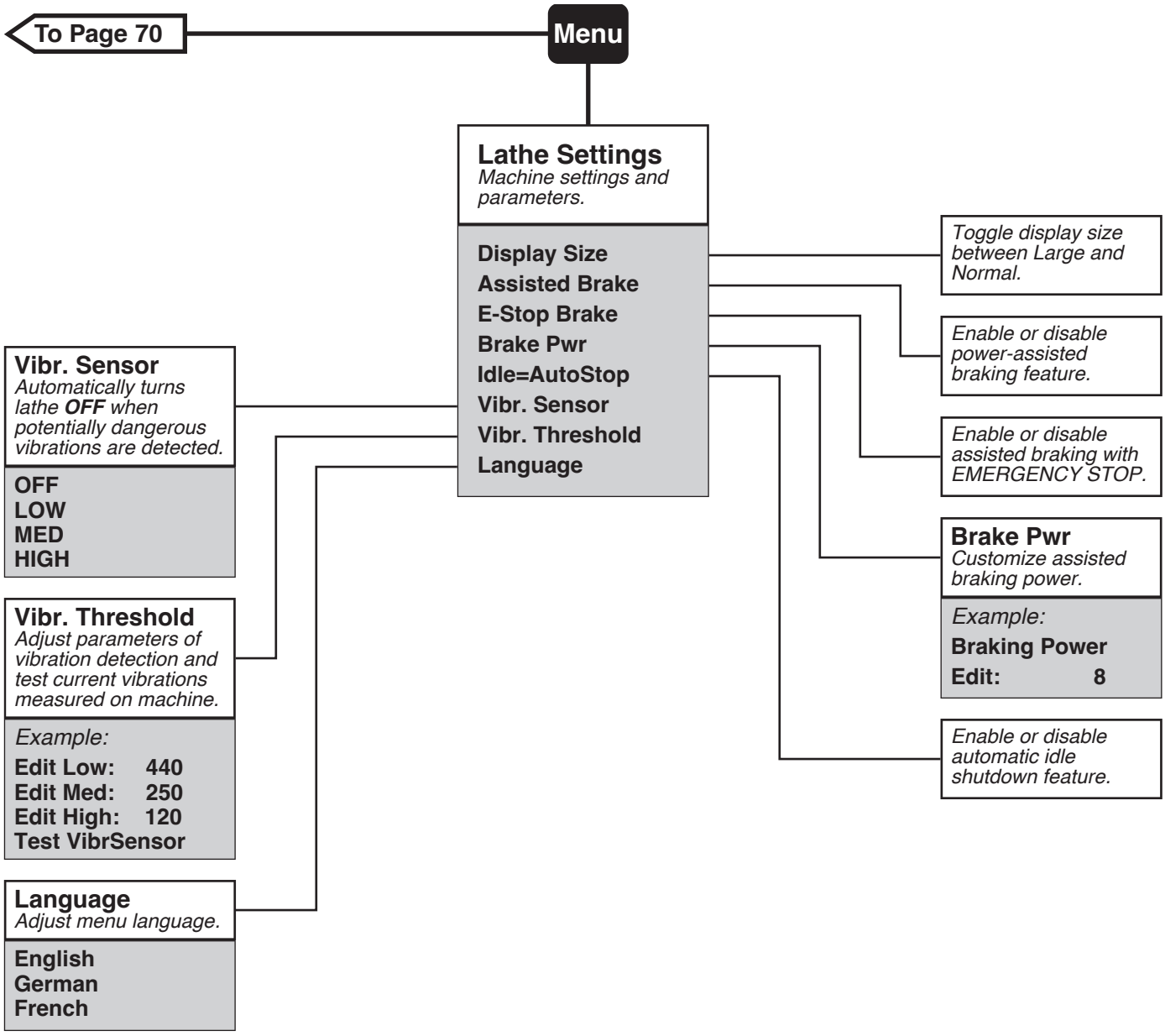
4. Press F3 to initiate factory reset, or press Menu button to return to home screen.

Command Tree

This section is an overview of the menus and features used to control this machine. For instructions on navigating the interface and the basics of operation, refer to **Controls & Components** on **Page 4**. Since software changes can affect the user interface, check **www.grizzly.com** for an up-to-date command tree if this one seems out of date.



Command Tree (Cont.)



WARRANTY & RETURNS

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

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

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

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

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

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

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