



MODEL G0632Z 16" X 42" VARIABLE- SPEED WOOD LATHE MANUAL INSERT

The Model G0632Z is the same machine as the Model G0632 except it has a higher full-load current rating, a different inverter and inverter cover, a hinged front belt access cover, and a tool holder on the stand. Except for the differences noted in this insert, all other content in the Model G0632 owner's manual applies to this machine.

▲WARNING: To reduce the risk of serious injury, you **MUST** read and understand this insert—and the entire Model G0632 manual—**BEFORE** assembling, installing, or operating this machine!

If you have any further questions about this manual insert or the differences between the Model G0632 and the Model G0632Z, contact our Technical Support at (570) 546-9663 or email techsupport@grizzly.com.



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(FOR MODELS MANUFACTURED SINCE 4/19) #KB18890 PRINTED IN CHINA



MACHINE DATA SHEET

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

MODEL G0632Z 16" X 42" VARIABLE-SPEED WOOD LATHE

Product Dimensions:

Weight..... 386 lbs.
 Width (side-to-side) x Depth (front-to-back) x Height..... 77-1/2 x 22-1/2 x 47 in.
 Footprint (Length x Width)..... 60 x 17-1/2 in.

Shipping Dimensions:

Type..... Wood Crate
 Content..... Machine
 Weight..... 394 lbs.
 Length x Width x Height..... 61 x 18 x 22 in.
 Must Ship Upright..... Yes

Electrical:

Power Requirement..... 220V, Single-Phase, 60 Hz
 Full-Load Current Rating..... 8A
 Minimum Circuit Size..... 15A
 Connection Type..... Cord & Plug
 Power Cord Included..... Yes
 Power Cord Length..... 6 ft.
 Power Cord Gauge..... 16 AWG
 Plug Included..... Yes
 Recommended Plug Type..... NEMA 6-15P
 Switch Type..... Sealed Rocker Switch
 Inverter (VFD) Type..... ATV-13
 Inverter (VFD) Size..... 2 HP

Motors:

Main

Horsepower..... 2 HP
 Phase..... 3-Phase
 Amps..... 8A
 Speed..... 1725 RPM
 Type..... TEFC Induction
 Power Transfer..... V-Belt Drive
 Bearings..... Shielded & Permanently Lubricated

Main Specifications:

Operation Information

Swing Over Bed..... 16 in.
 Swing Over Tool Rest Base..... 11-1/2 in.
 Distance Between Centers..... 42 in.
 Max. Distance Tool Rest to Spindle Center..... 6 in.
 No of Spindle Speeds..... Variable
 Spindle Speed Range..... 100 – 3200 RPM
 Floor to Center Height..... 44-1/2 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..... 0.445 in.
Type of Included Spindle Center..... Spur
Indexed Spindle Increments..... 10 deg.
No of Indexes..... 12

Tool Rest Information

Tool Rest Width..... 14-1/8 in.
Tool Rest Post Diameter..... 25 mm
Tool Rest Post Length..... 2-9/16 in.
Tool Rest Base Height..... 2-1/8 in.

Tailstock Information

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

Construction

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

Other Related Information

Bed Width..... 7 in.
Faceplate Size..... 6 in.

Other Specifications:

Country of Origin China
Warranty 1 Year
Approximate Assembly & Setup Time 30 Minutes
Serial Number Location ID Label

Features:

- Electronic Variable Speed Control
- Digital Spindle Speed Indicator
- 30 deg. Direct Indexing Using One Indexing Hole
- 10 deg. Indexing Using All Three Indexing Holes
- Headstock Can Be Positioned Anywhere Along the Bed
- Tailstock, Headstock, and Tool Rest Support Have Lever-Action Cam Locks For Quick Positioning
- Belt Drive Offers Two Speed Ranges
- Spindle Lock Pin
- Outboard Spindle Handle
- Forward/Reverse Switch
- Emergency Stop Button
- Operates a 3-Phase Motor on Single-Phase Power With Inverter

Accessories Included:

- 6" Face Plate
- Cup Live Center
- Hex Wrenches
- Indexing Pin
- Knock-out Tool
- Spur Center



New Parts

The Model G0632Z features a convenient tool holder attached to the stand (see **Figure 1**).

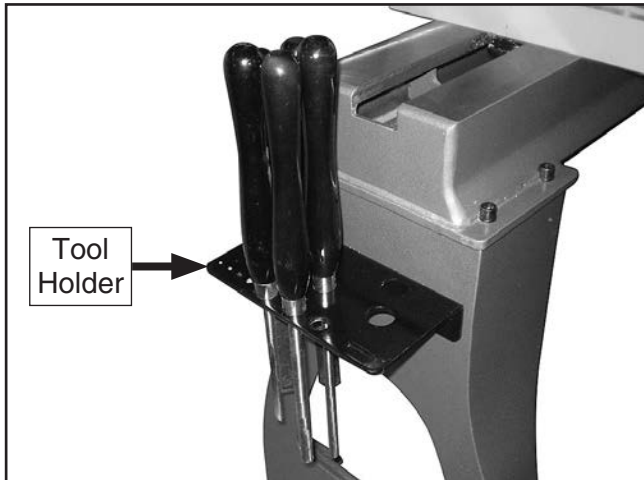


Figure 1. Tool holder attached to stand.

The front belt access panel is hinged, providing easy access to the spindle drive belt inside the headstock (see **Figure 2**). A magnet holds the cover closed.

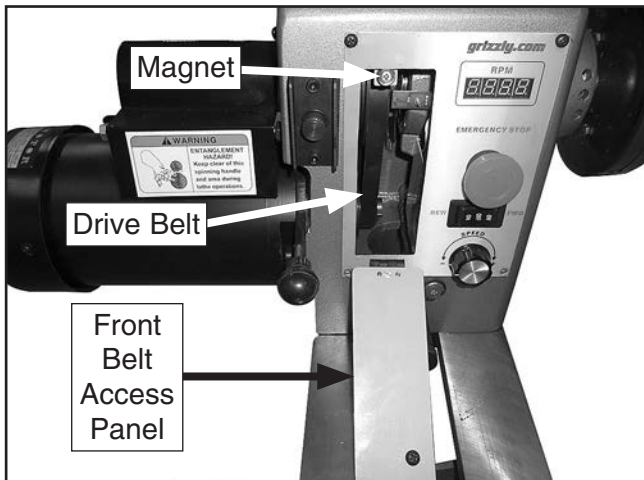


Figure 2. The front belt access panel is hinged and held closed with a magnet.

The Model G0632Z uses an ATV-13 variable-frequency inverter to control motor speed. The inverter cover features a removable side panel that encloses the power cords and (3) Type-3 M20-1.5 strain-relief connectors (see **Figure 3**).

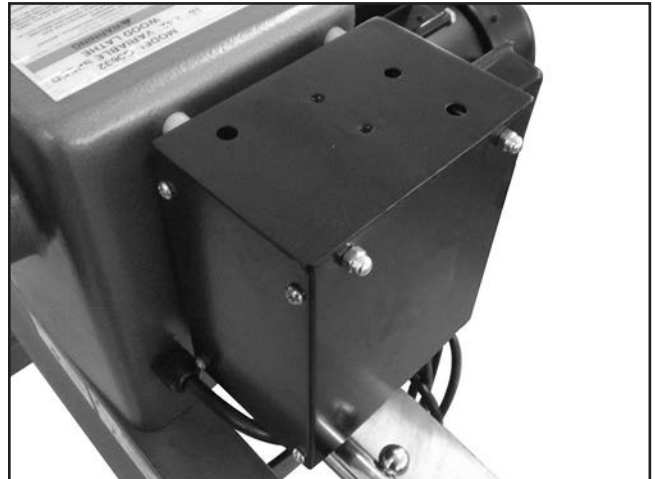


Figure 3. Inverter cover.



Electrical Components

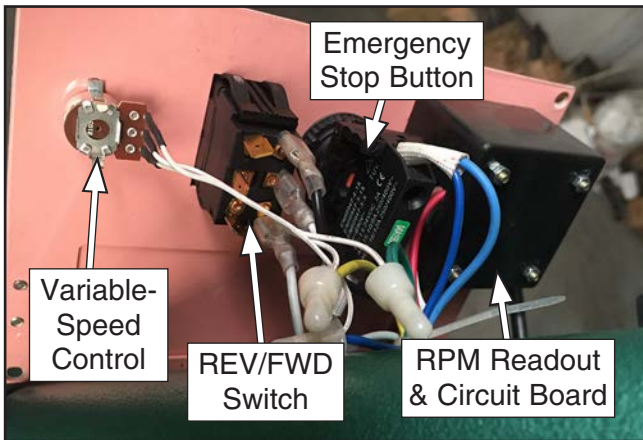


Figure 4. Control panel wiring (shown from the back of the panel).

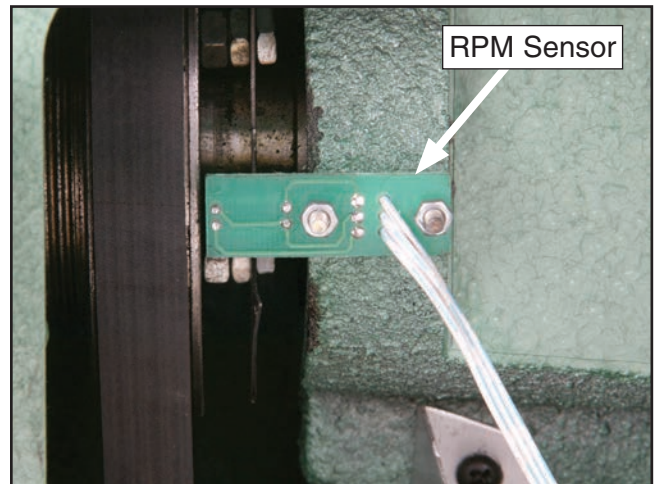


Figure 6. RPM sensor wiring.



Figure 5. Motor junction box wiring.

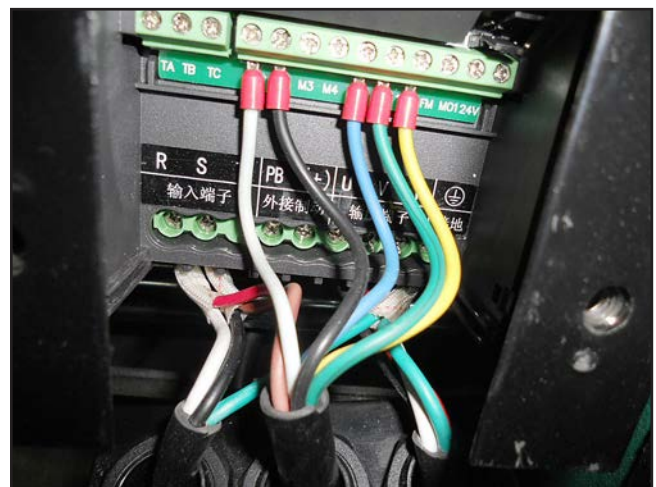
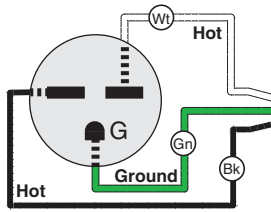


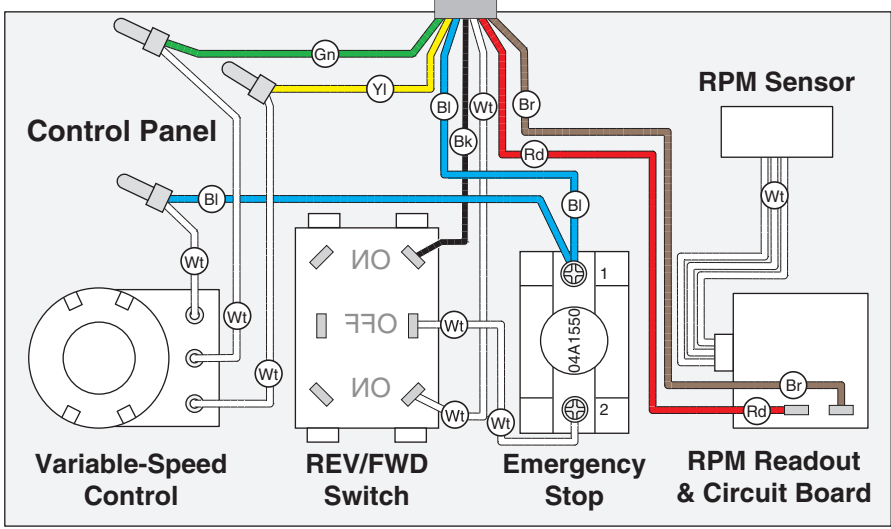
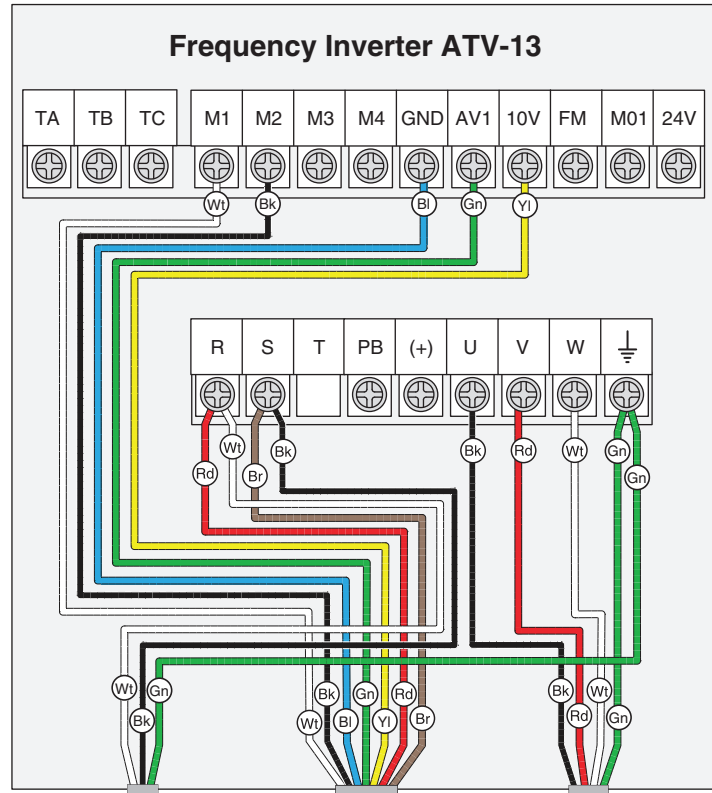
Figure 7. Frequency inverter wiring.



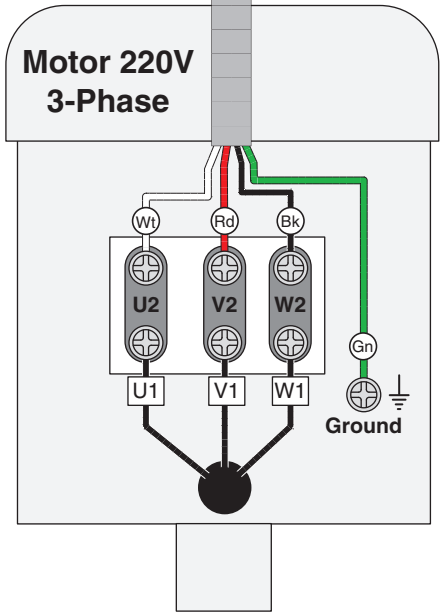
Wiring Diagram



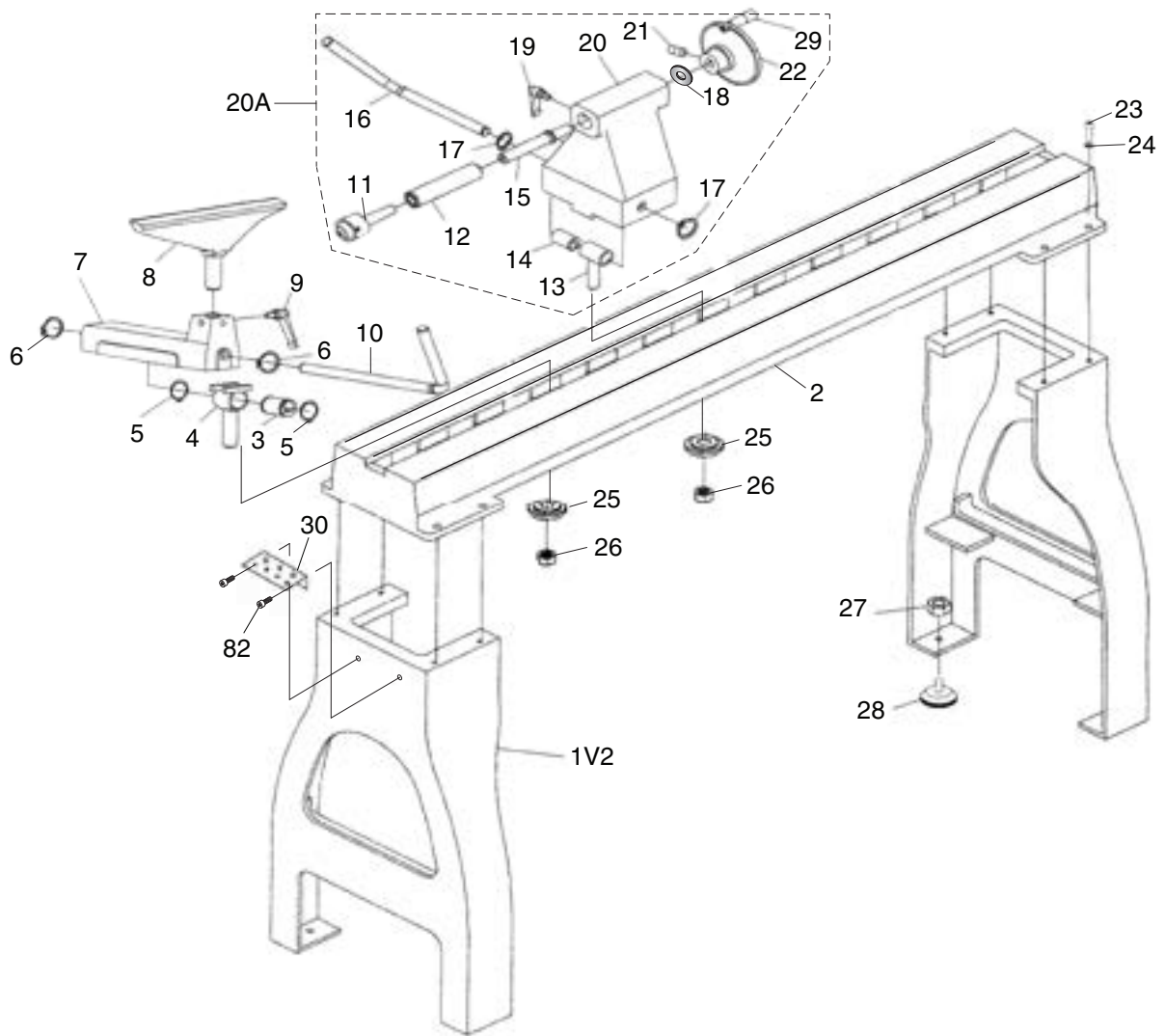
220V 1-Phase
6-15 Plug
(As Recommended)



(Viewed from Behind)



Stand

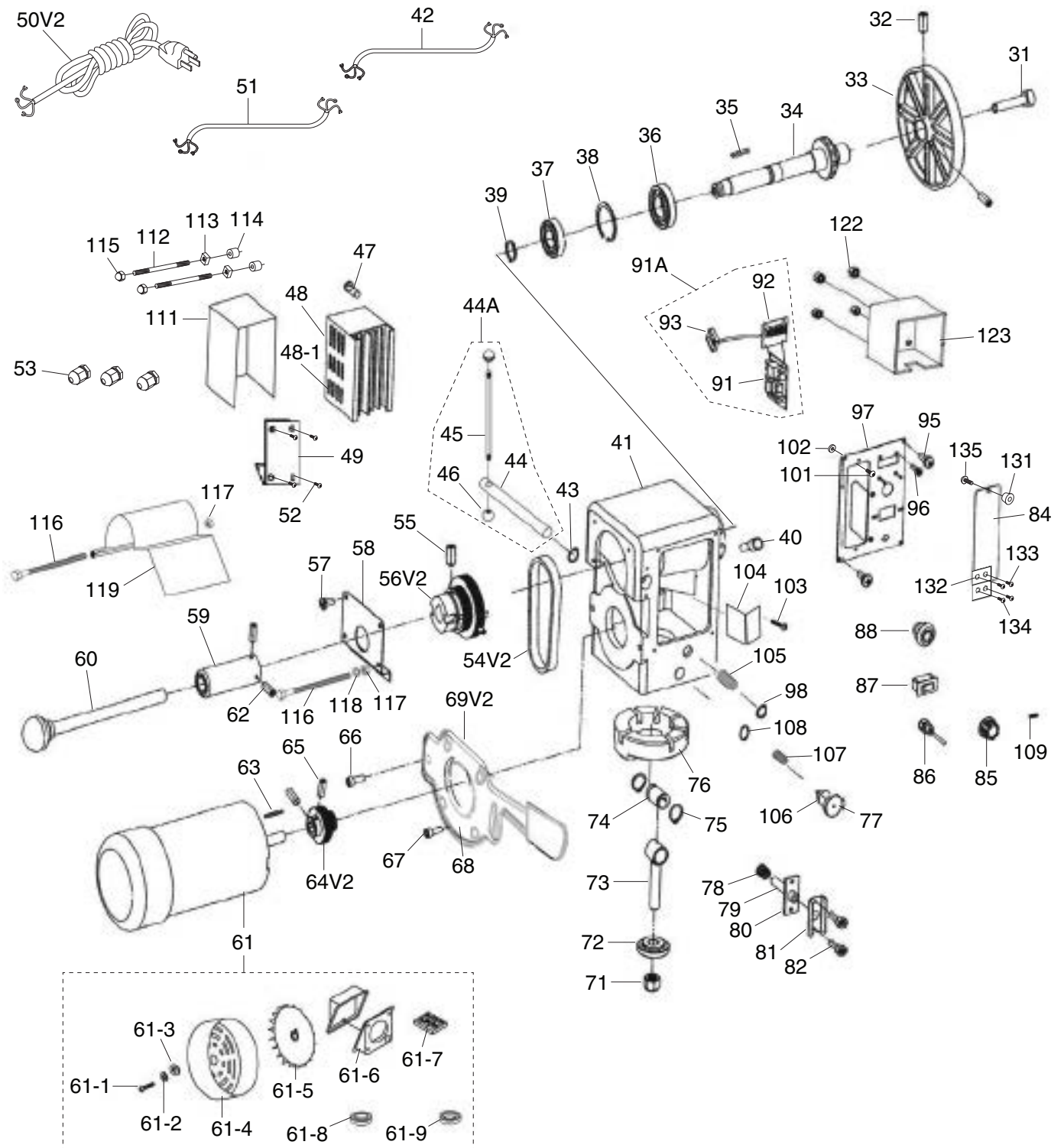


REF PART #	DESCRIPTION
1V2	P0632Z001V2 SUPPORT LEG V2.11.20
2	P0632Z002 BED
3	P0632Z003 BUSHING
4	P0632Z004 TOOL REST BASE LOCK BRACKET
5	P0632Z005 EXT RETAINING RING 25MM
6	P0632Z006 EXT RETAINING RING 18MM
7	P0632Z007 TOOL REST BASE
8	P0632Z008 TOOL REST
9	P0632Z009 ADJUSTABLE HANDLE 78L, M10-1.5 X 25
10	P0632Z010 TOOL REST BASE LOCK LEVER
11	P0632Z011 LIVE CENTER
12	P0632Z012 TAILSTOCK QUILL
13	P0632Z013 TAILSTOCK LOCK BRACKET
14	P0632Z014 BUSHING
15	P0632Z015 LEADSCREW
16	P0632Z016 TAILSTOCK LOCK LEVER

REF PART #	DESCRIPTION
17	P0632Z017 EXT RETAINING RING 18MM
18	P0632Z018 FLAT WASHER 18.5 X 40 X 2MM BR
19	P0632Z019 ADJUSTABLE HANDLE 78L, M5-.8 X 20
20	P0632Z020 TAILSTOCK
20A	P0632Z020A COMPLETE TAILSTOCK ASSY
21	P0632Z021 SET SCREW M6-1 X 12
22	P0632Z022 HANDWHEEL 132D X 18B-S X M8-1.25
23	P0632Z023 CAP SCREW M10-1.5 X 25
24	P0632Z024 LOCK WASHER 10MM
25	P0632Z025 CLAMP
26	P0632Z026 HEX NUT M18-2.5
27	P0632Z027 HEX NUT M10-1.5
28	P0632Z028 MACHINE FOOT M10-1.5 X 60
29	P0632Z029 HANDWHEEL HANDLE 9 X 20, M8-1.25 X 10
30	P0632Z030 TOOL HOLDER



Headstock



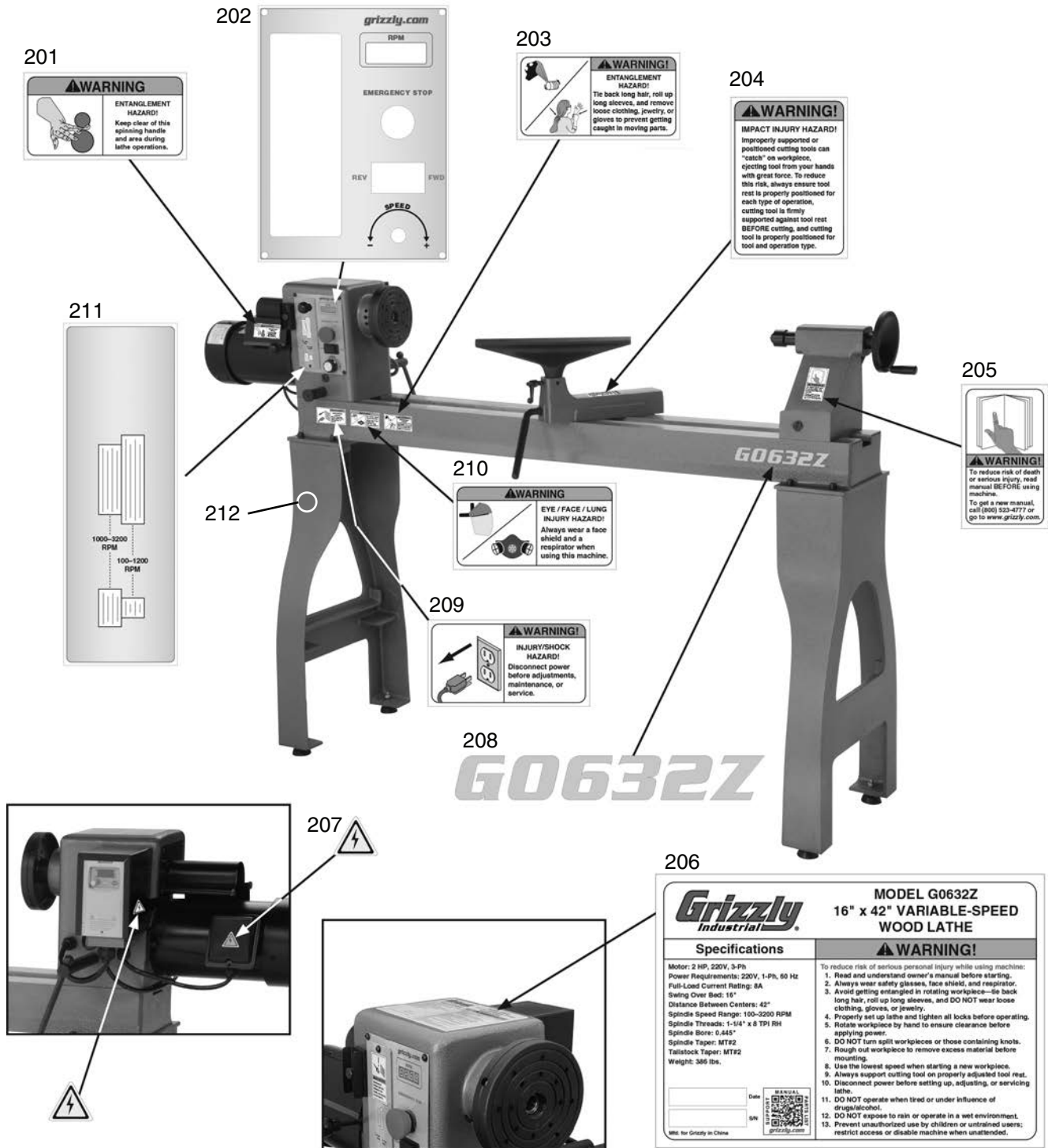
Headstock Parts

REF	PART #	DESCRIPTION
31	P0632Z031	SPUR CENTER
32	P0632Z032	SET SCREW M6-1 X 16
33	P0632Z033	FACEPLATE
34	P0632Z034	SPINDLE
35	P0632Z035	KEY 5 X 5 X 30 RE
36	P0632Z036	BALL BEARING 6207-2RS
37	P0632Z037	BALL BEARING 6206ZZ
38	P0632Z038	INT RETAINING RING 62MM
39	P0632Z039	EXT RETAINING RING 30MM
40	P0632Z040	INDEX PIN
41	P0632Z041	HEADSTOCK
42	P0632Z042	HEADSTOCK POWER CORD 4W 16G 12"
43	P0632Z043	EXT RETAINING RING 18MM
44	P0632Z044	STRAIGHT LOCK HANDLE ROD
44A	P0632Z044A	HEADSTOCK LOCK HANDLE ASSY
45	P0632Z045	SHOULDER STUD DE M10-1.5 X 8, 12 X 170
46	P0632Z046	BALL KNOB M10-1.5 D20 L18 STEEL
47	P0632Z047	CAP SCREW M5-.8 X 12
48	P0632Z048	INVERTER SAJ ATV13-2S1R5GH
48-1	P0632Z048-1	VFD KEYPAD
49	P0632Z049	INVERTER FRONT COVER
50V2	P0632Z050V2	POWER CORD 3W 16G 72" 6-15P V2.11.20
51	P0632Z051	MOTOR POWER CORD 4W 16G 12"
52	P0632Z052	PHLP HD SCR M6-1 X 16
53	P0632Z053	STRAIN RELIEF TYPE-3 M20-1.5
54V2	P0632Z054V2	RIBBED BELT V2.05.17
55	P0632Z055	SET SCREW M8-1.25 X 15
56V2	P0632Z056V2	SPINDLE PULLEY V2.05.17
57	P0632Z057	PHLP HD SCR M5-.8 X 12
58	P0632Z058	SIDE BELT ACCESS PANEL
59	P0632Z059	SPINDLE HANDLE
60	P0632Z060	KNOCKOUT TOOL
61	P0632Z061	MOTOR 1.5HP 220V 3-PH
61-1	P0632Z061-1	PHLP HD SCR M4-.7 X 8
61-2	P0632Z061-2	LOCK WASHER 4MM
61-3	P0632Z061-3	FLAT WASHER 4MM
61-4	P0632Z061-4	FAN COVER
61-5	P0632Z061-5	FAN
61-6	P0632Z061-6	MOTOR JUNCTION BOX
61-7	P0632Z061-7	JUNCTION BLOCK
61-8	P0632Z061-8	BALL BEARING 6304ZZ (FRONT)
61-9	P0632Z061-9	BALL BEARING 6203ZZ (REAR)
62	P0632Z062	SET SCREW M6-1 X 16
63	P0632Z063	KEY 5 X 5 X 45 RE
64V2	P0632Z064V2	MOTOR PULLEY V2.05.17
65	P0632Z065	SET SCREW M6-1 X 16
66	P0632Z066	CAP SCREW M10-1.5 X 25
67	P0632Z067	CAP SCREW M10-1.5 X 25
68	P0632Z068	FLAT WASHER 10MM
69V2	P0632Z069V2	MOTOR MOUNTING PLATE V2.04.19

REF	PART #	DESCRIPTION
71	P0632Z071	HEX NUT M18-2.5
72	P0632Z072	CLAMP BLOCK
73	P0632Z073	HEADSTOCK LOCK BRACKET
74	P0632Z074	BUSHING
75	P0632Z075	EXT RETAINING RING 26MM
76	P0632Z076	ROTATION BRACKET
77	P0632Z077	ROTATION LOCK PIN
78	P0632Z078	COMPRESSION SPRING 1.5 X 20 X 24
79	P0632Z079	SPINDLE LOCK PIN
80	P0632Z080	PLATE
81	P0632Z081	BRACKET
82	P0632Z082	CAP SCREW M5-.8 X 16
84	P0632Z084	FRONT BELT ACCESS PANEL
85	P0632Z085	VARIABLE-SPEED KNOB W/SET SCREW
86	P0632Z086	POTENTIOMETER B103J
87	P0632Z087	FWD/REV SWITCH KEDU HY60B
88	P0632Z088	E-STOP BUTTON KEDU HY57B
91A	P0632Z091A	RPM READOUT ASSEMBLY
91	P0632Z091	RPM READOUT CIRCUIT BOARD DKLD CB07A
92	P0632Z092	RPM READOUT LED DKLD CB078
93	P0632Z093	SPINDLE RPM SENSOR
95	P0632Z095	PHLP HD SCR M3-.5 X 12
96	P0632Z096	FLAT HD SCR M3-.5 X 20
97	P0632Z097	CONTROL PLATE
98	P0632Z098	EXT RETAINING RING 18MM
101	P0632Z101	PHLP HD SCR M4-.7 X 8
102	P0632Z102	MAGNETIC RING
103	P0632Z103	PHLP HD SCR M5-.8 X 10
104	P0632Z104	DIVIDING PLATE
105	P0632Z105	COMPRESSION SPRING 4 X 25 X 40
106	P0632Z106	ROTATION LOCK PIN NUT
107	P0632Z107	COMPRESSION SPRING
108	P0632Z108	EXT RETAINING RING 8MM
109	P0632Z109	SET SCREW M5-.8 X 8
111	P0632Z111	INVERTER COVER
112	P0632Z112	STUD DE M6-1 X 140, 40
113	P0632Z113	SQUARE NUT M6-1
114	P0632Z114	SPACER 10 X 14MM PLASTIC
115	P0632Z115	ACORN NUT M6-1
116	P0632Z116	HEX BOLT M8-1.25 X 140
117	P0632Z117	HEX NUT M8-1.25
118	P0632Z118	RUBBER WASHER 8MM
119	P0632Z119	SPINDLE HANDLE SAFETY COVER
122	P0632Z122	HEX NUT M3-.5
123	P0632Z123	RPM CIRCUIT BOARD COVER
131	P0632Z131	THUMB SCREW M6-1
132	P0632Z132	HINGE
133	P0632Z133	PHLP HD SCR M4-.7 X 6
134	P0632Z134	PHLP HD SCR M4-.7 X 10
135	P0632Z135	PHLP HD SCR M6-1 X 12



Labels & Cosmetics



REF PART #	DESCRIPTION
201	P0632Z201 ENTANGLEMENT/PINCH LABEL
202	P0632Z202 HEADSTOCK CONTROL PANEL LABEL
203	P0632Z203 ENTANGLEMENT WARNING LABEL
204	P0632Z204 IMPACT INJURY WARNING LABEL
205	P0632Z205 READ MANUAL LABEL
206	P0632Z206 MACHINE ID LABEL

REF PART #	DESCRIPTION
207	P0632Z207 ELECTRICITY WARNING LABEL
208	P0632Z208 MODEL NUMBER LABEL
209	P0632Z209 DISCONNECT POWER LABEL
210	P0632Z210 FACE/LUNG WARNING LABEL
211	P0632Z211 SPINDLE SPEED LABEL
212	P0632Z212 TOUCH-UP PAINT GRIZZLY GREEN



WARRANTY & RETURNS

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

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

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

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

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

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

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



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Grizzly ***Industrial, Inc.***®

MODEL G0632 **16" X 42" VARIABLE SPEED** **WOOD LATHE** **OWNER'S MANUAL** *(For models manufactured since 4/12)*



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#TS8724 PRINTED IN CHINA



WARNING!

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

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

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

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



WARNING!

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

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

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

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INTRODUCTION

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.

Grizzly Industrial MODEL GXXXX
MACHINE NAME

SPECIFICATIONS	WARNING!
Motor: _____	To reduce risk of serious injury when using this machine:
Specification: _____	1. Read manual before operation.
Specification: _____	2. Wear safety glasses and respirator.
Specification: _____	3. Make sure machine is properly adjusted/setup and
Weight: _____	4. Make sure the motor has stopped and disconnect
Date: _____	5. DO NOT expose to rain or dampness.
_____	6. DO NOT modify this machine in any way.
_____	7. _____
_____	8. _____
_____	9. _____
_____	10. Maintain machine carefully to prevent accidents.

Manufactured for Grizzly in Taiwan

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

Machine Description

The G0632 16" X 42" Wood Lathe is designed to turn wood stock so the operator can remove material with a chisel.

The variable speed control allows for spindle speed adjustment from 100–3200 RPM and the digital readout provides a precise reading of the current spindle speed.

The headstock can be positioned anywhere along the bed for increased flexibility in workpiece setup.



Identification

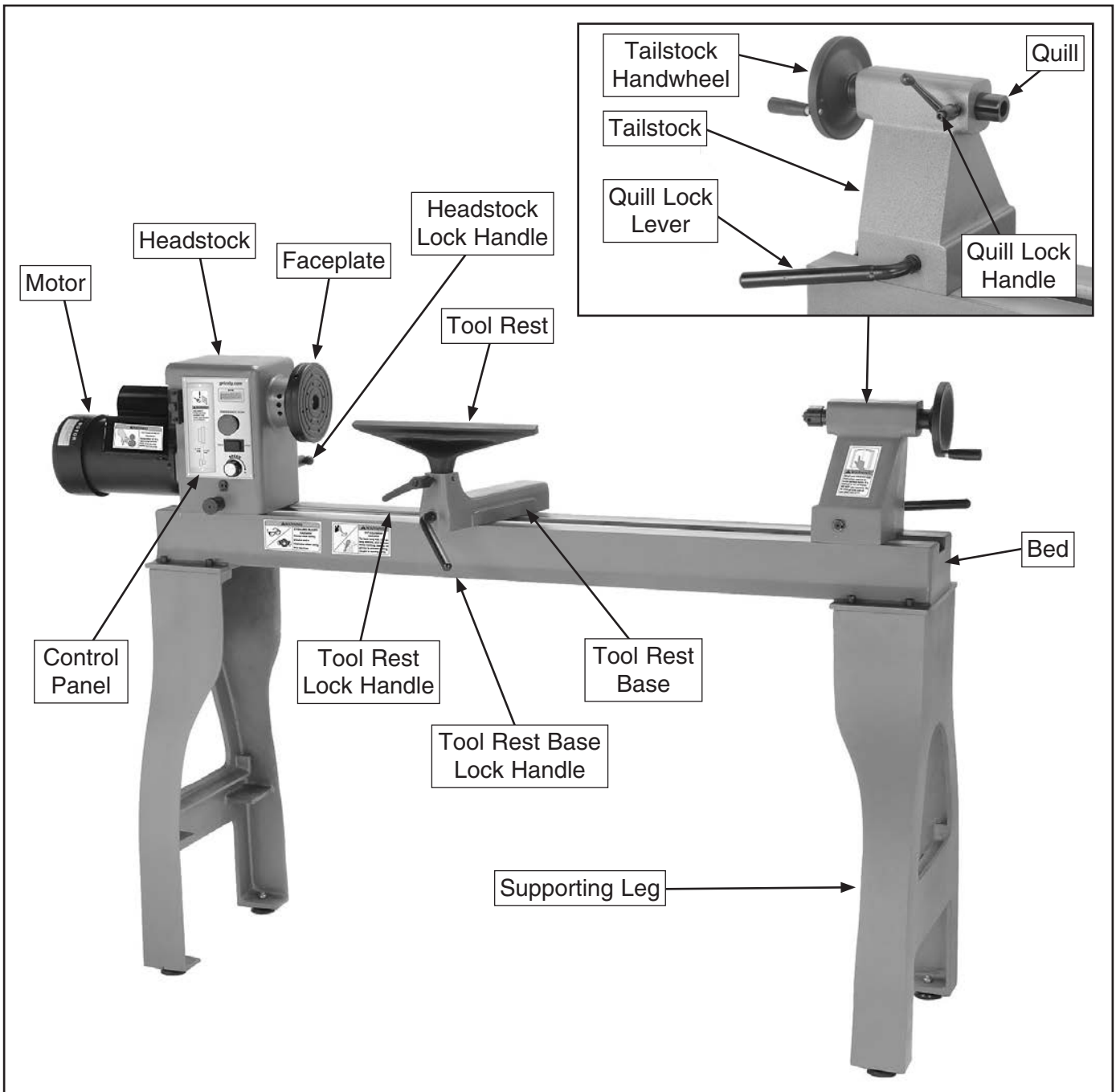
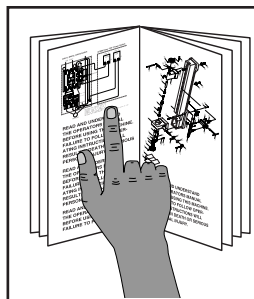


Figure 1. Model G0632 component identification.



! WARNING

To reduce the risk of serious injury when using this machine, read and understand this entire manual before beginning any operations.



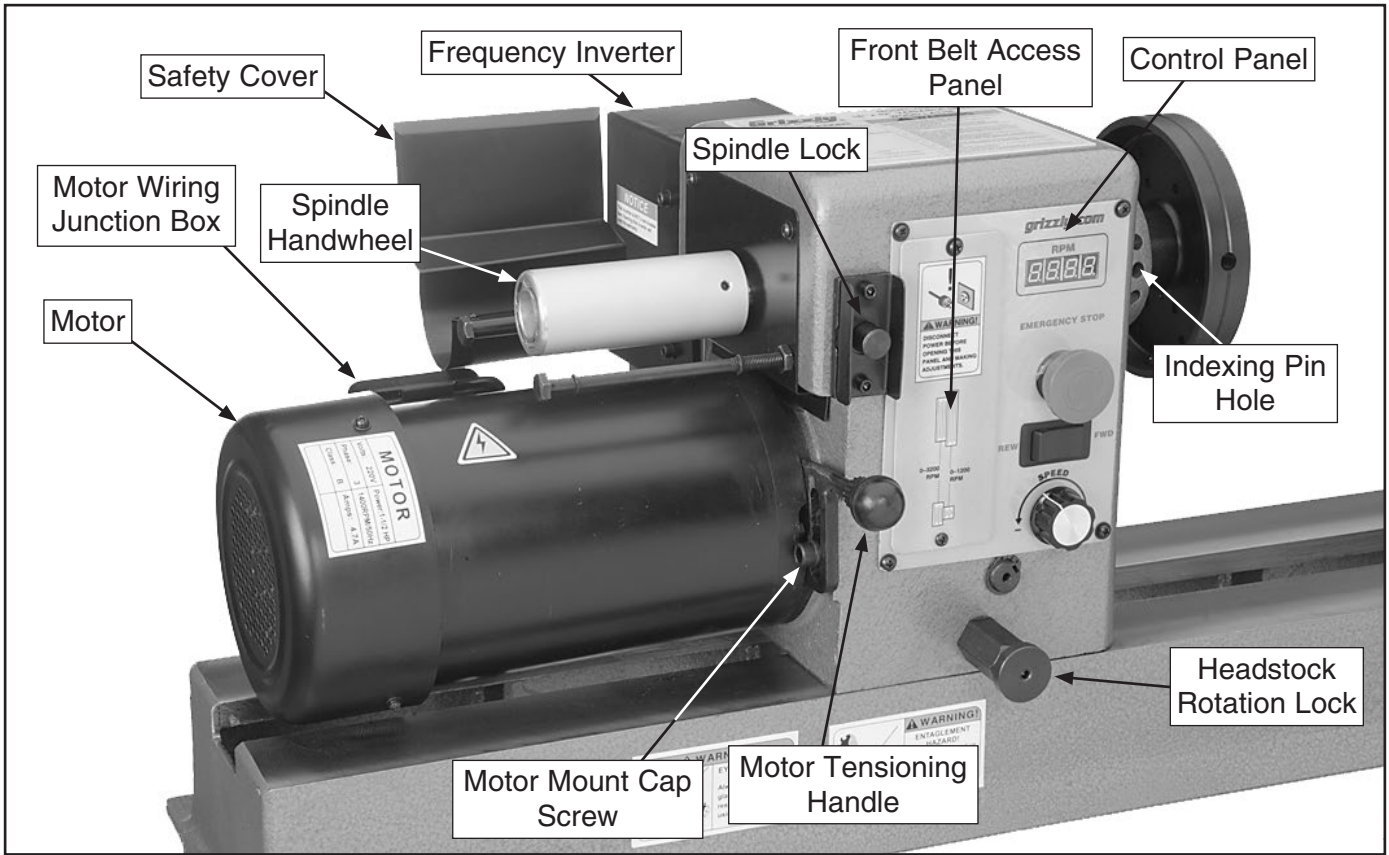


Figure 2. Model G0632 headstock.

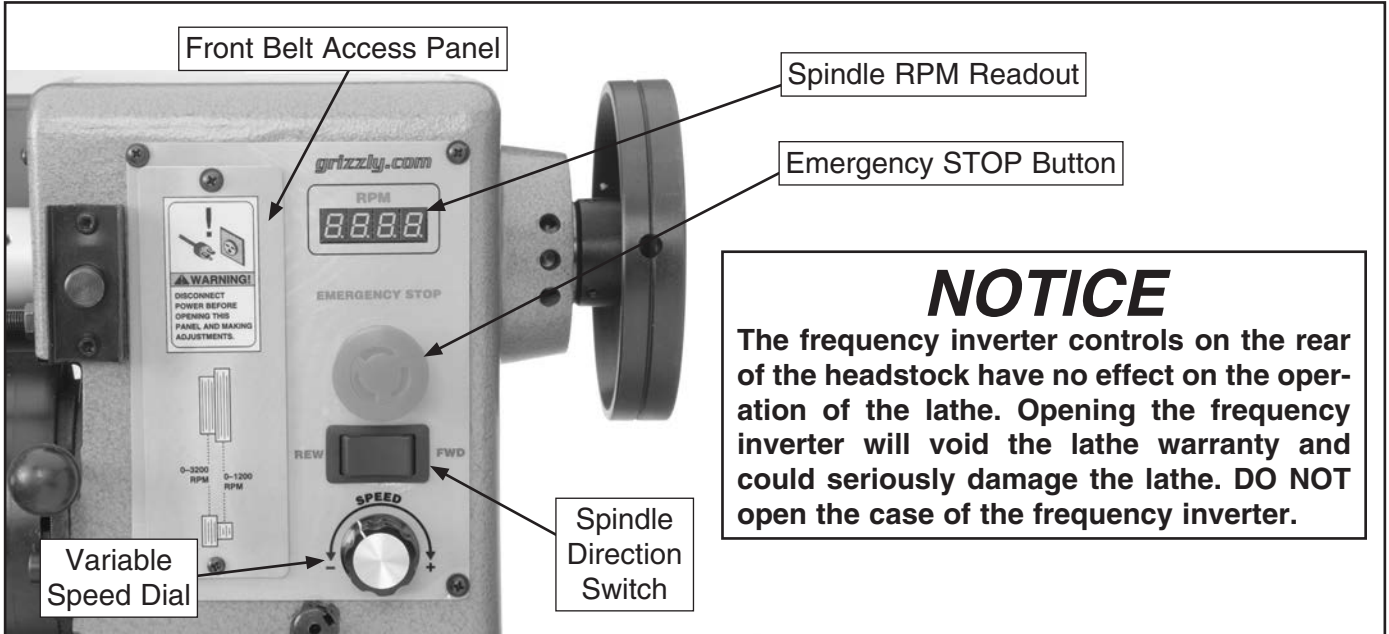


Figure 3. Model G0632 control panel identification.



Glossary Of Terms

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

Bed: The long, rail-like metal base to which the tailstock, tool base, and headstock are attached.

Chuck: A mechanical device that attaches to the spindle and holds the workpiece.

Faceplate: The metal disc that threads onto the headstock spindle.

Faceplate Turning: Turning situation in which the grain of the turning stock is at right angles to the lathe bed axis.

Backing Block: A sacrificial piece of wood glued to the base of the workpiece and screwed to the faceplate. Often used to prevent mounting marks from appearing on the completed workpiece.

Headstock: The cast metal box to which the motor is attached and contains the spindle, bearings, and electrical components for operating the lathe.

Index Head: The mechanism that allows the headstock spindle to be locked at specific intervals for layout or other auxiliary tasks.

Offset Turning: A turning situation where the center of the workpiece is offset at various stages of the work to produce different shapes.

Outboard Turning: Turning of workpiece with the headstock situated at the far end of the lathe so the work done is not over the bed of the lathe.

Roughing Out: Taking stock from square billet to round blank.

Spindle: This term has two meanings. First, it refers to the threaded shaft in the headstock to which the faceplate is attached. Second, it refers to any work that is spindle-turned.

Spindle-Turning: Work performed where the grain and length of the workpiece are parallel to the axis of the bed.

Swing: The capacity of the lathe, measured by doubling the distance from the bed to the spindle center.

Tailstock: The metal component at the opposite end of the bed from the headstock containing a quill and live or dead centers. It maintains pressure on the spindle-turned workpiece.

Tool Base: The movable metal fixture attached to the bed upon which the tool rest is fixed.

Tool Rest: The adjustable metal arm upon which the tool rests during a turning operation.

Way: One of the metal rails that make up the bed of the lathe.





MACHINE DATA SHEET

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

MODEL G0632 16" X 42" VARIABLE-SPEED WOOD LATHE

Product Dimensions:

Weight..... 386 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 77-1/16 x 22-1/16 x 47 in.
Footprint (Length x Width)..... 59-7/8 x 17-3/8 in.

Shipping Dimensions:

Type..... Wood Crate
Content..... Machine
Weight..... 394 lbs.
Length x Width x Height..... 61 x 18 x 22 in.
Must Ship Upright..... Yes

Electrical:

Power Requirement..... 220V, Single-Phase, 60 Hz
Prewired Voltage..... 220V
Full-Load Current Rating..... 4.7A
Minimum Circuit Size..... 15A
Connection Type..... Cord & Plug
Power Cord Included..... Yes
Power Cord Length..... 6 ft.
Power Cord Gauge..... 16 AWG
Plug Included..... No
Recommended Plug Type..... 6-15
Switch Type..... Sealed Rocker Switch
Inverter (VFD) Type..... Delta VFD-S
Inverter (VFD) Size..... 1 HP

Motors:

Main

Horsepower..... 1.5 HP
Phase..... 3-Phase
Amps..... 4.7A
Speed..... 1725 RPM
Type..... TEFC Induction
Power Transfer..... V-Belt Drive
Bearings..... Shielded & Permanently Lubricated

Main Specifications:

Operation Information

Swing Over Bed..... 16 in.
Swing Over Tool Rest Base..... 11-1/2 in.
Distance Between Centers..... 42 in.
Max. Distance Tool Rest to Spindle Center..... 6 in.
No of Spindle Speeds..... Variable
Spindle Speed Range..... 100 – 3200 RPM
Floor to Center Height..... 44-1/2 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..... 0.445 in.
Type of Included Spindle Center..... Spur
Indexed Spindle Increments..... 10 deg.
No of Indexes..... 12

Tool Rest Information

Tool Rest Width..... 14-1/8 in.
Tool Rest Post Diameter..... 25 mm
Tool Rest Post Length..... 2-9/16 in.
Tool Rest Base Height..... 2-1/8 in.

Tailstock Information

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

Construction

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

Other Related Information

Bed Width..... 7 in.
Faceplate Size..... 6 in.

Other Specifications:

Country of Origin China
Warranty 1 Year
Approximate Assembly & Setup Time 30 Minutes
Serial Number Location ID Label
ISO 9001 Factory No
Certified by a Nationally Recognized Testing Laboratory (NRTL) No

Features:

- Electronic Variable Speed Control
- Digital Spindle Speed Indicator
- 30 deg. Direct Indexing Using One Indexing Hole
- 10 deg. Indexing Using all Three Indexing Holes
- Headstock can be Positioned anywhere along the Bed
- Tailstock, Headstock, and Tool Rest Support have Lever Action Cam Locks for Quick Positioning
- Belt Drive Offers Two Speed Ranges
- Spindle Lock Pin
- Outboard Spindle Handle
- Forward/Reversing Switch
- Emergency Stop Switch
- Operates a 3-Phase Motor on Single-Phase Power with Inverter




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

Safety Instructions for Machinery

WARNING

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

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

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

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

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

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

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



WARNING

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



WARNING

Additional Safety for Wood Lathes

KEEPING GUARDS IN PLACE. Make sure all guards are in place and that the lathe sits on a flat, stable surface.

EYE/FACE PROTECTION. Airborne wood dust and debris can be hazardous to the eyes/face and may cause allergies or long-term respiratory health problems. Always wear eye protection or a face shield when operating the lathe.

RESPIRATORY PROTECTION. Always wear a respirator when using this machine. Wood dust may cause allergies or long-term respiratory health problems.

MOUNTING WORKPIECE. Before starting, be certain the workpiece has been properly imbedded on the headstock and tailstock centers and that there is adequate clearance for the full rotation.

ADJUSTING TOOL REST. Adjust tool rest to provide proper support for the turning tool you will be using. Test tool rest clearance by rotating workpiece by hand before turning lathe **ON**.

TURNING SPEED. Select the correct turning speed for your work, and allow the lathe to gain full speed before using.

USING SHARP CHISELS. Keep lathe chisels properly sharpened and held firmly in position when turning.

OPERATING DAMAGED LATHE. Never operate the lathe with damaged or worn parts.

WORKPIECE CONDITION. Always inspect the condition of your workpiece. **DO NOT** turn pieces with knots, splits, and other potentially dangerous conditions. Make sure joints of glued-up pieces have high quality bonds and won't fly apart during operation.

ADJUSTMENTS/MAINTENANCE. Make sure your wood lathe is turned **OFF**, disconnected from its power source, and all moving parts have come to a complete stop before starting any inspection, adjustment, or maintenance procedure.

STOPPING LATHE. **DO NOT** stop the lathe by using your hand against the workpiece. Allow the lathe to stop on its own.

AVOIDING ENTANGLEMENT. Keep long hair and loose clothing articles such as sleeves, belts, and jewelry items away from the lathe spindle.

FACEPLATE TURNING. When faceplate turning, make sure the faceplate is securely attached to the workpiece and it is properly attached to the spindle. When faceplate turning, use lathe chisels on the downward spinning side of the workpiece only.

SANDING/POLISHING. Remove the tool rest when performing sanding or polishing operations on the rotating spindle.

MATERIAL REMOVAL RATE. Attempting to remove too much material at once may cause workpiece to fly out of the lathe.

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 lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

CAUTION

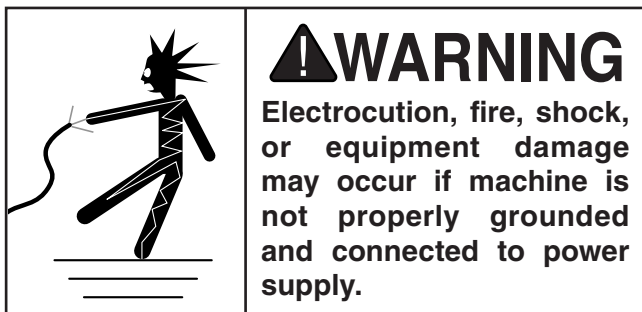
No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or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



SECTION 2: POWER SUPPLY

Availability

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



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 4.7 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 Requirements for 220V

This machine is prewired to operate on a 220V power supply circuit that has a verified ground and meets the following requirements:

Nominal Voltage 220V/240V
Cycle 60 Hz
Phase 1-Phase
Power Supply Circuit 15 Amps
Plug/Receptacle NEMA 6-15

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.)



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



Grounding 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.

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.

⚠ 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.

For 220V operation: The plug specified under “Circuit Requirements for 220V” on the previous page has a grounding prong that must be attached to the equipment-grounding wire on the included power cord. The plug must only be inserted into a matching receptacle (see following figure) that is properly installed and grounded in accordance with all local codes and ordinances.

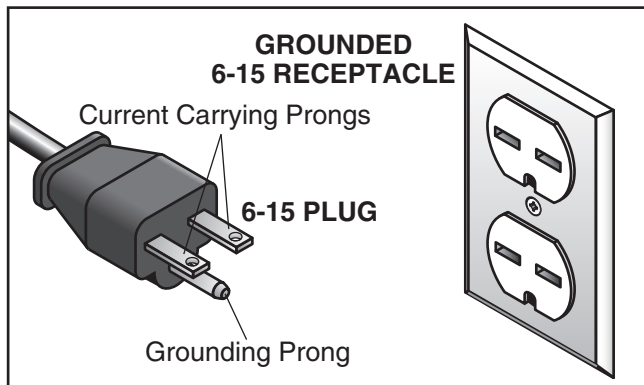
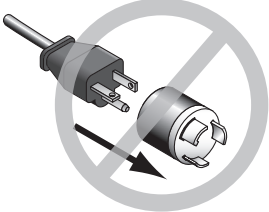


Figure 4. Typical 6-15 plug and receptacle.

⚠ CAUTION



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

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.

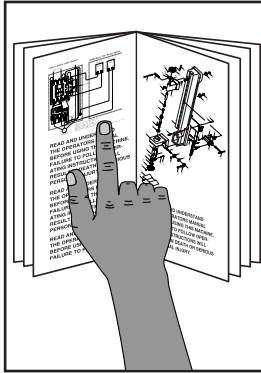
Extension cords cause voltage drop, which can damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

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 16 AWG
Maximum Length (Shorter is Better).....50 ft.

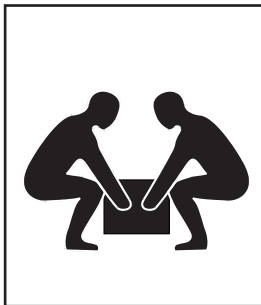


SECTION 3: SETUP



!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

This machine and its components are very heavy. Get lifting help or use power lifting equipment such as a forklift to move heavy items.

Needed for Setup

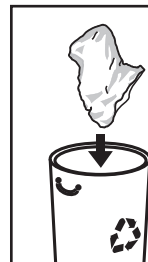
The following are needed to complete the setup process, but are not included with your machine.

Description	Qty
• Additional People	1
• Safety Glasses (for each person)	1
• Cleaner/Degreaser (Page 15)....	As Needed
• Disposable Shop Rags.....	As Needed
• Measuring Tape	1
• Wrench 17mm.....	1
• Level.....	1

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.***



!WARNING

SUFFOCATION HAZARD!

Keep children and pets away from plastic bags or packing materials shipped with this machine. Discard immediately.



Inventory

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

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

Box Inventory: (Figures 5–7)	Qty
A. Lathe Assembly	
—Headstock (mounted)	1
—Tool Rest Base (mounted).....	1
—Tailstock (mounted)	1
—Face Plate 6" (installed).....	1
B. Supporting Legs	2
C. Machine Feet.....	4
D. Tool Rest.....	1
E. Spur Center MT#2.....	1
F. Live Center MT#2.....	1
G. Hex Wrenches 3, 4, 8mm	1 Ea
H. Knockout Tool	1
I. Indexing Pin.....	1
J. Hardware (not shown)	
—Cap Screws M10-1.5 x 25	8
—Lock Washers 10mm.....	8

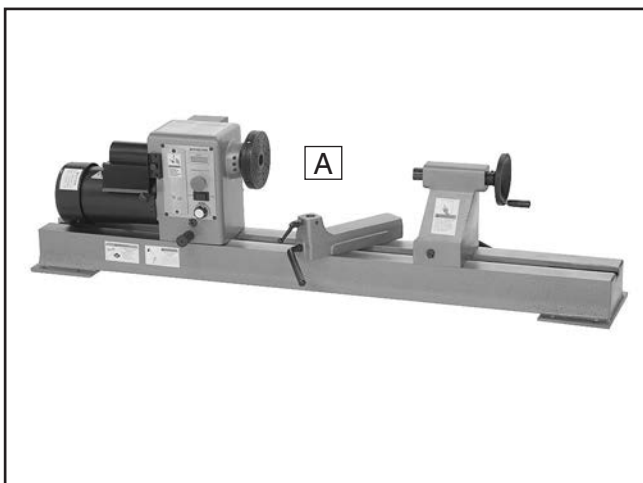


Figure 5. Model G0632 inventory A.

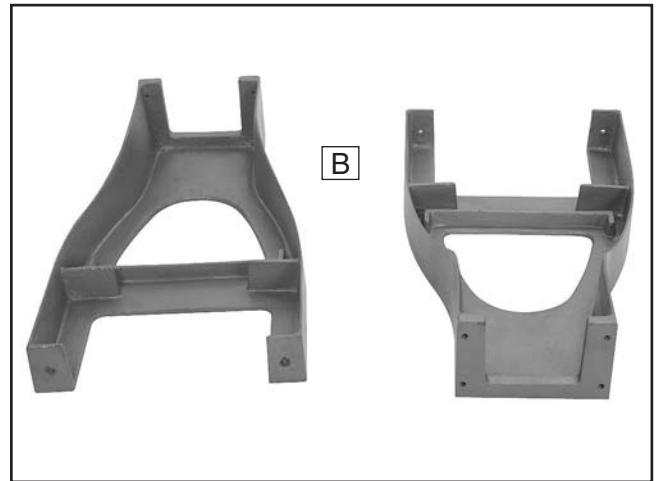


Figure 6. Model G0632 inventory B.

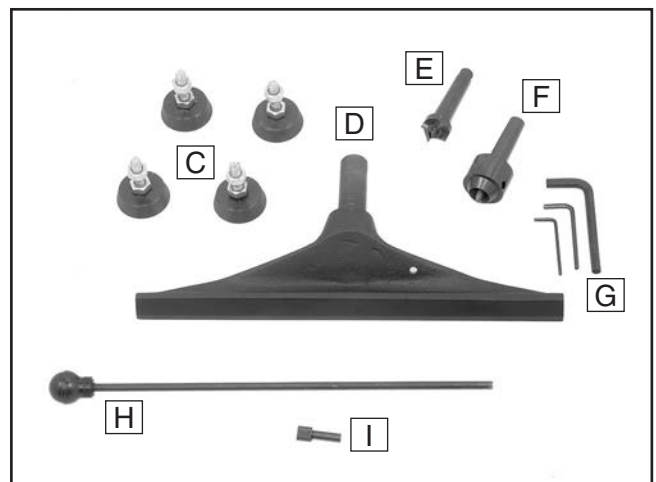


Figure 7. Model G0632 inventory C–I.

NOTICE

If you cannot find an item on this list, carefully check around/inside the machine and packaging materials. Often, these items get lost in packaging materials while unpacking or they are pre-installed at the factory.



Cleanup

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

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

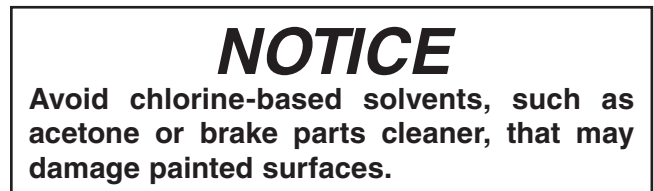
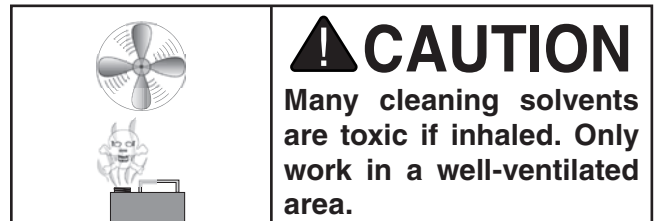
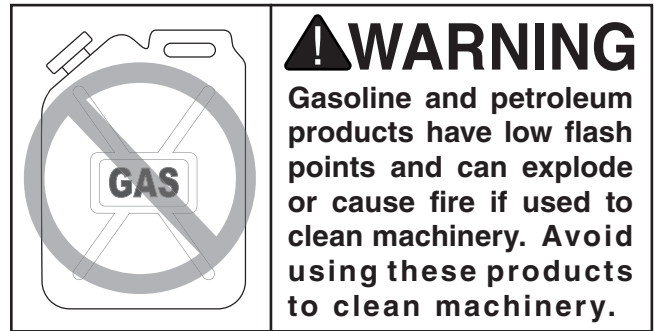
There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

Before cleaning, gather the following:

- Disposable rags
- Cleaner/degreaser (WD•40 works well)
- Safety glasses & disposable gloves
- Plastic paint scraper (optional)

Basic steps for removing rust preventative:

1. Put on safety glasses.
2. Coat the rust preventative with a liberal amount of cleaner/degreaser, then let it soak for 5–10 minutes.
3. Wipe off the surfaces. If your cleaner/degreaser is effective, the rust preventative will wipe off easily. If you have a plastic paint scraper, scrape off as much as you can first, then wipe off the rest with the rag.
4. Repeat **Steps 2–3** as necessary until clean, then coat all unpainted surfaces with a quality metal protectant to prevent rust.



T23692—Orange Power Degreaser

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



Figure 8. T23692 Orange Power Degreaser.



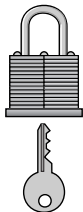
Site Considerations

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.**

	<p>CAUTION</p> <p>Children or untrained people may be seriously injured by this machine. Only install in an access restricted location.</p>
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Physical Environment

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

Electrical Installation

Place this machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure to leave enough space around machine to disconnect power supply or apply a lockout/tagout device, if required.

Lighting

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

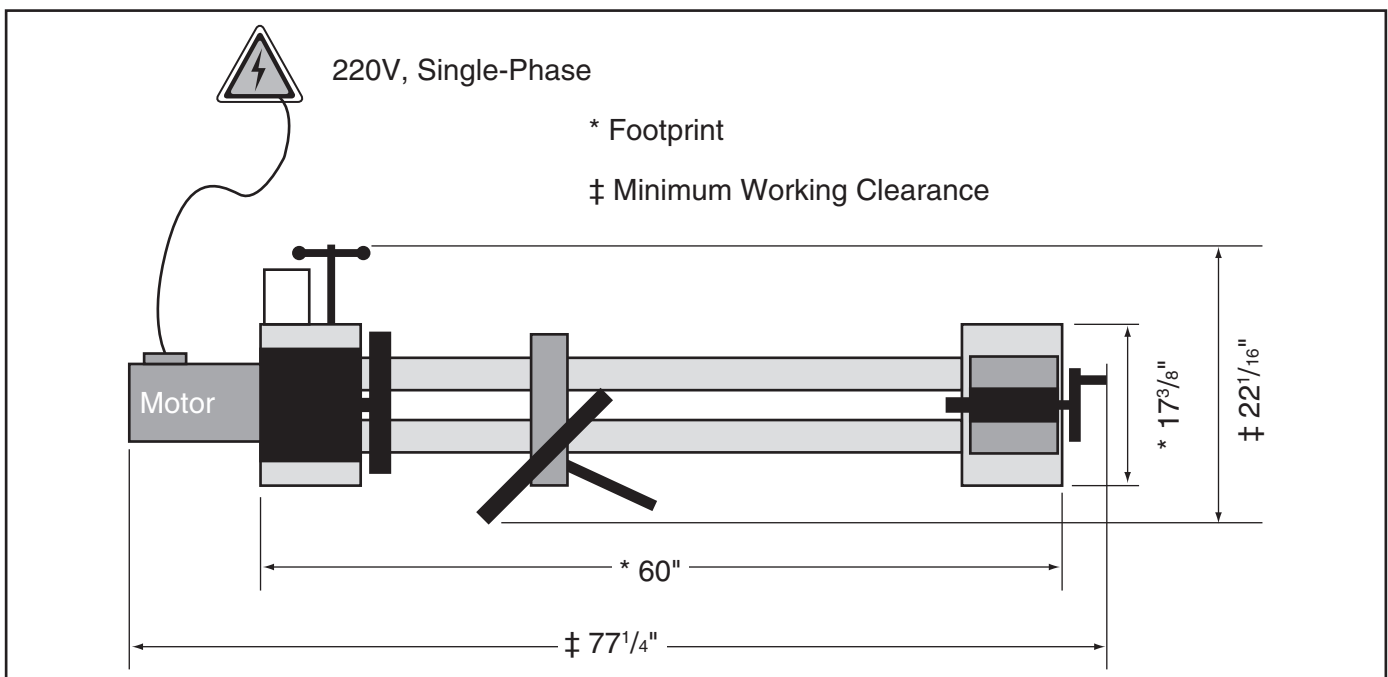


Figure 9. Minimum working clearances.



Mounting to Shop Floor

Although not required, we recommend that you bolt your new lathe to the floor. Because this is an optional step and floor materials may vary, machine feet are included with your lathe. Generally, you can either bolt your machine to the floor or mount it on the included machine feet. Whichever option you choose, we recommend leveling your machine with a precision level.

Bolting to Concrete Floors

Lag shield anchors with lag bolts and anchor studs (see **Figure 10**) are two popular methods for anchoring an object to a concrete floor. We suggest you research the many options and methods for mounting your machine and choose the best that fits your specific application.

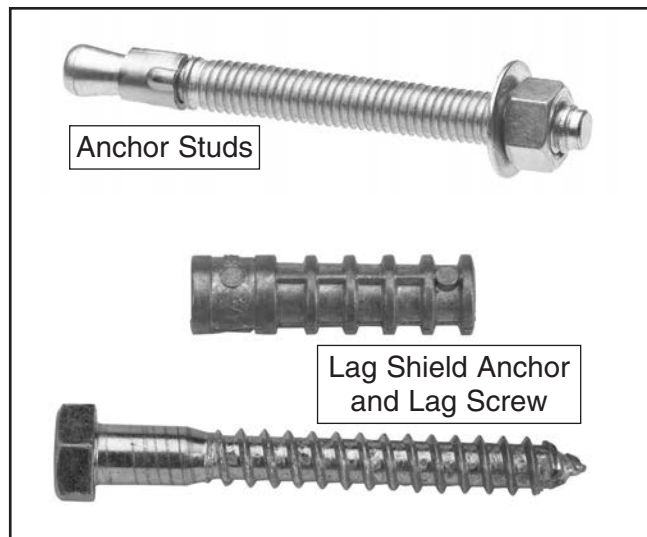


Figure 10. Typical fasteners for mounting to concrete floors.

NOTICE

Anchor studs are stronger and more permanent alternatives to lag shield anchors; however, they will stick out of the floor, which may cause a tripping hazard if you decide to move your machine.


Assembly

To assemble your lathe:

1. Stand the right and left supporting legs up approximately 47" apart, and get them reasonably aligned, as shown in **Figure 11**.



Figure 11. Stand legs approximately 47" apart to prepare for mounting the lathe.

	<p>! WARNING</p> <p>The G0632 and its components are very heavy. Get lifting help or use power lifting equipment such as a fork lift to move heavy items.</p>
--	--

2. Using the help of assistants, carefully lift the lathe onto the stands and align the mounting holes.

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

Continued on next page →



- Secure the lathe assembly to the supporting legs with the (8) M10-1.5 x 25 cap screws and 10mm flat washers (see **Figure 12**).



Figure 12. Securing lathe assembly to supporting legs.

- If you are bolting your lathe to the floor, skip to **Step 7**. Otherwise, move the tailstock, tool rest assembly, and headstock to one end of the lathe bed (see the **OPERATIONS** section beginning on **Page 21** for instructions for moving these components).
- Use assistants to lift the light end of the lathe onto support blocks in preparation for installing the machine feet (see **Figure 13**).

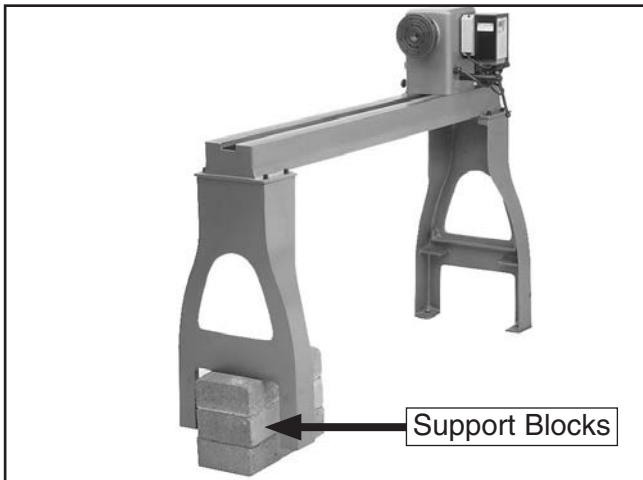


Figure 13. Example of supporting one end of lathe in preparation for installing the machine feet.

Note: Use assistants to support and stabilize the lathe while you install the machine feet.

- Insert the machine feet into the mounting holes of the supporting legs, as shown in **Figure 14**. Do not tighten the top hex nut yet. Repeat **Steps 5–6** on the other legs.



Figure 14. Machine feet installed.

- Place a level on the lathe bed and make necessary adjustments so that the bed is level from side-to-side and front-to-back.
 - If you are using the machine feet, adjust the top and bottom hex nuts on each leg to level the bed; then tighten the hex nuts to secure these adjustments.
 - If you are bolting your lathe to the floor, use shims under the legs to level the bed; then tighten the mounting fasteners.
- Insert the tool rest into the tool rest base and tighten the tool rest lock lever (see **Figure 15**).

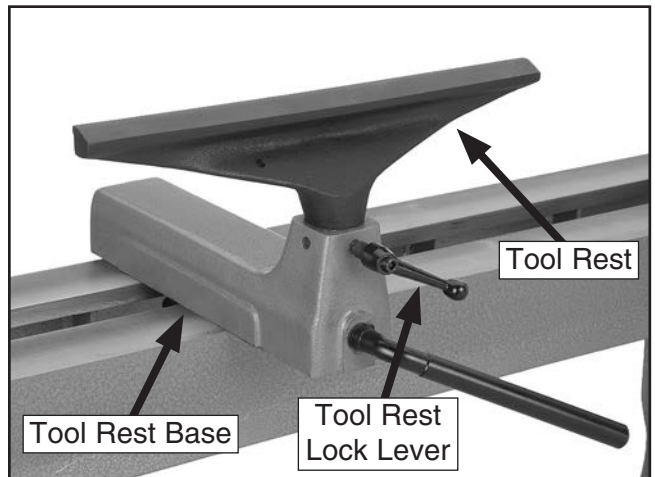


Figure 15. Tool rest installed on the tool rest base.



Power Connection

After you have completed all previous setup instructions and circuit requirements, the machine is ready to be connected to the power supply.

To avoid unexpected startups or property damage, use the following steps whenever connecting or disconnecting the machine from the power

Connecting Power

1. Turn the machine power switch **OFF**.
2. Insert the power cord plug into a matching power supply receptacle. The machine is now connected to the power source.

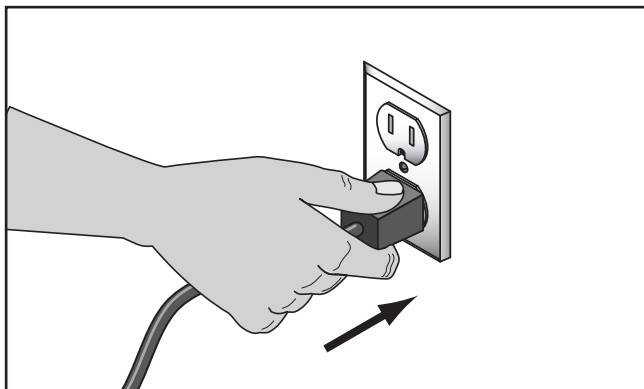


Figure 16. Connecting power.

Disconnecting Power

1. Turn the machine power switch **OFF**.
2. Grasp the molded plug and pull it completely out of the receptacle. **DO NOT** pull by the cord as this may damage the wires inside.

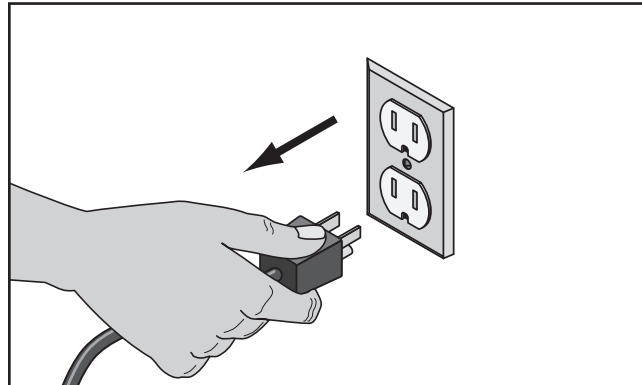


Figure 17. Disconnecting power.



Test Run

Once the assembly is complete, test run your machine to make sure it runs properly and is ready for regular operation. The test run consists of verifying the following: 1) The motor powers up and runs correctly and 2) the stop button safety feature works correctly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting on Page 39**.

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

!WARNING

Before starting the lathe, make sure you have performed the preceding assembly and adjustment instructions, and you have read through the rest of the manual and are familiar with the various functions and safety features on this machine. Failure to follow this warning could result in serious personal injury or even death!

To test run your lathe:

1. Make sure you understand the safety instructions at the beginning of the manual and that the machine is setup properly.
2. Make sure all tools and objects used during setup are cleared away from the machine.
3. Connect the machine to the power source.

4. Push the EMERGENCY stop button in, then twist it clockwise so it pops out. When the button pops out, the switch is reset and ready for operation (see **Figure 18**).

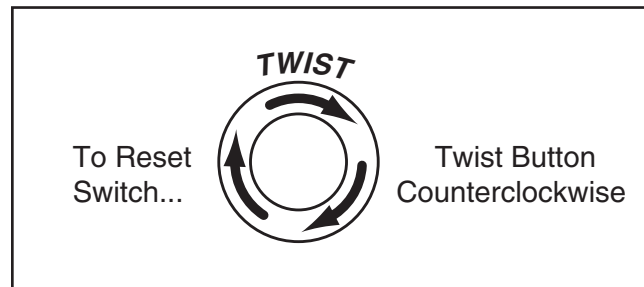
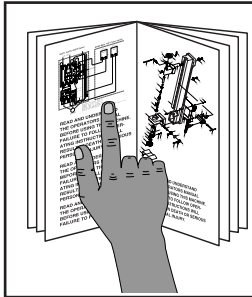


Figure 18. Resetting the EMERGENCY stop switch.

5. Verify that the machine is operating correctly by pressing the REV/FWD switch to FWD.
 - When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.
 - Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.
6. Press the REV/FWD switch to the center neutral position to stop the machine, and push in the EMERGENCY stop button.
7. WITHOUT resetting the EMERGENCY stop button, press the press the REV/FWD switch to FWD. The machine should not start.
 - If the machine does not start, the EMERGENCY stop button safety feature is working correctly. The **Test Run** is complete.
 - If the machine does start (with the EMERGENCY stop button pushed in), immediately disconnect power to the machine. The EMERGENCY stop button safety feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.



SECTION 4: OPERATIONS

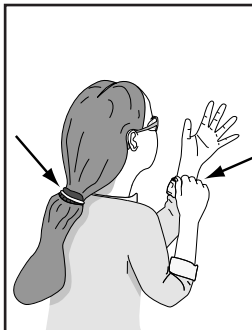
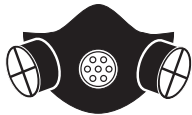
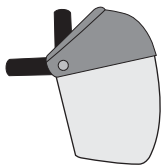


!WARNING

To reduce the risk of serious injury when using this machine, read and understand this entire manual before beginning any operations.

!WARNING

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



!WARNING

Loose hair, clothing, or jewelry could get caught in machinery and cause serious personal injury. Keep these items away from moving parts at all times to reduce this risk.

NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, review industry trade 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.

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.

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

1. Examines the workpiece to make sure it is suitable for turning. No extreme bows, knots, or cracks should exist.
2. Prepares and trims up the workpiece with a bandsaw or table saw to make it roughly concentric.
3. Installs the workpiece between centers, or attaches it to a faceplate or chuck.
4. Adjusts the tool rest to $\frac{1}{8}$ " above the workpiece centerline, and sets the minimum clearance between the workpiece and the lip of the tool rest to $\frac{1}{4}$ " gap.
5. Rotates the workpiece by hand to verify that the spindle and workpiece rotate freely throughout the full range of motion.
6. Positions any dust collection hoods near the workpiece to collect wood chips and secures it in place.
7. Verifies the belt is positioned for the appropriate speed range for the operation, type of wood, and size of workpiece installed.



8. Verifies the spindle direction switch is in the center neutral position and the spindle speed dial is turned all the way counterclockwise so the spindle does not start turning at high speed.
9. Ties back loose hair and clothing, and puts on face shield and respirator. Takes all other required safety precautions.
10. Starts the lathe and dust collector, adjusts the spindle direction and lathe speed, and carefully begins the turning operation, keeping the chisel against the tool rest the entire time it is cutting.

Basic Controls

Refer to **Figure 19** and the list below to familiarize yourself with the lathe controls.

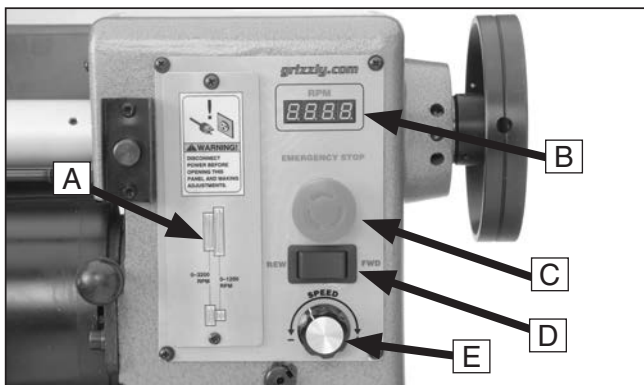


Figure 19. Control panel and RPM Readout.

- A. Front Belt Access Panel:** Remove to access the drive belt for changing speed ranges.
- B. Spindle RPM Readout:** Indicates the spindle speed in RPM (rotations per minute).
- C. Emergency STOP Button:** Stops motor when pushed in. Prevents restarting until it is reset. Reset switch by rotating clockwise until it pops out.
- D. Spindle Direction Switch:** Toggles the spindle direction between clockwise (FWD) or counterclockwise (REW).
- E. Variable Speed Dial:** Adjusts the spindle speed from low to high within the range governed by the pulley belt position.

Adjusting Headstock

The Model G0632 headstock can be positioned anywhere along the lathe bed and swiveled 360°.

To position the headstock along the length of the lathe bed:

1. DISCONNECT THE LATHE FROM THE POWER SOURCE!
2. Loosen the headstock lock handle (see **Figure 20**).

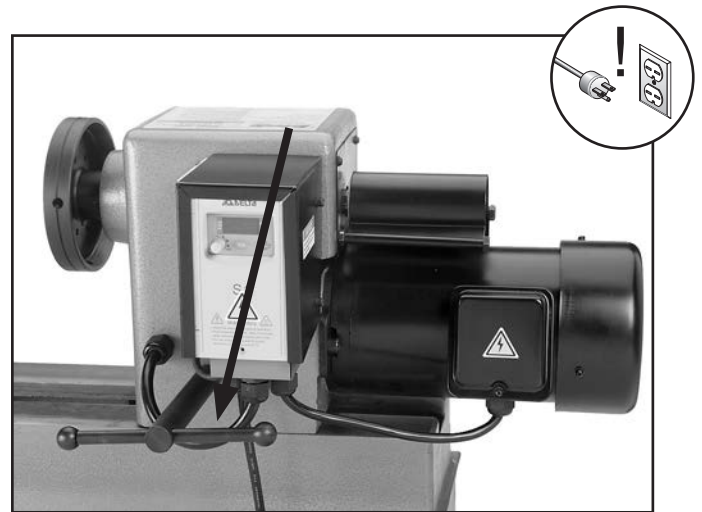


Figure 20. Headstock lock handle.

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

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



To swivel the headstock:

1. DISCONNECT THE LATHE FROM THE POWER SOURCE!
2. Loosen the headstock lock handle (see **Figure 20**).
3. Pull the swivel pin out and rotate the headstock to the desired position (see **Figure 21**).



Figure 21. Pulling out the swivel pin.

4. To lock the headstock in place, release the swivel pin and make sure that it engages the headstock.

Note: The swivel pin can lock the headstock at 45°, 90°, 135°, 180°, 270°, and 360°.

5. Re-tighten the headstock lock handle.

⚠️ WARNING

Always operate the lathe with the headstock firmly locked to the bed. Otherwise, serious personal injury may occur.

Adjusting Tailstock

The tailstock is equipped with a cam-action clamping system to secure it to the lathe bed. When the lever is tightened, a locking plate lifts up underneath the bed and secures the tailstock in place.

To position the tailstock along the length of the bed:

1. Loosen the tailstock lock handle and move the tailstock to the desired position along the bed (see **Figure 22**).

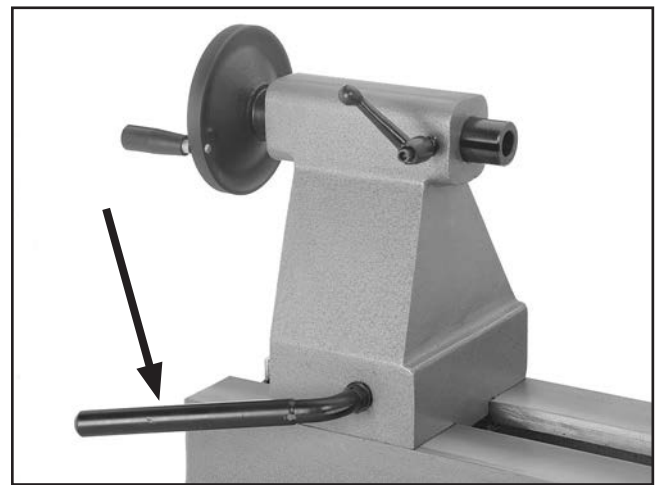


Figure 22. Tailstock lock handle.

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

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

⚠️ WARNING

Always operate the lathe with the tailstock firmly locked to the bed. Otherwise, serious personal injury may occur.



Adjusting Tool Rest

The tool rest base is equipped with a cam-action clamping system to secure it to the lathe bed. When the tool rest base lock handle is tightened, a locking plate lifts up and secures the tool rest assembly to the bed. The tool rest can also be positioned and locked at a specific angle or height.

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

1. Loosen the tool rest base lock handle and move the tool rest assembly to the desired position on the lathe bed (see **Figure 23**).

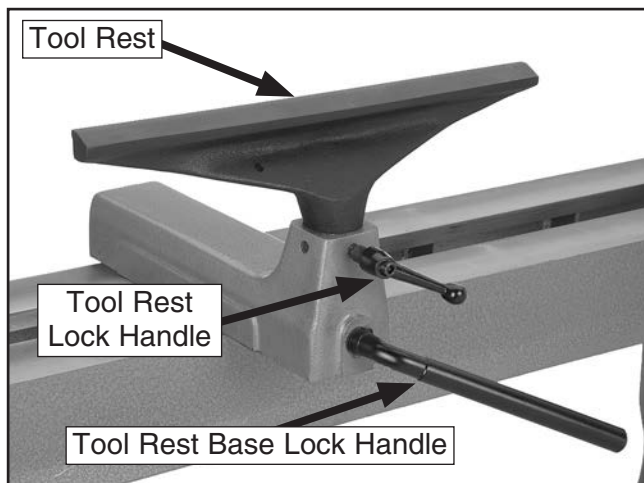


Figure 23. Tool rest controls.

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

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

⚠WARNING

Always operate the lathe with the tool rest assembly firmly locked in position. Otherwise, serious personal injury may occur.

To adjust the angle or height of the tool rest:

1. Loosen the tool rest lock handle and adjust the angle or height of the tool rest.
2. Position the tool rest approximately $\frac{1}{4}$ " away from the workpiece and approximately $\frac{1}{8}$ " above the workpiece center line (see **Figure 24**).

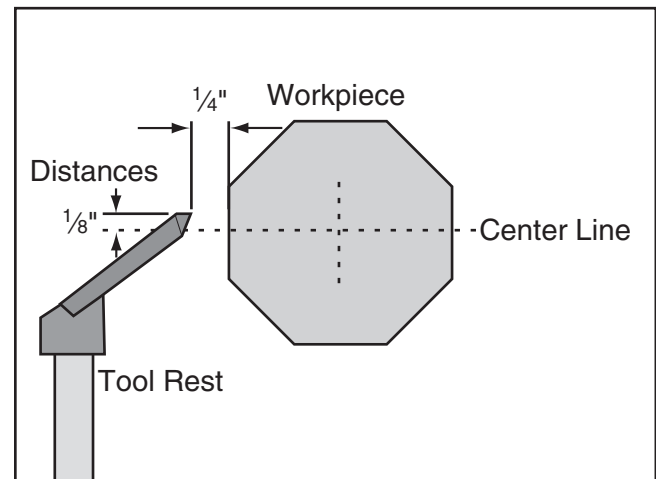


Figure 24. Tool rest position relative to workpiece.

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



Installing/Removing Headstock Center

⚠ WARNING

Make sure the headstock and tailstock centers are properly aligned before beginning any turning operation. See **Aligning Centers** on Page 41 for additional instructions on this procedure. Failure to observe this warning could result in the workpiece being thrown from the lathe resulting in serious personal injury.

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

To install the headstock center:

1. DISCONNECT THE LATHE FROM THE POWER SOURCE!
2. If the faceplate is installed on the spindle, remove it (see **Page 27** for detailed instructions).
3. Make sure the mating surfaces of the center and spindle are free of debris and oily substances before inserting the center.
4. Insert the tapered end of the center into the spindle, and push it in with a quick, firm motion (see **Figure 25**).

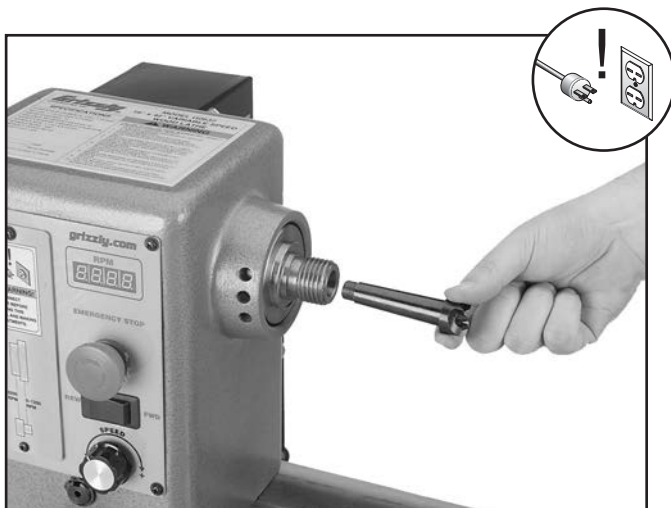


Figure 25. Installing center into the headstock spindle.

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

To remove the headstock center with the knockout tool:

1. DISCONNECT THE LATHE FROM THE POWER SOURCE!
2. Hold a clean rag under the spindle or wear a glove to catch the center when you remove it.
3. Insert the knockout tool through the outbound end of the spindle and firmly tap the center, catching it as it falls (see **Figure 26**).

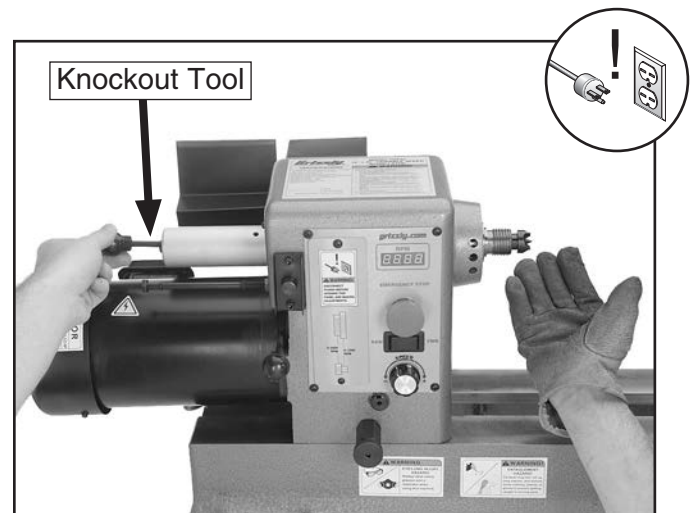


Figure 26. Removing the headstock center.



Installing/Removing Tailstock Center

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

To install the center into the tailstock quill:

1. Loosen the quill lock handle and rotate the tailstock handwheel until the quill extends out about 1" (see **Figure 27**).

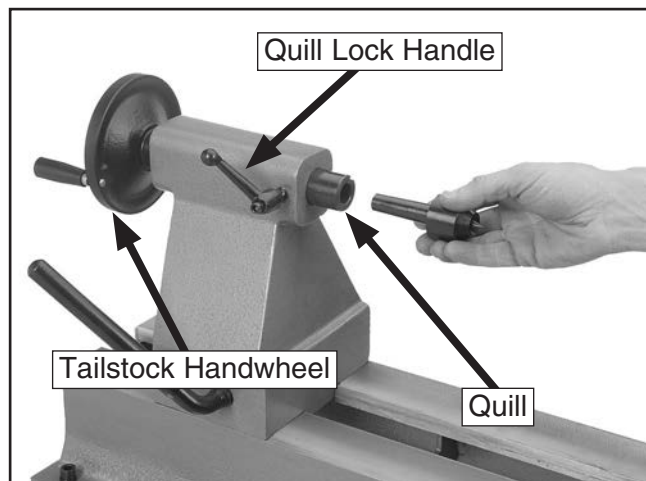


Figure 27. Installing center into tailstock quill.

2. Make sure the mating surfaces of the center and quill are free of debris and oily substances before inserting the center.
3. Insert the tapered end of the center into the tailstock quill as shown in **Figure 27**.
4. Make sure the center is securely installed by attempting to pull it out by hand—a properly installed center will not pull out by hand.
5. Make sure the center of the quill lock handle is aligned with the quill keyway (see **Figure 28**) to ensure that the tailstock center and quill will not freely rotate under load.

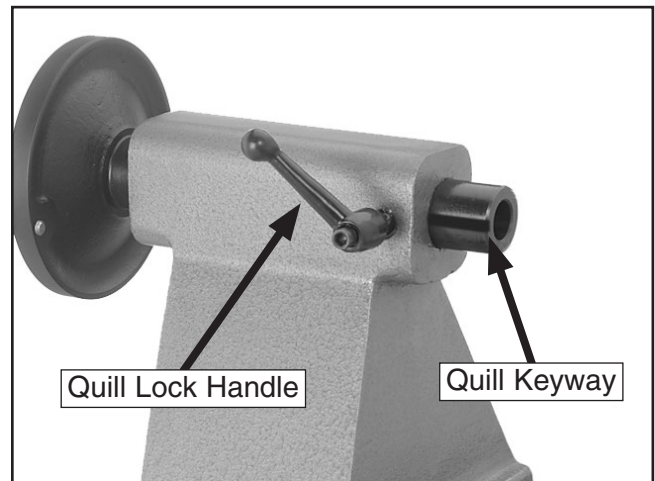


Figure 28. Quill lock handle aligned with quill keyway.

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

To remove the center from the tailstock quill:

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

!WARNING

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



Headstock Faceplate

To mount a workpiece to the faceplate, refer to **Faceplate Turning on Page 35**.

The faceplate can be installed only if the headstock center has been removed.

To install the headstock faceplate:

1. DISCONNECT THE LATHE FROM THE POWER SOURCE!
2. Depress the spindle lock and rotate the spindle by hand until the spindle lock slips into the locking slot on the spindle (see **Figure 29**).



Figure 29. Depressing the spindle lock.

3. Maintain pressure on the spindle lock and thread the faceplate onto the spindle until it is snug.

4. Using the included 4mm hex wrench, tighten the three set screws along the inside diameter of the faceplate to secure it to the spindle (see **Figure 30**).

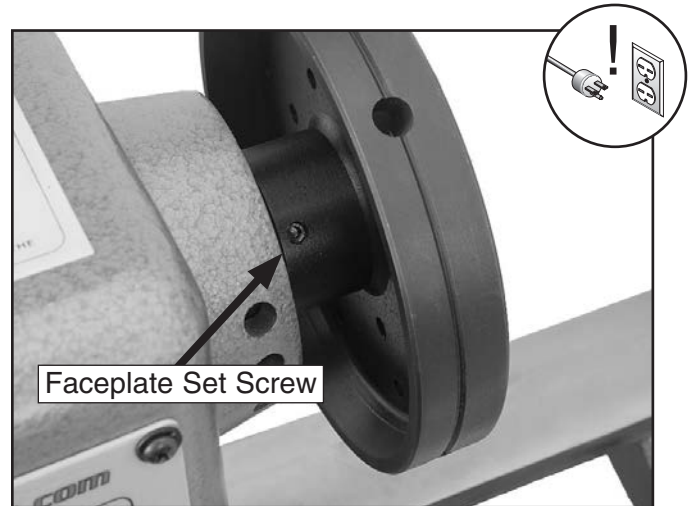


Figure 30. Headstock faceplate set screw.

⚠ WARNING

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

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



Changing Speed Ranges

The Model G0632 has two speed ranges: 1) the low range from 100 to 1200 RPM which provides a greater torque, and 2) the high range from 250 to 3200 RPM.

Refer to the speed recommendations table (see **Figure 31**) to choose the appropriate RPM for your operation. Then choose the speed range that will include the selected RPM.

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

Figure 31. Model G0632 speed recommendations.

To change speed ranges:

1. DISCONNECT THE LATHE FROM THE POWER SOURCE!
2. Remove the front belt access panel (see **Figure 32**).



Figure 32. Belt access panel removed.

3. Use the included 8mm hex wrench to loosen the motor mount cap screw just under the motor tensioning handle (see **Figure 33**).

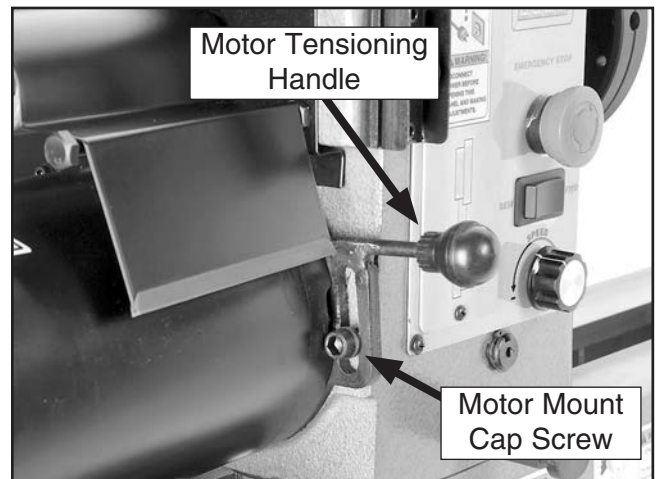


Figure 33. Motor tensioning handle and motor mount cap screw.



- Use the motor tensioning handle to lift the motor assembly all the way up and re-tighten the motor mount cap screw—this will hold the motor in place while you change the belt position.
- Reach into the belt access cavity and roll the belt onto the desired set of pulleys (see **Figure 34**).

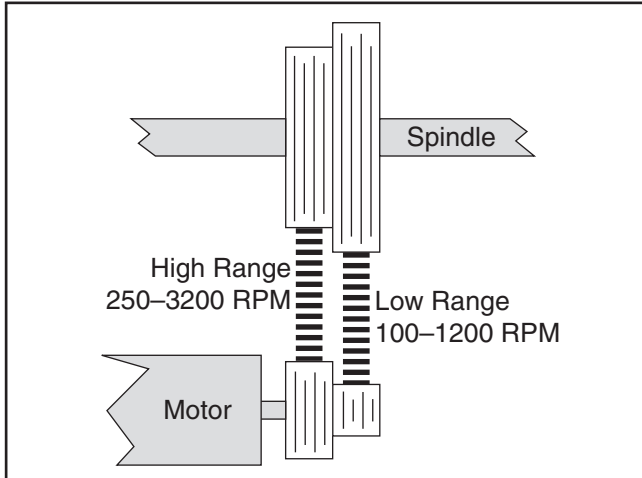


Figure 34. Speed range belt positions.

- Loosen the motor mount cap screw and lower the motor.
- Apply downward pressure on the motor tensioning handle to properly tension the drive belt and re-tighten the motor mount cap screw.

Note: When properly tensioned, the belt should deflect about $\frac{1}{4}$ " when moderate pressure is applied to the belt mid-way between the upper and lower pulley (see **Figure 35**).

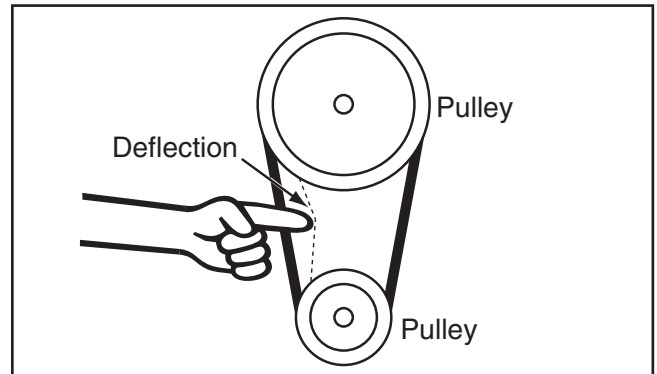


Figure 35. Testing for $\frac{1}{4}$ " belt deflection.

! WARNING

Always choose the correct speed for your particular turning project. As a general rule, the larger the workpiece diameter, the slower the speed. Always start the lathe on slow speed. Failure to heed this warning could lead to serious personal injury.

- Replace the front belt access panel.



Indexing

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

By inserting the indexing pin into one of the three outer indexes of the Model G0632 spindle housing and engaging one of the twelve inner indexes in the spindle, the workpiece can be positioned to one of 36 equal points (see **Figure 36**).

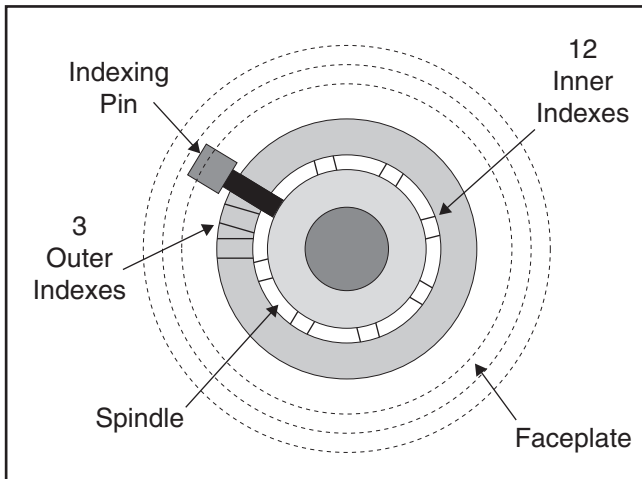


Figure 36. Model G0632 indexing configuration.

To use the indexing feature, place the indexing pin into one of the indexing holes in the headstock as shown in **Figure 37**. This will hold the spindle and workpiece at the desired indexed position.



Figure 37. Indexing pin and indexing holes.

CAUTION

Always disconnect the lathe from power before using the indexing feature of this lathe. Do NOT start the lathe with the indexing pin inserted into the spindle; otherwise property damage and personal injury could result.



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.

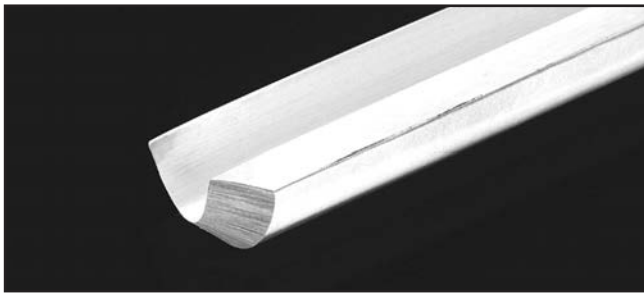


Figure 38. Example of a gouge.

- **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 39. 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 40. 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.

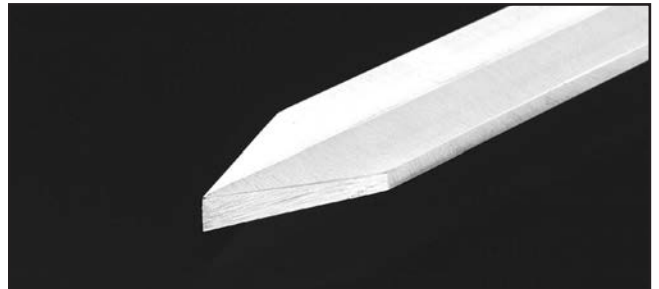


Figure 41. Example of a parting tool.

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



Spindle Turning

Spindle turning is the operation performed when a workpiece is mounted between the headstock and the tailstock (see **Figure 42**).



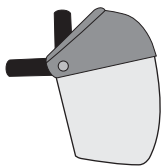
Figure 42. Typical spindle turning operation.

!WARNING

Make sure the headstock and tailstock centers are properly aligned before beginning any turning operation. See **Aligning Centers** on Page 41 for additional instructions on this procedure. Failure to observe this warning could result in the workpiece being thrown from the lathe resulting in serious personal injury.

!WARNING

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



To set up a spindle turning operation:

1. Find the center point of both ends of your workpiece by drawing diagonal lines from corner to corner across the end of the workpiece (see **Figure 43**).

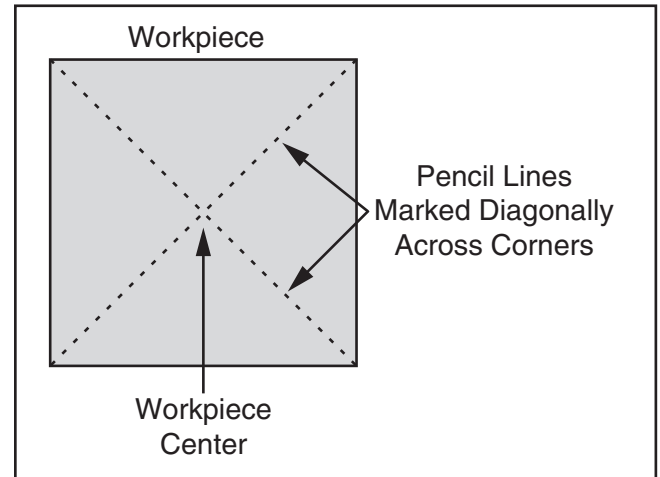


Figure 43. Workpiece marked diagonally from corner to corner to determine the center.

2. Using a wood mallet, tap the point of the spur center into the center of the workpiece on both ends, leaving an indented center mark.
3. Using a $\frac{1}{4}$ " drill bit, drill a $\frac{1}{4}$ " deep hole at the center mark on the end of the workpiece to be mounted on the headstock spur center.



4. To help embed the spur center into the workpiece, cut $\frac{1}{8}$ " deep saw kerfs in the same end of the workpiece along the diagonal lines marked in **Step 1**.
5. If your workpiece is over 2" x 2", cut the corners off the workpiece length-wise to make turning safer and easier.
6. Drive the spur center into the end center mark of the workpiece with a wood mallet to embed it at least $\frac{1}{4}$ " into the workpiece (see **Figure 44**).
8. Install the live center into the tailstock quill and tighten the quill lock handle to lock the quill in position (refer to **Page 26** for additional instructions).
9. Slide the tailstock toward the workpiece until the point of the live center touches the workpiece center mark, then lock the tailstock in this position.
10. Loosen the quill lock handle and rotate the tailstock handwheel to push the live center into the workpiece at least a $\frac{1}{4}$ ".

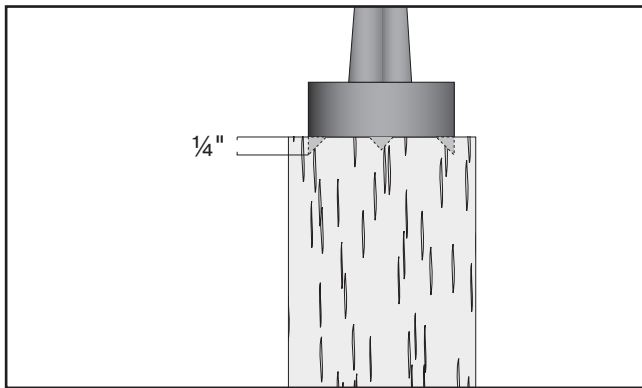


Figure 44. Spur center properly embedded.

7. With the workpiece still attached, insert the spur center into the headstock spindle (refer to **Installing Headstock Center** on **Page 25** for additional instructions).

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

⚠ WARNING

Do not press the workpiece too firmly with the tailstock or the bearings will bind and overheat. Likewise, do not adjust too loosely or the workpiece will spin off the lathe. Use good reason and care, otherwise, serious personal injury could result.

Continued on next page 



11. Position the tool rest approximately $\frac{1}{4}$ " away from the workpiece and approximately $\frac{1}{8}$ " above the workpiece center line (see **Figure 45**).

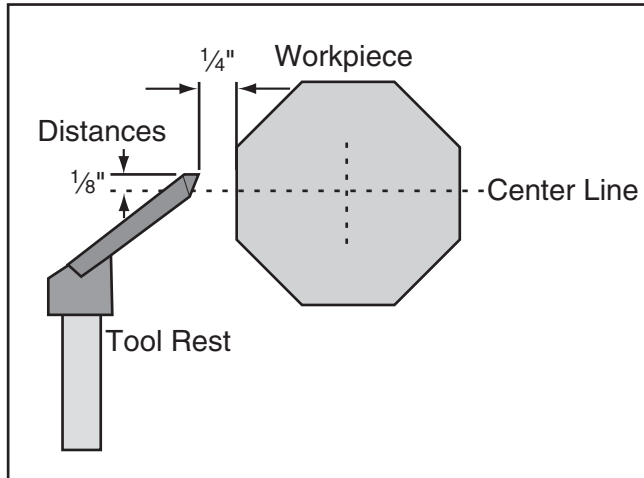


Figure 45. Tool rest position relative to workpiece.

12. Before beginning lathe operation, rotate the workpiece by hand to ensure that there is safe clearance on all sides.

⚠️ WARNING

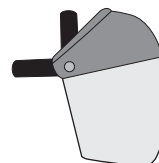
Keep the lathe tool resting on the tool rest the **ENTIRE** time that it is in contact with workpiece or when preparing to make contact between lathe tool and workpiece. Otherwise, the spinning workpiece could force the lathe tool out of your hands or entangle your hands with the workpiece. Failure to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

Spindle Turning Safety Tips:

- When turning the lathe **ON**, stand away from the path of the spinning workpiece until the lathe reaches full speed and you can verify that the lathe will not throw the workpiece.
- Use the slowest speed when starting or stopping the lathe.
- Select the right speed for the size of workpiece that you are turning:
 - Use the slower speeds for large workpieces (diameters of 4" and over) and for rough cutting.
 - Use the middle range speeds for workpiece diameters of 2–4".
 - Use the faster speeds for workpieces under 2".
- 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.

⚠️ WARNING

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



Faceplate Turning

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

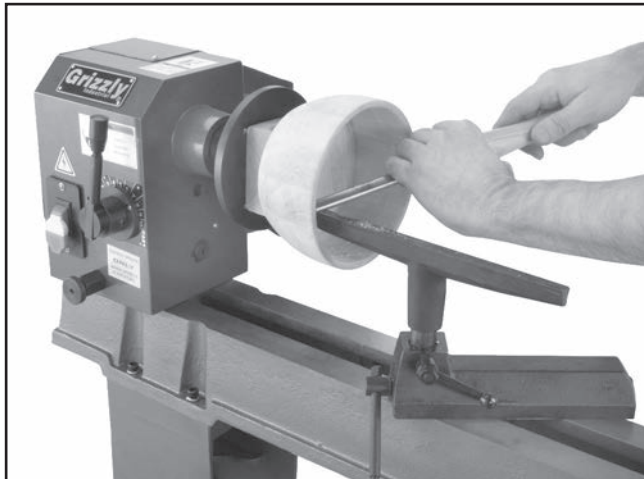


Figure 46. Typical faceplate turning operation.

To mount the workpiece onto the faceplate:

1. Mark the workpiece center as in **Spindle Turning** (see **Page 32**).

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

2. Center the faceplate on the workpiece and attach it with wood screws that do not have tapered heads (see **Figure 47**).



Figure 47. Typical attachment of faceplate to workpiece (shown with backing block).

NOTICE

Only use tap screws or wood screws with non-tapered heads (Figure 48) to attach the faceplate to the workpiece. Do NOT use dry-wall screws or screws with tapered heads because they can split the faceplate, or the screws may snap off during operation.

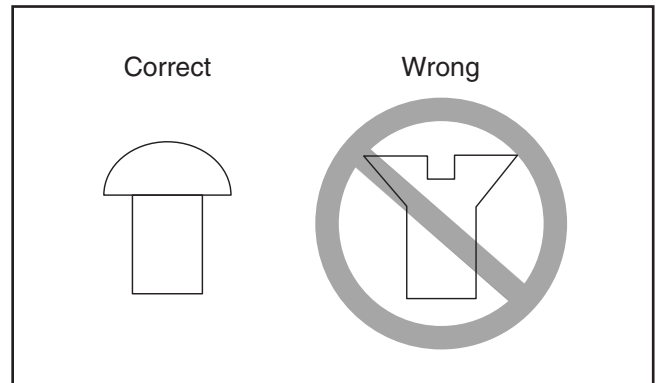


Figure 48. Correct and incorrect screw types for mounting faceplate to workpiece.

3. Thread and secure the faceplate onto the headstock spindle (refer to **Headstock Faceplate** on **Page 27** for faceplate mounting instructions).

If wood screws cannot be placed in the workpiece, then the faceplate can be mounted on a backing block that is glued to the workpiece.

To mount your workpiece to a backing block:

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

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



Outboard Turning

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

Figure 49 depicts the lathe setup at 90° for turning larger workpieces. When turning in this manner, you must use a free standing tool rest (not included).

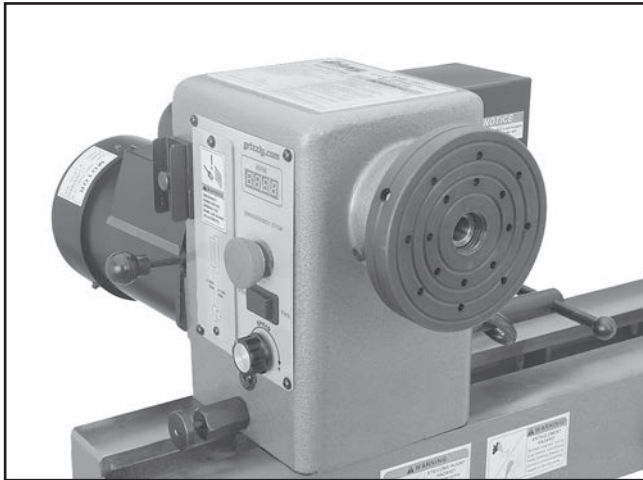


Figure 49. Headstock set at 90°.

⚠️ WARNING

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

Sanding/Finishing

After the turning operations are complete, the workpiece can be sanded and finished before removing it from the lathe (see **Figure 50**).

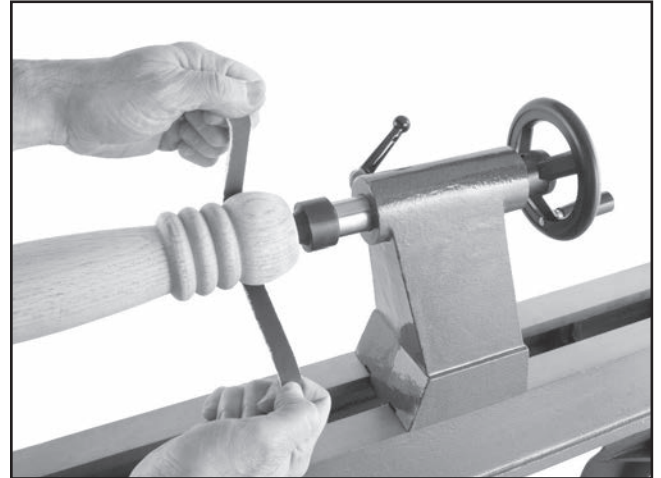


Figure 50. Typical sanding operation.

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

	<h2>⚠️ WARNING</h2> <p>Wrapping the sandpaper completely around the workpiece could pull your hands into the moving workpiece and may cause serious injury. Never wrap sandpaper or finishing materials completely around the workpiece.</p>
--	---



SECTION 5: ACCESSORIES

G1194—3-Jaw Chuck

A "must have" for the serious wood turner. This 3-jaw chuck is a self-centering style chuck used mostly for round work. All three jaws tighten together at the same time. Jaws are reversible for expanded work holding capacity. *Threaded insert required for mounting!*



Figure 51. Model G1194 3-Jaw Chuck.

G1082—4-Jaw Chuck

Another "must have" for the serious wood turner. This 4-jaw chuck is an independent type chuck that is used for square and odd-shaped pieces. Each jaw tightens individually and can be turned around to hold larger dimension workpieces. *Threaded insert required for mounting!*

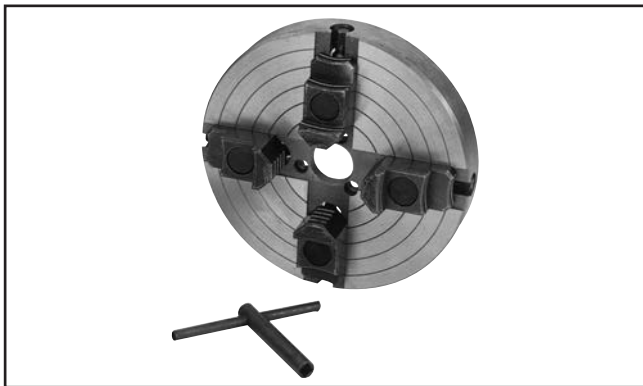


Figure 52. Model G1082 4-Jaw Chuck.

G3167—1¼" x 8 TPI RH Threaded Insert

This threaded insert is required to mount a 3- or 4-jaw chuck to your wood lathe.

T10117—Big Mouth Dust Hood with Stand

Capture dust from any machine operation with this Big Mouth Dust Hood. Simply attach a 4" dust collection hose and adjust the hood right where you need it. The free standing base eliminates complicated machine set-ups and the tilting 16³/₈" x 12⁷/₈" hood adjusts from 23" to 43" high. Every shop needs one of these!



Figure 53. T10117 Big Mouth Dust Hood.

H5954—Robert Sorby Stebcentre MT#2

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



Figure 54. Robert Sorby Stebcentre.

Call 1-800-523-4777 To Order



SECTION 6: MAINTENANCE



Schedule

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

Daily Check:

- Loose mounting bolts.
- Damaged centers or faceplate.
- Worn or damaged wires.
- Any other unsafe condition.

Weekly Maintenance:

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

Monthly Check:

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

Cleaning

Cleaning the Model G0632 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it.

Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning.

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

Lathe Bed

Protect the unpainted cast iron lathe bed by wiping it clean after every use—this ensures moisture from wood dust does not remain on the bare metal surfaces.

Keep your lathe bed rust-free with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9.

Lubrication

All bearings for the Model G0632 are lubricated and sealed at the factory, and do not need additional lubrication.

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

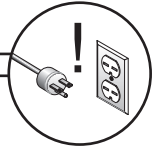
Use the tailstock handwheel to extend the quill out to the furthest position and apply a thin coat of white grease to the outside of the quill. DO NOT allow any oil or grease to get on the inside mating surfaces of the quill.



SECTION 7: SERVICE

Review the troubleshooting and procedures in this section to fix or adjust your machine if a problem develops. If you need replacement parts or you are unsure of your repair skills, then feel free to call our Technical Support at (570) 546-9663.

Troubleshooting

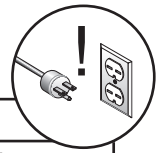


Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> Emergency stop push-button is engaged/faulty. Motor connection wired incorrectly. FWD/REV switch is at fault. Speed rotary switch is at fault. Wiring is open/has high resistance. Motor is at fault. Frequency inverter is at fault. 	<ol style="list-style-type: none"> Rotate clockwise slightly until it pops out/replace it. Correct motor wiring connections. Replace faulty FWD/REV switch. Replace bad speed rotary switch. Check for broken wires or disconnected/corroded connections, and repair/replace as necessary. Test/repair/replace. Replace.
Machine stalls or is underpowered.	<ol style="list-style-type: none"> Feed rate/cutting speed too fast for task. Belt slipping. Motor connection is wired incorrectly. Pulley slipping on shaft. Motor bearings are at fault. Machine is undersized for the task. Motor has overheated. Speed rotary switch at fault. Motor is at fault. 	<ol style="list-style-type: none"> Decrease feed rate/cutting speed. Replace bad belt and re-tension (see Page 41). Correct motor wiring connections. Replace loose pulley. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. Use sharp lathe bits and chisels; reduce the feed rate/depth of cut. Clean off motor, let cool, and reduce workload. Replace bad speed rotary switch. Test/repair/replace.
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> Motor or component is loose. Belt worn or loose. Motor fan is rubbing on fan cover. Pulley is loose. Machine is incorrectly mounted or sits unevenly on floor. Motor mount loose/broken. Workpiece, center, or faceplate is at fault. Motor bearings are at fault. 	<ol style="list-style-type: none"> Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid. Inspect/replace belts (see Page 41). Replace dented fan cover; replace loose/damaged fan. Replace shaft, pulley, setscrew, and key as required. Tighten/replace anchor studs in floor; relocate/shim machine. Tighten/replace. Center workpiece in center or faceplate; reduce RPM; replace defective center or faceplate. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.



Wood Lathe Operation



SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
Vibration noise while machine is running; noise changes when speed is changed.	1. Belt cavity cover(s) loose.	1. Tighten the screws that mount the belt cavity cover(s); if necessary install a soft, vibration dampening material between the belt cover and the headstock casting.
Vibration noise while machine is running; noise remains constant when speed is changed.	1. Dented fan cover on motor.	1. Replace or adjust fan cover. Inspect motor fan and replace if damaged.
Excessive vibration.	1. Workpiece mounted incorrectly. 2. Workpiece warped, out of round, or is flawed. 3. Spindle speed is set too fast for mounted workpiece. 4. Lathe is resting on an uneven surface. 5. Motor mount bolts are loose. 6. Belt is worn or damaged. 7. Spindle bearings are worn.	1. Re-mount workpiece, making sure that centers are embedded in true center of workpiece. 2. Cut workpiece to correct, or use a different workpiece. 3. Reduce the spindle speed. 4. Shim stand or adjust feet on stand to remove any wobbles present in the stand. 5. Tighten motor mount bolts. 6. Replace belt (see Page 41). 7. Replace spindle bearings.
Chisels grab or dig into workpiece.	1. Tool rest set too low. 2. Tool rest set too far from workpiece. 3. Wrong chisel/tool being used. 4. Chisel/tool dull.	1. Set tool rest higher. See Page 34 for how to properly set the tool rest height. 2. Move the tool rest closer to the workpiece. See Page 34 for the proper workpiece/tool rest clearance. 3. Use the correct chisel/tool; educate yourself by reading books, trade magazines, or seeking help from an experienced lathe operator. 4. Sharpen or replace the chisel/tool you are using.
Bad surface finish.	1. Wrong spindle speed. 2. Dull chisel or wrong chisel being used for the operation.	1. Use trial-and-error to find a better spindle speed. 2. Sharpen chisel or try a different chisel.
Inaccurate turning results from one end of the workpiece to the other.	1. Headstock and tailstock are not properly aligned with each other.	1. Realign the tailstock to the headstock (see Page 41).
Tailstock moves.	1. Tailstock mounting bolt loose. 2. Bed surface is oily or greasy.	1. Tighten. 2. Clean bed surface to remove excess oil/grease.
Can't remove tapered tool from tailstock barrel.	1. Tailstock barrel had not retracted all the way back into the tailstock. 2. Debris was not removed from taper before inserting into barrel.	1. Turn the barrel handwheel until it forces taper out of barrel. 2. Always make sure that taper surfaces are clean.



Aligning Centers

To ensure accurate and safe turning results, the headstock and tailstock centers must be aligned with one another.

To align the centers:

1. With the headstock and tailstock centers installed, slide the tailstock up to the headstock.
2. Loosen the headstock lock handle and swivel the headstock so the tip of the centers touch, as illustrated in **Figure 55**, then lock the headstock in place.

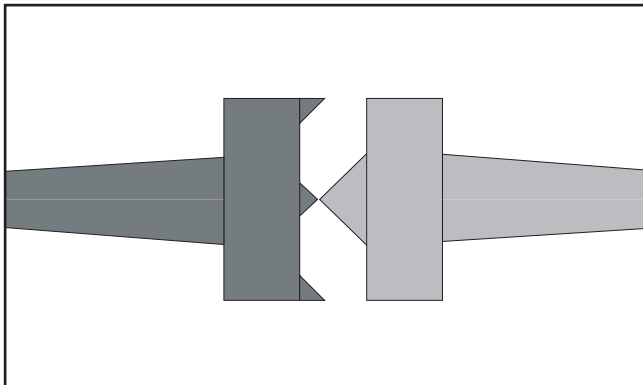


Figure 55. Center tips touching to ensure alignment.

Changing Belt

To change the belt:

1. DISCONNECT THE LATHE FROM THE POWER SOURCE!
2. Remove the front belt access panel (see **Figures 56 & 57**).
3. Remove the spindle handwheel safety cover and the two long hex bolts.
4. Use a 3mm hex wrench to loosen the three set screws in the spindle handwheel and remove it from the spindle.

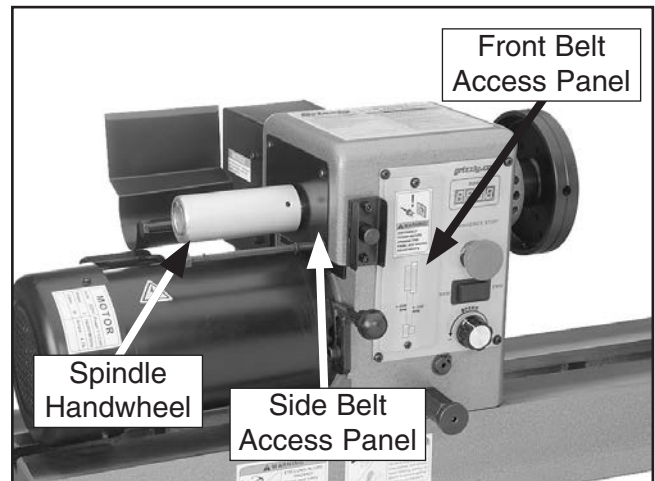


Figure 56. Spindle handwheel and belt access panels.



Figure 57. Headstock with spindle handwheel and belt access panels removed.

5. Loosen the motor mount cap screw and secure the motor in the upper position (see **Changing Speed Ranges** on **Page 28** for additional instructions).
6. Roll the belt off the motor (lower) pulleys, then pull the belt off the spindle pulleys and out the side belt access.
7. Install the new belt by reversing **Step 6**.
8. Re-tension the belt, and re-install the side belt access panel, the spindle handwheel and cover, and the front belt access panel.

Note: When properly tensioned, the belt should deflect about $\frac{1}{4}$ " when moderate pressure is applied to the belt mid-way between the upper and lower pulley.



SECTION 8: WIRING

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

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

WARNING

Wiring Safety Instructions

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

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

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

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

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

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











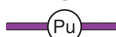



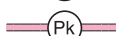
CAPACITORS/INVERTERS. Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

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

NOTICE

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

COLOR KEY

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



Electrical Components

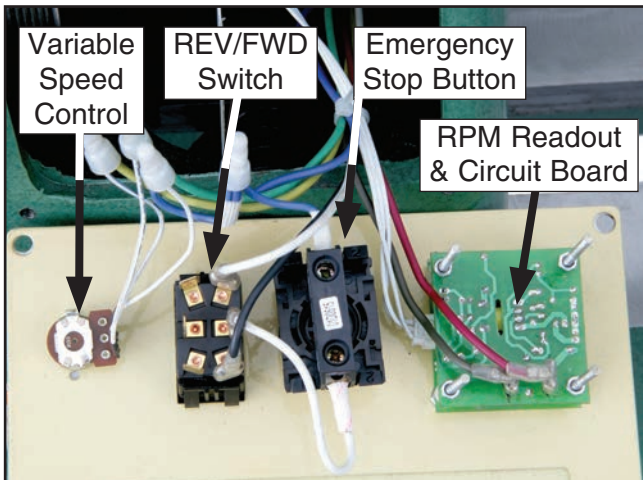


Figure 58. Model G0632 control panel wiring (shown from the back of the panel).

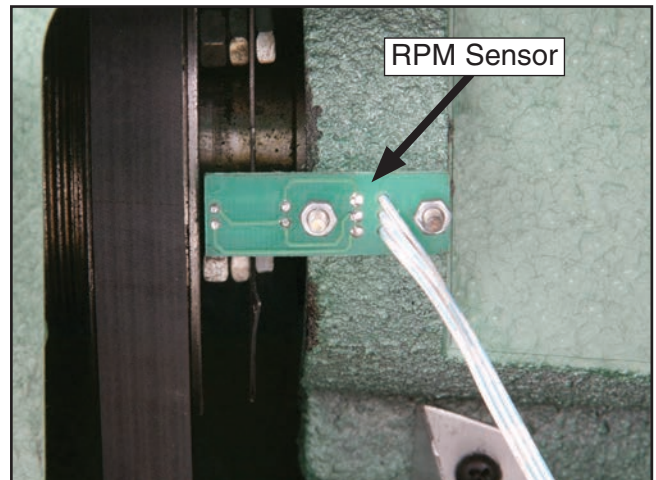


Figure 60. Model G0632 RPM sensor wiring.



Figure 59. Model G0632 motor junction box wiring.

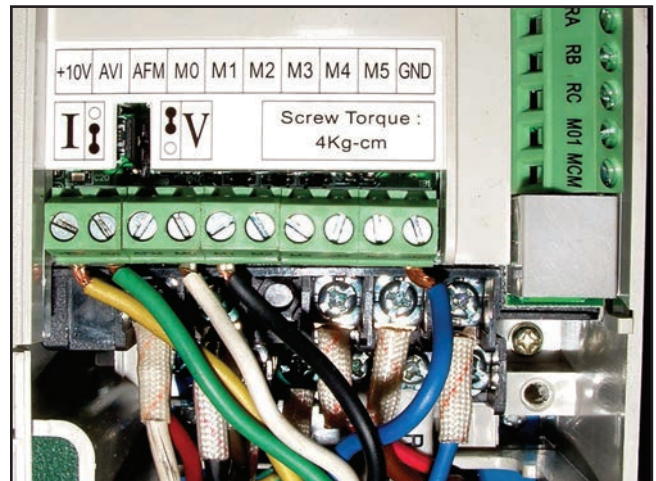
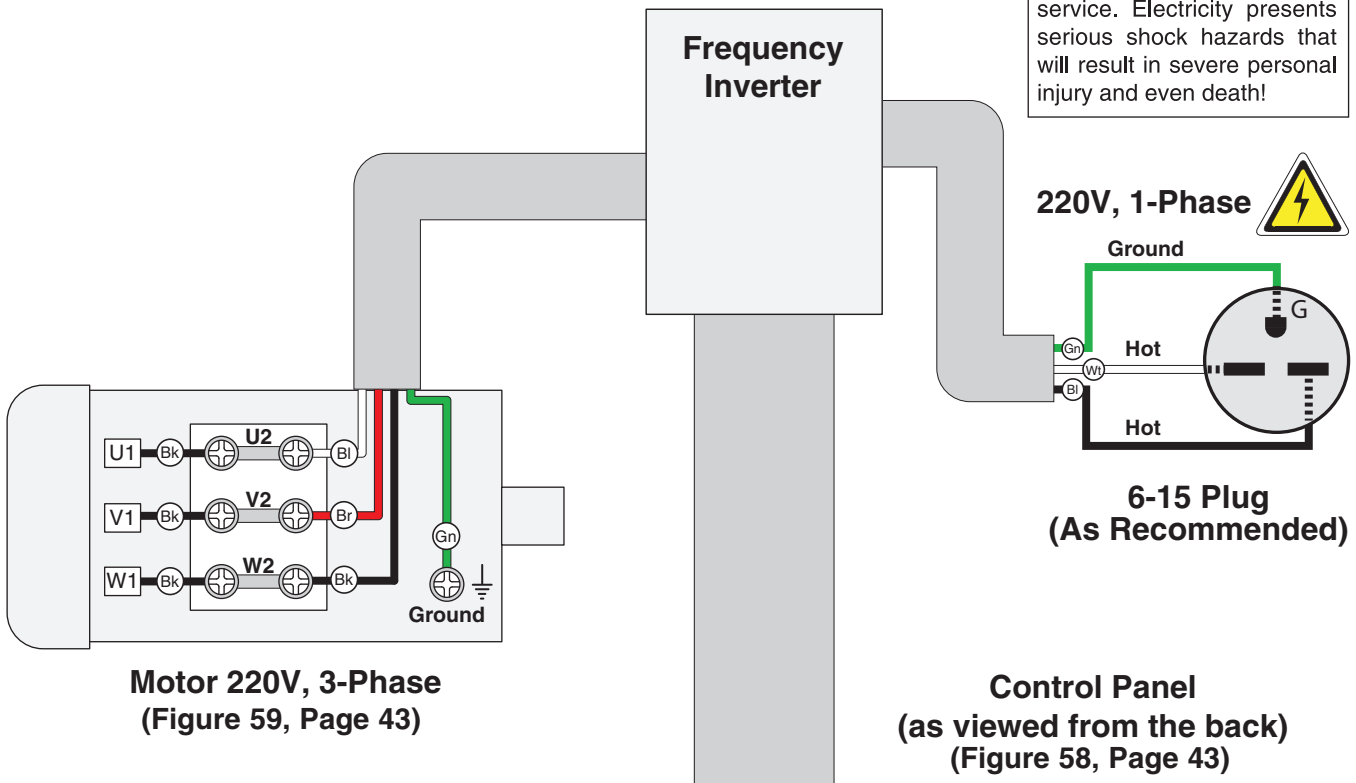


Figure 61. Model G0632 frequency inverter wiring.

Wiring Diagram Overview

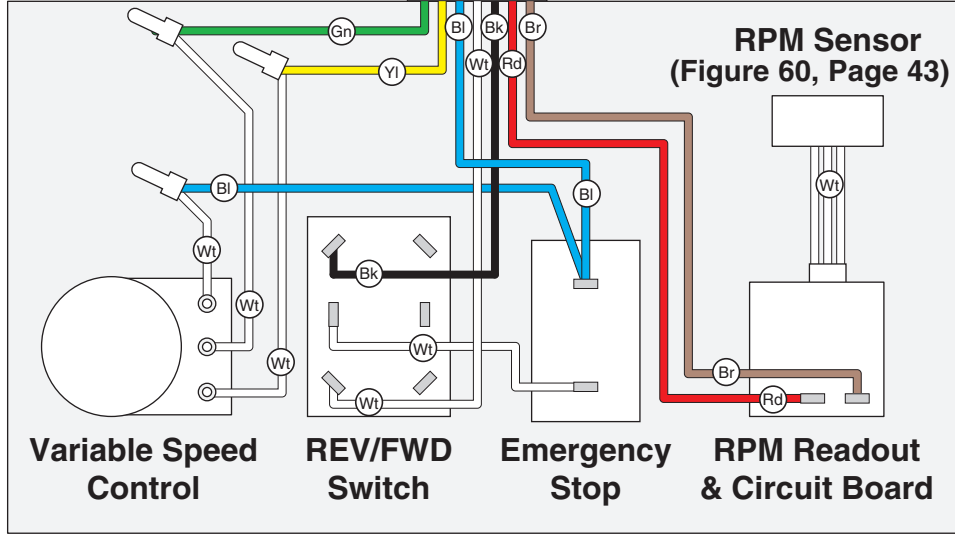
⚠ DANGER
 Disconnect power before performing any electrical service. Electricity presents serious shock hazards that will result in severe personal injury and even death!

(Wiring Page 45)
 (Figure 59, Page 43)



Motor 220V, 3-Phase
 (Figure 59, Page 43)

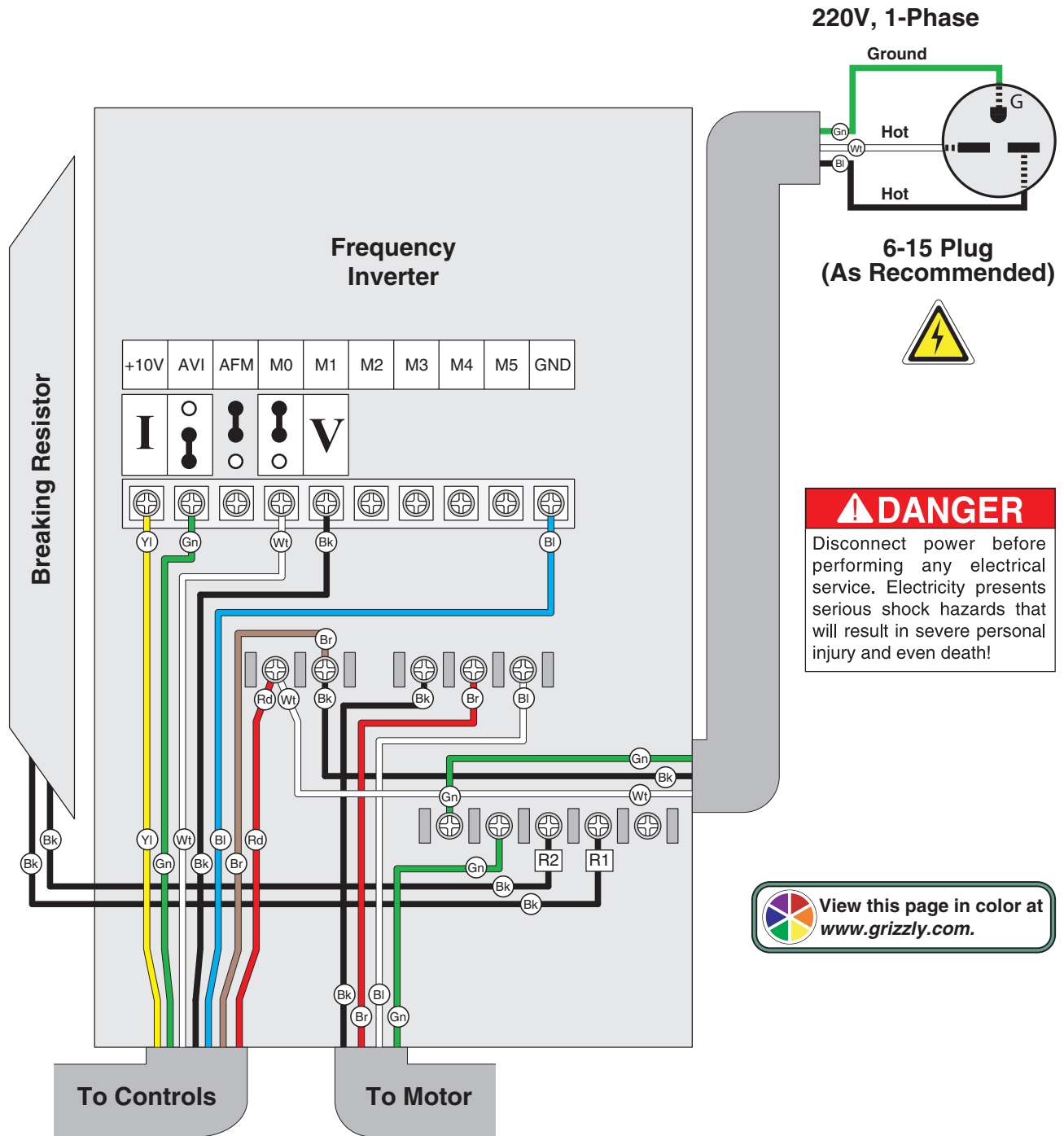
Control Panel
 (as viewed from the back)
 (Figure 58, Page 43)



 View this page in color at www.grizzly.com.

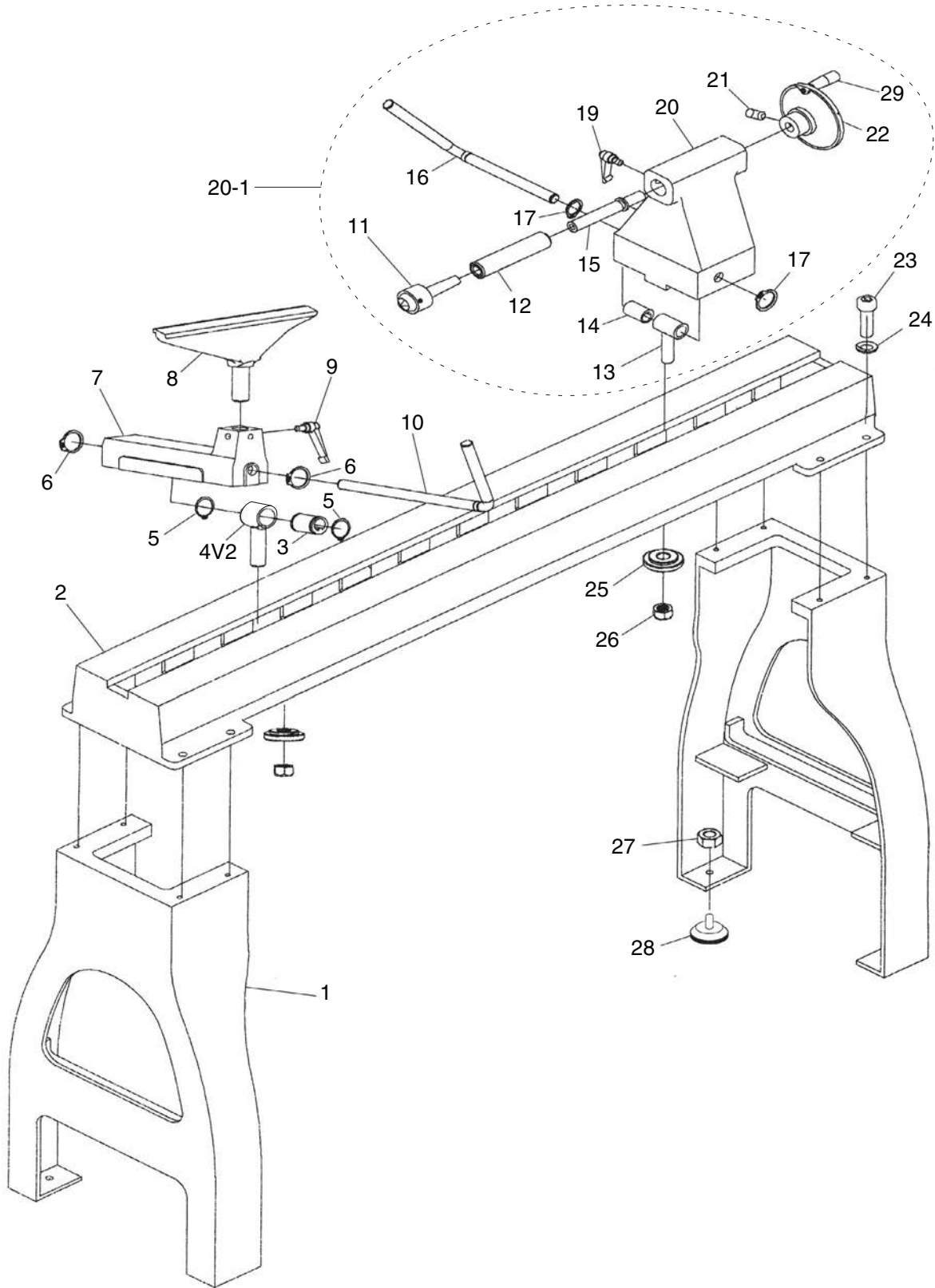


Frequency Inverter Wiring Diagram



SECTION 9: PARTS

Stand Breakdown



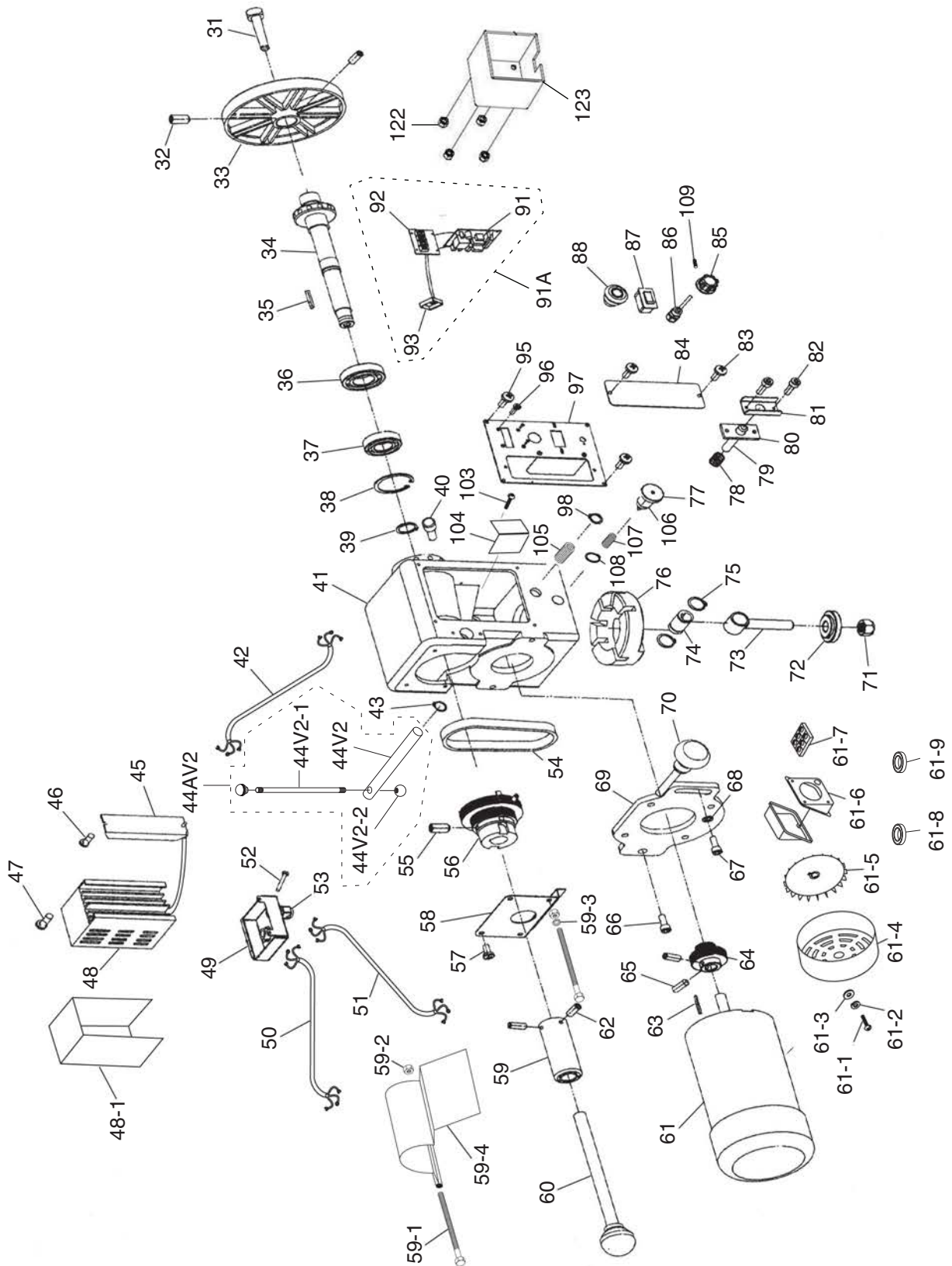
Stand Parts List

REF	PART #	DESCRIPTION
1	P0632001	SUPPORTING LEG
2	P0632002	BED
3	P0632003	BUSHING
4V2	P0632004V2	TOOL REST BASE LOCK BRACKET V2.02.08
5	PR11M	EXT RETAINING RING 25MM
6	PR07M	EXT RETAINING RING 18MM
7	P0632007	TOOL REST BASE
8	P0632008	TOOL REST
9	P0632009	TOOL REST LOCK LEVER
10	P0632010	TOOL REST BASE LOCK HANDLE
11	P0632011	LIVE CENTER
12	P0632012	QUILL
13	P0632013	TAILSTOCK LOCK BRACKET
14	P0632014	BUSHING
15	P0632015	LEADSCREW

REF	PART #	DESCRIPTION
16	P0632016	TAILSTOCK LOCK HANDLE
17	PR07M	EXT RETAINING RING 18MM
19	P0632019	QUILL LOCK LEVER
20	P0632020	TAILSTOCK
20-1	P0632020-1	COMPLETE TAILSTOCK ASSY
21	PSS04M	SET SCREW M6-1 X 12
22	P0632022	HANDWHEEL
23	PCAP64M	CAP SCREW M10-1.5 X 25
24	PLW06M	LOCK WASHER 10MM
25	P0632025	CLAMP
26	PN29M	HEX NUT M18-2.5
27	PN02M	HEX NUT M10-1.5
28	P0632028	MACHINE FOOT
29	P0632029	HANDWHEEL HANDLE



Headstock Breakdown



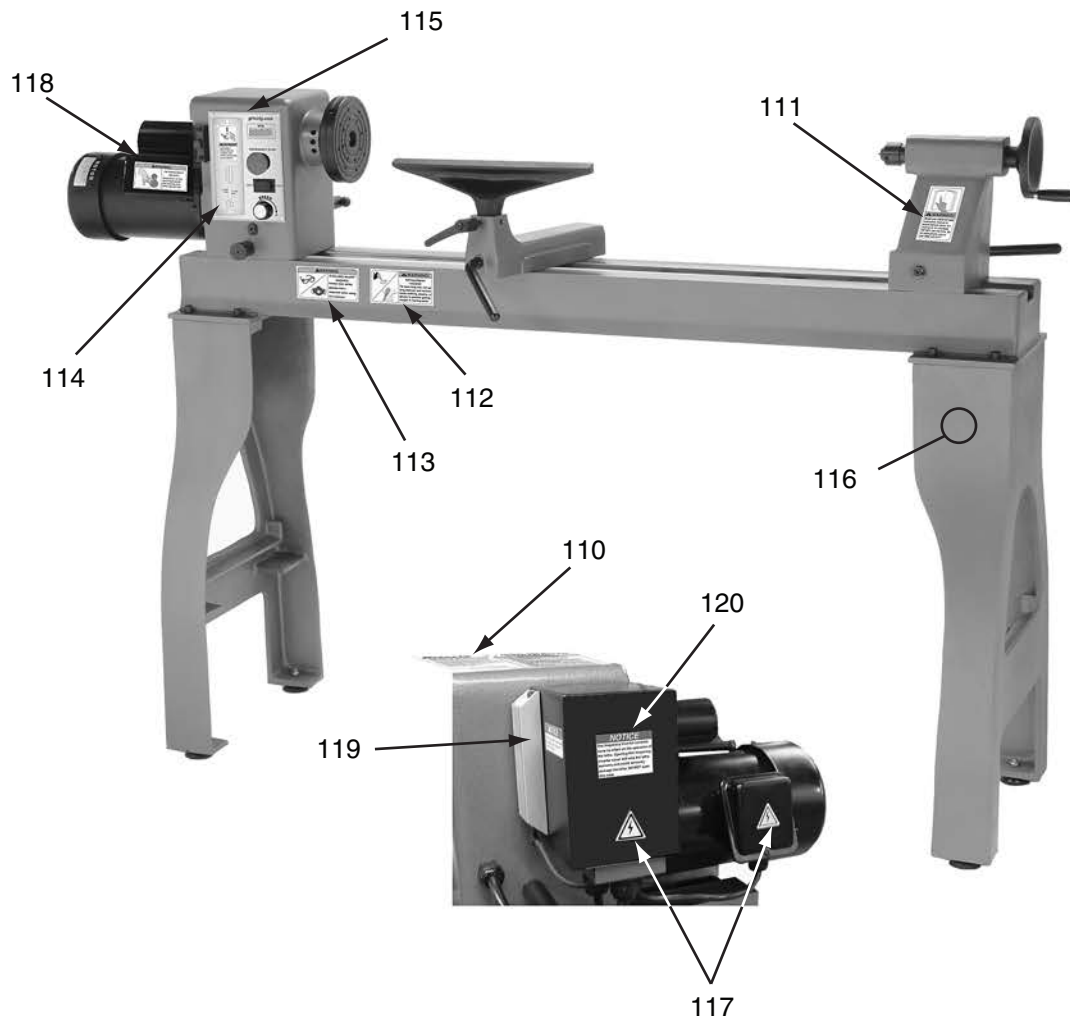
Headstock Parts List

REF	PART #	DESCRIPTION
31	P0632031	SPUR CENTER
32	P0632032	SET SCREW M6-1 X 16
33	P0632033	FACEPLATE
34	P0632034	SPINDLE
35	P0632035	KEY 5 X 5 X 30
36	P0632036	BALL BEARING 6207 2RS
37	P0632037	BALL BEARING 6206ZZ
38	P0632038	INT RETAINING RING 62MM
39	P0632039	EXT RETAINING RING 30MM
40	P0632040	INDEX PIN
41	P0632041	HEADSTOCK
42	P0632042	HEADSTOCK WIRING HARNESS
43	P0632043	EXT RETAINING RING 18MM
44	P0632044	HEADSTOCK LOCK HANDLE V1
44AV2	P0632044AV2	HEADSTOCK LOCK HANDLE ASSY V2.01.09
44V2	P0632044V2	STRAIGHT LOCK HANDLE ROD V2.01.09
44V2-1	P0632044V2-1	THREADED HANDLE V2.01.09
44V2-2	P0632044V2-2	KNOB 2PC V2.01.09
45	P0632045	BRAKING RESISTOR
46	P0632046	TAP SCREW M5 X 15
47	P0632047	CAP SCREW M5-.8 X 12
48	P0632048	FREQUENCY INVERTER
48-1	P0632048-1	FREQ INV SAFETY COVER
49	P0632049	WIRING BRACKET
50	P0632050	POWER CORD
51	P0632051	MOTOR WIRING HARNESS
52	P0632052	PHLP HD SCR M3-.5 X 10
53	P0632053	STRAIN RELIEF
54	P0632054	RIBBED BELT 180J6
55	P0632055	SET SCREW M8-1.25 X 15
56	P0632056	SPINDLE PULLEY
57	P0632057	PHLP HD SCREW M5-0.8 X 12
58	P0632058	SIDE BELT ACCESS PANEL
59	P0632059	SPINDLE HANDLE
59-1	P0632059-1	HEX BOLT M8-1.25 X 140
59-2	P0632059-2	HEX NUT M8-1.25
59-3	P0632059-3	RUBBER WASHER 8MM
59-4	P0632059-4	SPINDLE HANDLE SAFETY COVER
60	P0632060	KNOCKOUT TOOL
61	P0632061	MOTOR 1-1/2HP 220V 3PH
61-1	P0632061-1	PHLP HD SCR M3-.5 X 5
61-2	P0632061-2	LOCK WASHER 3MM
61-3	P0632061-3	FLAT WASHER 3MM
61-4	P0632061-4	FAN COVER
61-5	P0632061-5	FAN
61-6	P0632061-6	MOTOR JUNCTION BOX
61-7	P0632061-7	JUNCTION BLOCK

REF	PART #	DESCRIPTION
61-8	P0632061-8	FRONT MOTOR BEARING
61-9	P0632061-9	REAR MOTOR BEARING
62	P0632062	SET SCREW M6-1 X 16
63	P0632063	KEY 5 X 5 X 45
64	P0632064	MOTOR PULLEY
65	P0632065	SET SCREW M6-1 X 16
66	P0632066	CAP SCREW M10-1.5 X 25
67	P0632067	CAP SCREW M10-1.5 X 25
68	P0632068	FLAT WASHER 10MM
69	P0632069	MOTOR MOUNTING PLATE
70	P0632070	FEMALE KNOB M8-1.25
71	P0632071	HEX NUT M18-2.5
72	P0632072	CLAMP
73	P0632073	HEADSTOCK LOCK BRACKET
74	P0632074	BUSHING
75	P0632075	EXT RETAINING RING 26MM
76	P0632076	ROTATION BRACKET
77	P0632077	ROTATION LOCK PIN
78	P0632078	COMPRESSION SPRING
79	P0632079	SPINDLE LOCK PIN
80	P0632080	PLATE
81	P0632081	BRACKET
82	P0632082	CAP SCREW M5-.8 X 15
83	P0632083	PHLP HD SCR M5-.8 X 12
84	P0632084	FRONT BELT ACCESS PANEL
85	P0632085	VARIABLE SPEED KNOB
86	P0632086	VARIABLE SPEED CONTROL
87	P0632087	FWD/REV SWITCH
88	P0632088	EMERGENCY STOP SWITCH
91A	P0632091A	RPM READOUT ASSEMBLY
91	P0632091	RPM READOUT CIRCUIT BOARD
92	P0632092	RPM READOUT LED
93	P0632093	RPM SENSOR
95	P0632095	PHLP HD SCR M3-.5 X 12
96	P0632096	FLAT HD SCR M3-.5 X 20
97	P0632097	CONTROL PLATE
98	P0632098	EXT RETAINING RING 18MM
103	P0632103	PHLP HD SCR M5-.8 X 10
104	P0632104	DIVIDING PLATE
105	P0632105	COMPRESSION SPRING
106	P0632106	ROTATION LOCK PIN NUT
107	P0632107	COMPRESSION SPRING
108	P0632108	EXT RETAINING RING 8MM
109	P0632109	SET SCREW M5-.8 X 8
122	P0632122	HEX NUT M4-.7
123	P0632123	RPM READOUT BOX



Label Placement



REF	PART #	DESCRIPTION
110	P0632110	MACHINE ID LABEL
111	PLABEL-12A	READ MANUAL 2W X 3.3H V2.07.05
112	PLABEL-55B	ENTANGLEMENT HAZARD 3.8 X 2H
113	PLABEL-57B	GLASSES/RESPIRATOR 3.8 X 2H
114	P0632114	BELT ACCESS LABEL
115	P0632115	CONTROL PANEL LABEL

REF	PART #	DESCRIPTION
116	PPAINT-1	GRIZZLY GREEN TOUCH-UP PAINT
117	PLABEL-14	ELECTRICITY LABEL
118	P0632118	SPINDLE ENTANGLEMENT LABEL
119	P0632119	SMALL INVERTER NOTICE LABEL
120	P0632120	LARGE INVERTER NOTICE LABEL

WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine **MUST** maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, **REPLACE** that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.



WARRANTY AND RETURNS

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

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

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

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

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

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





WARRANTY CARD

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

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

1. How did you learn about us?

Advertisement Friend Catalog
 Card Deck Website Other:

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

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

3. What is your annual household income?

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

4. What is your age group?

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

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

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

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

0-2 3-5 6-9 10+

7. Do you think your machine represents a good value? Yes No

8. Would you recommend Grizzly Industrial to a friend? Yes No

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

Note: We never use names more than 3 times. Yes No

10. Comments: _____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE



Place
Stamp
Here



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



FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name _____
Street _____
City _____ State _____ Zip _____

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