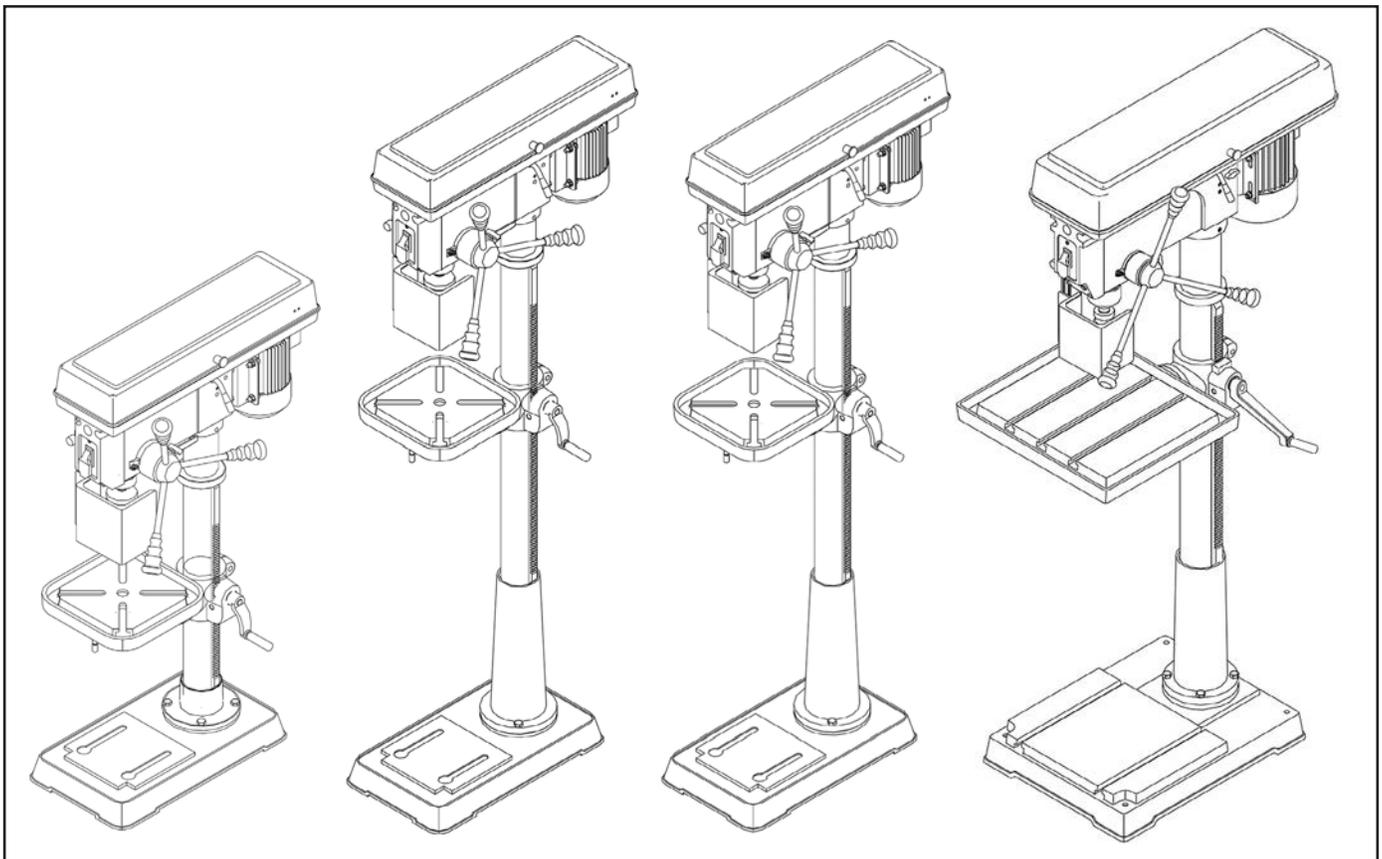


Grizzly **Industrial, Inc.**®

MODEL T34608–T34611 **15"/17"/20" DRILL PRESSES** **w/LED & LASER GUIDE** **OWNER'S MANUAL**

(For models manufactured since 06/25)



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

 **WARNING!**

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

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

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

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

 **WARNING!**

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

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

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

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INTRODUCTION

Contact Info

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

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

WARNING

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

CAUTION

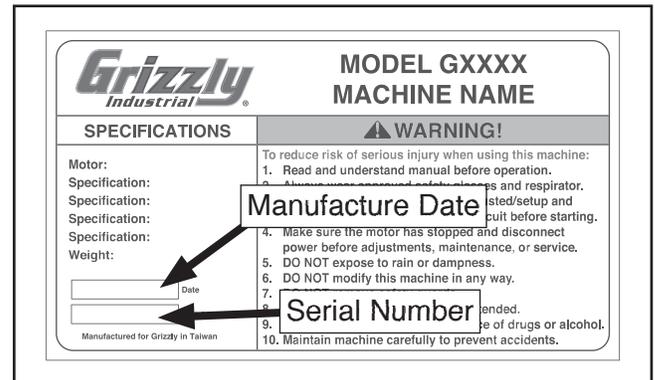
No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or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

Manual Accuracy

We 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.





MACHINE DATA SHEET

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

MODEL T34608

15" BENCHTOP DRILL PRESS W/LED & LASER GUIDE

Product Dimensions:

Weight..... 122 lbs.
 Width (side-to-side) x Depth (front-to-back) x Height..... 14-1/2 x 26 x 42 in.
 Footprint (Length x Width)..... 19-1/2 x 12 in.
 Space Required for Full Range of Movement (Width x Depth)..... 21-1/2 x 29-1/2 in.

Shipping Dimensions:

Type..... Cardboard
 Content..... Machine
 Weight..... 127 lbs.
 Length x Width x Height..... 35 x 20 x 12 in.

Electrical:

Power Requirement..... 120V, Single-Phase, 60 Hz
 Full-Load Current Rating..... 5.3A
 Minimum Circuit Size..... 15A
 Connection Type..... Cord & Plug
 Power Cord Included..... Yes
 Power Cord Length..... 72 in.
 Power Cord Gauge..... 18 AWG
 Plug Included..... Yes
 Included Plug Type..... 5-15
 Switch Type..... Paddle Safety Switch w/Removable Key

Motors:

Main

Horsepower..... 3/4 HP
 Phase..... Single-Phase
 Amps..... 5.3A
 Speed..... 1720 RPM
 Type..... TEFC Capacitor-Start Induction
 Power Transfer Belt
 Bearings..... Sealed & Permanently Lubricated

Main Specifications:

Operation Information

Type..... Bench
 Swing..... 15-1/4 in.
 Spindle Taper..... MT#2
 Spindle Travel..... 3-1/8 in.
 Max. Distance From Spindle to Column..... 7-5/8 in.
 Max. Distance From Spindle to Table..... 18-1/4 in.
 Number of Spindle Speeds..... 12
 Range of Spindle Speeds..... 250 - 3100 RPM
 Drilling Capacity (Mild Steel)..... 5/8 in.
 Drilling Capacity (Cast Iron)..... 3/4 in.
 Drill Chuck Type..... JT3 Keyed
 Drill Chuck Size..... 5/8 in.



Spindle Information

Distance From Spindle to Base.....	26-7/8 in.
Quill Diameter.....	1.850 in.

Table Information

Max. Table Tilt (Left/Right).....	45 deg.
Table Swivel Around Center.....	360 deg.
Table Swivel Around Column.....	360 deg.
Max. Movement of Work Table.....	14-1/2 in.
Table Length.....	10-9/16 in.
Table Width.....	10-9/16 in.
Table Thickness.....	1-3/16 in.
Number of T-Slots.....	4
T-Slot Size.....	15mm
Floor-To-Table Height.....	10-7/8 - 25-1/8 in.

Construction

Table.....	Cast Iron
Column.....	Steel
Spindle Housing.....	Cast Iron
Head.....	Cast Iron
Base.....	Cast Iron
Paint Type/Finish.....	Powder Coated

Other Related Information

Base Length.....	19-1/2 in.
Base Width.....	11-3/4 in.
Column Diameter.....	2-7/8 In.
Quill Flange/Collar Diameter.....	2.313 In.
Depth Stop Type.....	Hub
Has Work Light.....	Yes
Light Socket Type.....	5V LED
Maximum Bulb Wattage.....	1W
Has Laser Guide.....	Yes
Laser Classification.....	Class II
Laser Wavelength.....	650nm
Laser Maximum Output.....	1mW

Other Specifications:

Country of Origin	China
Warranty	1 Year
Approximate Assembly & Setup Time	30 Minutes
Serial Number Location	Machine ID Label
ISO 9001 Factory	Yes

Features:

- Hand-Crank Enabled Rack and Pinion Table Elevation
- Built-In LED Light
- Adjustable Class II Laser Guide
- 360 Deg. Table Positioning Around Column
- 12 Speed Settings (250, 340, 400, 650, 550, 600, 990, 1550, 1620, 1900, 2620, 3100 RPM)
- Adjustable Chip Guard





MACHINE DATA SHEET

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

MODEL T34609 15" FLOOR DRILL PRESS W/LED & LASER GUIDE

Product Dimensions:

Weight..... 135 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 14-1/2 x 26 x 63 in.
Footprint (Length x Width)..... 19-1/2 x 12 in.

Shipping Dimensions:

Type..... Cardboard
Content..... Machine
Weight..... 141 lbs.
Length x Width x Height..... 55 x 20 x 10 in.

Electrical:

Power Requirement..... 120V, Single-Phase, 60 Hz
Full-Load Current Rating..... 5.3A
Minimum Circuit Size..... 15A
Connection Type..... Cord & Plug
Power Cord Included..... Yes
Power Cord Length..... 72 in.
Power Cord Gauge..... 18 AWG
Plug Included..... Yes
Included Plug Type..... 5-15
Switch Type..... Paddle Safety Switch w/Removable Key

Motors:

Main

Horsepower..... 3/4 HP
Phase..... Single-Phase
Amps..... 5.3A
Speed..... 1720 RPM
Type..... TEFC Capacitor-Start Induction
Power Transfer Belt
Bearings..... Sealed & Permanently Lubricated
Centrifugal Switch/Contacts Type..... Internal

Main Specifications:

Operation Information

Type..... Floor
Swing..... 15-1/4 in.
Spindle Taper..... MT#2
Spindle Travel..... 3-1/4 in.
Max. Distance From Spindle to Column..... 7-5/8 in.
Max. Distance From Spindle to Table..... 28-1/8 in.
Number of Spindle Speeds..... 12
Range of Spindle Speeds..... 250 - 3100 RPM
Drilling Capacity (Mild Steel)..... 5/8 in.
Drilling Capacity (Cast Iron)..... 3/4 in.
Drill Chuck Type..... JT3 Keyed
Drill Chuck Size..... 5/8 in.



Spindle Information

Distance From Spindle to Base.....	48 in.
Quill Diameter.....	1.850 in.

Table Information

Max. Table Tilt (Left/Right).....	45 deg.
Table Swivel Around Center.....	360 deg.
Table Swivel Around Column.....	360 deg.
Max. Movement of Work Table.....	25-1/2 in.
Table Length.....	10-9/16 in.
Table Width.....	10-9/16 in.
Table Thickness.....	1-3/16 in.
Number of T-Slots.....	4
T-Slot Size.....	15mm
Floor-To-Table Height.....	22 - 47-1/2 in.

Construction

Table.....	Cast Iron
Column.....	Steel
Spindle Housing.....	Cast Iron
Head.....	Cast Iron
Base.....	Cast Iron
Paint Type/Finish.....	Powder Coated

Other Related Information

Base Length.....	19-1/2 in.
Base Width.....	11-3/4 in.
Column Diameter.....	2-7/8 In.
Quill Flange/Collar Diameter.....	2.313 In.
Depth Stop Type.....	Hub
Has Work Light.....	Yes
Light Socket Type.....	5V LED
Maximum Bulb Wattage.....	1W
Has Laser Guide.....	Yes
Laser Classification.....	Class II
Laser Wavelength.....	650nm
Laser Maximum Output.....	1mW

Other Specifications:

Country of Origin	China
Warranty	1 Year
Approximate Assembly & Setup Time	30 Minutes
Serial Number Location	Machine ID Label
ISO 9001 Factory	Yes

Features:

- Hand-Crank Enabled Rack and Pinion Table Elevation
- Built-in LED Light
- Adjustable Class II Laser Guide
- 360 Deg. Table Positioning Around Column
- 12 Speed Settings (250, 340, 400, 550, 600, 650, 990, 1550, 1620, 1900, 2620, 3100)
- Adjustable Chip Guard





MACHINE DATA SHEET

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

MODEL T34610 17" FLOOR DRILL PRESS W/LED & LASER GUIDE

Product Dimensions:

Weight..... 166 lbs.
 Width (side-to-side) x Depth (front-to-back) x Height..... 15-1/2 x 27-1/2 x 63-1/2 in.
 Footprint (Length x Width)..... 20 x 13-1/2 in.
 Space Required for Full Range of Movement (Width x Depth)..... 24 x 32 in.

Shipping Dimensions:

Type..... Cardboard
 Content..... Machine
 Weight..... 174 lbs.
 Length x Width x Height..... 55 x 21 x 10 in.

Electrical:

Power Requirement..... 120V, Single-Phase, 60 Hz
 Full-Load Current Rating..... 9.9A
 Minimum Circuit Size..... 15A
 Connection Type..... Cord & Plug
 Power Cord Included..... Yes
 Power Cord Length..... 72 in.
 Power Cord Gauge..... 16 AWG
 Plug Included..... Yes
 Included Plug Type..... 5-15
 Switch Type..... Paddle Safety Switch w/Removable Key

Motors:

Main

Horsepower..... 1-1/2 HP
 Phase..... Single-Phase
 Amps..... 9.9A
 Speed..... 1720 RPM
 Type..... TEFC Capacitor-Start Induction
 Power Transfer..... Belt
 Bearings..... Sealed & Permanently Lubricated

Main Specifications:

Operation Information

Type..... Floor
 Swing..... 17 in.
 Spindle Taper..... MT#2
 Spindle Travel..... 3-1/8 in.
 Max. Distance From Spindle to Column..... 8-1/2 in.
 Max. Distance From Spindle to Table..... 26-3/8 in.
 Number of Spindle Speeds..... 16
 Range of Spindle Speeds..... 210 - 3630 RPM
 Drilling Capacity (Mild Steel)..... 3/4 in.
 Drilling Capacity (Cast Iron)..... 1 in.
 Drill Chuck Type..... JT3 Keyed
 Drill Chuck Size..... 5/8 in.



Spindle Information

Distance From Spindle to Base.....	46-1/2 in.
Quill Diameter.....	2.047 in.

Table Information

Max. Table Tilt (Left/Right).....	45 deg.
Table Swivel Around Center.....	360 deg.
Table Swivel Around Column.....	360 deg.
Max. Movement of Work Table.....	24-3/8 in.
Table Length.....	12-3/8 in.
Table Width.....	12-3/8 in.
Table Thickness.....	1-3/16 in.
Number of T-Slots.....	4
T-Slot Size.....	15mm
Floor-To-Table Height.....	22-1/8 - 47 in.

Construction

Table.....	Cast Iron
Column.....	Steel
Spindle Housing.....	Cast Iron
Head.....	Cast Iron
Base.....	Cast Iron
Paint Type/Finish.....	Powder Coated

Other Related Information

Base Length.....	19-3/4 in.
Base Width.....	13-1/4 in.
Column Diameter.....	3-1/8 in.
Quill Flange/Collar Diameter.....	2.625 in.
Depth Stop Type.....	Hub
Has Work Light.....	Yes
Light Socket Type.....	5V LED
Maximum Bulb Wattage.....	1W
Has Laser Guide.....	Yes
Laser Classification.....	Class II
Laser Wavelength.....	650nm
Laser Maximum Output.....	1mW

Other Specifications:

Country of Origin	China
Warranty	1 Year
Approximate Assembly & Setup Time	30 Minutes
Serial Number Location	Machine ID Label
ISO 9001 Factory	Yes

Features:

- Hand-Crank Enabled Rack and Pinion Table Elevation
- Built-In LED Worklight
- Adjustable Class II Laser Guide
- 360 Deg. Table Positioning Around Column
- 16 Speed Settings (210, 310, 350, 480, 520, 550, 640, 720, 800, 870, 1480, 1650, 1820, 2380, 2540, 3630)
- Adjustable Chip Guard





MACHINE DATA SHEET

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

MODEL T34611 20" FLOOR DRILL PRESS W/LED & LASER GUIDE

Product Dimensions:

Weight..... 245 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 23 x 34 x 66-1/2 in.
Footprint (Length x Width)..... 23 x 18 in.

Shipping Dimensions:

Type..... Cardboard
Content..... Machine
Weight..... 254 lbs.
Length x Width x Height..... 57 x 26 x 13 in.

Electrical:

Power Requirement..... 120V, Single-Phase, 60 Hz
Full-Load Current Rating..... 12.9A
Minimum Circuit Size..... 15A
Connection Type..... Cord & Plug
Power Cord Included..... Yes
Power Cord Length..... 72 in.
Power Cord Gauge..... 14 AWG
Plug Included..... Yes
Included Plug Type..... 5-15 plug
Switch Type..... Paddle Safety Switch w/Removable Key

Motors:

Main

Horsepower..... 2 HP
Phase..... Single-Phase
Amps..... 12.9A
Speed..... 1720 RPM
Type..... TEFC Capacitor-Start Induction
Power Transfer Belt
Bearings..... Sealed & Permanently Lubricated
Centrifugal Switch/Contacts Type..... Internal

Main Specifications:

Operation Information

Type..... Floor
Swing..... 20-1/4 in.
Spindle Taper..... MT#3
Spindle Travel..... 4-3/4 in.
Max. Distance From Spindle to Column..... 10-1/8 in.
Max. Distance From Spindle to Table..... 25-5/8 in.
Number of Spindle Speeds..... 12
Range of Spindle Speeds..... 180 - 3550 RPM
Drilling Capacity (Mild Steel)..... 1-1/8 in.
Drilling Capacity (Cast Iron)..... 1-1/4 in.
Drill Chuck Type..... JT3 Keyed
Drill Chuck Size..... 5 - 20mm



Spindle Information

Distance From Spindle to Base.....	46-7/8 in.
Quill Diameter.....	2.434 in.

Table Information

Max. Table Tilt (Left/Right).....	45 deg.
Table Swivel Around Center.....	360 deg.
Max. Movement of Work Table.....	19 in.
Table Length.....	16-3/4 in.
Table Width.....	18-3/4 in.
Table Thickness.....	1-1/2 in.
Number of T-Slots.....	3
T-Slot Size.....	15mm
T-Slot Centers.....	3-15/16 in.
Floor-To-Table Height.....	24-1/2 - 43-1/2 in.

Construction

Table.....	Cast Iron
Column.....	Steel
Spindle Housing.....	Cast Iron
Head.....	Cast Iron
Base.....	Cast Iron
Paint Type/Finish.....	Powder Coated

Other Related Information

Base Length.....	22-3/4 in.
Base Width.....	17-5/8 in.
Column Diameter.....	3-5/8 in.
Quill Flange/Collar Diameter.....	2.950 in.
Depth Stop Type.....	Hub
Has Work Light.....	Yes
Light Socket Type.....	5V LED
Maximum Bulb Wattage.....	1W
Has Laser Guide.....	Yes
Laser Classification.....	Class II
Laser Wavelength.....	650nm
Laser Maximum Output.....	1mW

Other Specifications:

Country of Origin	China
Warranty	1 Year
Approximate Assembly & Setup Time	30 Minutes
Serial Number Location	Machine ID Label
ISO 9001 Factory	Yes

Features:

- Hand-Crank Enabled Rack and Pinion Table Elevation
- Built-In LED Light
- Adjustable Class II Laser Guide
- 360 Deg. Table Positioning Around Column
- 12 Speed Settings (180, 280, 320, 450, 480, 510, 1000, 1350, 1600, 1920, 2500, 3550)
- Adjustable Chip Guard



SAFETY

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

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



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



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



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

NOTICE

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

Safety Instructions for Machinery



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

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

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

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

ELECTRICAL EQUIPMENT INJURY RISKS.

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

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

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



WARNING

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



Additional Safety for Drill Presses

WARNING

Serious injury or death can occur from getting clothing, jewelry, or long hair entangled in rotating spindle or bit/cutting tool. Contact with rotating bit/cutting tool can result in severe cuts or amputation of fingers. Flying metal chips can cause blindness or eye injuries. Broken bits/cutting tools, unsecured workpieces, chuck keys, or other adjustment tools thrown from rotating spindle can strike nearby operator or bystanders with deadly force. To reduce the risk of these hazards, operator and bystanders **MUST** completely heed hazards and warnings below.

EYE/FACE/HAND PROTECTION. Flying chips created by drilling can cause eye injuries or blindness. Always wear a face shield in addition to safety glasses. Always keep hands and fingers away from drill bit/cutting tool. Avoid awkward hand positions, where a sudden slip could cause hand to move into bit/cutting tool.

AVOIDING ENTANGLEMENT. DO NOT wear loose clothing, gloves, or jewelry. Tie back long hair. Keep all guards in place and secure. Always allow spindle to stop on its own. DO NOT stop spindle using your hand or any other object.

REMOVING ADJUSTMENT TOOLS. Chuck key, wrenches, and other tools left on machine can become deadly projectiles when spindle is started. Remove all loose items or tools used on spindle immediately after use.

CORRECT SPINDLE SPEED. Using wrong spindle speed can cause bits/cutting tools to break and strike operator or bystanders. Follow recommended speeds and feeds for each size/type of bit/cutting tool and workpiece material.

SECURING BIT/CUTTING TOOL. Firmly secure bit/cutting tool in chuck so it cannot fly out of spindle during operation or startup.

DRILLING PREPARATION. To avoid loss of drilling control or bit breakage, only drill into a flat surface that is approximately perpendicular to bit. Clear table of all objects before starting spindle. Never start spindle with bit pressed against workpiece.

SECURING TABLE AND HEADSTOCK. To avoid loss of control leading to accidental contact with tool/bit, tighten all table and headstock locks before operating drill press.

WORKPIECE CONTROL. An unsecured workpiece may unexpectedly shift, spin out of control, or be thrown if bit/cutting tool “grabs” during operation. Clamp workpiece to table or in table-mounted vise, or brace against column to prevent rotation. NEVER hold workpiece by hand during operation. NEVER start machine with bit/cutting tool touching workpiece; allow spindle to gain full speed before drilling.

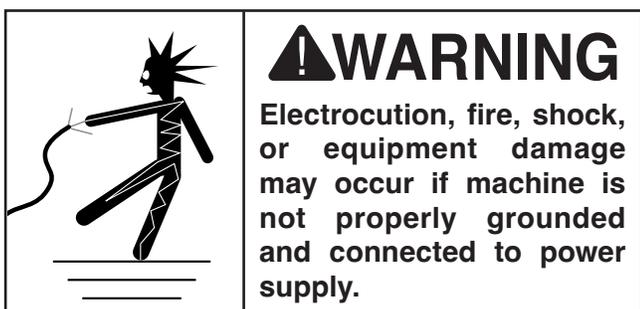
INSPECTING BIT/CUTTING TOOL. Damaged bits/cutting tools may break apart during operation and hit operator or bystanders. Dull bits/cutting tools increase cutting resistance and are more likely to grab and spin/throw workpiece. Always inspect bits/cutting tools for sharpness, chips, or cracks before each use. Replace dull, chipped, or cracked bits/cutting tools immediately.



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.

T34608/T34609	5.3 Amps
T34610	9.9 Amps
T34611	12.9 Amps

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

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

! WARNING

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

120V Circuit Requirements

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

Nominal Voltage	110V, 115V, 120V
Cycle	60 Hz
Phase	Single-Phase
Power Supply Circuit	15 Amps
Plug/Receptacle	NEMA 5-15

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.)

! CAUTION

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

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



Grounding & Plug Requirements

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

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

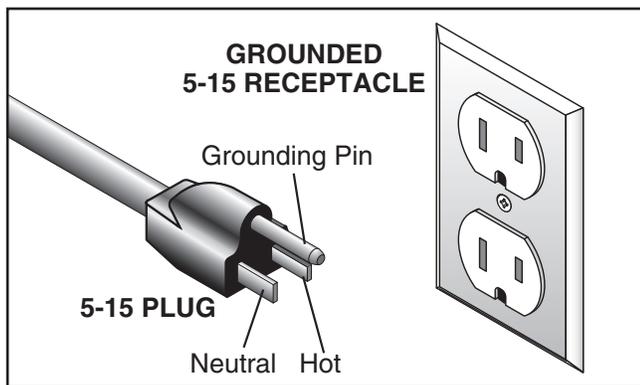


Figure 1. Typical 5-15 plug and receptacle.

⚠ CAUTION

SHOCK HAZARD!

Two-prong outlets do not meet the grounding requirements for this machine. Do not modify or use an adapter on the plug provided—if it will not fit the outlet, have a qualified electrician install the proper outlet with a verified ground.

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 machine is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

Extension Cords

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

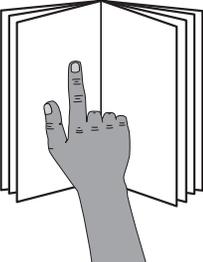
Extension cords cause voltage drop, which can damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

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

- Minimum Gauge Size**
- T34608/T34609/T34610..... 18 AWG
 - T34611 16 AWG
- Maximum Length (Shorter is Better).....50 ft.**



SETUP

	<p>⚠ 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!</p>
---	---

	<p>⚠ WARNING Wear safety glasses during the entire setup process!</p>
---	--

	<p>⚠ WARNING HEAVY LIFT! Straining or crushing injury may occur from improperly lifting machine or some of its parts. To reduce this risk, get help from other people and use a forklift (or other lifting equipment) rated for weight of this machine.</p>
--	---

Unpacking

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

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



Inventory

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

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

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.

T34608—T34610 (Figure 2)	Qty
A. Headstock	1
B. Downfeed Handles	3
C. Table Height Lock Handle	1
D. Table Height Crank.....	1
E. Base	1
F. Table.....	1
G. Arbor MT#2 x JT3	1
H. Drill Chuck JT3 5/8"	1
I. Drill Chuck Key.....	1
J. Drift Key.....	1
K. Hex Bolts M10-1.5 x 35	4
L. Hex Wrenches 3, 4, 5mm.....	1 Ea.
M. Table Swivel Lock Handle	1
N. Chip Guard	1
O. Chip Guard Rail.....	1
P. Column Assembly (T34608).....	1
Q. Column Assembly (T34609/T34610)	1

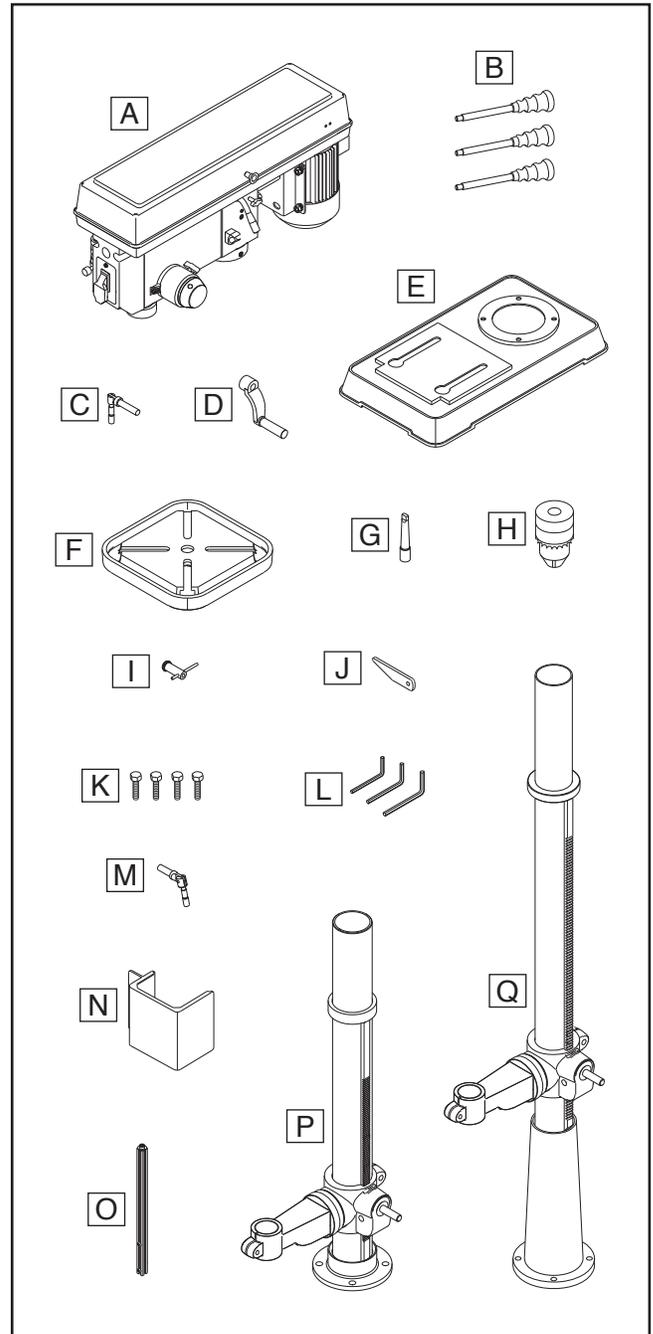


Figure 2. Inventory.



T34611 (Figure 3)	Qty
A. Headstock	1
B. Downfeed Handles	3
C. Drift Key.....	1
D. Hex Bolts M12-1.75 x 40.....	4
E. Table Height Lock Handle	1
F. Table Height Crank.....	1
G. Hex Wrenches 3, 4, 5mm.....	1 Ea.
H. Chip Guard Rail.....	1
I. Chip Guard	1
J. Table Assembly	1
K. Arbor MT#3 x JT3	1
L. Drill Chuck Key.....	1
M. Drill Chuck 5–20mm.....	1
N. Base	1
O. Column Assembly	1

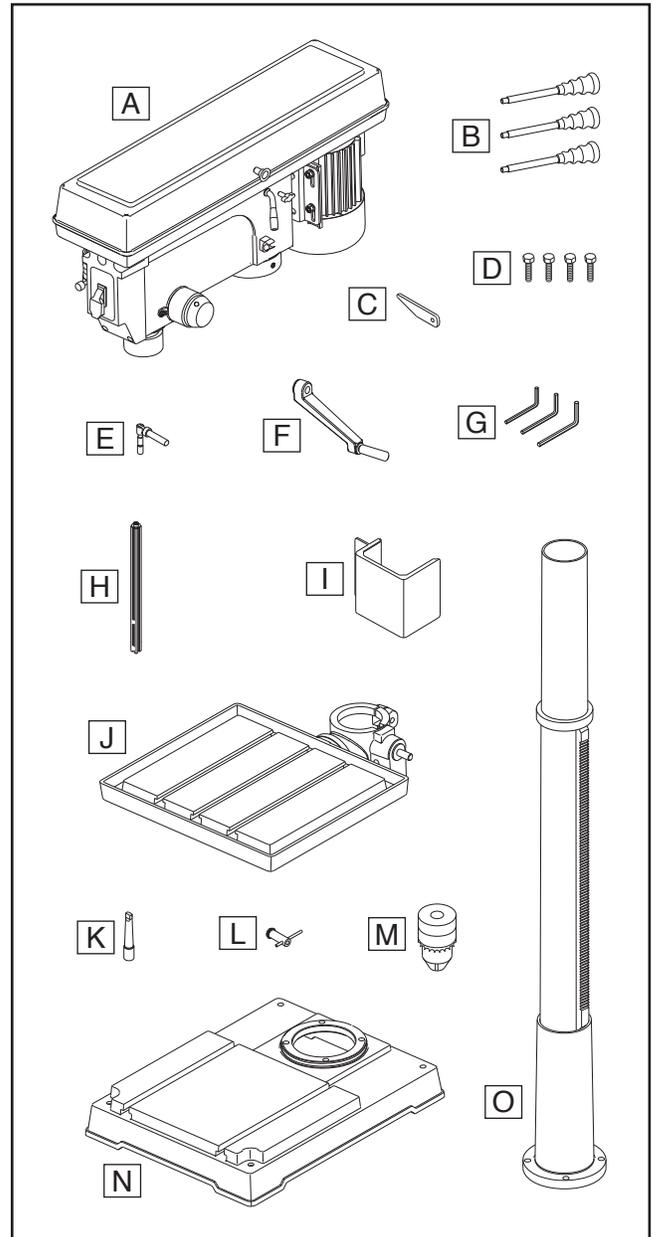


Figure 3. Inventory.



Cleanup

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

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

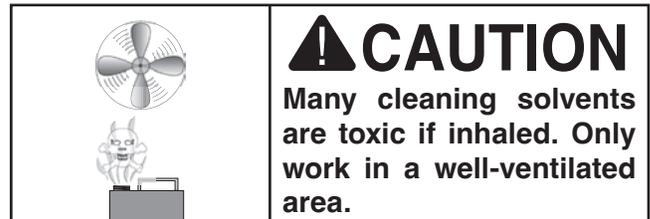
There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

Before cleaning, gather the following:

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

Basic steps for removing rust preventative:

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



T23692—Orange Power Degreaser

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



Figure 4. T23692 Orange Power Degreaser.



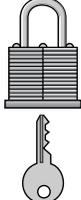
Site Considerations

Weight Load

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

Space Allocation

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



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

Physical Environment

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

Electrical Installation

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

Lighting

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

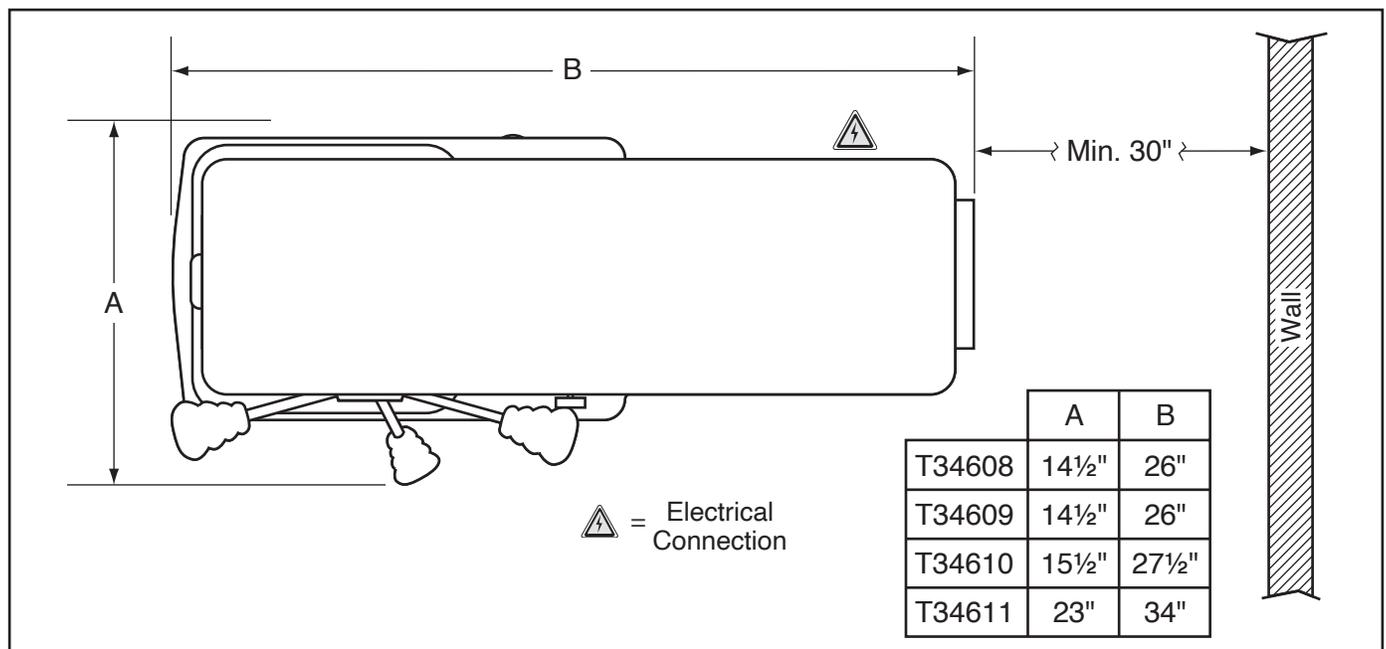


Figure 5. Minimum working clearances.



Bench Mounting (T34608)

The Model T34608 base has holes that allow it to be fastened to a workbench or other mounting surface to prevent it from moving during operation and causing accidental injury or damage.

The strongest mounting option is a "Through Mount" (see example below) where holes are drilled all the way through the workbench—and hex bolts, washers, and hex nuts are used to secure the machine in place.

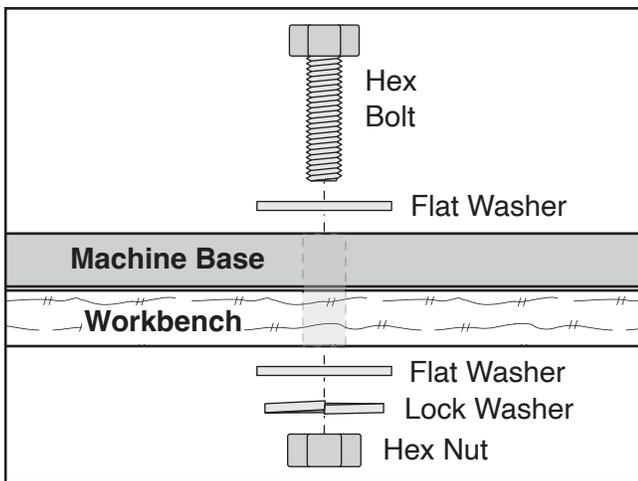


Figure 6. "Through Mount" setup.

Another option is a "direct mount" (see example below) where the machine is secured directly to the workbench with lag screws and washers.

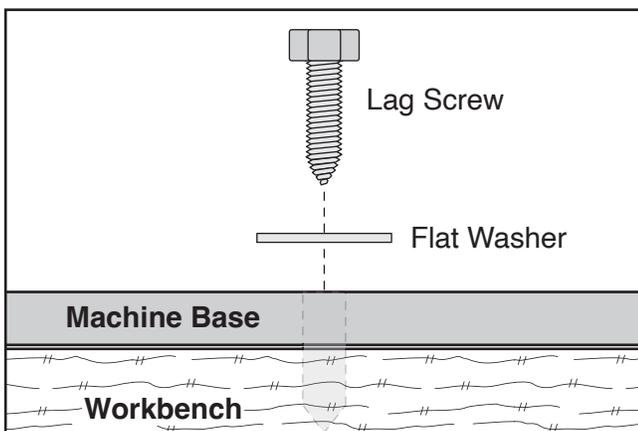


Figure 7. "Direct Mount" setup.

Anchoring to Floor (T34609–T34611)

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

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

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

Anchoring to Concrete Floors

Lag shield anchors with lag screws (see below) are a popular way to anchor machinery to a concrete floor, because the anchors sit flush with the floor surface, making it easy to unbolt and move the machine later, if needed. However, anytime local codes apply, you MUST follow the anchoring methodology specified by the code.

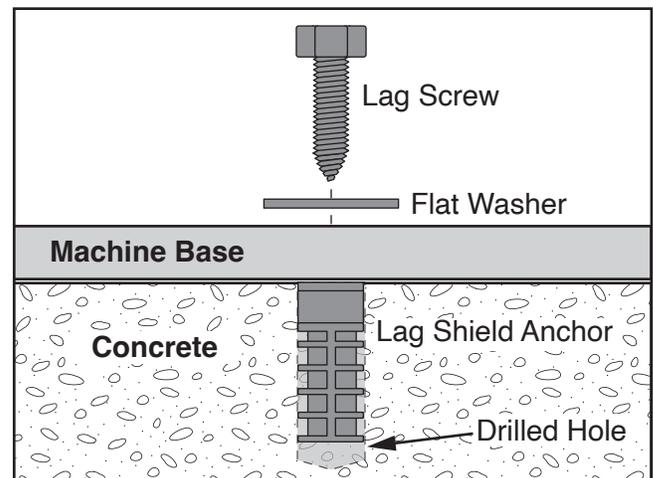
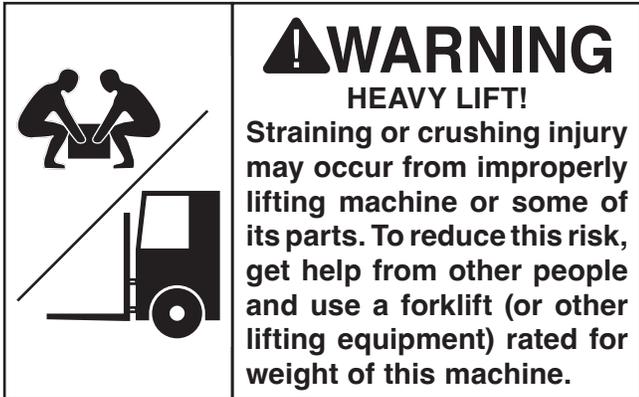


Figure 8. Popular method for anchoring machinery to a concrete floor.



Assembly

The machine must be fully assembled before it can be operated. Before beginning the assembly process, refer to **Needed for Setup** and gather all listed items. To ensure the assembly process goes smoothly, first clean any parts that are covered or coated in heavy-duty rust preventative (if applicable).



To assemble the machine:

1. Attach the column assembly (see **A** in **Figure 9**) to the base (see **B** in **Figure 9**) with four hex bolts (see **C** in **Figure 9**). Tighten firmly.

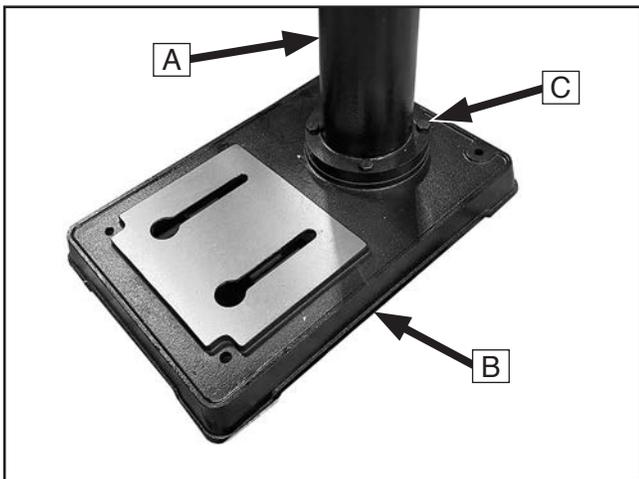


Figure 9. Column assembly attached to base (Model T34610 shown).

- For **Models T34608–T34610** assembly, proceed to **Step 6**.
- For **Model T34611** assembly, proceed to **Step 2**.

2. **T34611 Only:** Mark the top of the rack (see **A** in **Figure 10**), to keep track of which end is up.
3. **T34611 Only:** Loosen the set screw (see **B** in **Figure 10**) to remove the column collar (see **C** in **Figure 10**).

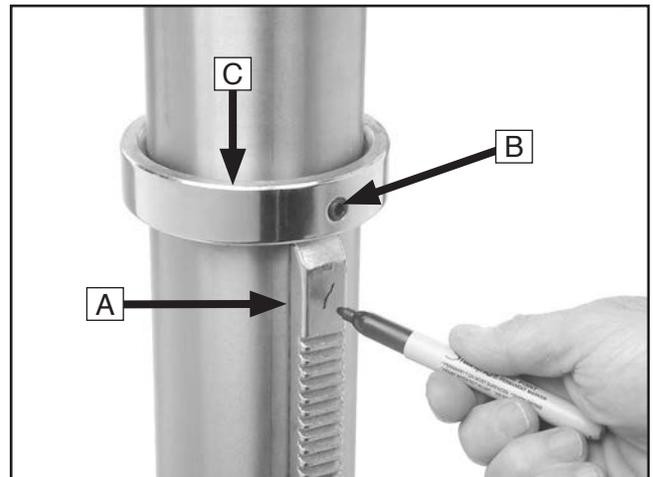


Figure 10. Example of marking top of rack.

4. **T34611 Only:** Place the rack (see **A** in **Figure 11**) inside of the table assembly (see **B** in **Figure 11**), mesh it with the pinion, and slide the table assembly over the column (see **C** in **Figure 11**).

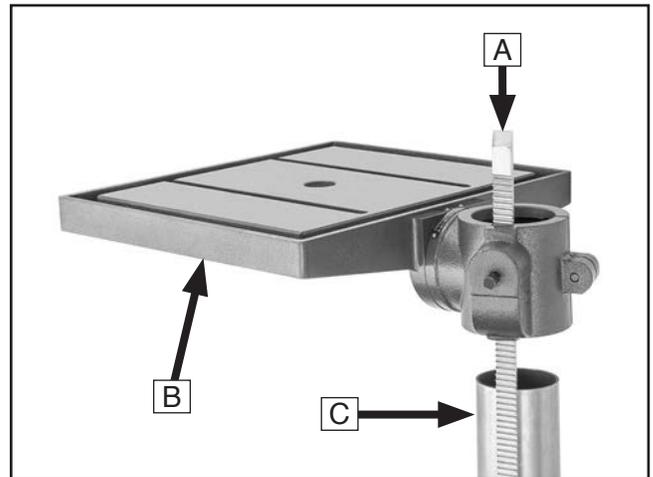


Figure 11. Example of sliding table assembly and rack over column.

5. **T34611 Only:** Slide the column collar over the column with the beveled edge (see **A** in **Figure 12**) facing down, then fit the beveled edge of collar over rack and tighten the set screw (see **B** in **Figure 12**) to secure.



Note: Do not overtighten the set screw or you may split the column collar. Also make sure the rack is seated firmly between the column collar and the column base.

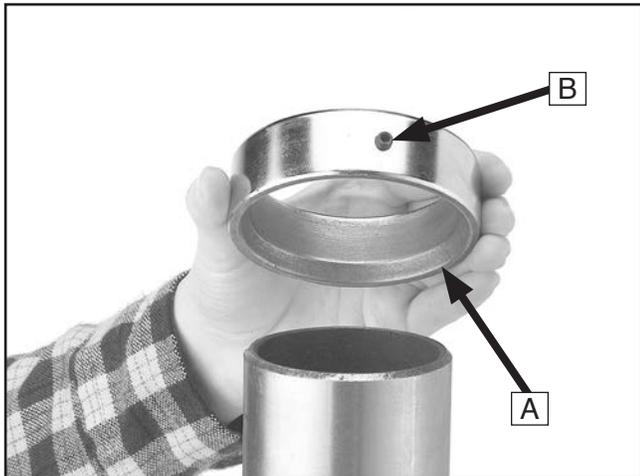


Figure 12. Correct column collar orientation.

6. Thread the table height lock handle (see **A** in **Figure 13**) into the table bracket (see **B** in **Figure 13**).
7. Slide the table height crank (see **C** in **Figure 13**) onto the table bracket shaft.
8. Turn the crank until the set screw (see **D** in **Figure 13**) is aligned with the flat section on the shaft, then tighten the set screw.

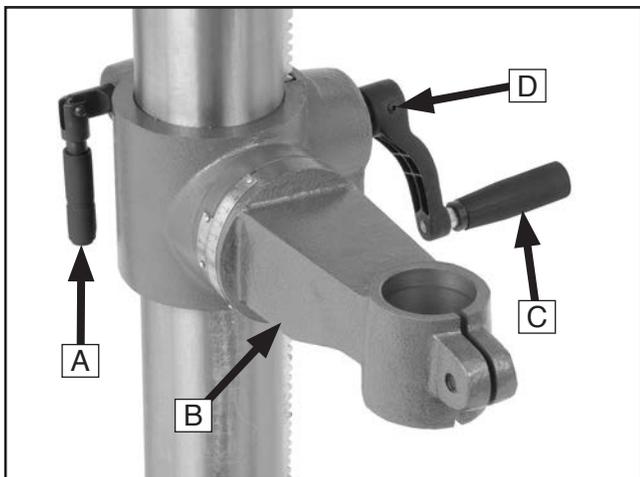


Figure 13. Example of table height controls installed.

- For **Models T34608–T34610** assembly, proceed to **Step 9**.
- For **Model T34611** assembly, proceed to **Step 10**.

9. **T34608–T34610 Only:** Insert the table (see **A** in **Figure 14**) into the table bracket. Thread the table swivel lock handle (see **B** in **Figure 14**) into the table bracket.

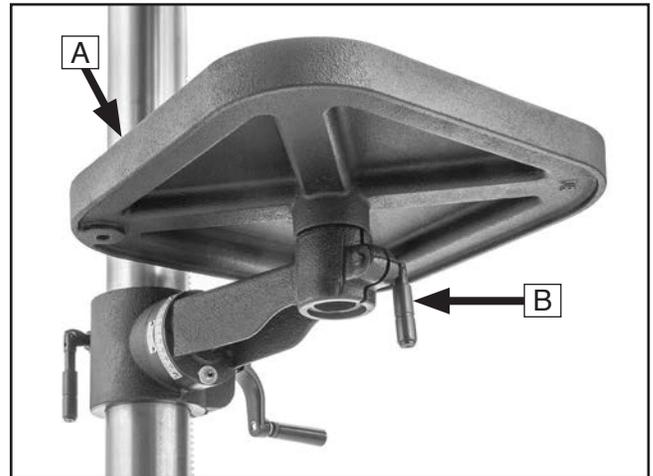


Figure 14. Example of table installed.

10. With the aid of a second person, carefully lift the headstock onto the column top.
11. Rotate the headstock until the sides of the belt door are parallel with the sides of the base, then tighten two set screws (see **A** in **Figure 15**).
12. Install three downfeed handles (see **B** in **Figure 15**) into the downfeed hub (see **C** in **Figure 15**).

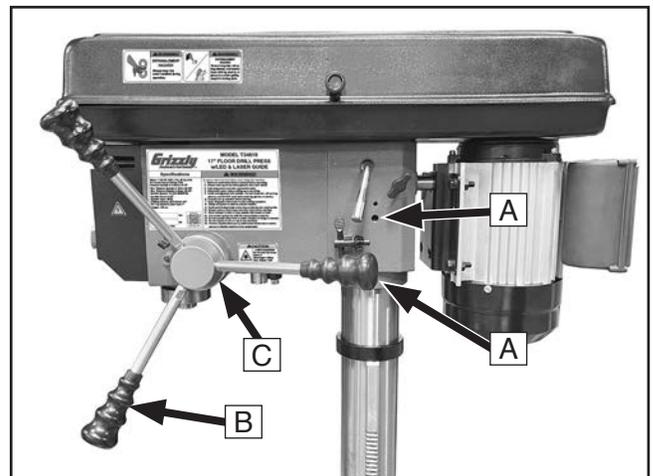


Figure 15. Headstock and downfeed handles installed.



- Remove (2) Phillips head screws from T-slot nuts (see **A** in **Figure 16**) inside chip guard rail (see **B** in **Figure 16**), then use screws and nuts to attach chip guard (see **C** in **Figure 16**) to chip guard rail.

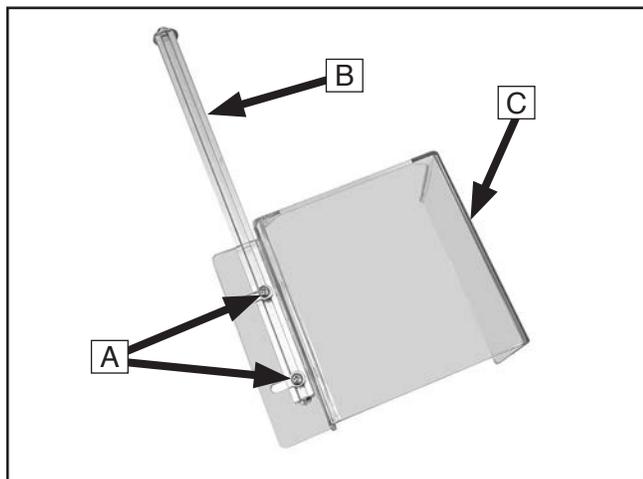


Figure 16. Chip guard attached to chip guard rail.

- Remove Phillips head screw and flat washer (see **A** in **Figure 17**) from chip guard rail.
- Loosen chip guard lock knob (see **B** in **Figure 17**), insert chip guard rail through bottom of mount on side of headstock, then tighten lock knob to secure.

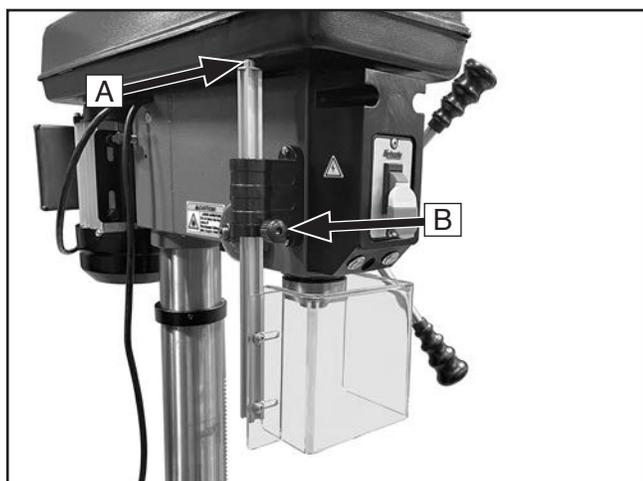


Figure 17. Chip guard attached to chip guard rail.

- Install fasteners removed in **Step 14**.

Joining Drill Chuck & Arbor

An arbor is included for the drill chuck that comes with this machine. The following procedure describes how to install the arbor in the chuck.

After the arbor is installed in the drill chuck, it is very difficult to separate the assembly. If you would like to use a different chuck in the future, we recommend obtaining a new arbor.

IMPORTANT: DO NOT install the drill chuck and arbor assembly into the spindle until **AFTER** the test run.

To join drill chuck and arbor:

- Use acetone or lacquer thinner to clean drill chuck and arbor mating surfaces, especially the bore.
- Retract chuck jaws completely into chuck.
- Insert small end of arbor into chuck.
- Hold assembly by the arbor and tap chuck onto a block of wood with medium force, as illustrated below.

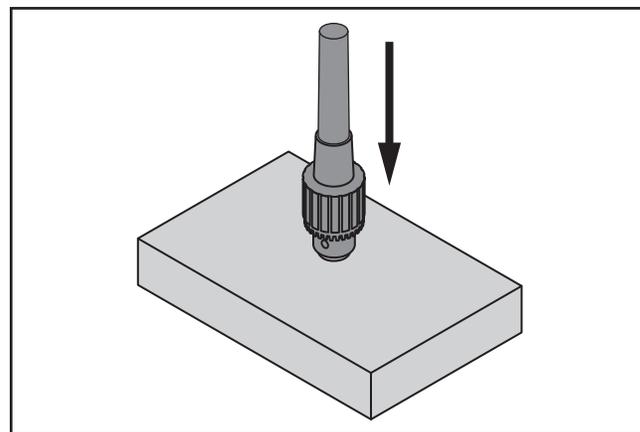


Figure 18. Tapping drill chuck/arbor on block of wood.

- Attempt to separate drill chuck and arbor by hand—if they separate, repeat **Steps 3–4**.



Spindle Break-In

The spindle break-in procedure distributes lubrication throughout the bearings to reduce the risk of early bearing failure if there are any "dry" spots or areas where lubrication has settled in the bearings. You **must** complete this procedure **before** placing operational loads on the spindle for the first time when the machine is new or if it has been sitting idle for longer than 6 months.

Always start the spindle break-in at the lowest speed to minimize wear if there *are* dry spots. Allow the spindle to run long enough to warm up and distribute the bearing grease, then incrementally increase spindle speeds and repeat this process at each speed until reaching the maximum spindle speed. Following the break-in procedure in this progressive manner helps minimize any potential wear that could occur before lubrication is fully distributed.

NOTICE

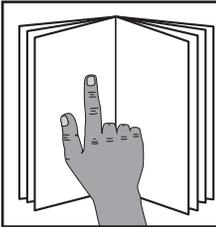
Complete spindle bearing break-in procedure to prevent rapid wear and tear of spindle components once drill press is placed into operation.

To perform spindle break-in:

1. Make sure spindle area is free of obstructions.
2. Configure V-belts for the lowest spindle speed. Refer to **Changing Spindle Speed** on **Page 30**.
3. Connect machine to power and run spindle for 10 minutes.
4. Turn machine **OFF**, and allow spindle to come to a complete stop.
5. Repeat **Steps 2–4** for each speed listed below in progressive order (use value that is shown on belt arrangement chart of your machine):
 - a. 510/640/650 RPM
 - b. 1600/1620/1650 RPM
 - c. 3100/3550/3630 RPM



OPERATIONS

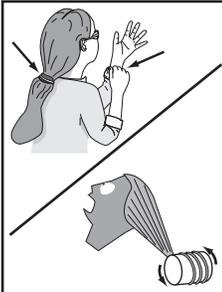


!WARNING

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

!WARNING

To reduce risk of eye or face injury from flying chips, always wear approved safety glasses and a face shield when operating this machine.



!WARNING

Keep hair, clothing, and jewelry away from moving parts at all times. Entanglement can result in death, amputation, or severe crushing injuries!

Power Controls

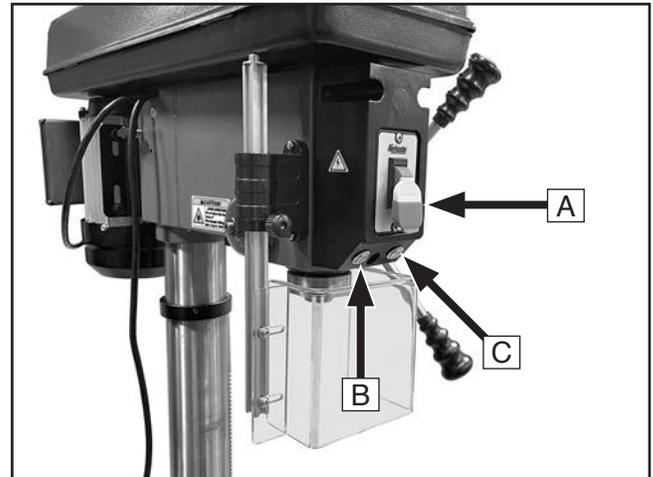


Figure 19. Control panel controls.

- A. **Start/Stop Switch:** Turns motor **ON** when moved up; turns motor **OFF** when moved down. Removal of yellow key disables switch so motor cannot start.
- B. **Laser Button:** Turns laser guide **ON** or **OFF**.
- C. **LED Button:** Turns LED **ON** or **OFF**.



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.

NOTICE

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

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

1. Examines workpiece to make sure it is suitable for drilling.
2. Puts on required safety glasses and face shield.
3. Firmly secures workpiece to table using vise or T-slot clamps.
4. Installs correct drill bit for operation.
5. Adjusts table to correct height and tilt, then locks it in place.
6. Selects appropriate spindle speed according to drill bit speed chart located on **Page 29**.
7. Configures machine for appropriate spindle speed.
8. Connects machine to power, starts spindle rotation, and sets spindle speed.
9. Performs drilling operation.
10. When finished, turns machine **OFF** and disconnects it from power.



Installing/Removing Arbor

Usually, once the chuck and arbor have been properly mounted together, they are considered semi-permanent connections. If you would like to install a different chuck, we recommend getting a new arbor for that chuck.

Installing Arbor in Spindle

1. Disconnect the machine from the power source.
2. Pivot chip guard out of the way.
3. Join chuck and arbor (refer to **Joining Drill Chuck & Arbor** on **Page 24**).
4. Rotate chuck on arbor until chuck jaws retract into drill chuck body.
5. Use acetone or lacquer thinner to clean mating surfaces of arbor and spindle socket.
6. Slide arbor (see **A** in **Figure 20**) into spindle socket (see **B** in **Figure 20**) while slowly rotating chuck to line up tang on arbor with slot in socket.

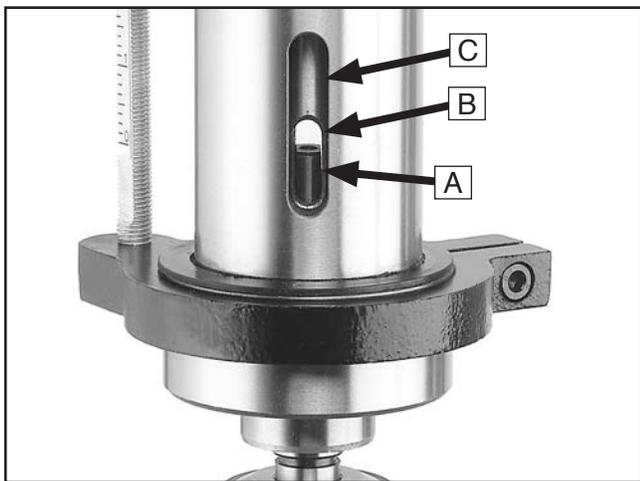


Figure 20. Example of arbor tang lined up with spindle socket.

7. Strike face of chuck from below with rubber-faced mallet to seat arbor in spindle.
8. Check seat by gently pulling down on chuck.
9. Pivot chip guard back into place.

Removing Arbor from Spindle

The arbor can be removed to install other Morse Taper #2 tooling in the spindle. A drift key is included to help remove the arbor or other tooling from the spindle.

To remove the arbor from the spindle:

1. Disconnect the machine from the power source.
2. Pivot chip guard out of the way.
3. Rotate downfeed handles until drift key slot is exposed in side of quill.
4. Rotate spindle until inner drift key slot (see **B** in **Figure 20**) is aligned with outer slot (see **C** in **Figure 20**). You will see through spindle when slot is properly aligned.
5. Insert drift key (see **A** in **Figure 21**) into drift key slot, then tap drift key with metal hammer (see **B** in **Figure 21**) until chuck released.

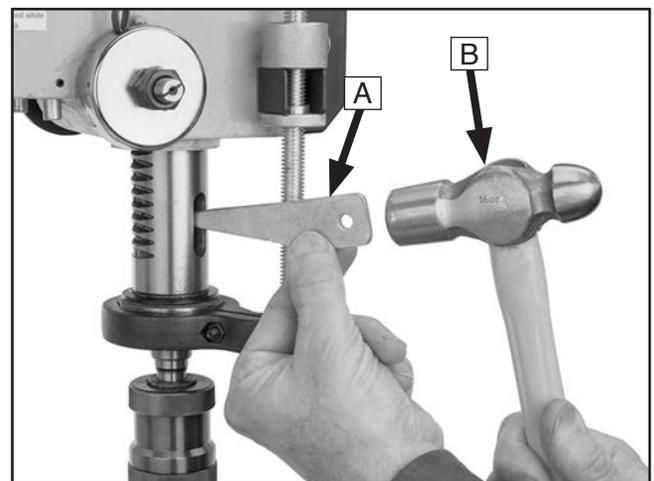


Figure 21. Example of using drift key to remove arbor from spindle.



Choosing Spindle Speeds

Using Drill Bit Speed Chart

The chart shown in **Figure 28** is intended as a generic guide only. Always follow the manufacturer's speed recommendations if provided with your drill bits, cutters, or hole saws. Exceeding the recommended speeds may be dangerous to the operator.

The speeds shown here are intended to get you started. The optimum speed will always depend on various factors, including tool diameter, drilling pressure, material hardness, material quality, and desired finish.

Often, when drilling materials other than wood, some type of lubrication is necessary.

Lubrication Suggestions

WoodNone
 PlasticsSoapy Water
 BrassWater-Based Lubricant
 Aluminum..... Paraffin-Based Lubricant
 Mild Steel..... Oil-Based Lubricant

CAUTION

Larger bits turning at slower speeds tend to grab workpiece aggressively. This can result in operator's hand being pulled into bit or workpiece being thrown with great force. Always clamp workpiece to table to prevent reduce risk of injury.

Twist/Brad Point Drill Bits	Soft Wood	Hard Wood	Plastic	Brass	Aluminum	Mild Steel
1/16" – 3/16"	3000	2500	2500	2500	3000	2500
13/64" – 3/8"	2000	1500	2000	1250	2500	1250
25/64" – 5/8"	1500	750	1500	750	1500	600
11/16" – 1"	750	500	1000	400	1000	350

Spade/Forstner Bits	Soft Wood	Hard Wood	Plastic	Brass	Aluminum	Mild Steel
1/4" – 1/2"	2000	1500				
9/16" – 1"	1500	1250				
1-1/8" – 1-7/8"	1000	750				
2–3"	500	350				

Hole Saws	Soft Wood	Hard Wood	Plastic	Brass	Aluminum	Mild Steel
1/2" – 7/8"	500	500	600	600	600	500
1" – 1-7/8"	400	400	500	500	500	400
2" – 2-7/8"	300	300	400	400	400	300
3" – 3-7/8"	200	200	300	300	300	200
4" – 5"	100	100	200	200	200	100

Rosette Cutters	Soft Wood	Hard Wood	Plastic	Brass	Aluminum	Mild Steel
Carbide Insert Type	350	250				
One-Piece Type	1800	500				

Tenon/Plug Cutters	Soft Wood	Hard Wood	Plastic	Brass	Aluminum	Mild Steel
3/8" – 1/2"	1200	1000				
5/8" – 1"	800	600				

Figure 22. Drill bit speed chart (RPMs).



Changing Spindle Speed

A spindle speed and belt arrangement chart is found on the inside of the belt door. Refer to this chart whenever changing speeds.

To change spindle speed:

1. Disconnect the machine from the power source.
2. Loosen the lock knob on the belt door, then open the door.
3. Release V-belt tension by loosening two knobs (see **A** in **Figure 23**) and moving tension lever toward the front of the machine (see **B** in **Figure 23**).

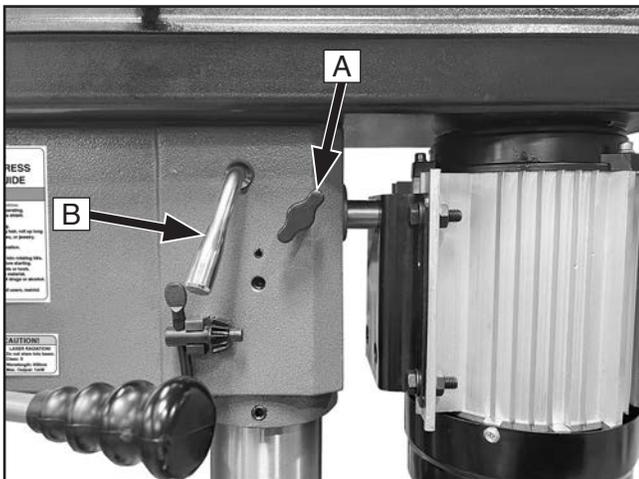


Figure 23. V-belt tension components.

4. Move V-belt onto desired pulley sheaves according to chart on belt door.
5. Move tension lever (see **B** in **Figure 23**) toward rear of machine until belt deflects approximately 10mm when pressed with thumb midway between two pulleys.
6. Tighten knobs (see **A** in **Figure 23**).
7. Close and lock the belt door.

Adjusting Depth Stop

To drill multiple holes at the same preset depth, use the depth stop:

1. With the drill bit in the chuck, lower the downfeed handle to advance the chuck to the desired point.
2. Turn the depth scale collar (see **C** in **Figure 24**) counterclockwise until it stops moving.
3. Tighten the depth scale lock knob (see **D** in **Figure 24**).

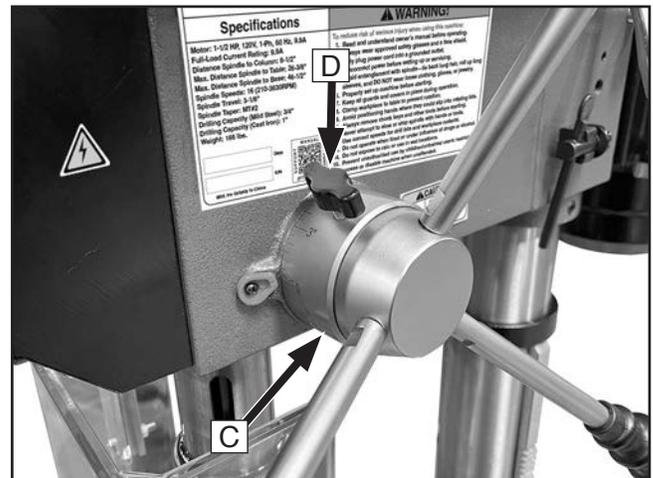


Figure 24. Depth stop components.



Tilting Table

To tilt the table:

1. Disconnect the machine from the power source.
2. Tighten the cap screw (see **B** in **Figure 25**) to pull locking taper pin out of table bracket.
3. Loosen the hex bolt (see **C** in **Figure 25**) to tilt the table. Only loosen the hex bolt slightly, otherwise the table assembly will separate from the column and fall.
4. Tighten the hex bolt (see **C** in **Figure 25**).
 - If returning table tilt to 0°, install taper pin assembly (see **B** in **Figure 25**) and loosen cap screw to secure. You may need to tap assembly with soft mallet to fully seat taper pin.

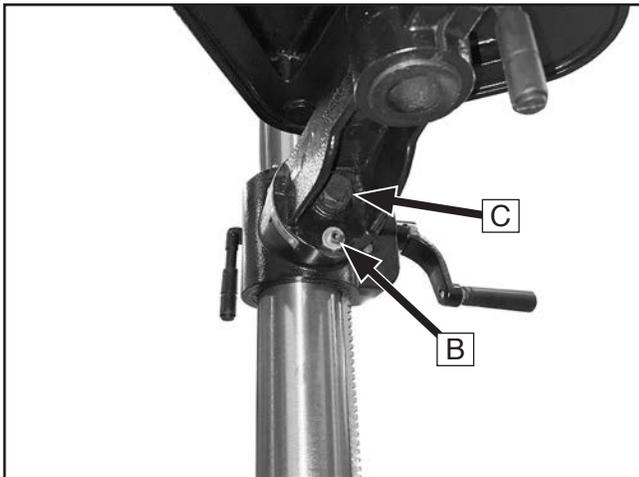


Figure 25. Table tilt components (Model T34610 shown).

Adjusting Laser Guide

The lasers are designed for use with twist drill bits. There will be shadowing with wider tools, such as Forstner bits, therefore use will be limited. The two laser beams need to meet at the drill center (see **Figure 26**).

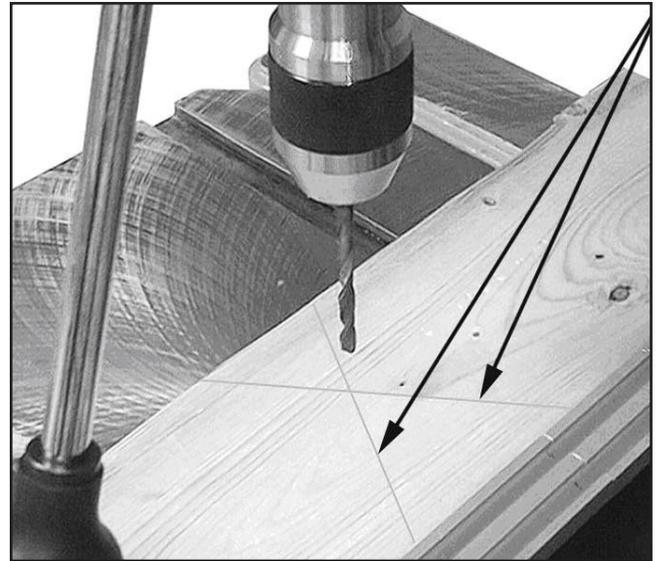


Figure 26. Location of laser beams.

The laser assembly has been installed and pre-set at the factory. To adjust, install a small drill bit and rotate lasers gently with a set of pliers.

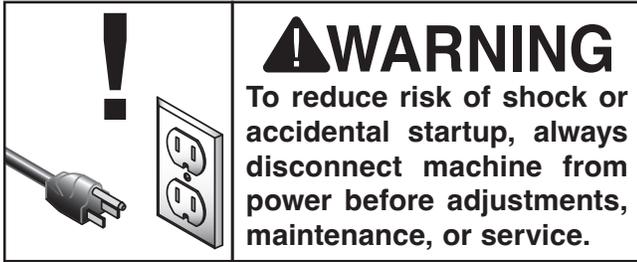
Loosen screws holding lasers to adjust.

⚠ CAUTION

- Do not stare into beam of laser.
- Do not view directly with optical instruments.
- Do not point the laser beam at people or animals.
- Do not use the laser beam on highly reflective materials. Reflected laser light is dangerous.
- A defective laser beam may be replaced only, not repaired.



MAINTENANCE



Cleaning & Protecting

Clean the machine regularly. Apply metal protectant to unpainted metal parts.

Lubrication

Periodically lubricate the pinion gear and the rack, the table elevation mechanism, the drive splines (grooves) in the spindle, and the teeth of the quill gently with grease.



SERVICE

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

Troubleshooting

Symptom	Possible Cause	Possible Solution
Motor does not start.	<ol style="list-style-type: none">1. No electricity.2. Defective switch, motor, or cord.	<ol style="list-style-type: none">1. Check main power and fuses.2. Consult an electrician.
Chuck will not stay on spindle.	<ol style="list-style-type: none">1. Oil or grease on contact surfaces.	<ol style="list-style-type: none">1. Clean the tapered surfaces of chuck and spindle.
Machine vibration.	<ol style="list-style-type: none">1. Incorrect belt tension.2. Dry spindle quill.3. Spindle pulley loose.4. Motor pulley loose.5. Dull drill bit.	<ol style="list-style-type: none">1. Adjust belt tension.2. Lubricate spindle quill.3. Tighten retaining nut.4. Tighten set screw.5. Resharpener drill bit.
Drill bit burns.	<ol style="list-style-type: none">1. Incorrect speed.2. Chips clogged.3. Dull drill bit.4. Feeding too slow.	<ol style="list-style-type: none">1. Reduce speed.2. Retract drill bit frequently.3. Resharpener drill bit.4. Feed faster.
Drill leads off.	<ol style="list-style-type: none">1. Cutting lips or angle not equal.2. Drilled hole off-center.3. Bent drill bit.4. Drill bit not properly installed.	<ol style="list-style-type: none">1. Resharpener drill bit correctly.2. Drill a pilot hole first.3. Use a proper drill bit.4. Install drill bit correctly.



Adjusting Return Spring Tension

The return spring is adjusted at the factory and should not need further adjustment.

If adjustment is necessary:

1. Disconnect the machine from the power source.
2. Loosen two lock nuts (see **A** in **Figure 27**) approximately 6mm.
3. Firmly hold the coil spring cover (see **B** in **Figure 27**).
4. Pull out the cover and rotate until the pin (see **C** in **Figure 27**) on the return spring plate engages the next notch in the coil spring cover. Turn the cover clockwise to decrease tension and counterclockwise to increase tension.
5. Tighten two lock nuts (see **A** in **Figure 27**). Do not over-tighten. Nuts should not contact the housing when tight.

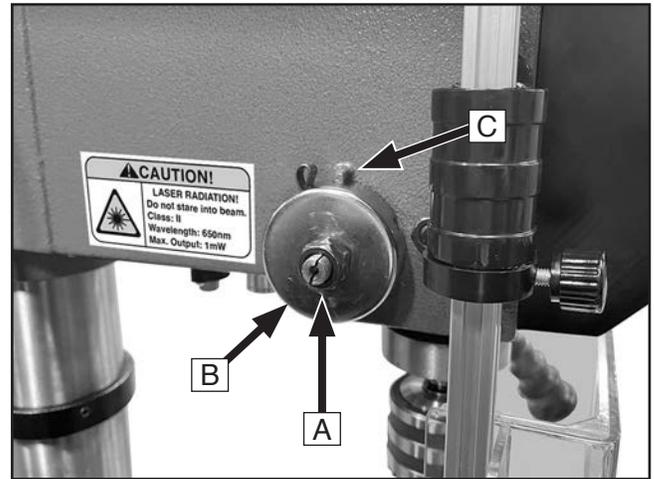


Figure 27. Return spring adjustment components.



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.

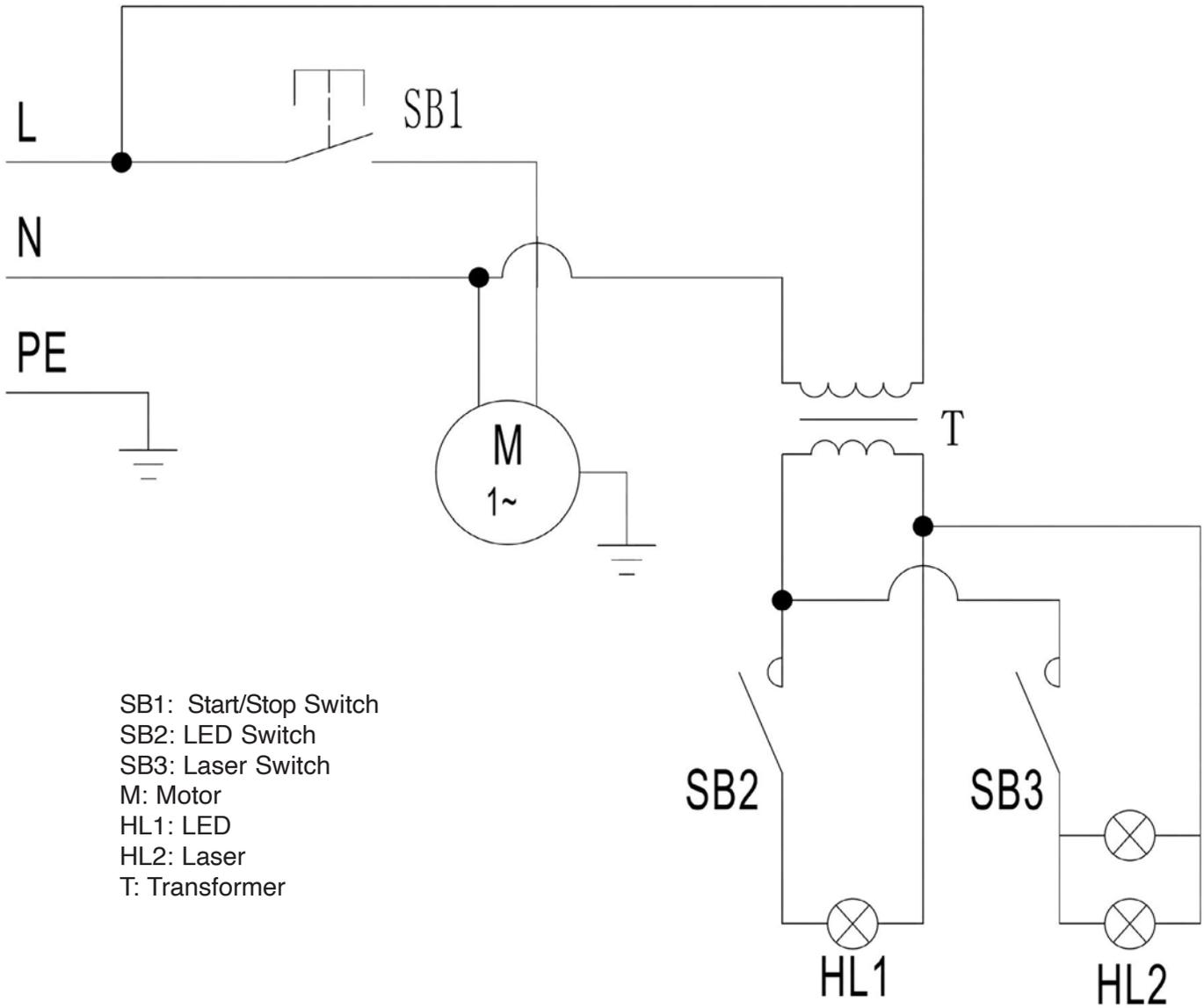
MOTOR WIRING. The motor wiring shown in these diagrams is current at the time of printing but may not match your machine. If you find this to be the case, use the wiring diagram inside the motor junction box.

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.



Wiring Schematic



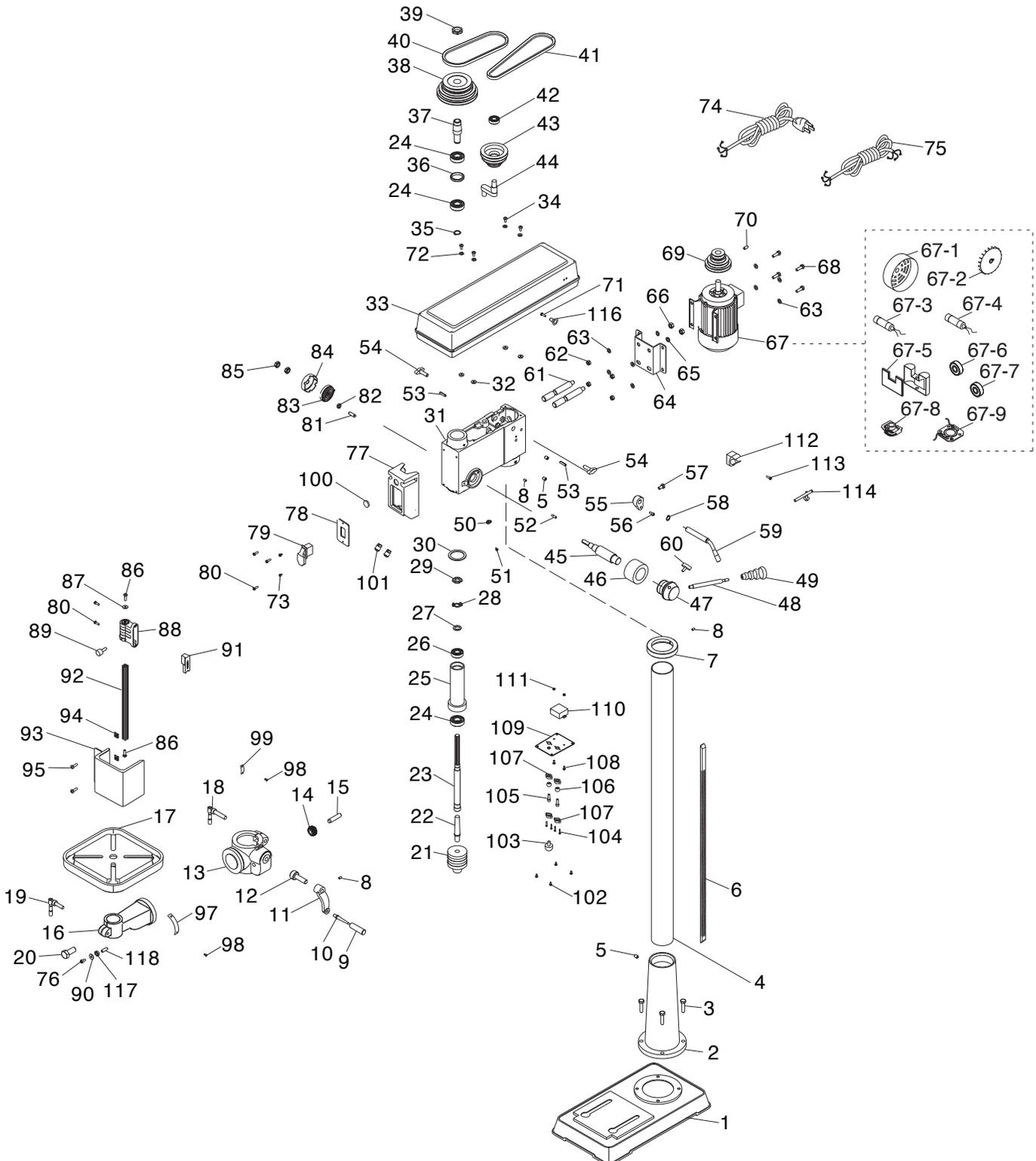
SB1: Start/Stop Switch
 SB2: LED Switch
 SB3: Laser Switch
 M: Motor
 HL1: LED
 HL2: Laser
 T: Transformer



PARTS

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

T34608 Main



T34608 Main Parts List

REF PART #	DESCRIPTION
1	PT34608001 BASE
2	PT34608002 COLUMN SUPPORT
3	PT34608003 HEX BOLT M10-1.5 X 35
4	PT34608004 COLUMN
5	PT34608005 SET SCREW M10-1.5 X 12
6	PT34608006 RACK
7	PT34608007 COLLAR
8	PT34608008 SET SCREW M6-1 X 10
9	PT34608009 HANDLE GRIP
10	PT34608010 HANDLE SHAFT
11	PT34608011 CRANK ARM
12	PT34608012 WORM SHAFT
13	PT34608013 TABLE BRACKET
14	PT34608014 HELICAL GEAR 14T
15	PT34608015 GEAR SHAFT
16	PT34608016 TABLE MOUNTING ARM
17	PT34608017 TABLE
18	PT34608018 FOLDING HANDLE M12-1.75 X 35
19	PT34608019 FOLDING HANDLE M10-1.5 X 28
20	PT34608020 HEX BOLT M16-2 X 35
21	PT34608021 DRILL CHUCK JT3 X 5/8"
22	PT34608022 DRILL CHUCK ARBOR JT3-MT#2
23	PT34608023 SPINDLE MT#2
24	PT34608024 BALL BEARING 6204-2RS
25	PT34608025 QUILL
26	PT34608026 BALL BEARING 6203-2RS
27	PT34608027 FLAT WASHER 17.5 X 27 X 2MM
28	PT34608028 LOCK WASHER 17.5MM
29	PT34608029 LOCK NUT M17-1
30	PT34608030 SPACER 46.3 X 60 X 4, RUBBER
31	PT34608031 HEADSTOCK
32	PT34608032 FOAM
33	PT34608033 BELT COVER
34	PT34608034 PHLP HD SCR M6-1 X 12
35	PT34608035 EXT RETAINING RING 20MM
36	PT34608036 SPACER 38 X 46 X 7.5MM
37	PT34608037 SPINDLE SLEEVE
38	PT34608038 SPINDLE PULLEY
39	PT34608039 HEX NUT M24-1.5, LH
40	PT34608040 V-BELT M24
41	PT34608041 V-BELT M26
42	PT34608042 BALL BEARING 6202-2RS
43	PT34608043 IDLER PULLEY
44	PT34608044 CRANK SHAFT
45	PT34608045 PINION GEAR SHAFT
46	PT34608046 COLLAR DEPTH STOP W/SCALE
47	PT34608047 HUB
48	PT34608048 STUE-UDE M10-1.5 X 13, M8-1.25 X 15, 146
49	PT34608049 KNOB, TAPERED
50	PT34608050 POINTER
51	PT34608051 PHLP HD SCR M4-.7 X 8
52	PT34608052 STOP SCREW M6-1 X 8
53	PT34608053 ROLL PIN 6 X 26

REF PART #	DESCRIPTION
54	PT34608054 LOCK KNOB M10-1.5 X 33
55	PT34608055 BELT TENSION BLOCK
56	PT34608056 CAP SCREW M6-1 X 12
57	PT34608057 HEX BOLT M8-1.25 X 16
58	PT34608058 EXT RETAINING RING 15MM
59	PT34608059 BELT TENSION LEVER
60	PT34608060 LOCK KNOB M8-1.25 X 17
61	PT34608061 SLIDE BAR
62	PT34608062 HEX NUT M8-1.25
63	PT34608063 FLAT WASHER 8MM
64	PT34608064 MOTOR MOUNT
65	PT34608065 LOCK WASHER 12MM
66	PT34608066 HEX NUT M12-1.75
67	PT34608067 MOTOR 3/4 HP 120V 1PH
67-1	PT34608067-1 MOTOR FAN COVER
67-2	PT34608067-2 MOTOR FAN
67-3	PT34608067-3 R CAPACITOR 35M 450V 1-5/8 X 3-1/8
67-4	PT34608067-4 S CAPACITOR 200M 250V 1-5/8 X 3-1/8
67-5	PT34608067-5 JUNCTION BOX
67-6	PT34608067-6 BALL BEARING 6003-2RS, FRONT
67-7	PT34608067-7 BALL BEARING 6202-2RS, REAR
67-8	PT34608067-8 CENTRIFUGAL SWITCH 16MM 1720
67-9	PT34608067-9 CONTACT PLATE 36 X 50 X 5.5MM
68	PT34608068 HEX BOLT M8-1.25 X 25
69	PT34608069 MOTOR PULLEY
70	PT34608070 SET SCREW M8-1.25 X 16
71	PT34608071 PHLP HD SCR M5-.8 X 20
72	PT34608072 FLAT WASHER 6MM
73	PT34608073 TAP SCREW M4.2 X 9.5
74	PT34608074 POWER CORD 18G 3W 72" 5-15P
75	PT34608075 MOTOR CORD 18G 3W 43"
76	PT34608076 CAP SCREW M5-.8 X 12
77	PT34608077 SWITCH BOX
78	PT34608078 SWITCH PLATE
79	PT34608079 ON/OFF SWITCH DKLD AN17
80	PT34608080 PHLP HD SCR M5-.8 X 16
81	PT34608081 ANTI-ROTATION SCREW M10-1.5 X 28
82	PT34608082 HEX NUT M10-1.5
83	PT34608083 FLAT COIL SPRING
84	PT34608084 RETURN SPRING COVER
85	PT34608085 HEX NUT M12-1.5 THIN
86	PT34608086 PHLP HD SCR M6-1 X 8
87	PT34608087 FENDER WASHER 6MM
88	PT34608088 MICRO SWITCH BRACKET
89	PT34608089 KNOB BOLT M6-1 X 20
90	PT34608090 FENDER WASHER 6MM
91	PT34608091 MICRO SWITCH COVER
92	PT34608092 CHIP GUARD RAIL
93	PT34608093 CHIP GUARD
94	PT34608094 T-SLOT NUT M5-.8
95	PT34608095 PHLP HD SCR M5-.8 X 8
97	PT34608097 TABLE TILT SCALE
98	PT34608098 RIVET 4 X 6 NAMEPLATE



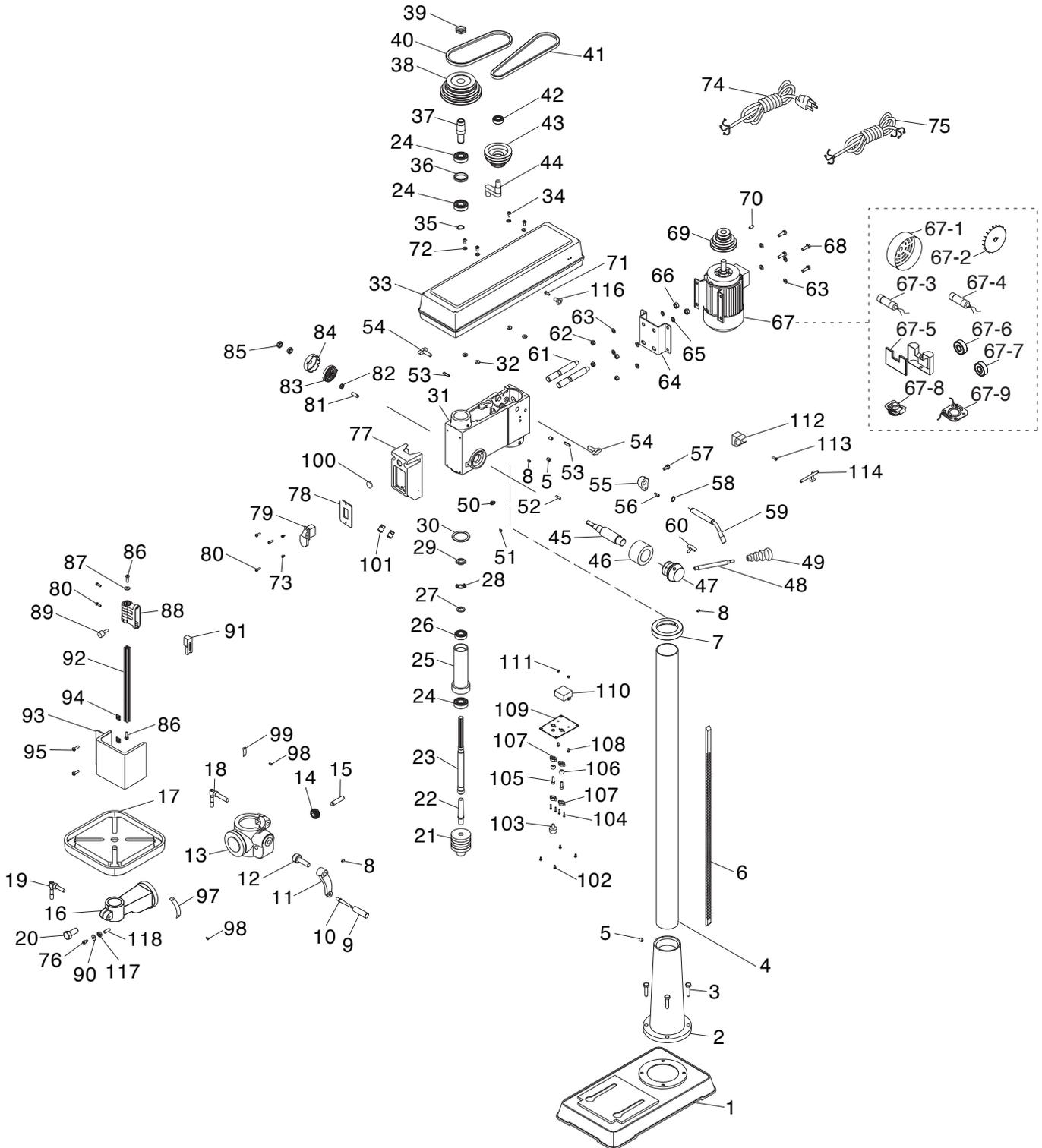
T34608 Main Parts List (Cont.)

REF PART #	DESCRIPTION
99	PT34608099 POINTER
100	PT34608100 CAP
101	PT34608101 SELF LOCK BUTTON YONGLI YL165S-H11GZ
102	PT34608102 PHLP HD SCR M4-.7 X 12
103	PT34608103 LED
104	PT34608104 PHLP HD SCR M3-.5 X 16
105	PT34608105 LASER DIODE
106	PT34608106 LASER DIODE LOCK RING
107	PT34608107 LASER DIODE HOLDER
108	PT34608108 PHLP HD SCR M4-.7 X 12

REF PART #	DESCRIPTION
109	PT34608109 LASER DIODE BRACKET
110	PT34608110 TRANSFORMER DONGKE B26-7B
111	PT34608111 HEX NUT M4-.7
112	PT34608112 DRILL CHUCK KEY HOLDER
113	PT34608113 PHLP HD SCR M4-.7 X 12
114	PT34608114 DRILL CHUCK KEY 5/16" STD 11T SD-5/8"
116	PT34608116 KNOB M5-.8
117	PT34608117 HEX NUT M10-1.5, THIN
118	PT34608118 TAPER PIN 8 X 25MM



T34609 Main



T34609 Main Parts List

REF PART #	DESCRIPTION
1	PT34609001 BASE
2	PT34609002 COLUMN SUPPORT
3	PT34609003 HEX BOLT M10-1.5 X 35
4	PT34609004 COLUMN
5	PT34609005 SET SCREW M10-1.5 X 12
6	PT34609006 RACK
7	PT34609007 COLLAR
8	PT34609008 SET SCREW M6-1 X 10
9	PT34609009 HANDLE GRIP
10	PT34609010 HANDLE SHAFT
11	PT34609011 CRANK ARM
12	PT34609012 WORM SHAFT
13	PT34609013 TABLE BRACKET
14	PT34609014 HELICAL GEAR 14T
15	PT34609015 GEAR SHAFT
16	PT34609016 TABLE MOUNTING ARM
17	PT34609017 TABLE
18	PT34609018 FOLDING HANDLE M12-1.75 X 35
19	PT34609019 FOLDING HANDLE M10-1.5 X 28
20	PT34609020 HEX BOLT M16-2 X 35
21	PT34609021 DRILL CHUCK JT3 X 5/8"
22	PT34609022 DRILL CHUCK ARBOR JT3-MT#2
23	PT34609023 SPINDLE MT#2
24	PT34609024 BALL BEARING 6204-2RS
25	PT34609025 QUILL
26	PT34609026 BALL BEARING 6203-2RS
27	PT34609027 FLAT WASHER 17.5 X 27 X 2MM
28	PT34609028 LOCK WASHER 17.5MM
29	PT34609029 LOCK NUT M17-1
30	PT34609030 SPACER 46.3 X 60 X 4, RUBBER
31	PT34609031 HEADSTOCK
32	PT34609032 FOAM PAD
33	PT34609033 BELT COVER
34	PT34609034 SCREW W/WASHER M6-1 X 12
35	PT34609035 EXT. RETAINING RING 20MM
36	PT34609036 SPACER 38 X 46 X 7.5MM
37	PT34609037 SPINDLE SLEEVE
38	PT34609038 SPINDLE PULLEY
39	PT34609039 HEX NUT M24-1.5, LH
40	PT34609040 V-BELT M24
41	PT34609041 V-BELT M26
42	PT34609042 BALL BEARING 6202-2RS
43	PT34609043 IDLER PULLEY
44	PT34609044 CRANK SHAFT
45	PT34609045 PINION GEAR SHAFT
46	PT34609046 COLLAR DEPTH STOP W/SCALE
47	PT34609047 HUB
48	PT34609048 STUE-UDE M10-1.5 X 13, M8-1.25 X 15, 146
49	PT34609049 KNOB, TAPERED
50	PT34609050 POINTER
51	PT34609051 PHLP HD SCR M4-.7 X 8
52	PT34609052 STOP SCREW M6-1 X 8
53	PT34609053 ROLL PIN 6 X 26

REF PART #	DESCRIPTION
54	PT34609054 LOCK KNOB M10-1.5 X 33
55	PT34609055 BELT TENSION BLOCK
56	PT34609056 CAP SCREW M6-1 X 12
57	PT34609057 HEX BOLT M8-1.25 X 16
58	PT34609058 EXT. RETAINING RING 15MM
59	PT34609059 BELT TENSION LEVER
60	PT34609060 LOCK KNOB M8-1.25 X 17
61	PT34609061 SLIDE BAR
62	PT34609062 HEX NUT M8-1.25
63	PT34609063 FLAT WASHER 8MM
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67-2	PT34609067-2 MOTOR FAN
67-3	PT34609067-3 R CAPACITOR 35M 450V 1-5/8 X 3-1/8
67-4	PT34609067-4 S CAPACITOR 200M 250V 1-5/8 X 3-1/8
67-5	PT34609067-5 JUNCTION BOX
67-6	PT34609067-6 BALL BEARING 6003-2RS, FRONT
67-7	PT34609067-7 BALL BEARING 6202-2RS, REAR
67-8	PT34609067-8 CENTRIFUGAL SWITCH 16MM X 1720
67-9	PT34609067-9 CONTACT PLATE 36 X 50MM
68	PT34609068 HEX BOLT M8-1.25 X 25
69	PT34609069 MOTOR PULLEY
70	PT34609070 SET SCREW M8-1.25 X 16
71	PT34609071 PHLP HD SCR M5-.8 X 20
72	PT34609072 FLAT WASHER 6MM
73	PT34609073 TAP SCREW M4.2 X 9.5
74	PT34609074 POWER CORD 18G 3W 72" 5-15P
75	PT34609075 MOTOR CORD 18G 3W 43"
76	PT34609076 CAP SCREW M5-.8 X 12
77	PT34609077 SWITCH BOX
78	PT34609078 SWITCH PLATE
79	PT34609079 ON/OFF SWITCH DKLD AN17
80	PT34609080 PHLP HD SCR M5-.8 X 16
81	PT34609081 ANTI-ROTATION SCREW M10-1.5 X 28
82	PT34609082 HEX NUT M10-1.5
83	PT34609083 FLAT COIL SPRING
84	PT34609084 RETURN SPRING COVER
85	PT34609085 HEX NUT M12-1.5 THIN
86	PT34609086 PHLP HD SCR M6-1 X 8
87	PT34609087 FENDER WASHER 6MM
88	PT34609088 MICRO SWITCH BRACKET
89	PT34609089 KNOB BOLT M6-1 X 20
90	PT34609090 FENDER WASHER 6MM
91	PT34609091 MICRO SWITCH COVER
92	PT34609092 CHIP GUARD RAIL
93	PT34609093 CHIP GUARD
94	PT34609094 T-SLOT NUT M5-.8
95	PT34609095 PHLP HD SCR M5-.8 X 8
97	PT34609097 TABLE TILT SCALE
98	PT34609098 RIVET 4 X 6 NAMEPLATE



T34609 Main Parts List (Cont.)

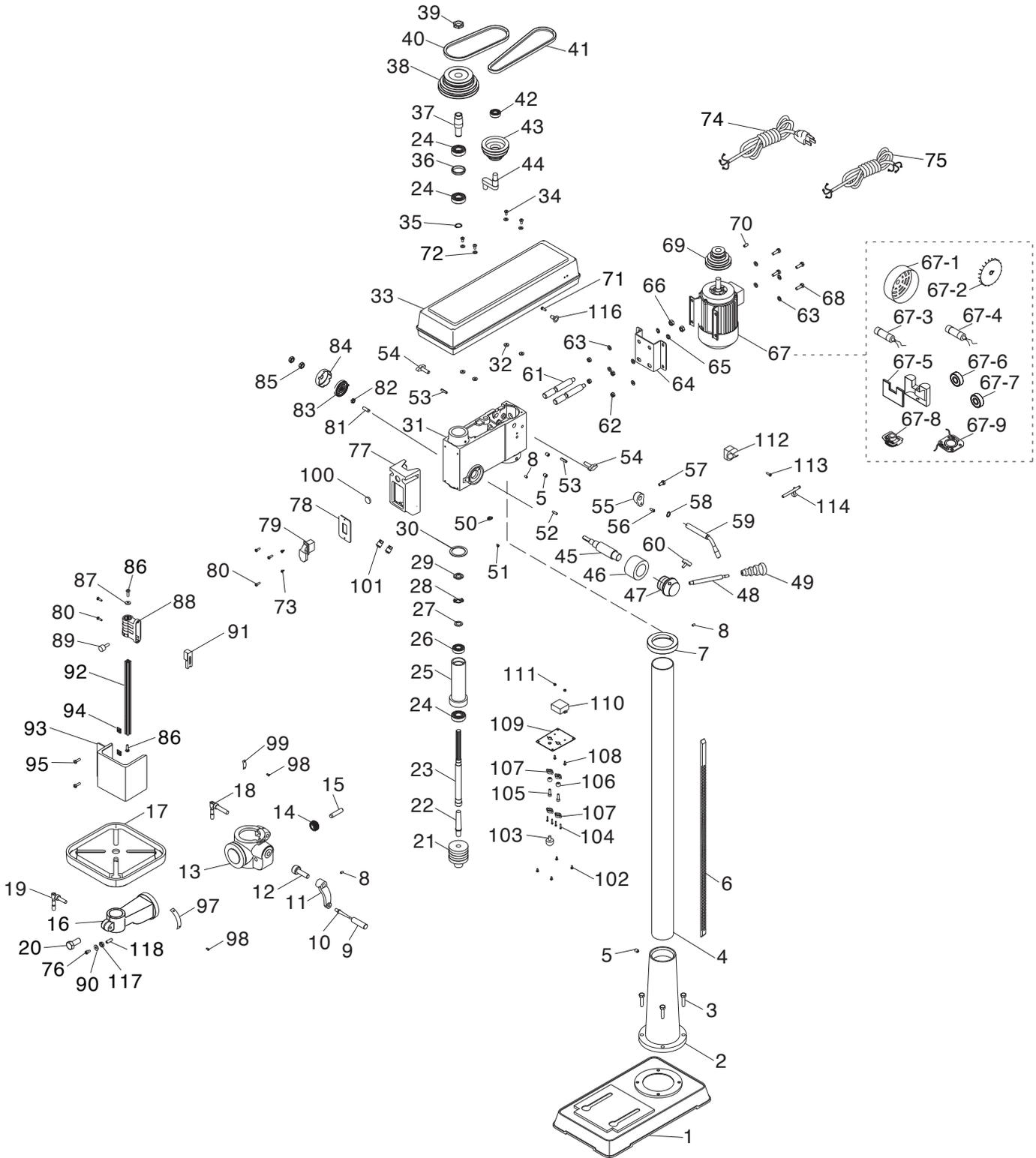
REF PART #	DESCRIPTION
99	PT34609099 POINTER
100	PT34609100 CAP
101	PT34609101 SELF LOCK BUTTON YONGLI YL165S-H11GZ
102	PT34609102 PHLP HD SCR M4-.7 X 12
103	PT34609103 LED
104	PT34609104 PHLP HD SCR M3-.5 X 16
105	PT34609105 LASER DIODE
106	PT34609106 LASER DIODE LOCK RING
107	PT34609107 LASER DIODE HOLDER
108	PT34609108 PHLP HD SCR M4-.7 X 12

REF PART #	DESCRIPTION
109	PT34609109 LASER DIODE BRACKET
110	PT34609110 TRANSFORMER DONGKE B26-7B
111	PT34609111 HEX NUT M4-.7
112	PT34609112 DRILL CHUCK KEY HOLDER
113	PT34609113 PHLP HD SCR M4-.7 X 12
114	PT34609114 DRILL CHUCK KEY 5/16" STD 11T SD-5/8"
116	PT34609116 KNOB M5-.8
117	PT34609117 HEX NUT M10-1.5, THIN
118	PT34609118 TAPER PIN 8 X 25MM

BUY PARTS ONLINE AT GRIZZLY.COM!
Scan QR code to visit our Parts Store.




T34610 Main



T34610 Main Parts List

REF PART #	DESCRIPTION
1	PT34609001 BASE
2	PT34609002 COLUMN SUPPORT
3	PT34609003 HEX BOLT M10-1.5 X 35
4	PT34609004 COLUMN
5	PT34609005 SET SCREW M10-1.5 X 12
6	PT34609006 RACK
7	PT34609007 COLLAR
8	PT34609008 SET SCREW M6-1 X 10
9	PT34609009 HANDLE GRIP
10	PT34609010 HANDLE SHAFT
11	PT34609011 CRANK ARM
12	PT34609012 WORM SHAFT
13	PT34609013 TABLE BRACKET
14	PT34609014 HELICAL GEAR 14T
15	PT34609015 GEAR SHAFT
16	PT34609016 TABLE MOUNTING ARM
17	PT34609017 TABLE
18	PT34609018 FOLDING HANDLE M12-1.75 X 35
19	PT34609019 FOLDING HANDLE M10-1.5 X 28
20	PT34609020 HEX BOLT M16-2 X 35
21	PT34609021 DRILL CHUCK JT3 X 5/8"
22	PT34609022 DRILL CHUCK ARBOR JT3-MT#2
23	PT34609023 SPINDLE MT#2
24	PT34609024 BALL BEARING 6204-2RS
25	PT34609025 QUILL
26	PT34609026 BALL BEARING 6203-2RS
27	PT34609027 FLAT WASHER 17.5 X 27 X 2MM
28	PT34609028 LOCK WASHER 17.5MM
29	PT34609029 LOCK NUT M17-1
30	PT34609030 SPACER 46.3 X 60 X 4, RUBBER
31	PT34609031 HEADSTOCK
32	PT34609032 FOAM PAD
33	PT34609033 BELT COVER
34	PT34609034 SCREW W/WASHER M6-1 X 12
35	PT34609035 EXT. RETAINING RING 20MM
36	PT34609036 SPACER 38 X 46 X 7.5MM
37	PT34609037 SPINDLE SLEEVE
38	PT34609038 SPINDLE PULLEY
39	PT34609039 HEX NUT M24-1.5, LH
40	PT34609040 V-BELT M24
41	PT34609041 V-BELT M26
42	PT34609042 BALL BEARING 6202-2RS
43	PT34609043 IDLER PULLEY
44	PT34609044 CRANK SHAFT
45	PT34609045 PINION GEAR SHAFT
46	PT34609046 COLLAR DEPTH STOP W/SCALE
47	PT34609047 HUB
48	PT34609048 STUE-UDE M10-1.5 X 13, M8-1.25 X 15, 146
49	PT34609049 KNOB, TAPERED
50	PT34609050 POINTER
51	PT34609051 PHLP HD SCR M4-.7 X 8
52	PT34609052 STOP SCREW M6-1 X 8
53	PT34609053 ROLL PIN 6 X 26

REF PART #	DESCRIPTION
54	PT34609054 LOCK KNOB M10-1.5 X 33
55	PT34609055 BELT TENSION BLOCK
56	PT34609056 CAP SCREW M6-1 X 12
57	PT34609057 HEX BOLT M8-1.25 X 16
58	PT34609058 EXT. RETAINING RING 15MM
59	PT34609059 BELT TENSION LEVER
60	PT34609060 LOCK KNOB M8-1.25 X 17
61	PT34609061 SLIDE BAR
62	PT34609062 HEX NUT M8-1.25
63	PT34609063 FLAT WASHER 8MM
64	PT34609064 MOTOR MOUNT
65	PT34609065 LOCK WASHER 12MM
66	PT34609066 HEX NUT M12-1.75
67	PT34609067 MOTOR 3/4 HP 120V 1PH
67-1	PT34609067-1 MOTOR FAN COVER
67-2	PT34609067-2 MOTOR FAN
67-3	PT34609067-3 R CAPACITOR 35M 450V 1-5/8 X 3-1/8
67-4	PT34609067-4 S CAPACITOR 200M 250V 1-5/8 X 3-1/8
67-5	PT34609067-5 JUNCTION BOX
67-6	PT34609067-6 BALL BEARING 6003-2RS, FRONT
67-7	PT34609067-7 BALL BEARING 6202-2RS, REAR
67-8	PT34609067-8 CENTRIFUGAL SWITCH 16MM X 1720
67-9	PT34609067-9 CONTACT PLATE 36 X 50MM
68	PT34609068 HEX BOLT M8-1.25 X 25
69	PT34609069 MOTOR PULLEY
70	PT34609070 SET SCREW M8-1.25 X 16
71	PT34609071 PHLP HD SCR M5-.8 X 20
72	PT34609072 FLAT WASHER 6MM
73	PT34609073 TAP SCREW M4.2 X 9.5
74	PT34609074 POWER CORD 18G 3W 72" 5-15P
75	PT34609075 MOTOR CORD 18G 3W 43"
76	PT34609076 CAP SCREW M5-.8 X 12
77	PT34609077 SWITCH BOX
78	PT34609078 SWITCH PLATE
79	PT34609079 ON/OFF SWITCH DKLD AN17
80	PT34609080 PHLP HD SCR M5-.8 X 16
81	PT34609081 ANTI-ROTATION SCREW M10-1.5 X 28
82	PT34609082 HEX NUT M10-1.5
83	PT34609083 FLAT COIL SPRING
84	PT34609084 RETURN SPRING COVER
85	PT34609085 HEX NUT M12-1.5 THIN
86	PT34609086 PHLP HD SCR M6-1 X 8
87	PT34609087 FENDER WASHER 6MM
88	PT34609088 MICRO SWITCH BRACKET
89	PT34609089 KNOB BOLT M6-1 X 20
90	PT34609090 FENDER WASHER 6MM
91	PT34609091 MICRO SWITCH COVER
92	PT34609092 CHIP GUARD RAIL
93	PT34609093 CHIP GUARD
94	PT34609094 T-SLOT NUT M5-.8
95	PT34609095 PHLP HD SCR M5-.8 X 8
97	PT34609097 TABLE TILT SCALE
98	PT34609098 RIVET 4 X 6 NAMEPLATE



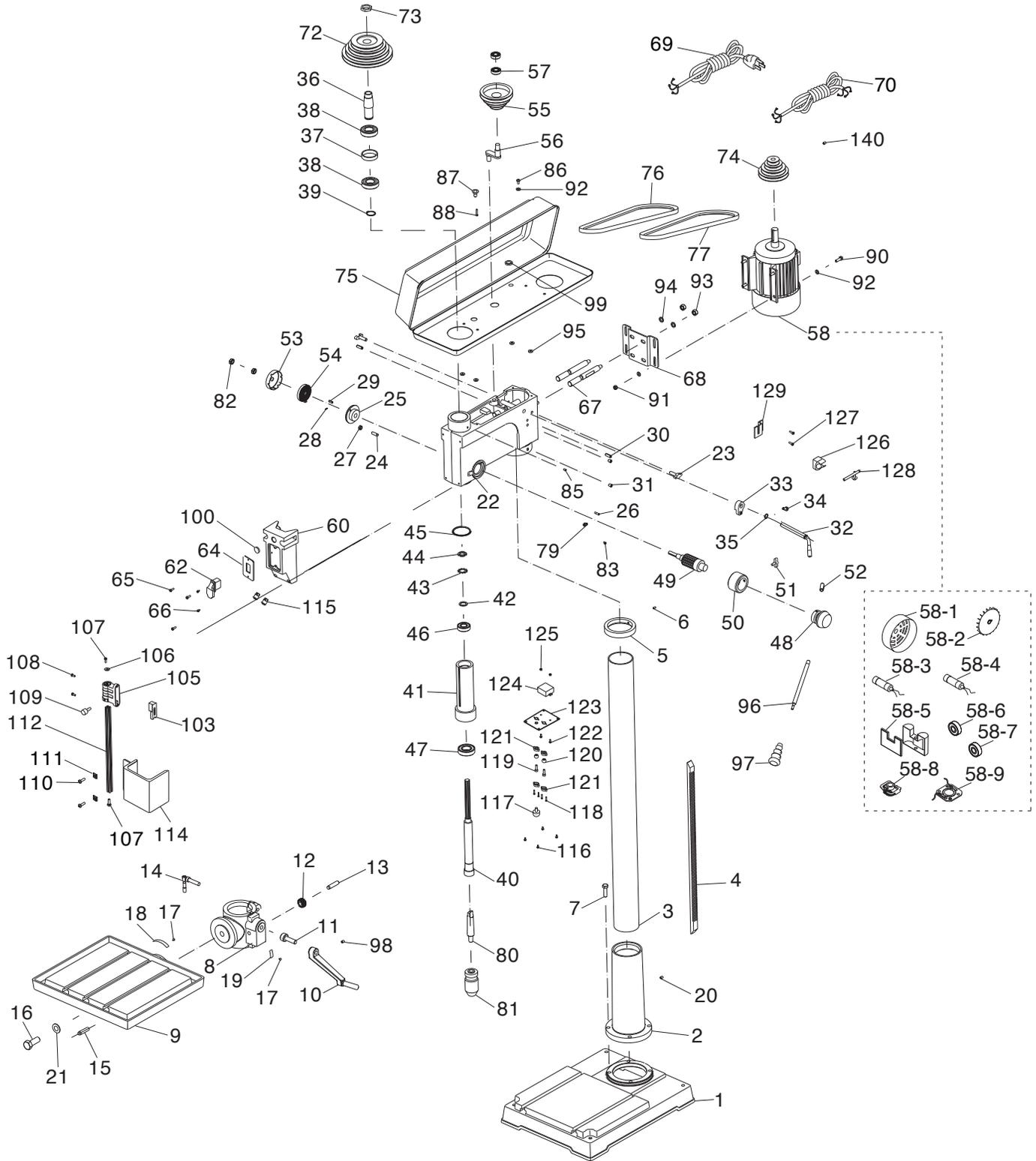
T34610 Main Parts List (Cont.)

REF PART #	DESCRIPTION
99	PT34610099 POINTER
100	PT34610100 CAP
101	PT34610101 SELF LOCK BUTTON YONGLI YL165S-H11GZ
102	PT34610102 PHLP HD SCR M4-.7 X 12
103	PT34610103 LED
104	PT34610104 PHLP HD SCR M3-.5 X 16
105	PT34610105 LASER DIODE
106	PT34610106 LASER DIODE LOCK RING
107	PT34610107 LASER DIODE HOLDER
108	PT34610108 PHLP HD SCR M4-.7 X 12

REF PART #	DESCRIPTION
109	PT34610109 LASER DIODE BRACKET
110	PT34610110 TRANSFORMER DONGKE B26-7B
111	PT34610111 HEX NUT M4-.7
112	PT34610112 DRILL CHUCK KEY HOLDER
113	PT34610113 PHLP HD SCR M4-.7 X 12
114	PT34610114 DRILL CHUCK KEY 5/16" STD 11T SD-5/8"
116	PT34610116 KNOB M5-.8
117	PT34610117 HEX NUT M10-1.5, THIN
118	PT34610118 TAPER PIN 8 X 25MM



T34611 Main



T34611 Main Parts List

REF PART #	DESCRIPTION
1	PT34611001 BASE
2	PT34611002 COLUMN SUPPORT
3	PT34611003 COLUM
4	PT34611004 RACK
5	PT34611005 COLLAR
6	PT34611006 HEX BOLT M6-1 X 10
7	PT34611007 HEX BOLT M12-1.75 X 40
8	PT34611008 TABLE BRACKET
9	PT34611009 TABLE
10	PT34611010 TABLE HEIGHT CRANK
11	PT34611011 WORM SHAFT
12	PT34611012 HELICAL GEAR 14T
13	PT34611013 GEAR SHAFT
14	PT34611014 FOLDING HANDLE M12-1.75 X 35
15	PT34611015 ALIGNMENT PIN
16	PT34611016 HEX BOLT M20-2.5 X 50
17	PT34611017 RIVET 2.4 X 6 NAMEPLATE
18	PT34611018 TABLE TILT SCALE
19	PT34611019 POINTER
20	PT34611020 SET SCREW M10-1.5 X 12
21	PT34611021 FLAT WASHER 12MM
22	PT34611022 HEADSTOCK
23	PT34611023 LOCK KNOB M10-1.5 X 33
24	PT34611024 ANTI-ROTATION SCR M10-1.5 X 28MM
25	PT34611025 RETURN SPRING COVER
26	PT34611026 STOP SCREW M6-1 X 8
27	PT34611027 LOCK NUT M10-1.5
28	PT34611028 ROLL PIN 2.5 X 10
29	PT34611029 ROLL PIN 6 X 16
30	PT34611030 ROLL PIN 8 X 25
31	PT34611031 SET SCREW M10-1.5 X 12
32	PT34611032 BELT TENSION LEVER
33	PT34611033 BELT TENSION BLOCK
34	PT34611034 HEX BOLT M8-1.25 X 16
35	PT34611035 EXT. RETAINING RING 15MM
36	PT34611036 SPINDLE SLEEVE
37	PT34611037 SPACER 52 X 59 X 13MM
38	PT34611038 BALL BEARING 6206-2RS
39	PT34611039 EXT. RETAINING RING 30MM
40	PT34611040 SPINDLE MT#3
41	PT34611041 QUILL
42	PT34611042 FLAT WASHER 21 X 30 X 2
43	PT34611043 LOCK WASHER 21MM
44	PT34611044 LOCK NUT M20-1.5
45	PT34611045 SPACER 60 X 70 X 4.7, RUBBER
46	PT34611046 BALL BEARING 6204-2RS
47	PT34611047 BALL BEARING 6206-2RS
48	PT34611048 HUB
49	PT34611049 PINION GEAR SHAFT
50	PT34611050 COLLAR DEPTH STOP W/SCALE
51	PT34611051 KNOB BOLT M8-1.25 X 17, WING
52	PT34611052 ROLL PIN 5 X 16
53	PT34611053 RETURN SPRING COVER

REF PART #	DESCRIPTION
54	PT34611054 FLAT COIL SPRING
55	PT34611055 IDLER PULLEY
56	PT34611056 CRANK SHAFT
57	PT34611057 BALL BEARING 6202-2RS
58	PT34611058 MOTOR 2 HP 120V 1PH
58-1	PT34611058-1 MOTOR FAN COVER
58-2	PT34611058-2 MOTOR FAN
58-3	PT34611058-3 R CAPACITOR 70M 450V 2 X 3-15/16
58-4	PT34611058-4 S CAPACITOR 400M 250V 2 X 3-15/16
58-5	PT34611058-5 JUNCTION BOX
58-6	PT34611058-6 BALL BEARING 6205-2RS, FRONT
58-7	PT34611058-7 BALL BEARING 6205-2RS, REAR
58-8	PT34611058-8 CENTRIFUGAL SWITCH 24MM X 1720
58-9	PT34611058-9 CONTACT PLATE 53 X 72.5 X 5.5
60	PT34611060 SWITCH BOX
62	PT34611062 ON/OFF SWITCH DKLD AN17
64	PT34611064 SWITCH PLATE
65	PT34611065 PHLP HD SCR M5-.8 X 16
66	PT34611066 TAP SCREW M4.2 X 9
67	PT34611067 SLIDE BAR
68	PT34611068 MOTOR MOUNT
69	PT34611069 POWER CORD 14G 3W 72" 5-15P
70	PT34611070 MOTOR CORD 14G 3W 47"
72	PT34611072 SPINDLE PULLEY
73	PT34611073 HEX NUT M27-1.5, LH
74	PT34611074 MOTOR PULLEY
75	PT34611075 BELT COVER
76	PT34611076 V-BELT A-33
77	PT34611077 V-BELT A-35
79	PT34611079 POINTER
80	PT34611080 DRILL CHUCK ARBOR MT#3-JT3
81	PT34611081 DRILL CHUCK JT3 X 5-20MM
82	PT34611082 HEX NUT M12-1.5 THIN
83	PT34611083 PHLP HD SCR M4-.7 X 8
85	PT34611085 SET SCREW M6-1 X 12
86	PT34611086 PHLP HD SCR M6-1 X 12
87	PT34611087 KNOB M5-.8
88	PT34611088 PHLP HD SCR M5-.8 X 20
90	PT34611090 HEX BOLT M8-1.25 X 25
91	PT34611091 HEX NUT M8-1.25
92	PT34611092 FLAT WASHER 8MM
93	PT34611093 HEX NUT M12-1.75
94	PT34611094 LOCK WASHER 12MM
95	PT34611095 FOAM PAD
96	PT34611096 STUE-UDE M12-1.75 X 13, M8-1.25 X 15, 215
97	PT34611097 KNOB M8-1.25, TAPERED
98	PT34611098 CAP SCREW M6-1 X 10
99	PT34611099 BUSHING 18 X 30 X 5MM, RUBBER
100	PT34611100 CAP
103	PT34611103 MICRO SWITCH COVER
105	PT34611105 MICRO SWITCH BRACKET
106	PT34611106 FENDER WASHER 6MM
107	PT34611107 PHLP HD SCR M6-1 X 8



T34611 Main Parts List (Cont.)

REF	PART #	DESCRIPTION
108	PT34611108	PHLP HD SCR M5-.8 X 16
109	PT34611109	KNOB BOLT M6-1 X 20
110	PT34611110	PHLP HD SCR M5-.8 X 8
111	PT34611111	T-SLOT NUT M5-.8
112	PT34611112	CHIP GUARD RAIL
114	PT34611114	CHIP GUARD
115	PT34611115	SELF LOCK BUTTON YONGLI YL165S-H11GZ
116	PT34611116	PHLP HD SCR M4-.7 X 12
117	PT34611117	LED
118	PT34611118	PHLP HD SCR M3-.5 X 16
119	PT34611119	LASER DIODE

REF	PART #	DESCRIPTION
120	PT34611120	LASER DIODE LOCK RING
121	PT34611121	LASER DIODE HOLDER
122	PT34611122	PHLP HD SCR M4-.7 X 12
123	PT34611123	LASER DIODE BRACKET
124	PT34611124	TRANSFORMER DONGKE B26-7B
125	PT34611125	HEX NUT M4-.7
126	PT34611126	DRILL CHUCK KEY HOLDER
127	PT34611127	PHLP HD SCR M4-.7 X 12
128	PT34611128	DRILL CHUCK KEY 3/8" STD 11T SD-3/4"
129	PT34611129	BRACKET



Labels & Cosmetics

201



⚠️ WARNING!
ENTANGLEMENT HAZARD!
Always keep this cover installed during operation.



⚠️ WARNING!
ENTANGLEMENT HAZARD!
Tie back long hair, roll up long sleeves, and remove loose clothing, jewelry, or gloves to prevent getting caught in moving parts.

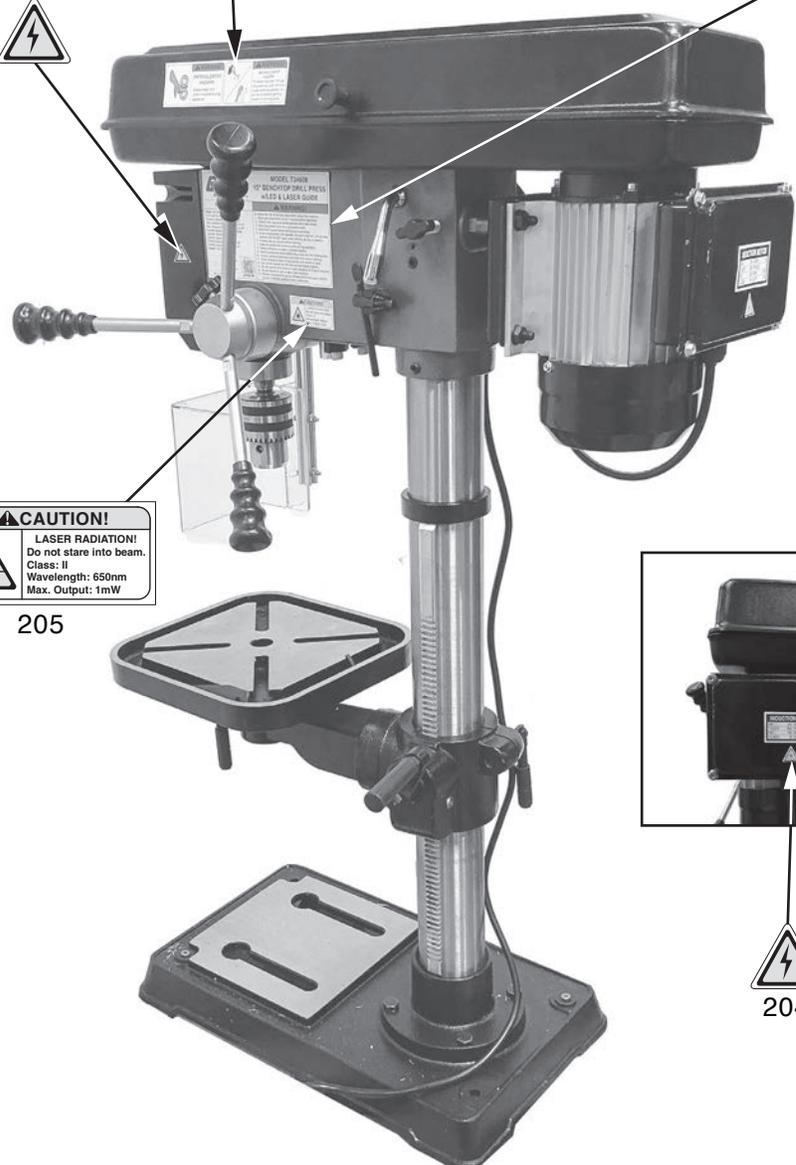
204



205



⚠️ CAUTION!
LASER RADIATION!
Do not stare into beam.
Class: II
Wavelength: 650nm
Max. Output: 1mW



MODEL T34608
15" BENCHTOP DRILL PRESS
w/LED & LASER GUIDE

Specifications	⚠️ WARNING!
Motor: 3/4 HP 120V, 1-Phase, 60 Hz Full-Load Current Rating: 3.5A Distance Spindle to Column: 7-5/8" Max. Distance Spindle to Table: 18-3/8" Max. Distance Spindle to Base: 25-7/8" Spindle Speeds: 12 (210-2100 RPM) Spindle Travel: 3-1/2" Spindle Taper: MFT-2 Drilling Capacity (Mild Steel): 3/8" Drilling Capacity (Cast Iron): 3/8" Weight: 122 lbs.	To reduce the risk of serious injury when using this machine: 1. Read and understand owner's manual before operating. 2. Always wear approved safety glasses and a face shield. 3. Only plug power cord into a grounded outlet. 4. Disconnect power before setting up or servicing. 5. Avoid entanglement with spindle—the back long hair, roll up long sleeves, and DO NOT wear loose clothing, gloves, or jewelry. 6. Prepare set up machine before starting. 7. Keep all guards and covers in place during operation. 8. Clamp workpiece to table to prevent rotation. 9. Avoid positioning hands when they could slip into rotating bits. 10. Always remove chuck keys and other tools before starting. 11. Never attempt to stop or stop spindle with hands or tools. 12. Use correct speeds for drill bits and workpiece material. 13. Do not operate when tired or under influence of drugs or alcohol. 14. Do not operate in rain or use in wet locations. 15. Prevent unauthorized use by children/untrained users; restrict access or disable machine when unattended.

MODEL T34609
15" FLOOR DRILL PRESS
w/LED & LASER GUIDE

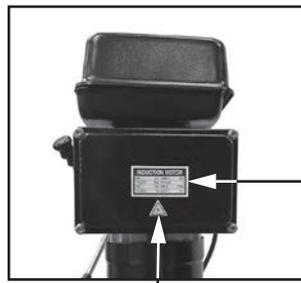
Specifications	⚠️ WARNING!
Motor: 3/4 HP 120V, 1-Phase, 60 Hz Full-Load Current Rating: 3.5A Distance Spindle to Column: 7-5/8" Max. Distance Spindle to Table: 25-3/8" Max. Distance Spindle to Base: 40" Spindle Speeds: 12 (210-2100 RPM) Spindle Travel: 3-1/2" Spindle Taper: MFT-2 Drilling Capacity (Mild Steel): 3/8" Drilling Capacity (Cast Iron): 3/8" Weight: 128 lbs.	To reduce the risk of serious injury when using this machine: 1. Read and understand owner's manual before operating. 2. Always wear approved safety glasses and a face shield. 3. Only plug power cord into a grounded outlet. 4. Disconnect power before setting up or servicing. 5. Avoid entanglement with spindle—the back long hair, roll up long sleeves, and DO NOT wear loose clothing, gloves, or jewelry. 6. Prepare set up machine before starting. 7. Keep all guards and covers in place during operation. 8. Clamp workpiece to table to prevent rotation. 9. Avoid positioning hands when they could slip into rotating bits. 10. Always remove chuck keys and other tools before starting. 11. Never attempt to stop or stop spindle with hands or tools. 12. Use correct speeds for drill bits and workpiece material. 13. Do not operate when tired or under influence of drugs or alcohol. 14. Do not operate in rain or use in wet locations. 15. Prevent unauthorized use by children/untrained users; restrict access or disable machine when unattended.

MODEL T34610
17" FLOOR DRILL PRESS
w/LED & LASER GUIDE

Specifications	⚠️ WARNING!
Motor: 1 HP 120V, 1-Phase, 60 Hz Full-Load Current Rating: 5.5A Distance Spindle to Column: 8-1/2" Max. Distance Spindle to Table: 25-3/8" Max. Distance Spindle to Base: 45-1/2" Spindle Speeds: 18 (210-2000 RPM) Spindle Travel: 3-1/2" Spindle Taper: MFT-2 Drilling Capacity (Mild Steel): 3/8" Drilling Capacity (Cast Iron): 3/8" Weight: 156 lbs.	To reduce the risk of serious injury when using this machine: 1. Read and understand owner's manual before operating. 2. Always wear approved safety glasses and a face shield. 3. Only plug power cord into a grounded outlet. 4. Disconnect power before setting up or servicing. 5. Avoid entanglement with spindle—the back long hair, roll up long sleeves, and DO NOT wear loose clothing, gloves, or jewelry. 6. Prepare set up machine before starting. 7. Keep all guards and covers in place during operation. 8. Clamp workpiece to table to prevent rotation. 9. Avoid positioning hands when they could slip into rotating bits. 10. Always remove chuck keys and other tools before starting. 11. Never attempt to stop or stop spindle with hands or tools. 12. Use correct speeds for drill bits and workpiece material. 13. Do not operate when tired or under influence of drugs or alcohol. 14. Do not operate in rain or use in wet locations. 15. Prevent unauthorized use by children/untrained users; restrict access or disable machine when unattended.

MODEL T34611
20" FLOOR DRILL PRESS
w/LED & LASER GUIDE

Specifications	⚠️ WARNING!
Motor: 2 HP 120V, 1-Phase, 60 Hz Full-Load Current Rating: 7.5A Distance Spindle to Column: 10-1/8" Max. Distance Spindle to Table: 35-3/8" Max. Distance Spindle to Base: 45-7/8" Spindle Speeds: 12 (150-2000 RPM) Spindle Travel: 4-3/4" Spindle Taper: MFT-2 Drilling Capacity (Mild Steel): 1-1/8" Drilling Capacity (Cast Iron): 1-1/8" Weight: 245 lbs.	To reduce the risk of serious injury when using this machine: 1. Read and understand owner's manual before operating. 2. Always wear approved safety glasses and a face shield. 3. Only plug power cord into a grounded outlet. 4. Disconnect power before setting up or servicing. 5. Avoid entanglement with spindle—the back long hair, roll up long sleeves, and DO NOT wear loose clothing, gloves, or jewelry. 6. Prepare set up machine before starting. 7. Keep all guards and covers in place during operation. 8. Clamp workpiece to table to prevent rotation. 9. Avoid positioning hands when they could slip into rotating bits. 10. Always remove chuck keys and other tools before starting. 11. Never attempt to stop or stop spindle with hands or tools. 12. Use correct speeds for drill bits and workpiece material. 13. Do not operate when tired or under influence of drugs or alcohol. 14. Do not operate in rain or use in wet locations. 15. Prevent unauthorized use by children/untrained users; restrict access or disable machine when unattended.



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INDUCTION MOTOR			
HP	3/4	AMPS	5.3
VOLTS	120	PHASE	1
HZ	60	RPM	1720
CLASS	B	DUTY	S1

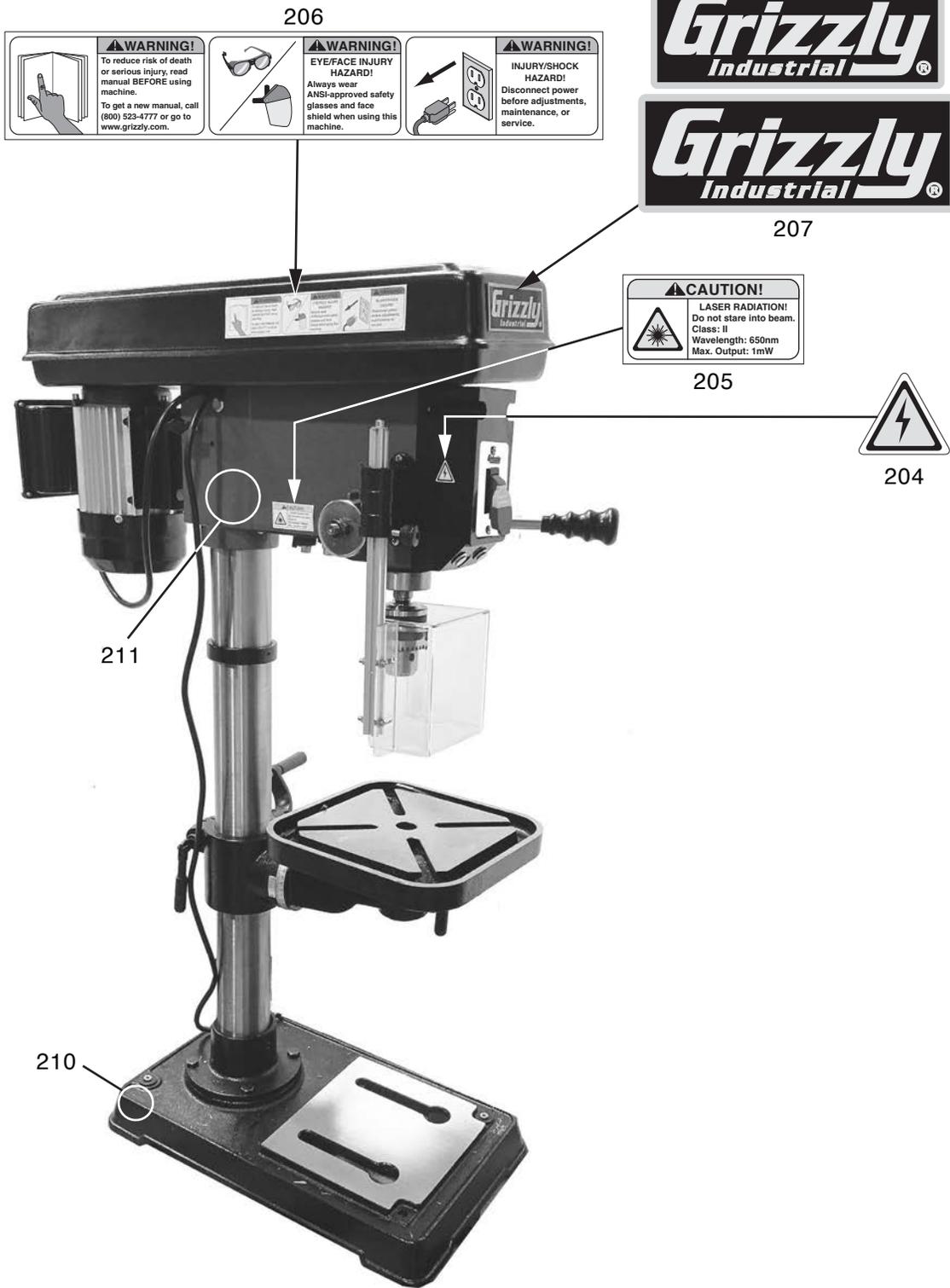
INDUCTION MOTOR			
HP	1-1/2	AMPS	9.9
VOLTS	120	PHASE	1
HZ	60	RPM	1720
CLASS	B	DUTY	S1

INDUCTION MOTOR			
HP	2	AMPS	12.9
VOLTS	120	PHASE	1
HZ	60	RPM	1720
CLASS	B	DUTY	S1

204




Labels & Cosmetics (Cont.)



Labels & Cosmetics Parts List

REF	PART #	DESCRIPTION
201	PT34608201	ENTANGLEMENT WARNING LABEL
202	PT34608202	MACHINE ID LABEL (T34608)
202	PT34609202	MACHINE ID LABEL (T34609)
202	PT34610202	MACHINE ID LABEL (T34610)
202	PT34611202	MACHINE ID LABEL (T34611)
203	PT34608203	MOTOR LABEL (T34608/T34609)
203	PT34610203	MOTOR LABEL (T34610)
203	PT34611203	MOTOR LABEL (T34611)

REF	PART #	DESCRIPTION
204	PT34608204	ELECTRICITY LABEL
205	PT34608205	LASER RADIATION LABEL
206	PT34608206	MACHINE WARNING LABEL
207	PT34610207	GRIZZLY LABEL (T34608/T34609)
207	PT34608207	GRIZZLY LABEL (T34610/T34611)
210	PT34608210	TOUCH UP PAINT, GLOSSY BLACK
211	PT34608211	TOUCH UP PAINT, GRIZZLY GREEN

WARNING

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



WARRANTY & RETURNS

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

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

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

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

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

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

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



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