



MODEL T10816
BENCHTOP HOLLOW-CHISEL
MORTISER
OWNER'S MANUAL

(For models manufactured since 11/14)



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**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE
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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

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

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

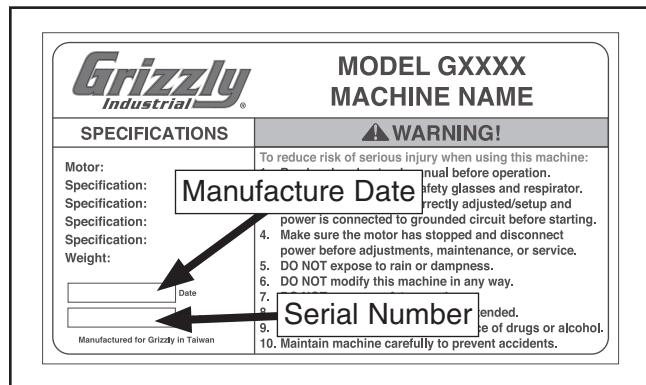
Manual Accuracy

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

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

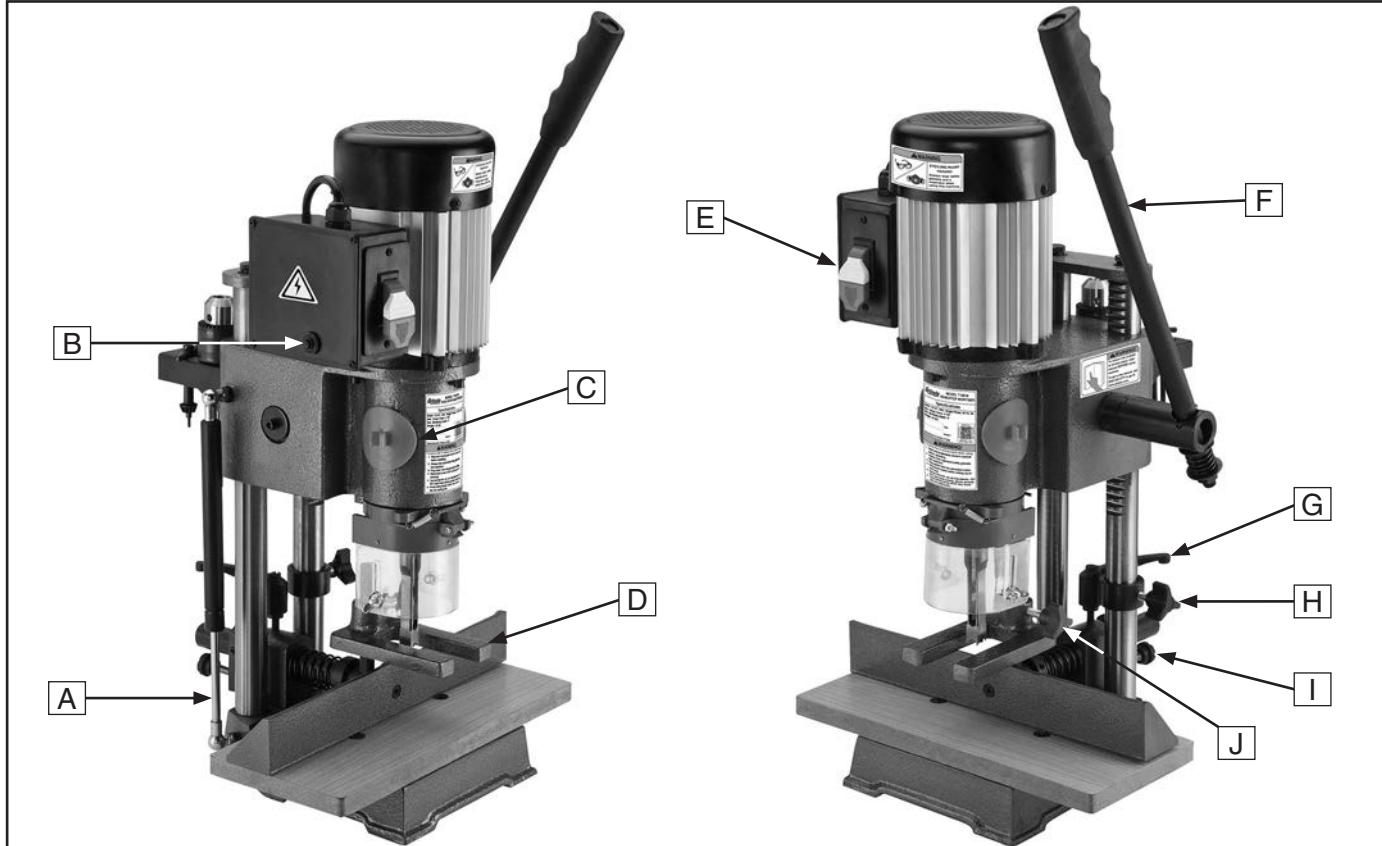
If you find this to be the case, and the difference between the manual and machine leaves you confused or unsure about something, check our website for an updated version. We post current manuals and manual updates for free on our website at www.grizzly.com.

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



Controls & Components

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



- A. **Gas Spring:** Supports headstock.
- B. **Reset Button:** Allows machine to be restarted after thermal overload protection has tripped the motor. To reset the button, place ON/OFF switch in OFF position, wait a few minutes for motor to cool, then press reset button. If button does not stay depressed, allow motor to cool off longer, then try again.
- C. **Chuck Access Cover:** Provides access to chuck inside of headstock.
- D. **Hold-Down:** Holds workpiece down when chisel is raised after mortising operation.
- E. **ON/OFF Switch:** Starts and stops motor. Yellow key can be removed to disable switch.
- F. **Hand Lever:** Raises and lowers headstock.
- G. **Fence Lock Handle:** Locks fence. When loosened, allows fence to move.
- H. **Depth Stop:** Limits depth headstock can travel.
- I. **Fence Micro-Adjustment Bracket:** Provides fine control of fence movement.
- J. **Hold-Down Lock Knob:** Locks hold-down.





MACHINE DATA SHEET

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

MODEL T10816 BENCHTOP HOLLOW-CHISEL MORTISER

Product Dimensions:

Weight.....	55 lbs.
Width (side-to-side) x Depth (front-to-back) x Height.....	13-1/2 x 22 x 29 in.
Footprint (Length x Width).....	10 x 8 in.

Shipping Dimensions:

Type.....	Cardboard Box
Content.....	Machine
Weight.....	60 lbs.
Length x Width x Height.....	23 x 13 x 11 in.
Must Ship Upright.....	Yes

Electrical:

Power Requirement.....	120V, Single-Phase, 60 Hz
Full-Load Current Rating.....	5A
Minimum Circuit Size.....	15A
Power Cord Included.....	Yes
Power Cord Length.....	6 ft.
Power Cord Gauge.....	18 AWG
Plug Included.....	Yes
Included Plug Type.....	5-15
Switch Type.....	Paddle Safety Switch w/Removable Key

Motors:

Main

Type.....	TEFC Induction
Horsepower.....	1/2 HP
Phase.....	Single-Phase
Amps.....	5A
Speed.....	1725 RPM
Power Transfer	Direct Drive
Bearings.....	Shielded & Permanently Lubricated

Main Specifications:

Operation

Spindle Travel.....	4-1/4 in.
Spindle Taper.....	B16
Number of Spindle Speeds.....	1
Range of Spindle Speeds.....	1725 RPM

Cutting Capacities

Maximum Stock Width.....	13-3/8 in.
Maximum Stock Thickness.....	4 in.
Maximum Mortising Depth.....	3 in.
Maximum Chisel Travel.....	4-7/8 in.
Maximum Distance Column to Chisel.....	5-1/8 in.
Maximum Chisel Size.....	1/2 in.
Collar Size.....	3/4 in.



Table Information

Table Size Length.....	13-1/2 in.
Table Size Width.....	6 in.
Table Size Thickness.....	5/8 in.

Chuck Information

Chuck Type.....	B16
Chuck Size.....	1/2 in.
Chuck Capacity.....	1/2 in.

Construction

Base.....	Cast Iron
Head.....	Cast Iron
Table.....	Wood
Paint Type/Finish.....	Enamel
Column.....	Steel
Fence.....	Cast Iron

Other

Handle Length.....	17-3/4 in.
Head Drive.....	Rack & Pinion

Other Specifications:

Country of Origin	China
Warranty	1 Year
Approximate Assembly & Setup Time	15 Minutes
Serial Number Location	ID Label
ISO 9001 Factory	Yes
CSA, ETL, or UL Certified/Listed	No

Features:

- Multi-positional handle
- Double support columns
- Adjustable depth stop
- Extra chuck and arbor allows mortiser to function as drill press
- Chuck guard
- Spring-tension fence with depth stop
- Storage rack for tools
- Gas strut
- Cast iron construction throughout
- Includes 1/4", 3/8", and 1/2" chisels



SECTION 1: SAFETY

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

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



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



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



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



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

Safety Instructions for Machinery



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

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

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

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

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

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

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



WARNING

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



Additional Safety for Mortising Machines

⚠️WARNING

The primary risks of operating a mortising machine are as follows: You can be seriously injured or killed by getting clothing, jewelry, or long hair entangled with the chisel. Your fingers can be severely cut or amputated by the chisel. You can be blinded or hurt by flying wood chips, broken cutting tools, workpieces, or adjustment tools that can be thrown from the spinning chuck with great force. To reduce your risk of serious injury when operating this machine, completely heed and understand the following:

HAND PROTECTION. Do not place your hands under or near chisel while spindle is in motion. Chisels are sharp and may become hot during operation! Allow chisels to cool before handling. Always use caution when handling, especially when installing or removing.

USING CORRECT MATERIALS. Mortising materials such as metals, plastics, and glass can result in serious personal injury and machine damage. Do not use machine for anything except mortising in wood.

CHISEL COMPATIBILITY. Mortising chisels can fly out of chuck at operator if not properly secured, causing serious personal injury. Make sure mortising chisel fits a minimum of $\frac{1}{2}$ " into chuck.

INSPECT CUTTING TOOLS. Inspect chisels and augers for sharpness, chips, or cracks before each use. Replace dull, chipped, or cracked cutting tools immediately.

INSPECT MACHINE. Loose chisels and augers can be ejected at operator, and headstock can fall if not properly secured, causing serious personal injury. Inspect machine for smooth head casting movement, loose augers/chisels, loose nuts/bolts, and lock levers before connecting machine to power and operating. Correct any problems before use.

SECURE WORKPIECE TO TABLE. Clamp workpiece to table or secure in a vise mounted to table, so workpiece cannot unexpectedly shift or spin during operation. NEVER hold workpiece by hand during operation.

⚠️WARNING

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

⚠️CAUTION

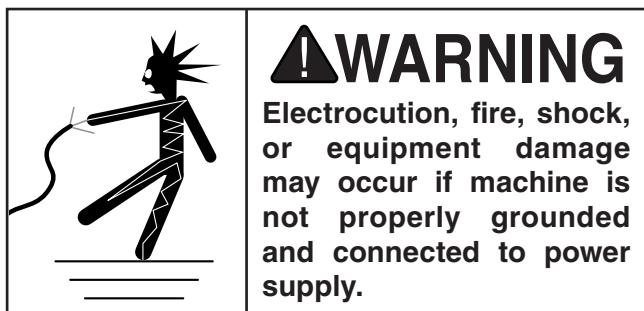
No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or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



SECTION 2: POWER SUPPLY

Availability

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



WARNING

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

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	120V
Cycle	60 Hz
Phase	Single-Phase
Power Supply Circuit	15 Amps
Plug	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.

Full-Load Current Rating

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

Full-Load Current Rating 5 Amps

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

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



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!

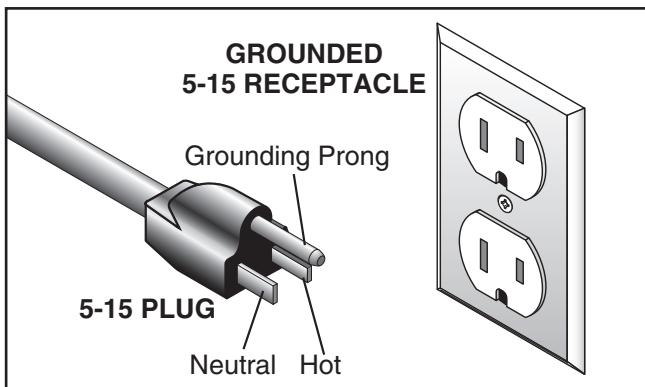
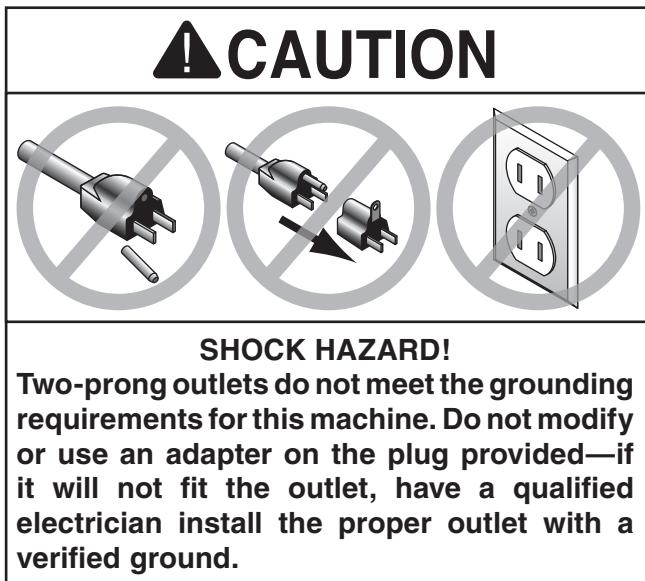


Figure 1. Typical 5-15 plug and receptacle.



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

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

Extension Cords

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

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

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

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



SECTION 3: SETUP

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.**

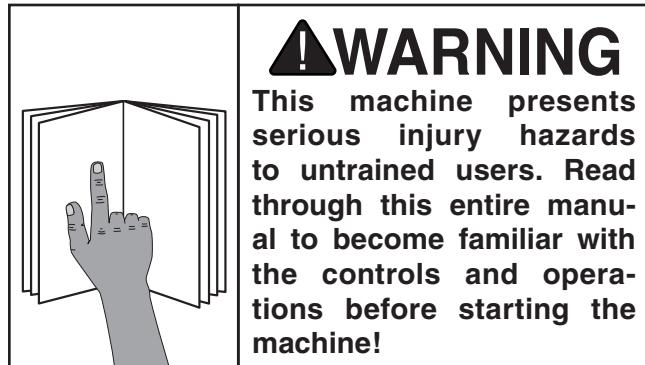
IMPORTANT: Save all packaging materials until you are completely satisfied with the machine and have resolved any issues between Grizzly or the shipping agent. You **MUST** have the original packaging to file a freight claim. It is also extremely helpful if you need to return your machine later.



Needed for Setup

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

Description	Qty
Safety Glasses	1
Screwdriver Phillips #2	1
Screwdriver Phillips #4	1
Screwdriver Flat Head #2	1
Hex Wrench 3, 5, 6mm	3
Machinist's Square	1
Cleaner/Degreaser	As Needed
Disposable Shop Rags.....	As Needed



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.

Inventory	Qty
A. Fence.....	1
B. Hand Lever.....	1
C. Hold-Down.....	1
D. Micro-Adjustment	1
E. Hand Lever Clutch.....	1
F. Hold-Down Rod.....	1
G. Chuck/Spindle for Drilling Operations	1
H. Mortising Chisel and Auger Drill Bit 1/2".....	1
I. Mortising Chisel and Auger Drill Bit 3/8".....	1
J. Mortising Chisel and Auger Drill Bit 1/4"	1
K. Chip Guard.....	1
L. Tool Storage Rack.....	1
M. Work Table	1
N. Hardware Bag (Not Shown).....	1
—Chuck Key	1
—Hold-Down Rod	1
—Compression Spring	1
—Hex Wrenches 3, 5, 6mm.....	3
—Flat Head Screws M8-1.25 x 20mm	2
—Cap Screws M6-1 x 15mm	3
—Flat Washers 6mm	2
—Shoulder Bolt M10-1.5 x 10mm.....	1
—Hex Nut M10-1.5	1
—Fender Washer 13mm	1
—Fender Washer 19mm	1
—Bushing 3/4" (may come pre-installed) ...	1

NOTICE

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

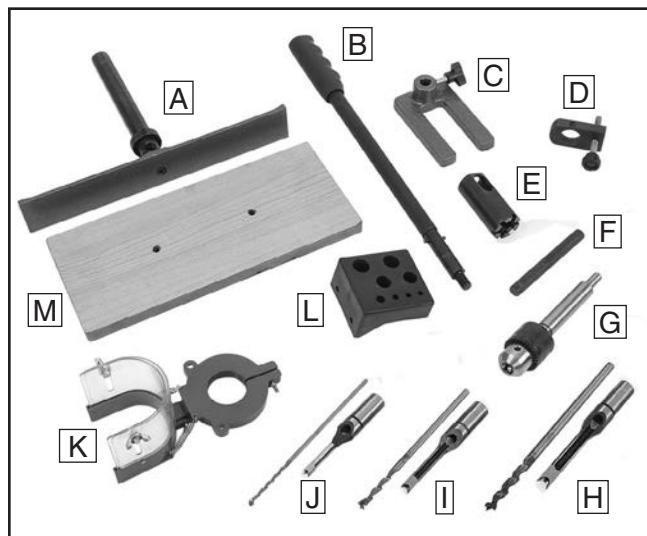


Figure 2. T10816 inventory.



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.

NOTICE

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

Site Considerations

Workbench Load

Refer to the **Machine Data Sheet** for the weight and footprint specifications of your machine. Some workbenches may require additional reinforcement to support the weight of the machine and workpiece materials.

Placement Location

Consider anticipated workpiece sizes and additional space needed for auxiliary stands, work tables, or other machinery when establishing a location for this machine in the shop. Below is the minimum amount of space needed for the machine.

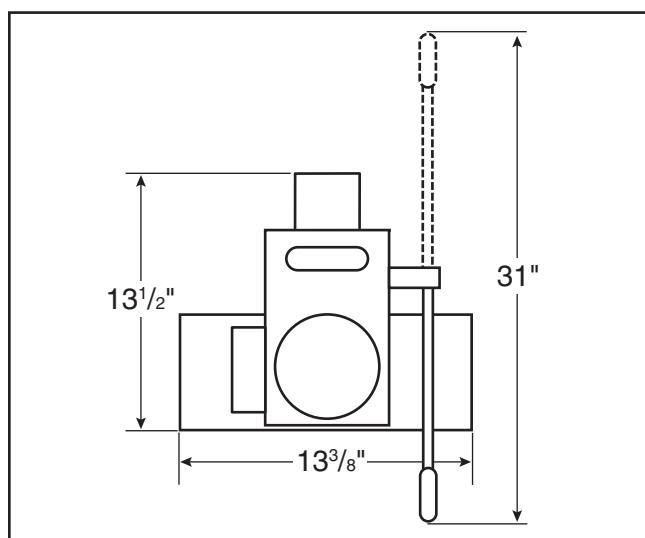
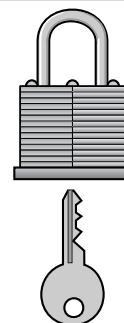


Figure 3. Minimum working clearances.



CAUTION

Children and visitors may be seriously injured if unsupervised around this machine. Lock entrances to the shop or disable start switch or power connection to prevent unsupervised use.



Bench Mounting

Number of Mounting Holes 2
Diameter of Mounting Hardware $\frac{1}{2}$ "

The base of this machine has mounting 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.

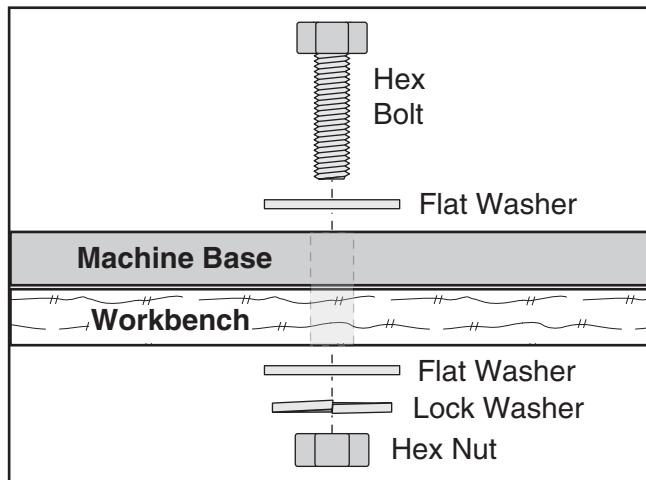


Figure 4. Typical "Through-Mount" setup.

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

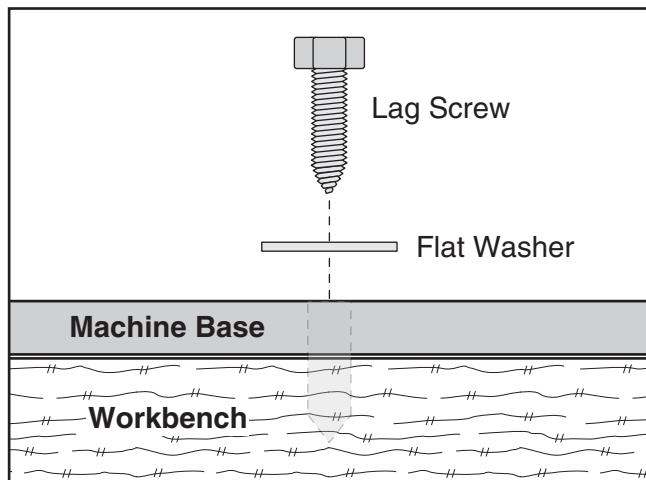


Figure 5. Typical "Direct-Mount" setup.

Assembly

To assemble the mortiser:

1. Attach hand lever clutch (see **Figure 6**) to hub with compression spring and M10-1.5 x 10 shoulder bolt, ensuring that indent for locating pin is facing front of machine.

Note: Hand lever clutch can be indexed on hub to rotate position of hand lever (refer to **Adjusting Hand Lever on Page 23**).

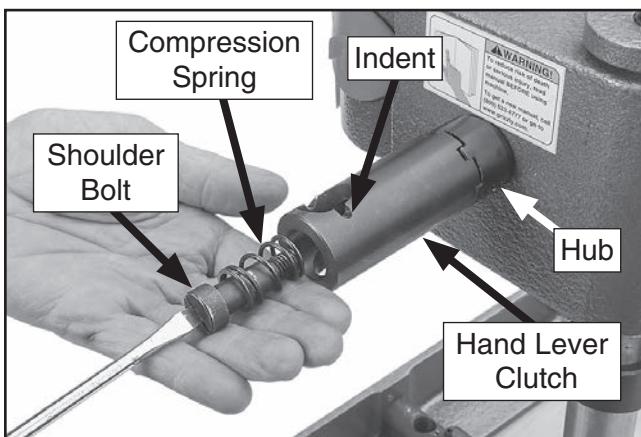


Figure 6. Handle clutch attached to hub.

2. Slide threaded end of hand lever through opening in handle clutch (see **Figure 7**), and secure with 19mm fender washer, compression spring, 13mm fender washer, and M10-1.5 hex nut.

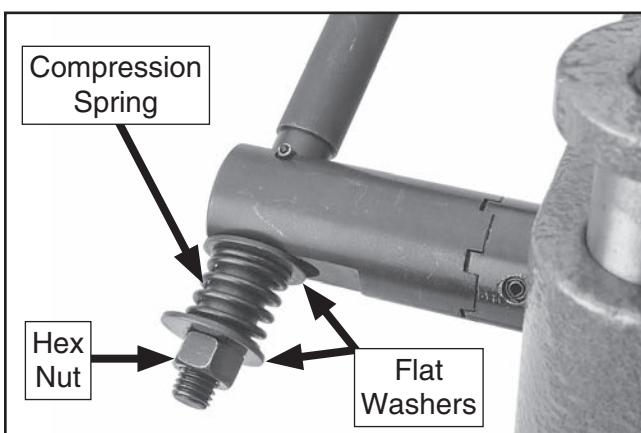


Figure 7. Handle lever fully installed.



3. Raise headstock to highest point and secure with depth stop, as shown in **Figure 8** (see **Adjusting Depth Stop on Page 23**).

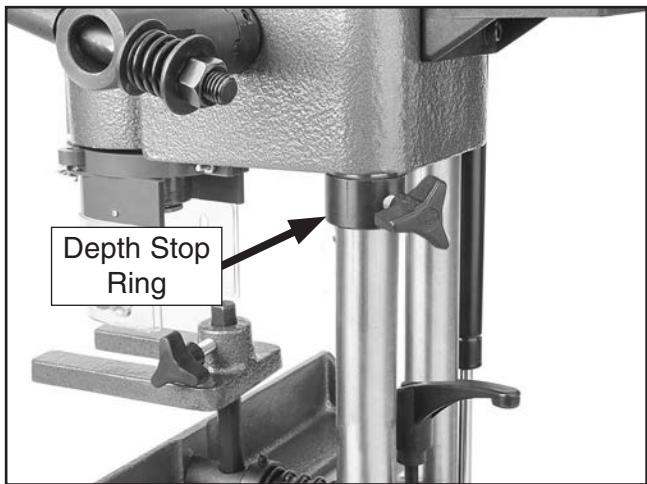


Figure 8. Depth stop securing headstock at highest position.

4. Secure work table to base using (2) M8-1.25 x 20 flat head screws (see **Figure 9**).

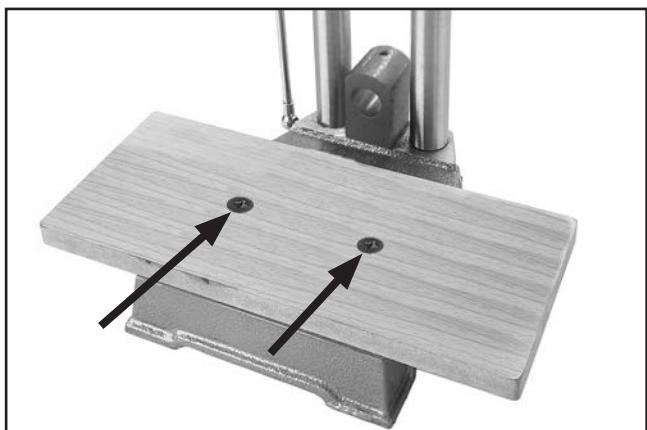


Figure 9. Work table secured to base.

5. Slide compression spring onto fence rod. Then slide fence through guide block between base of columns (see **Figure 10**).

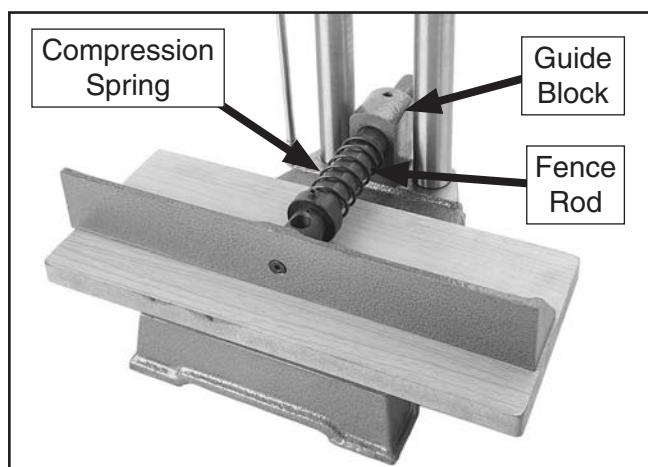


Figure 10. Fence assembly in position on table.

6. Thread fence lock handle into threaded hole (see **Figure 11**) in guide block, and turn clockwise until it *just* touches fence rod. Do not lock yet.

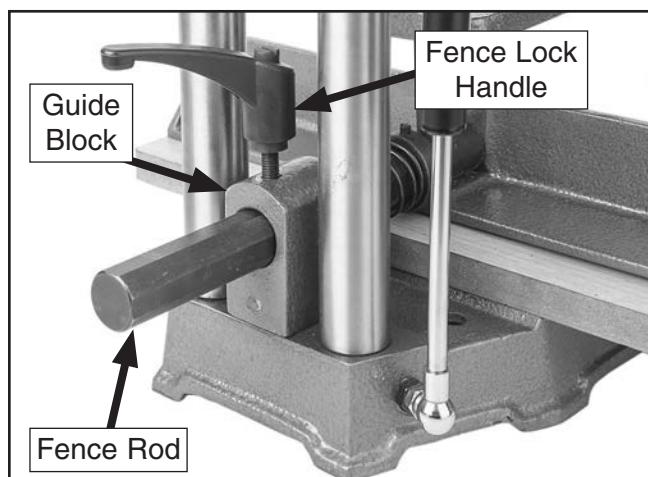


Figure 11. Fence lock handle threaded in hole.



7. Slide micro-adjustment bracket (see **Figure 12**) onto fence rod, and tighten M6-1 x 12 set screw against flat side of rod.

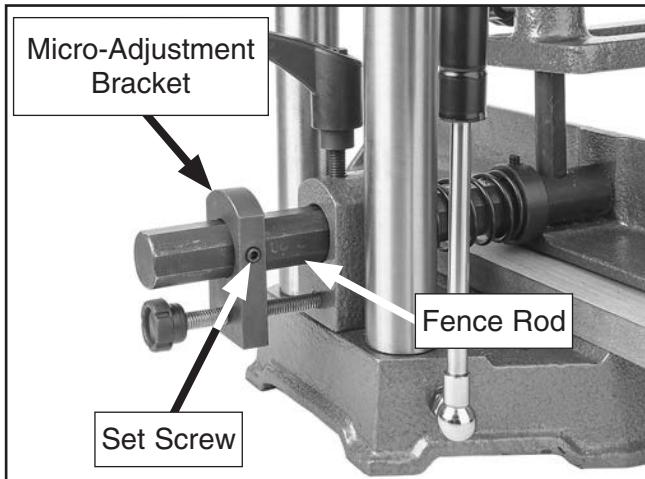


Figure 12. Fine adjustment knob and collar.

8. Install hold-down rod in recess in fence rod. Secure by tightening M6-1 x 12 set screw (see **Figure 13**).

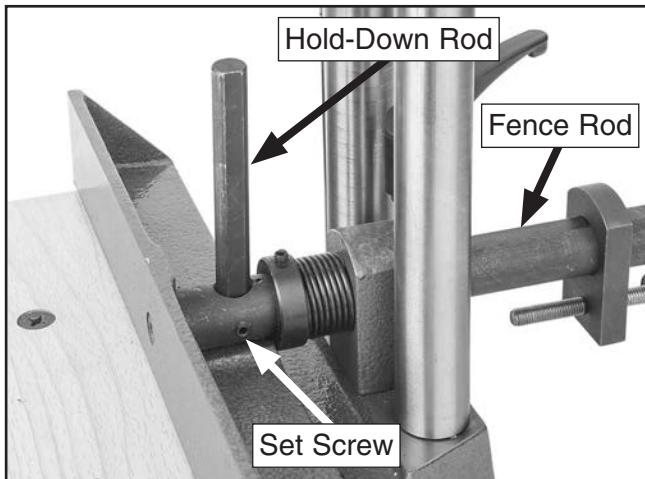


Figure 13. Hold-down rod secured with set screw.

9. Slide hold-down onto rod and secure by turning molded knob clockwise (see **Figure 14**).

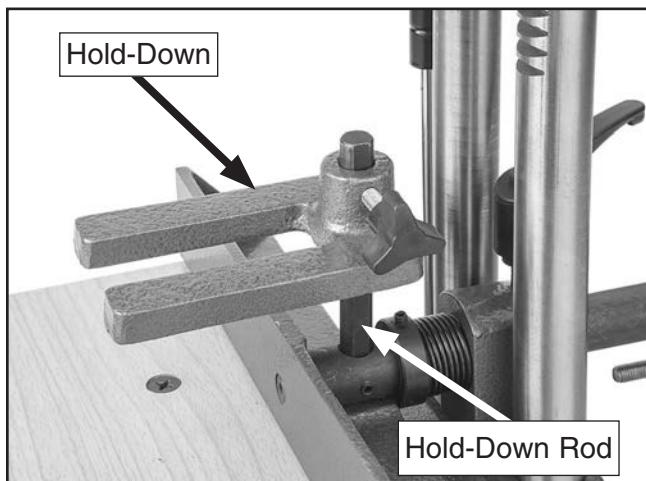


Figure 14. Hold-down installed on rod.

10. Slide chip guard around throat of headstock and secure with Phillips head screw (see **Figure 15**).

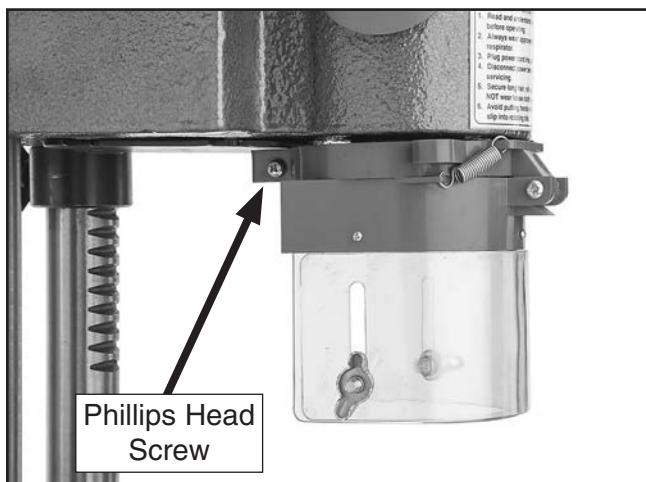


Figure 15. Chip guard installed around throat of headstock.



11. Attach tool storage rack to back of headstock using (2) M6-1 x 15 cap screws and (2) 6mm flat washers (see **Figure 16**).

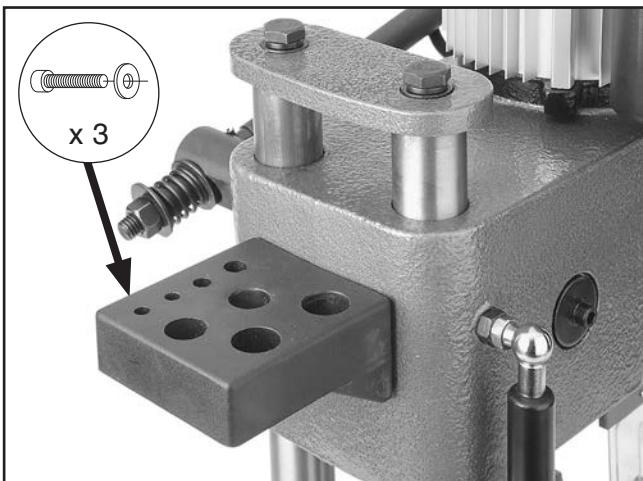


Figure 16. Tool storage rack installed.

Joining Drill Chuck & Arbor

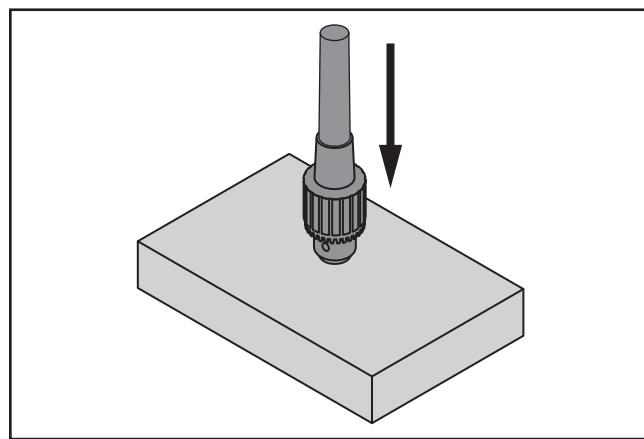
An arbor is included for the drill chuck that comes with this machine. The following procedure describes how to install the arbor in the chuck.

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:

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



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



Test Run

Once assembly is complete, test run the machine to ensure it is properly connected to power and safety components are functioning correctly.

If you find an unusual problem during the test run, immediately stop the machine, disconnect it from power, and fix the problem BEFORE operating the machine again. The **Troubleshooting** table in the **SERVICE** section of this manual can help.

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

!WARNING

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

!WARNING

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

To test run machine:

1. Ensure there is not an auger or chisel installed, and that all tools are cleared away from machine.
2. Connect machine to power supply.
3. Turn machine **ON**, verify motor operation, and then turn machine **OFF**.

The motor should run smoothly and without unusual problems or noises.
4. Remove switch disabling key, as shown in **Figure 17**.

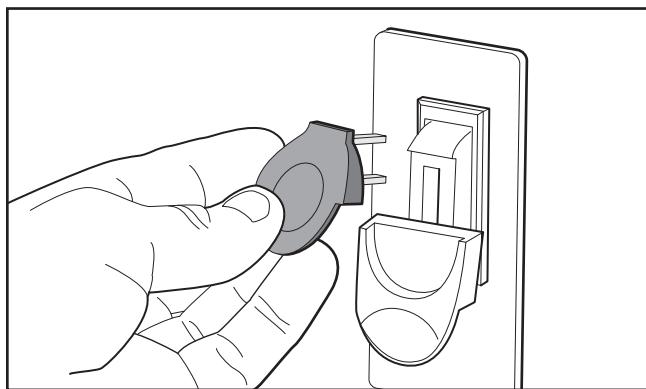
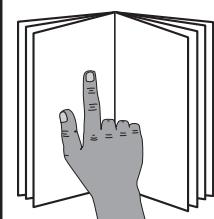


Figure 17. Removing switch key from paddle switch.

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



SECTION 4: OPERATIONS



WARNING

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

WARNING

To reduce risk of eye injury from flying chips or lung damage from breathing dust, always wear safety glasses and a respirator when operating this machine.



WARNING

Never mortise treated lumber—the smoke is extremely poisonous.

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. Puts on safety glasses and respirator.
2. Installs chisel and auger in chuck.
3. Places workpiece on table and secures with hold-down.
4. Adjusts fence to correct position for operation.
5. Positions depth stop for precise depth of mortise.
6. When all safety precautions have been taken, turns mortiser **ON**.
7. Using hand lever, slowly feeds chisel and auger into workpiece until correct depth is reached.
8. Raises hand lever to extract chisel and auger from workpiece.
9. Turns machine **OFF**.



Installing Mortising Chisel

This mortising machine uses $\frac{3}{4}$ " shank chisels ranging from $\frac{1}{4}$ "– $\frac{1}{2}$ ". If you want to use chisels that did not come with this machine, make sure they conform to the dimensions in **Figure 18**.

Chisel	Min. Overall Auger Length (A)	Max Auger Dia. (B)	Min. Overall Chisel Length (C)
$\frac{1}{4}$ "	$6\frac{1}{2}$ "	$\frac{3}{16}$ "	$4\frac{1}{2}$ "
$\frac{3}{8}$ "	$6\frac{1}{2}$ "	$\frac{1}{4}$ "	$4\frac{11}{16}$ "
$\frac{1}{2}$ "	$6\frac{1}{2}$ "	$\frac{3}{8}$ "	$5\frac{7}{16}$ "

Figure 18. T10816 chisel and auger dimensions.

Items Needed	Qty
Hex Wrench 5mm.....	1
Chuck Key	1
Square	1
Scrap Piece of Wood.....	1

To install mortising chisel:

1. DISCONNECT MACHINE FROM POWER!
2. Raise headstock to highest position with hand lever, then secure with depth stop (see **Adjusting Depth Stop on Page 22**).

3. Wear heavy leather gloves to protect your hands, or wrap a shop towel around sharp end of chisel. Place wood scrap on table to protect it during chisel and auger installation.

4. Remove chuck access covers (see **Figure 19**).
5. Install bushing (see **Figure 19**) with M6-1 x 15 cap screw. Cap screw must pass through casting and stop flush with inner wall of bushing.

Tip: *Feel inside casting with finger to ensure cap screw is correctly positioned.*

6. Slide auger into chisel, then insert chisel and auger into bushing (see **Figure 19**).
7. Push chisel up until it stops at bushing (see **Figure 19**), then allow it to slide back down approximately $\frac{1}{64}$ " to prevent binding. Tighten cap screw just enough to hold chisel in place. Do not overtighten.

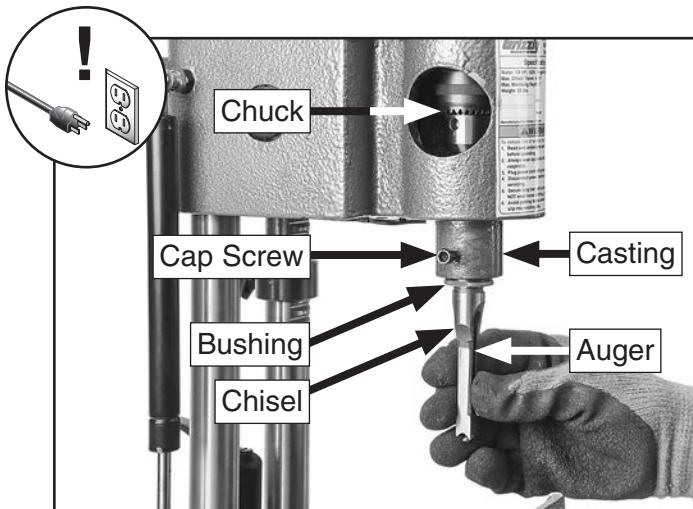


Figure 19. Inserting chisel into bushing.



8. Slide auger into chuck, allowing tip to extend past tip of chisel $\frac{1}{16}$ " (see **Figure 20**). Tighten chuck with key.

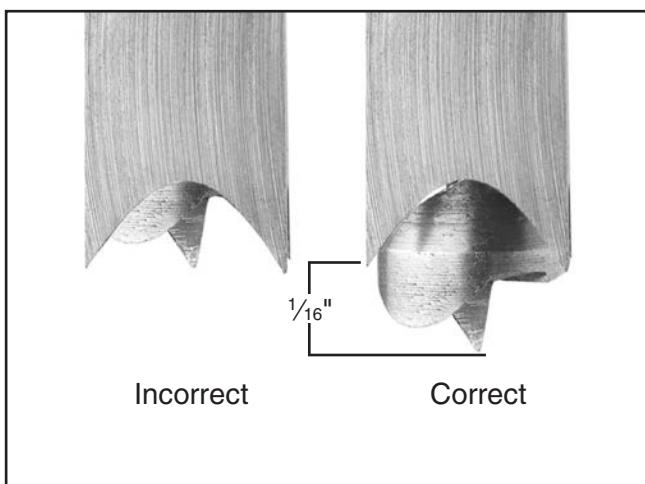


Figure 20. Auger extending beyond tip of chisel.

9. Tighten cap screw to secure chisel.
10. Rotate chuck by hand and make sure no binding occurs.

—If binding does occur, loosen bushing cap screw and rotate chisel 90°.

11. Place a square against fence and chisel (see **Figure 21**) to verify that chisel is square to fence.

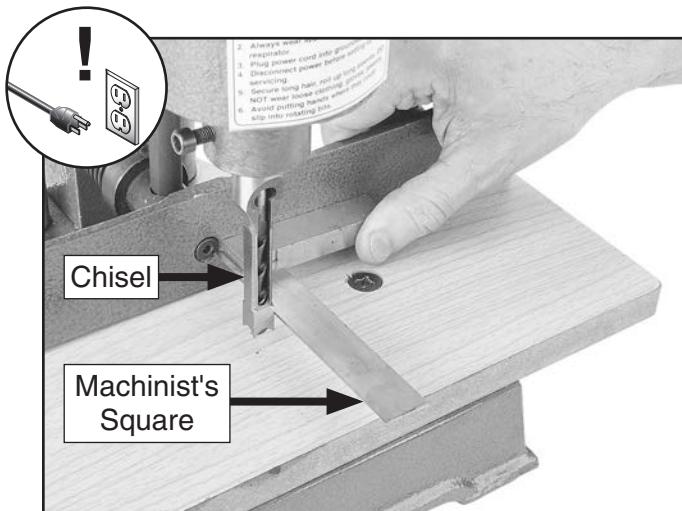


Figure 21. Ensuring chisel is square to fence.

—If chisel is not square to fence, then loosen bushing cap screw, twist chisel into alignment, then retighten cap screw.

12. Re-install chuck access covers.



Adjusting Fence

The fence is spring-loaded and can be moved back and forth on the table by hand by loosening the lock handle. The fence also includes a micro-adjustment bracket that provides fine control of fence movement.

Tools Needed	Qty
Hex Wrench 3mm.....	1

To adjust fence:

1. Loosen fence lock handle (see **Figure 22**).
2. Loosen M6-1 x 12 set screw on micro-adjustment bracket (see **Figure 22**).

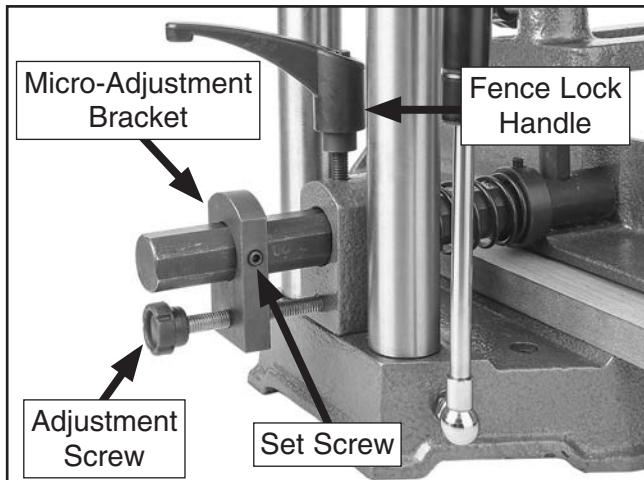


Figure 22. Fence controls.

3. Manually move fence to within 1/8" of final position, and tighten fence lock handle.
4. Slide micro-adjustment bracket forward on fence rod until adjustment screw (see **Figure 22**) contacts back of guide block.
5. Tighten set screw on micro-adjustment bracket.
6. Loosen fence lock handle.
7. Turn knob on micro-adjustment bracket clockwise to move fence forward; counter-clockwise to move fence backward.

Adjusting Hold-Down

The hold-down acts as a clamp, securing the workpiece to the table. The hold-down must be used to keep the workpiece from rising when the chisel is removed after a cut.

To adjust hold-down:

1. Position chisel over workpiece and lock depth stop.
2. Loosen hold-down lock knob, and adjust hold-down to $1/16$ " above top of workpiece. This allows workpiece to move horizontally for making multiple mortises. Secure hold-down with lock knob (see **Figure 23**).

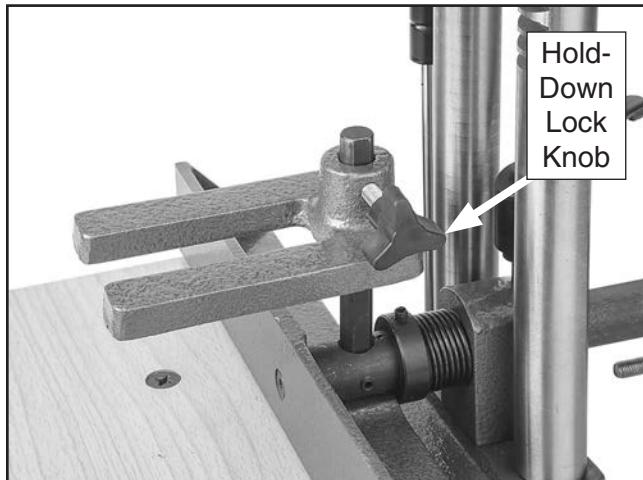


Figure 23. Low hold down position.

Note: When placed in position shown in **Figure 23**, hold-down will accommodate a workpiece slightly taller than the fence. The hold-down may also be flipped over to secure thicker workpieces.



Adjusting Depth Stop

When adjusted correctly, the depth stop ensures that the mortise is not cut too deep and that repeated mortise depths are consistent. Always make the mortise at least an $\frac{1}{8}$ " deeper than the tenon to allow room for excess glue.

To adjust depth stop:

1. Loosen knob on depth stop.
2. Lower chisel to depth required for operation.

Tip: Before cutting mortise, mark depth of cut required on workpiece (see **Figure 24**).

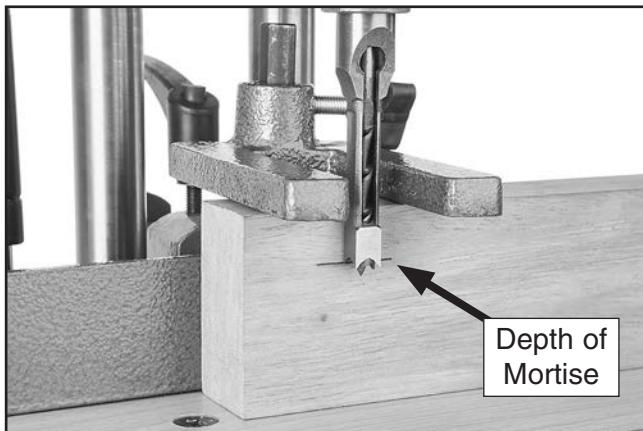


Figure 24. Depth of mortise marked on workpiece.

3. Raise depth stop to bottom of headstock and tighten knob.

Adjusting Hand Lever

To maximise torque and ensure ease of use, the position of the hand lever can be adjusted to accommodate the operator.

To adjust hand lever:

1. Lift hand lever to highest position.
2. Pull lever to right, 90 degrees to machine.
3. When hand lever clutch separates from hub (see **Figure 25**), rotate hand lever to desired position.

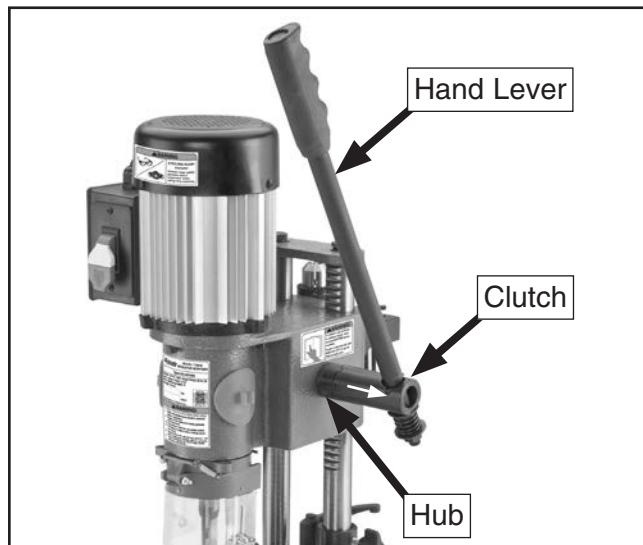


Figure 25. Location of hand lever components.

4. Push hand lever left, ensuring that teeth in hub and clutch mesh.



Cutting a Mortise

To cut a basic mortise:

1. DISCONNECT MACHINE FROM POWER!
2. Verify that chisel and fence are square (see **Installing Mortising Chisel on Page 20**), and adjust as needed.
3. Lay out desired mortise on test piece of scrap lumber.
4. Position test piece flush with fence, and set depth stop (see **Adjusting Depth Stop on Page 23**).

WARNING

HAND INJURY HAZARD!

During the next step, keep fingers and hands away from chisel and auger path when cutting the mortise.

5. Adjust fence so that chisel is aligned with outline of mortise (see **Figure 27**).

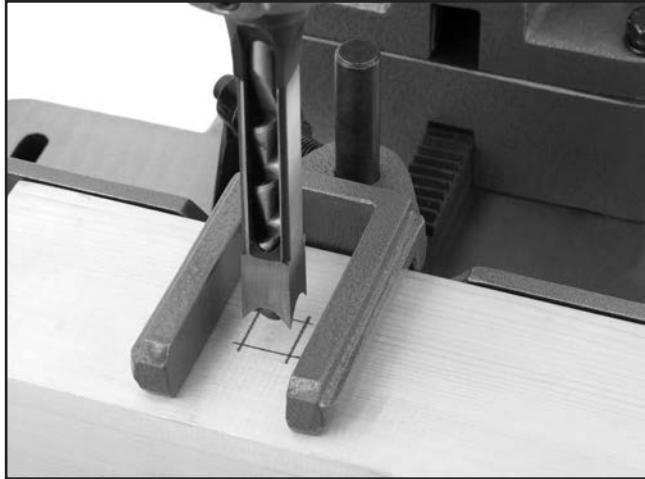


Figure 26. Aligning chisel with mortise outline.

6. Position and lock hold-down (see **Adjusting Hold-Down on Page 22**).
7. Turn power **ON**, and use hand lever to feed mortising chisel into test piece.

WARNING

Pulling down on the handle can be difficult on some woods. However, NEVER use a cheater pipe or handle extender on the handle. You could break the hand lever and be seriously injured.

—Feed rate must be fast enough to prevent tip of auger from burning, but slow enough to prevent motor from stalling. This speed will vary depending on wood type, moisture content, and frequency of chip clearing from mortise.

—When cutting deep mortises, make a 1" deep cut, then back off and allow chips to clear before cutting deeper.

Note: With some chisels, noise and smoke is normal, but we recommend using a small amount of lubrication on augers (not chisels) to keep this to a minimum. See **Page 26** for more information on lubricating augers.

8. Once desired depth is achieved, move hand lever back to highest position. The test piece should remain in place as this is done.
9. Turn power **OFF**.
10. Check placement of hole on test piece, and adjust fence and depth stop, if necessary. When desired accuracy of placement is achieved, repeat **Steps 3-8** on actual workpiece.
11. When making rectangular mortises, follow sequence of cuts shown in **Figure 27**. Position chisel over center of cuts 5, 6, and 7, since these only use part of the chisel.

1	5	2	6	3	7	4
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Figure 27. Sequence of cuts.



SECTION 5: ACCESSORIES

!WARNING

Installing unapproved accessories may cause machine to malfunction, resulting in serious personal injury or machine damage. To reduce this risk, only install accessories recommended for this machine by Grizzly.

NOTICE

Refer to our website or latest catalog for additional recommended accessories.

T20501—Face Shield Crown Protector 4"

T20502—Face Shield Crown Protector 7"

T20503—Face Shield Window

T20451—"Kirova" Clear Safety Glasses

T20452—"Kirova" Anti-Reflective S. Glasses

H7194—Bifocal Safety Glasses 1.5

H7195—Bifocal Safety Glasses 2.0

H7196—Bifocal Safety Glasses 2.5



Figure 28. Assortment of basic eye protection.

D2056—700 Lb. Capacity Shop Fox® Stand

A perfect stand for mounting your smaller machines on. Sturdy and rugged for everyday shop use.



Figure 29. D2056 Shop Fox® Stand.

H8237—Mortising Chisel 4-Pc. Set

Replace those dull and worn out mortising chisels. These Mortising Chisels fit all mortising attachments with 3/4" collars. Each chisel is sharpened and ready to use and includes 1/4", 5/16", 3/8" and 1/2" square chisels and a protective molded case.

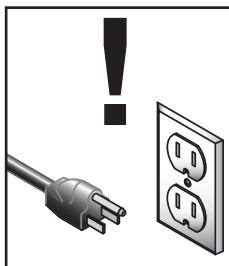


Figure 30. H8237 Mortising Chisel 4-Pc. Set.

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



SECTION 6: MAINTENANCE



WARNING

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

Schedule

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

Daily Check:

- Loose mounting bolts.
- Worn switch or damaged wires.
- Any other unsafe condition.
- Worn or damaged chisel or augers.

Cleaning

Cleaning the Model T10816 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning.

Unpainted Cast Iron

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

Keep tables rust-free with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9 (see **Section 5: Accessories** on **Page 25** for more details).

Augers & Mortising Chisels

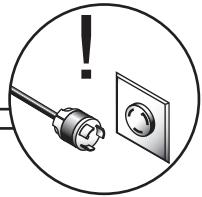
The augers for mortising chisels operate under extreme conditions. A small amount of bees wax applied to the auger can aid in reducing heat and expelling chips. It is important that a small amount is used and none is applied to the chisel. Bees wax coming into contact with the finished surfaces will impede adhesion of glues and finishes.



SECTION 7: SERVICE

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

Troubleshooting



Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	<ol style="list-style-type: none">1. Switch disabling key removed.2. Incorrect power supply voltage or circuit size.3. Power supply circuit breaker tripped or fuse blown.4. Motor wires connected incorrectly.5. Wiring open/has high resistance.6. ON/OFF switch at fault.7. Start capacitor at fault.8. Thermal overload relay has tripped.9. Motor brushes at fault.10. Motor at fault.	<ol style="list-style-type: none">1. Install switch disabling key.2. Ensure correct power supply voltage and circuit size.3. Ensure circuit is sized correctly and free of shorts. Reset circuit breaker or replace fuse.4. Correct motor wiring connections.5. Check/fix broken, disconnected, or corroded wires.6. Replace switch.7. Test/replace.8. Reset; adjust trip load dial if necessary; replace.9. Remove/replace brushes.10. Test/repair/replace.
Machine stalls or is underpowered.	<ol style="list-style-type: none">1. Machine undersized for task.2. Workpiece material not suitable for machine.3. Feed rate/cutting speed too fast.4. Workpiece crooked; fence loose or misadjusted.5. Motor wired incorrectly.6. Motor overheated.7. Dull chisel/auger.	<ol style="list-style-type: none">1. Use sharp augers/reduce feed rate/reduce spindle RPM.2. Only cut wood/ensure moisture is below 20%.3. Decrease feed rate/cutting speed.4. Straighten or replace workpiece/adjust fence (Page 22).5. Wire motor correctly.6. Clean motor, let cool, and reduce workload.7. Sharpen/replace chisel/auger.
Machine has vibration or noisy operation.	<ol style="list-style-type: none">1. Machine incorrectly mounted to workbench or floor.2. Motor or component loose.3. Motor fan rubbing on fan cover.4. Motor bearings at fault.	<ol style="list-style-type: none">1. Adjust feet, shim, or tighten mounting hardware (Page 14).2. Inspect/replace damaged bolts/nuts, and retighten with thread locking fluid.3. Fix/replace fan cover; replace loose/damaged fan.4. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.

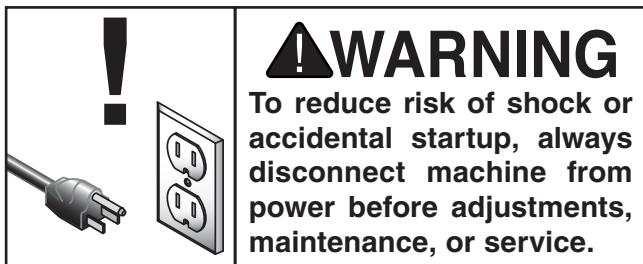


Mortising Operations

Symptom	Possible Cause	Possible Solution
Difficult to pull lever down during machine operation.	<ol style="list-style-type: none"> Auger does not protrude enough from end of chisel. Chisel or auger is dull. Mortising operating handle is not positioned for maximum leverage. 	<ol style="list-style-type: none"> Adjust auger depth. Sharpen/replace auger and chisel. Adjust handle for maximum length, and position it so you have maximum leverage at most difficult mortising depth.
Mortising auger and chisel are extremely noisy, chatter, and smoke. (An average amount of noise and chatter are normal for any mortising machine.)	<ol style="list-style-type: none"> Auger out of alignment with chisel. Chisel mounting bushing is loose or damaged, causing poor auger-to-chisel alignment. Chisel or auger is bent. 	<ol style="list-style-type: none"> Reinstall chisel in a different position. Replace bushing, using care not to over-tighten chisel-retaining set screw. Replace chisel and auger as a matched set.
Mortising auger and chisel generate smoke and burn the workpiece.	<ol style="list-style-type: none"> Auger is dull. Drilling pressure is too aggressive and overheats auger. Wood chips load up in chisel and overheat auger. Wood is too green, has high moisture content, or is pressure treated. 	<ol style="list-style-type: none"> Sharpen/replace auger and chisel. Adjust auger depth, reduce drilling pressure, clear chips often. Apply small amount of bees wax to auger; face chisel slot sideways; clear chips often. Only mortise dry, untreated wood.
Headstock drops when hand lever is released.	<ol style="list-style-type: none"> Gas spring at fault. 	<ol style="list-style-type: none"> Replace gas spring (Page 29).



Replacing Gas Spring



The gas spring shown in **Figure 31** keeps the headstock under pressure so it does not drop when the hand lever is released. If you ever notice that the gas spring is not working correctly, promptly replace it.

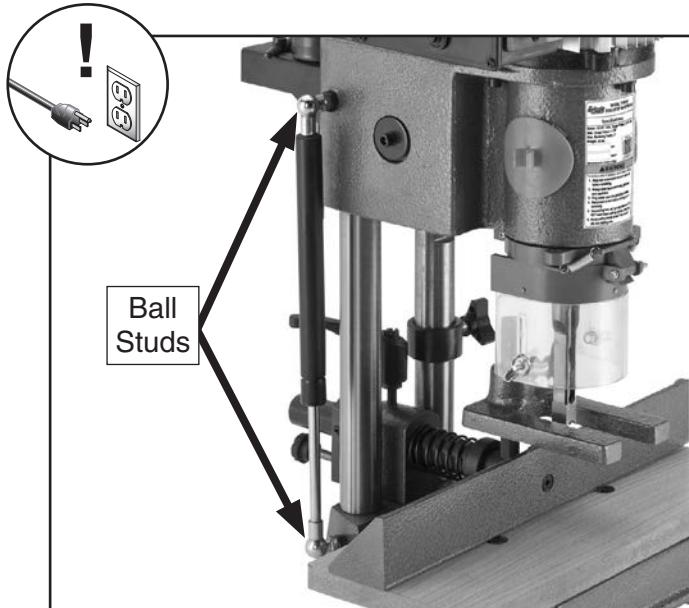


Figure 31. Location of ball studs on gas spring.

Tools Needed:	Qty
Open-End Wrench 12mm.....	1
Open-End Wrench 13mm.....	1

To replace gas spring:

1. Raise headstock as high as it will go, then lock depth stop beneath headstock (see **Adjusting Depth Stop on Page 23**).
2. Loosen hex nut (see **Figure 32**).

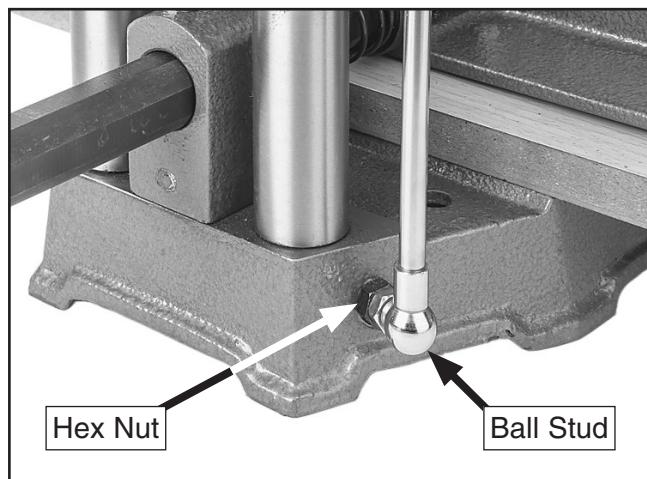


Figure 32. Ball stud and hex nut secured to base.

3. Unscrew ball stud (see **Figure 31**).
4. Repeat **Steps 2–3** on other ball stud.

Note: *Ball studs on gas spring are pressed in and cannot be replaced. Do NOT attempt to remove them. When ordering replacement parts from Grizzly (see **Main Parts List on Page 33, Part #PT10816063**) the new gas spring will have ball studs already pressed in.*

5. Install new gas spring using hex nuts removed in **Step 1**.



SECTION 8: WIRING

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

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

⚠️WARNING

Wiring Safety Instructions

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

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

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

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

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

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

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

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

NOTICE

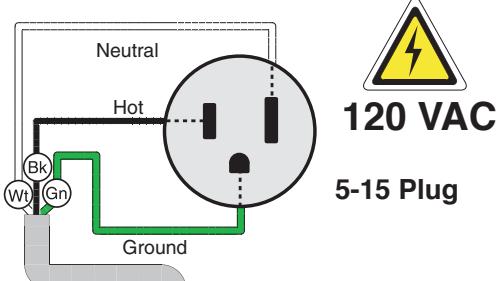
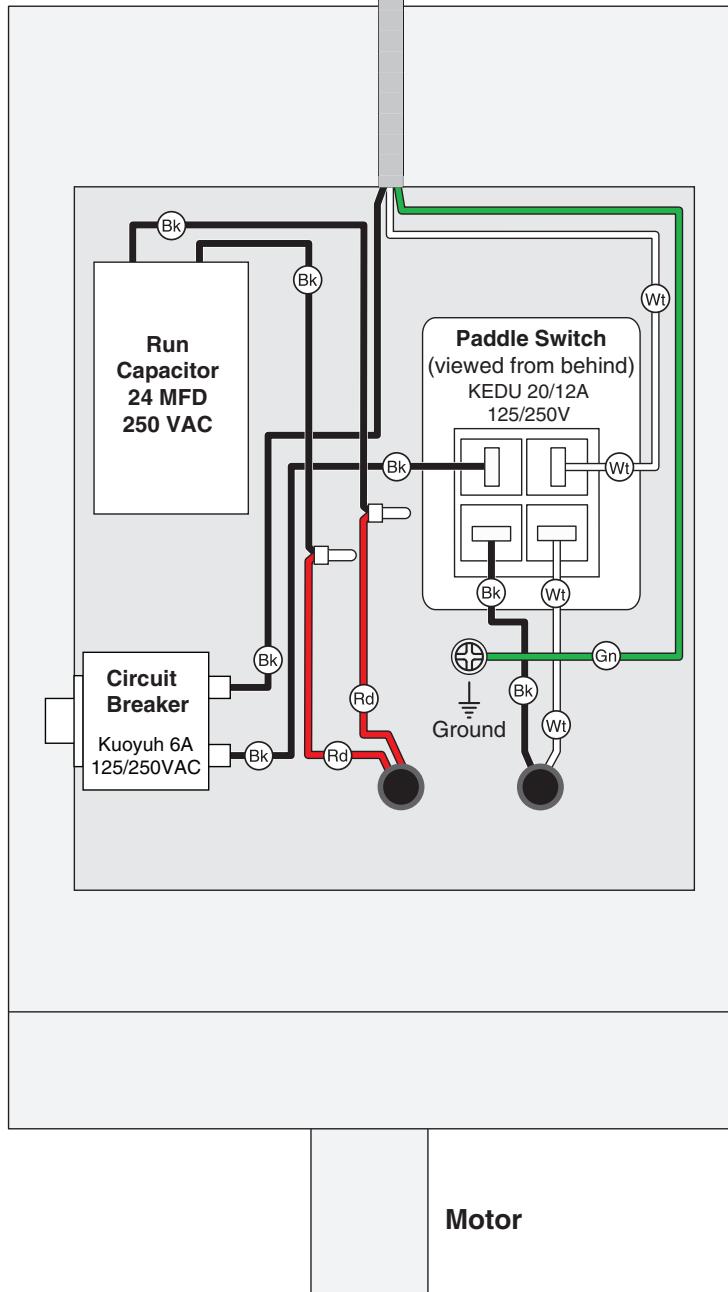
The photos and diagrams included in this section are best viewed in color. You can view these pages in color at www.grizzly.com.

COLOR KEY

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



Wiring Diagram & Electrical Components



NOTICE

The motor wiring shown here is current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.

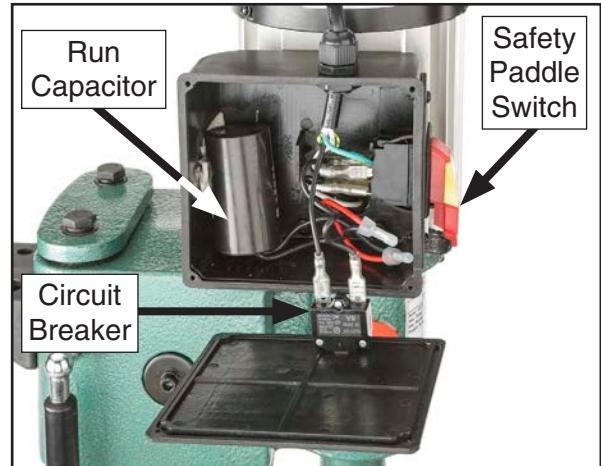
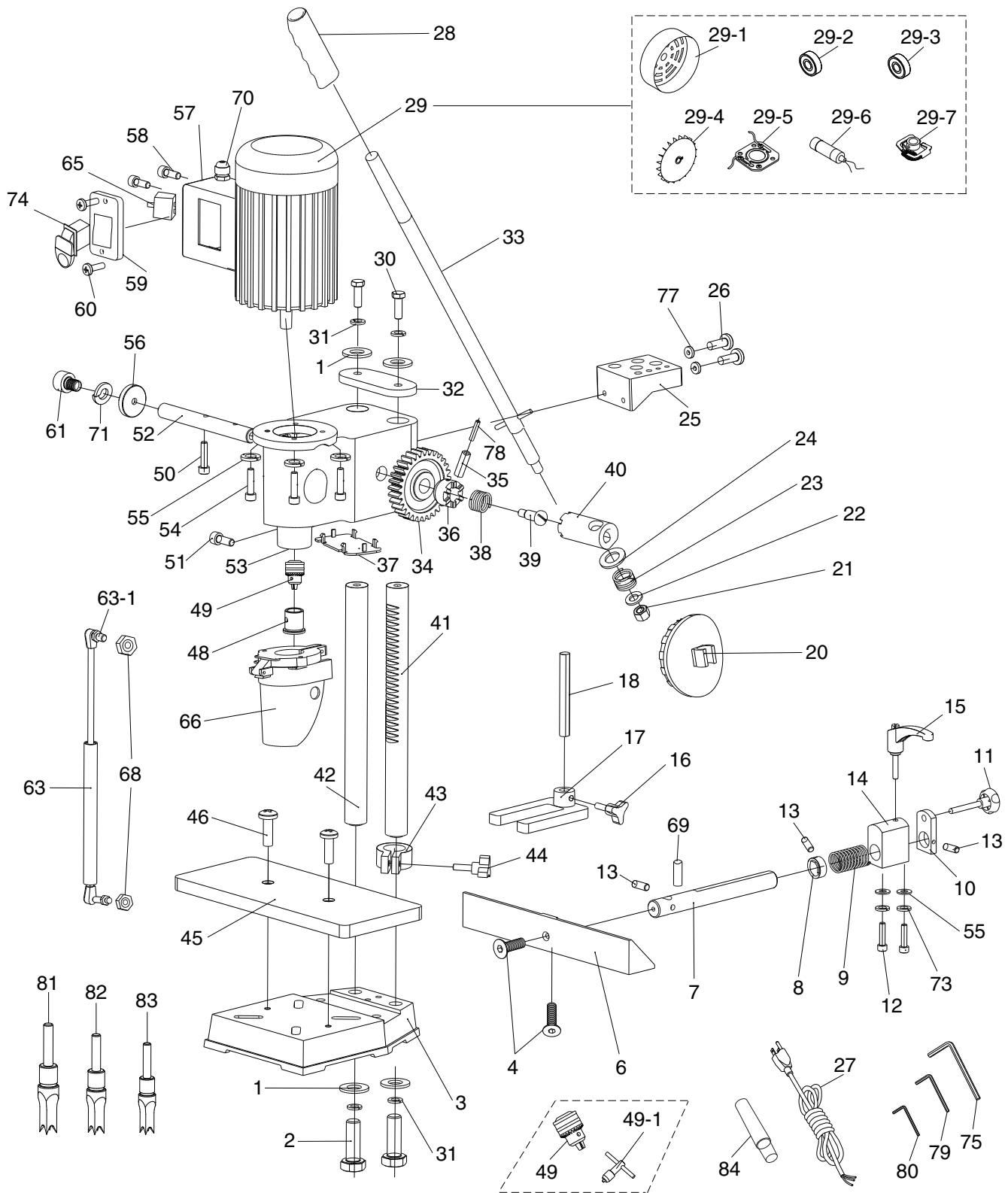


Figure 33. Switch box.



SECTION 9: PARTS

Main Breakdown



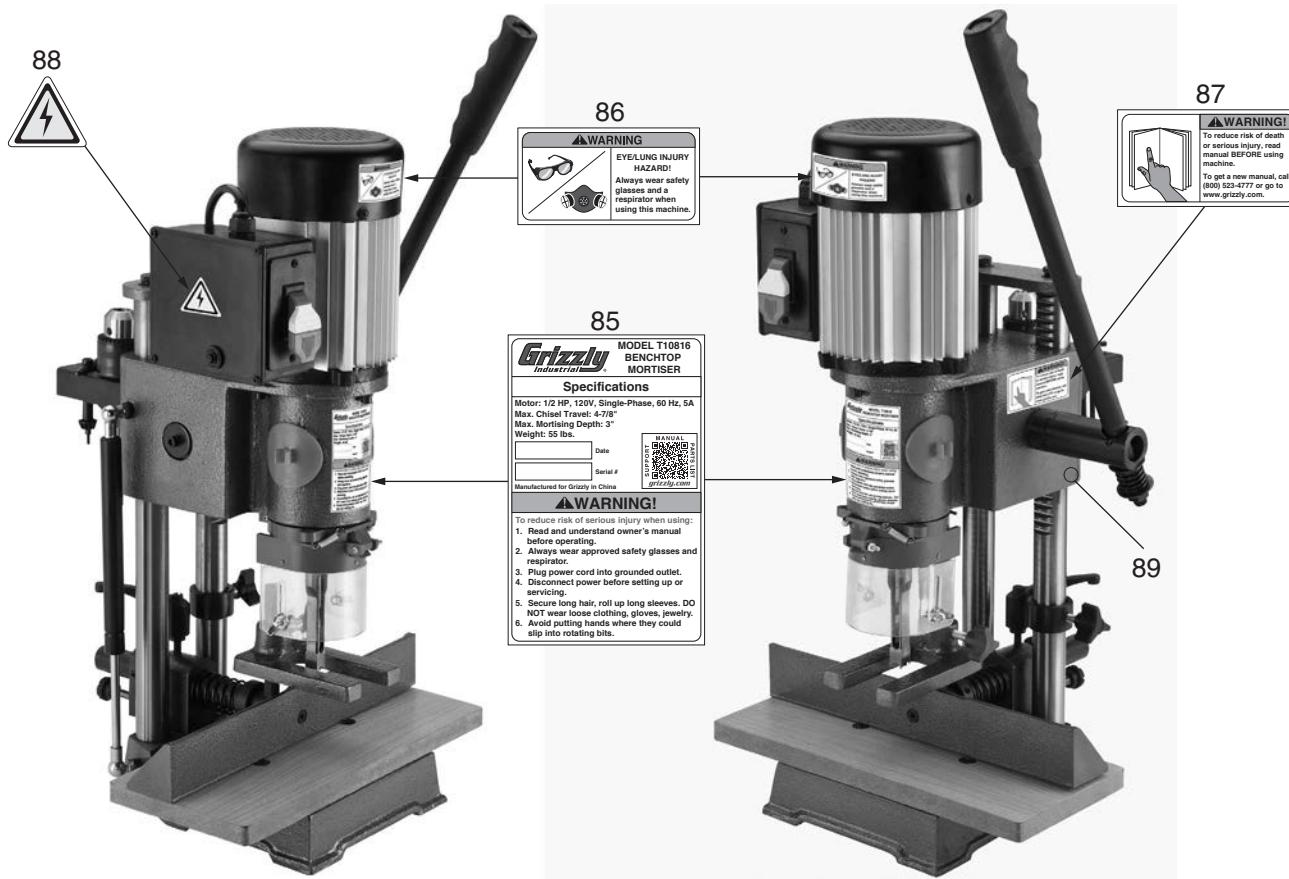
Main Parts List

REF	PART #	DESCRIPTION
1	PT10816001	FLAT WASHER 10MM
2	PT10816002	HEX BOLT M10-1.5 X 30
3	PT10816003	BASE
4	PT10816004	FLAT HD CAP SCR M6-1 X 12
6	PT10816006	FENCE
7	PT10816007	FENCE ROD
8	PT10816008	FENCE COLLAR
9	PT10816009	COMPRESSION SPRING 33 X 80MM
10	PT10816010	MICRO-ADJUSTMENT BRACKET
11	PT10816011	MICRO-ADJUSTMENT KNOB M8-1.25 X 65
12	PT10816012	CAP SCREW M8-1.25 X 20
13	PT10816013	SET SCREW M5-.8 X 8
14	PT10816014	GUIDE BLOCK
15	PT10816015	ADJUSTABLE HANDLE M8-1.25 X 25
16	PT10816016	HOLD-DOWN LOCK KNOB M16-2 X 25
17	PT10816017	HOLD-DOWN BRACKET
18	PT10816018	HOLD-DOWN ROD
20	PT10816020	CHUCK ACCESS COVER, PLASTIC
21	PT10816021	HEX NUT M12-1.75
22	PT10816022	FENDER WASHER 12MM
23	PT10816023	COMPRESSION SPRING 25 X 28MM
24	PT10816024	FENDER WASHER 20MM
25	PT10816025	TOOL RACK
26	PT10816026	CAP SCREW M6-1 X 15
27	PT10816027	POWER CORD 18G 3W 72" 5-15P
28	PT10816028	HAND GRIP
29	PT10816029	MOTOR 1/2HP 120V 1-PH
29-1	PT10816029-1	MOTOR FAN COVER
29-2	PT10816029-2	BALL BEARING 6202ZZ
29-3	PT10816029-3	BALL BEARING 6203ZZ
29-4	PT10816029-4	MOTOR FAN
29-5	PT10816029-5	CONTACT PLATE
29-6	PT10816029-6	R CAPACITOR 14M 250V 1-3/8 X 2-1/2
29-7	PT10816029-7	CENTRIFUGAL SWITCH
30	PT10816030	HEX BOLT M10-1.5 X 25
31	PT10816031	LOCK WASHER 10MM
32	PT10816032	STEP PLATE
33	PT10816033	HAND LEVER
34	PT10816034	GEAR 34T
35	PT10816035	ROLL PIN 8 X 35
36	PT10816036	HUB
37	PT10816037	PLASTIC COVER
38	PT10816038	COMPRESSION SPRING 19 X 28MM

REF	PART #	DESCRIPTION
39	PT10816039	SHOULDER SCREW M10-1.5 40, 26 X 40
40	PT10816040	HAND LEVER CLUTCH
41	PT10816041	GEAR COLUMN
42	PT10816042	GUIDE COLUMN
43	PT10816043	DEPTH LOCK COLLAR
44	PT10816044	DEPTH LOCK KNOB M8-1.25 X 18
45	PT10816045	TABLE
46	PT10816046	PHLP HD SCR M8-1.25 X 20
48	PT10816048	CHISEL BUSHING 3/4"
49	PT10816049	DRILL CHUCK B16 1.5-13MM
49-1	PT10816049-1	DRILL CHUCK KEY 1/4" SE 12T SD-1/2"
50	PT10816050	CAP SCREW M8-1.25 X 45
51	PT10816051	CAP SCREW M6-1 X 20
52	PT10816052	GEAR SHAFT
53	PT10816053	HEADSTOCK
54	PT10816054	CAP SCREW M8-1.25 X 25
55	PT10816055	FLAT WASHER 8MM
56	PT10816056	OVERSIZED FLAT WASHER 6 X 3.5MM
57	PT10816057	MOTOR JUNCTION BOX
58	PT10816058	PHLP HD SCR M3-.5 X 14
59	PT10816059	SWITCH PLATE
60	PT10816060	PHLP HD SCR M4-.7 X 12
61	PT10816061	CAP SCREW M6-1 X 16
63	PT10816063	GAS SPRING 38MM
63-1	PT10816063-1	BALL STUD 12-1.75
65	PT10816065	CIRCUIT BREAKER KUOYUH 88-SERIES 6A
66	PT10816066	CHIP GUARD
68	PT10816068	HEX NUT M8-1.25
69	PT10816069	ROLL PIN 4 X 30
70	PT10816070	STRAIN RELIEF M16-2 X 15 ST PLASTIC
71	PT10816071	LOCK WASHER 6MM
73	PT10816073	LOCK WASHER 8MM
74	PT10816074	PADDLE SWITCH KEDU HY18
75	PT10816075	HEX WRENCH 6MM
77	PT10816077	FLAT WASHER 6MM
78	PT10816078	ROLL PIN 5 X 35
79	PT10816079	HEX WRENCH 5MM
80	PT10816080	HEX WRENCH 3MM
81	PT10816081	MORTISING CHISEL 1/2"
82	PT10816082	MORTISING CHISEL 3/8"
83	PT10816083	MORTISING CHISEL 1/4"
84	PT10816084	DRILL CHUCK ARBOR MT#2 X B16



Labels & Cosmetics



REF	PART #	DESCRIPTION
85	PT10816085	MACHINE ID LABEL
86	PT10816086	EYE LUNG HAZARD LABEL 2.8 X 1.5
87	PT10816087	READ MANUAL LABEL 2.8 X 1.5

REF	PART #	DESCRIPTION
88	PT10816088	ELECTRICITY LABEL 1.4 X 1.2
89	PT10816089	GRIZZLY GREEN TOUCH-UP PAINT

WARNING

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





WARRANTY CARD

Name _____

Street _____

City _____ State _____ Zip _____

Phone # _____ Email _____

Model # _____ Order # _____ Serial # _____

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

1. How did you learn about us?

Advertisement
 Card Deck

Friend
 Website

Catalog
 Other:

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

Cabinetmaker & FDM
 Family Handyman
 Hand Loader
 Handy
 Home Shop Machinist
 Journal of Light Cont.
 Live Steam
 Model Airplane News
 Old House Journal
 Popular Mechanics

Popular Science
 Popular Woodworking
 Precision Shooter
 Projects in Metal
 RC Modeler
 Rifle
 Shop Notes
 Shotgun News
 Today's Homeowner
 Wood

Wooden Boat
 Woodshop News
 Woodsmith
 Woodwork
 Woodworker West
 Woodworker's Journal
 Other:

3. What is your annual household income?

\$20,000-\$29,000
 \$50,000-\$59,000

\$30,000-\$39,000
 \$60,000-\$69,000

\$40,000-\$49,000
 \$70,000+

4. What is your age group?

20-29
 50-59

30-39
 60-69

40-49
 70+

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

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

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

0-2

3-5

6-9

10+

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

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

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

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

10. Comments: _____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE



Place
Stamp
Here



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



FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name _____
Street _____
City _____ State _____ Zip _____

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

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.

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

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

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

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



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