

IMPORTANT: Chuck guard MUST be installed before drill chuck!



Model G7942

IMPORTANT UPDATE

For Owner's Manual Revised April, 2005

For Machine Serial #'s 12411 & Higher

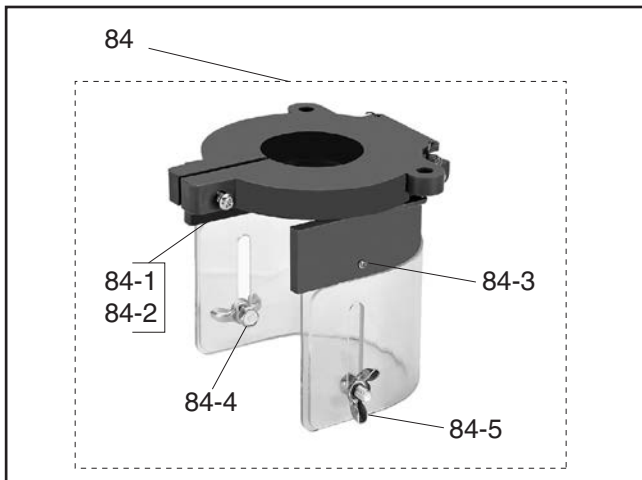
The following change was recently made to this machine since the owner's manual was printed:

- Added a chuck guard.

Aside from this information, all other content in the owner's manual applies and MUST be read and understood for your own safety. **IMPORTANT: Keep this update with the owner's manual for future reference.**

For questions or help, contact our Tech Support at (570) 546-9663 or techsupport@grizzly.com.

Added Part



REF	PART #	DESCRIPTION
84	P7942084	CHUCK GUARD ASSEMBLY
84-1	PS51M	PHLP HD SCR M4-.7 X 30
84-2	PN04M	HEX NUT M4-.7
84-3	PHTEK47M	TAP SCREW M2.2 X 4.5
84-4	PB107M	HEX BOLT M5-.8 X 12
84-5	PWN05M	WING NUT M5-.8

Tools Needed

	Qty
Wrench 10mm	1
Wrench 5mm	1
Phillips Head Screwdriver	1

Installation

1. Unthread the depth stop rod (see **Figure 1**) from the hex nut under the bracket, then remove it from the machine.

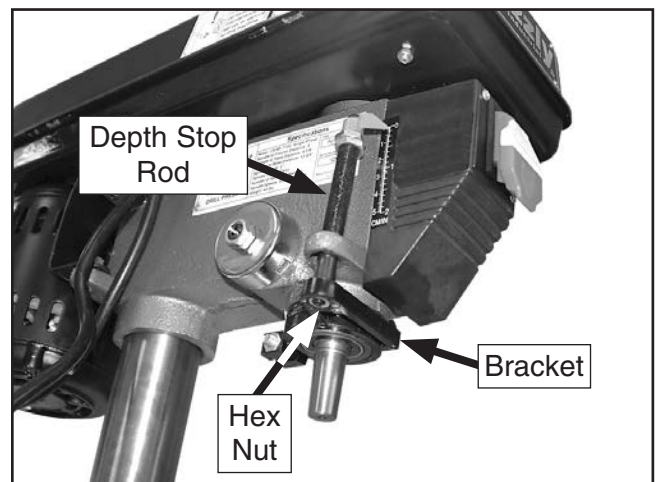


Figure 1. Depth stop rod and bracket.

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#TS15629 PRINTED IN CHINA

2. Loosen the hex bolt shown in **Figure 2**, then slide the depth stop bracket off the quill flange.

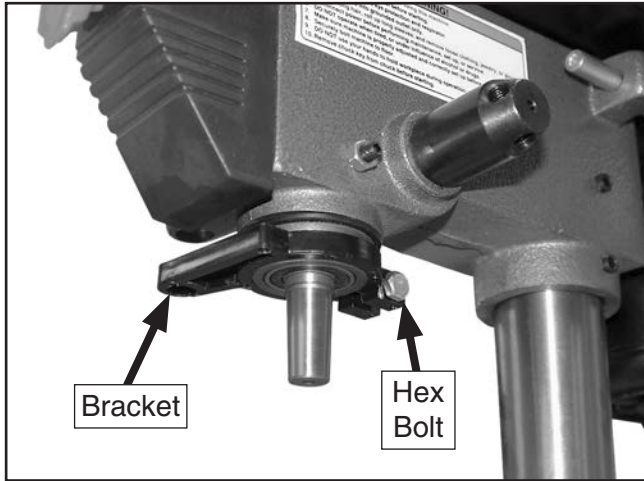


Figure 2. Depth stop bracket hex bolt.

3. Slide the chuck guard onto the quill flange, as shown in **Figure 3**, then tighten the Phillips head screw to secure it.

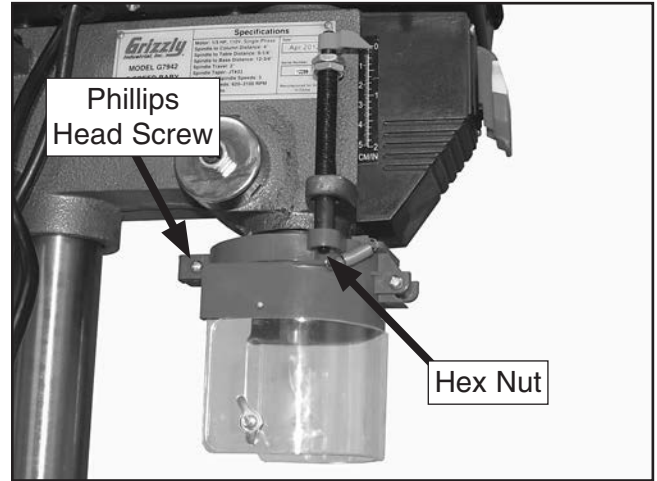


Figure 3. Chuck guard installed.

4. Insert the hex nut removed in **Step 1** under the left side of the chuck guard flange, then re-install the depth stop rod.





5 SPEED BABY DRILL PRESS

MODEL G7942

INSTRUCTION MANUAL



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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

Foreword

We are proud to offer the Model G7942 5 Speed Baby Drill Press. This machine is part of a growing Grizzly family of fine woodworking machinery. When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

We are pleased to provide this manual with the Model G7942. It was written to guide you through assembly, review safety considerations, and cover general operating procedures. It represents our effort to produce the best documentation possible.

The specifications, drawings, and photographs illustrated in this manual represent the Model G7942 as supplied when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly. For your convenience, we always keep current Grizzly manuals available on our website at **www.grizzly.com**. Any updates to your machine will be reflected in these manuals as soon as they are complete. Visit our site often to check for the latest updates to this manual!



Contact Info

If you have any comments regarding this manual, please write to us at the address below:

Grizzly Industrial, Inc.
c/o Technical Documentation
P.O. Box 2069
Bellingham, WA 98227-2069

We stand behind our machines. If you have any service questions or parts requests, please call or write us at the location listed below.

Grizzly Industrial, Inc.
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
Fax: (800) 438-5901
E-Mail: techsupport@grizzly.com
Web Site: <http://www.grizzly.com>





MACHINE DATA SHEET

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

MODEL G7942 5 SPEED BABY DRILL PRESS

Design Type Bench Model

Overall Dimensions:

Table 6½" x 6½"
Overall Height 23"
Overall Width 9"
Overall Depth 16¼"
Column Diameter 1.810"
Quill Diameter 1.680"
Shipping Weight 50 lbs.
Net Weight 43 lbs.
Box Size 18" L x 13½" W x 9" H
Footprint 12½" x 8"

Construction:

Table Precision Ground Cast Iron
Column Cylindrical Ground Steel Tubing
Base & Head Cast Iron

Capacities:

Spindle Travel 2"
Max. Distance, Spindle to Base 12¾"
Max. Distance, Spindle to Table 9¼"
Arbor Taper JT #33
Swing 8"
Chuck Size ½" (13mm), Keyed
Speeds 5, Belt Controlled
Range of Speeds 620, 1100, 1720, 2340, 3100 RPM
Drilling Capacity ½" Diameter in Steel

Main Motor:

Type TEFC Capacitor Start Induction
Horsepower ⅓ HP
Phase / Cycle Single Phase / 60 Hz
Voltage 110V
Amps 2
RPM 1720
Power Transfer V-Belt
Bearings Shielded & Lubricated Ball Bearings
Switch Toggle ON/OFF Switch, w/ Safety Lock Tab

Features:

Table 360° Swivel Around Support Column, Tilt ±90°, Lock Levers
Vertical Table Movement Crank Handle Operated Rack and Pinion
T-Slot 2 - 5/8" x 5", Accommodates ½" Clamping Kit
Depth Gauge On Feed Handle Hub, Inch Increments

Specifications, while deemed accurate, are not guaranteed.

Identification

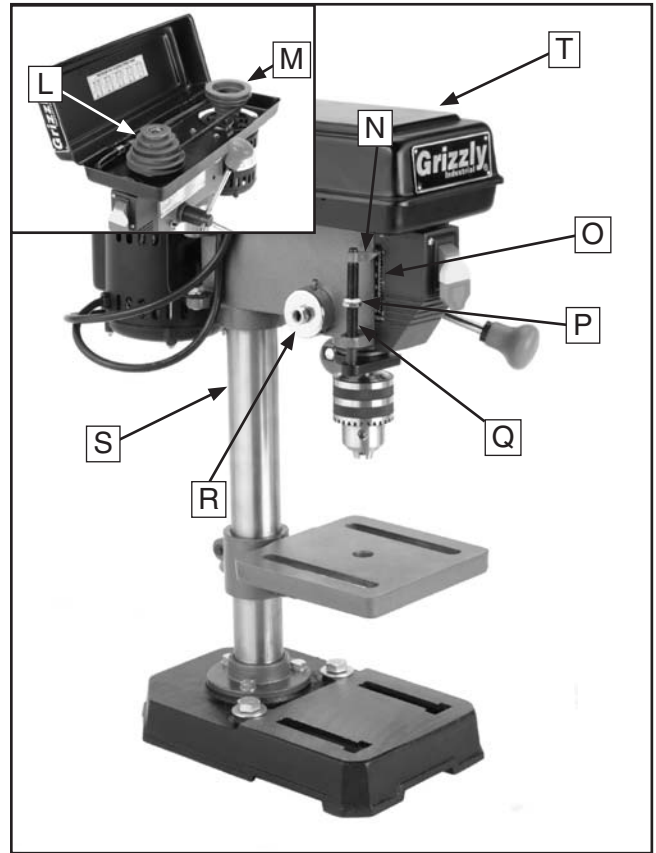
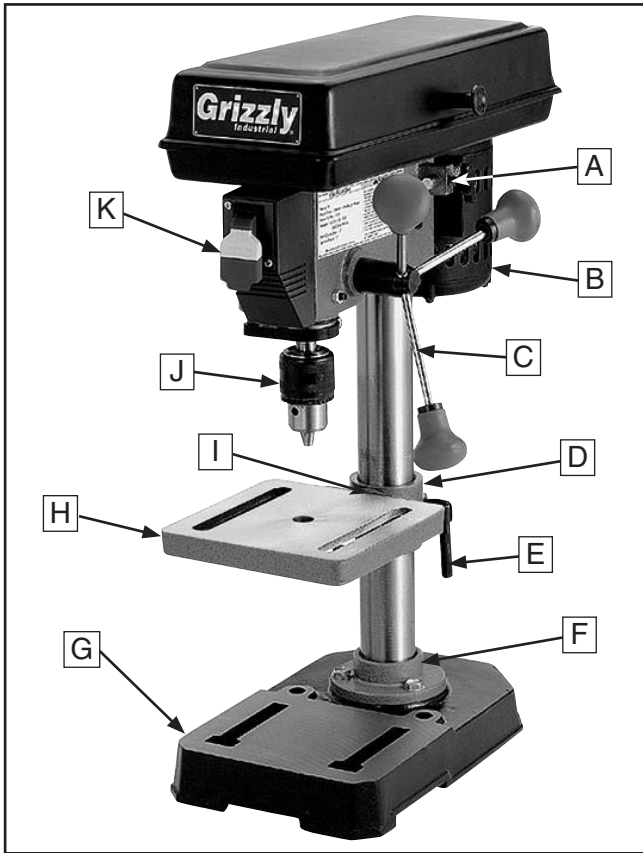


Figure 1. G7942 Identification.

- A. Belt Tensioner
- B. Motor
- C. Feed Handle
- D. Table Support
- E. Support Lock Handle
- F. Column Support
- G. Base
- H. Table
- I. Bevel Scale
- J. Chuck
- K. ON/OFF Switch with Key

- L. Spindle Pulley
- M. Motor Pulley
- N. Pointer
- O. Depth Gauge
- P. Stop Nuts
- Q. Depth Stop Rod
- R. Return Spring
- S. Column
- T. Cover



SECTION 1: SAFETY


WARNING

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 which are 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.

 **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.

WARNING

Safety Instructions for Machinery

- 1. READ THROUGH THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.
- 2. ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- 3. ALWAYS WEAR AN ANSI APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Wood dust is a carcinogen and can cause cancer and severe respiratory illnesses.
- 4. ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing damage.
- 5. WEAR PROPER APPAREL. DO NOT** wear loose clothing, gloves, neckties, rings, or jewelry which may get caught in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
- 6. NEVER OPERATE MACHINERY WHEN TIRED, OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.

WARNING

Safety Instructions for Machinery

7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.
8. **KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.
9. **MAKE WORKSHOP CHILD PROOF.** Use padlocks, master switches, and remove start switch keys.
10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power **OFF** and allow all moving parts to come to a complete stop before leaving machine unattended.
11. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.
12. **KEEP WORK AREA CLEAN AND WELL LIT.** Clutter and dark shadows may cause accidents.
13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Undersized cords overheat and lose power. Replace extension cords if they become damaged. DO NOT use extension cords for 220V machinery.
14. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY.** Make sure switch is in **OFF** position before reconnecting.
15. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**
17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make a habit of checking for keys and adjusting wrenches before turning machinery **ON**.
18. **CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding and alignment of parts, broken parts, part mounting, loose bolts, and any other conditions that may affect machine operation. Repair or replace damaged parts.
19. **USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury.
20. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.
21. **SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.
22. **DO NOT OVERREACH.** Keep proper footing and balance at all times.
23. **MANY MACHINES WILL EJECT THE WORKPIECE TOWARD THE OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."
24. **ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY.**
25. **BE AWARE THAT CERTAIN WOODS MAY CAUSE AN ALLERGIC REACTION** in people and animals, especially when exposed to fine dust. Make sure you know what type of wood dust you will be exposed to and always wear an approved respirator.

WARNING

Additional Safety for Drill Presses

- 1. EYE/FACE/HAND PROTECTION.** A face shield used with safety glasses is recommended. Always keep hands and fingers away from the drill bit. Never hold a workpiece by hand while drilling! **DO NOT** wear gloves when operating the drill.
- 2. SECURING BIT.** Properly tighten and securely lock the drill bit in the chuck.
- 3. CORRECT BIT.** Use only round, hex, or triangular shank drill bits.
- 4. ADJUSTING KEYS AND WRENCHES.** Remove all adjusting keys and wrenches before turning the machine **ON**.
- 5. DRILLING SHEET METAL.** Never drill sheet metal unless it is securely clamped to the table.
- 6. SURFACE/WORKPIECE PREP.** Never turn the drill press **ON** before clearing the table of all objects (tools, scrap wood, etc.) **DO NOT** drill material that does not have a flat surface, unless a suitable support is used.
- 7. DAMAGED TOOLS.** Never use tools in poor condition. Dull or damaged cutting tools are hard to control and may cause serious injury.
- 8. DRILL OPERATION.** Never start the drill press with the drill bit pressed against the workpiece. Feed the drill bit evenly into the workpiece. Back the bit out of deep holes.

Turn the machine **OFF** and clear chips and scrap pieces with a brush. Shut power **OFF**, remove drill bit, and clean table before leaving the machine.
- 9. OPERATING SPEED.** Always operate your drill press at speeds that are appropriate for the drill bit size and the material that you are drilling.
- 10. MAINTENANCE/SPEED CHANGES.** Never change speeds or do maintenance with the machine plugged in.
- 11. MOUNTING WORKPIECES.** Use clamps or vises to secure workpiece before drilling. Position work so you avoid drilling into the table.
- 12. TABLE LOCK.** Make sure the table lock is tightened before starting the drill press.
- 13. EXPERIENCING DIFFICULTIES.** If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact our Service Department at (570) 546-9663.

WARNING

Like all machines there is danger associated with the Model G7942. 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: CIRCUIT REQUIREMENTS

110V Operation

!WARNING

Serious personal injury could occur if you connect the machine to the power source before you have completed the set up process. **DO NOT** connect the machine to the power source until instructed to do so.

Amperage Draw

The 1/3 HP motor on the Model G7942 will draw the following amps:

Motor Load 2 Amps

Circuit Requirements

Only connect your machine to a circuit that meets the requirements below. Always check to see if the wires and circuit breaker in your circuit are capable of handling the amperage draw from your machine, as well as any other machines that could be operating on the same circuit. If you are unsure, consult a qualified electrician.

Minimum Circuit Requirement 15 Amp

Plug/Receptacle Type

Included Plug Type NEMA 5-15

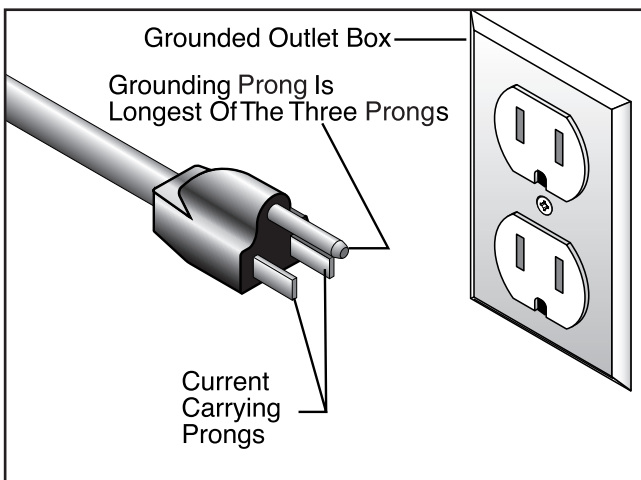

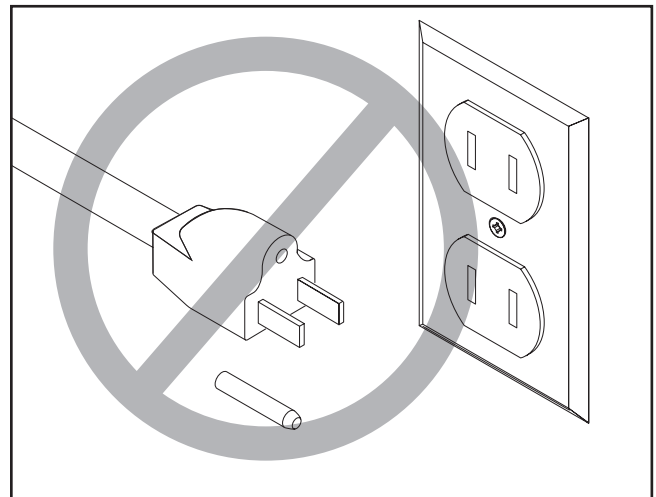


Figure 2. Typical type 5-15 plug and receptacle.



!WARNING
Electrocution or fire could result if this machine is not grounded correctly or if your electrical configuration does not comply with local and state codes. Ensure compliance by checking with a qualified electrician!



!CAUTION
This machine must have a ground prong in the plug to help ensure that it is grounded. **DO NOT** remove ground prong from plug to fit into a two-pronged outlet! If the plug will not fit the outlet, have the proper outlet installed by a qualified electrician.

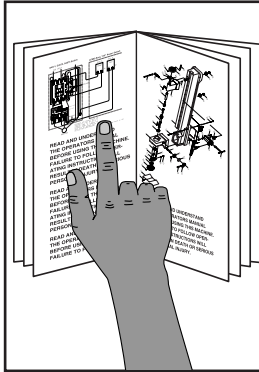
Extension Cords

- Make sure the cord is rated Standard Service (grade S) or better.
- The extension cord must contain a ground wire and plug pin.



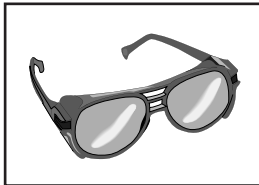
SECTION 3: SET UP

Set Up Safety



!WARNING

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



!WARNING

Wear safety glasses during the entire set up process!



Items Needed For Set Up

The following items are needed to complete the set up process, but are not included with your machine:

Description	Qty
• Safety Glasses	1
• Adjustable Wrench	1
• Machinist Square.....	1
• Clean Cloth.....	1
• Rubber Mallet/Plastic Tipped Hammer	1
• Block of Wood (Short piece of 2 x 4)	1
• Drill	1
• Drill Bit $\frac{5}{16}$ "	1
• Lag Bolts M8-1.25 x 80	2
• Carriage Bolts $\frac{5}{16}$ -18 x 4	2
• Flat Washers $\frac{5}{16}$	2
• Hex Nuts $\frac{5}{16}$ -18	2



Unpacking

The Model G7942 was carefully packed when it left our warehouse. If you discover the machine is damaged after you have signed for delivery, please immediately call Customer Service at (570) 546-9663 for advice.

Save the containers and all packing materials for possible inspection by the carrier or its agent. Otherwise, filing a freight claim can be difficult.

When you are completely satisfied with the condition of your shipment, you should inventory the contents.



Inventory

After all the parts have been removed from the two boxes, you should have the following items:

Box 1 (Figure 3)	Qty
A. Headstock Assembly	1
B. Base	1
C. Column	1
D. Table	1
E. Combination Wrench	3
F. Support Lock Handle	1
G. Feed Handles	1

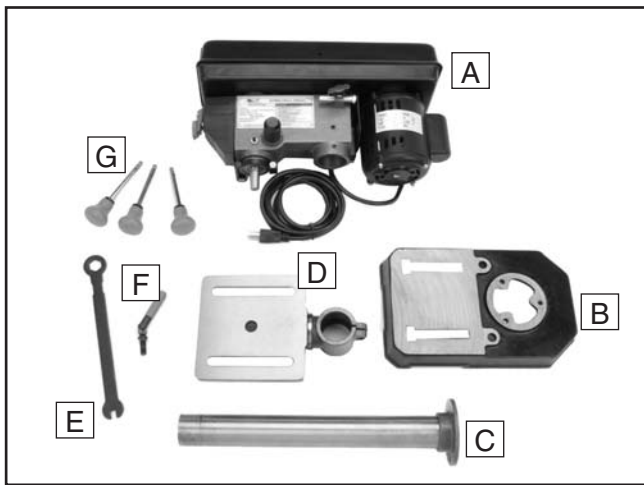


Figure 3. Box 1 inventory.

H. Tools & Hardware (Not Shown)	
— Flat Washers 8mm	3
— Hex Bolts M8-1.25 x 20	3
— Hex Wrenches 3, 4mm	2

Box 2 (Figure 4)	Qty
I. Chuck	1
J. Chuck Key	1

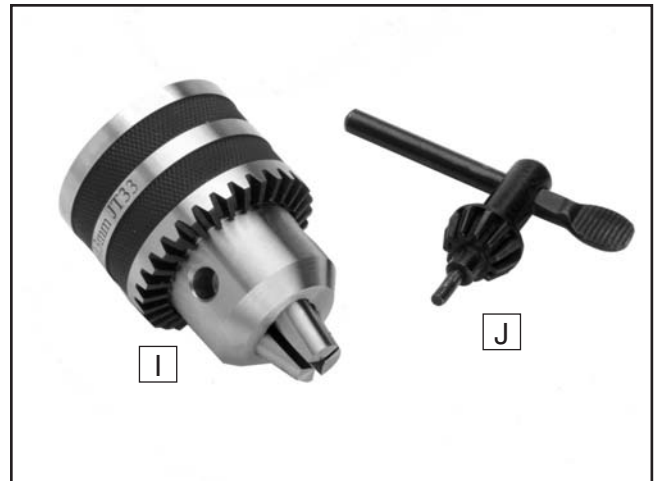


Figure 4. Box 2 inventory.

!WARNING

Children and animals may climb into plastic bags and suffocate. Discard all plastic bags safely.

In the event that any nonproprietary parts are missing (e.g. a nut or a washer), we would be glad to replace them, or for the sake of expediency, replacements can be obtained at your local hardware store.

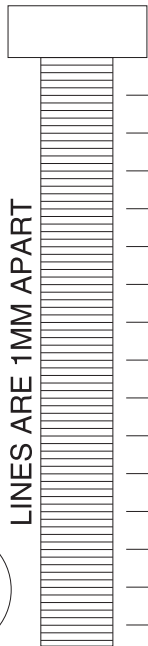
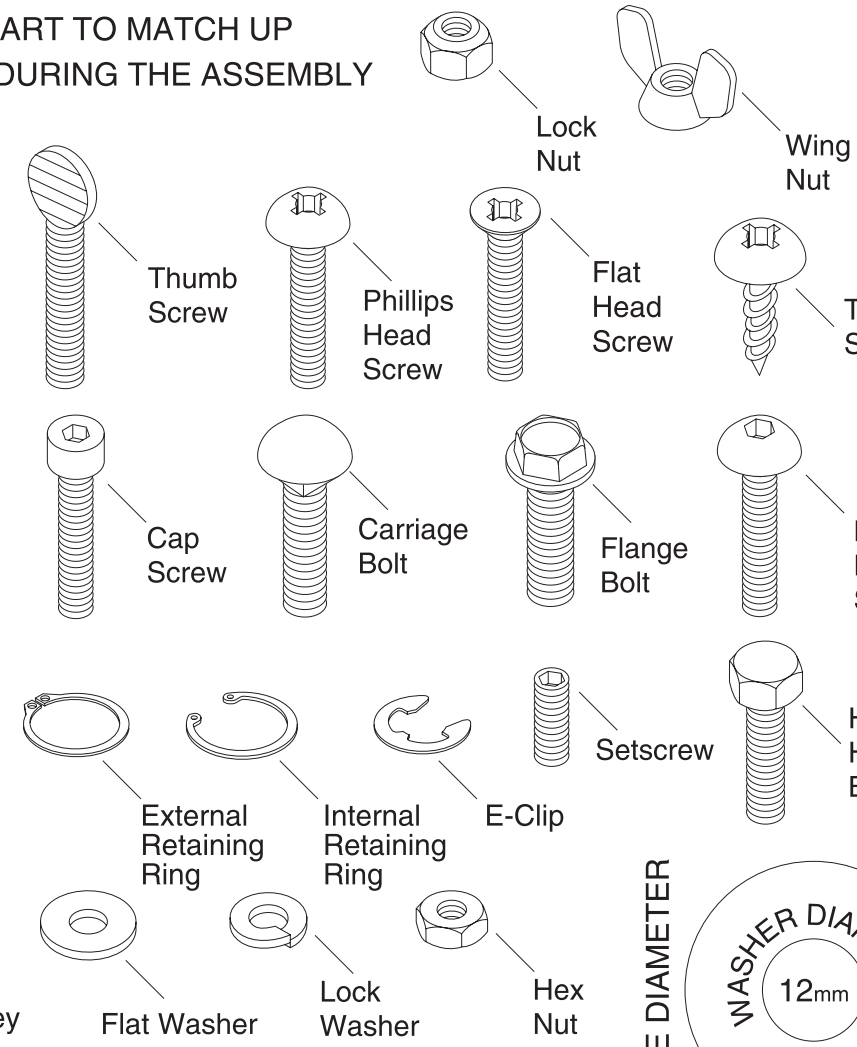


Hardware Recognition Chart

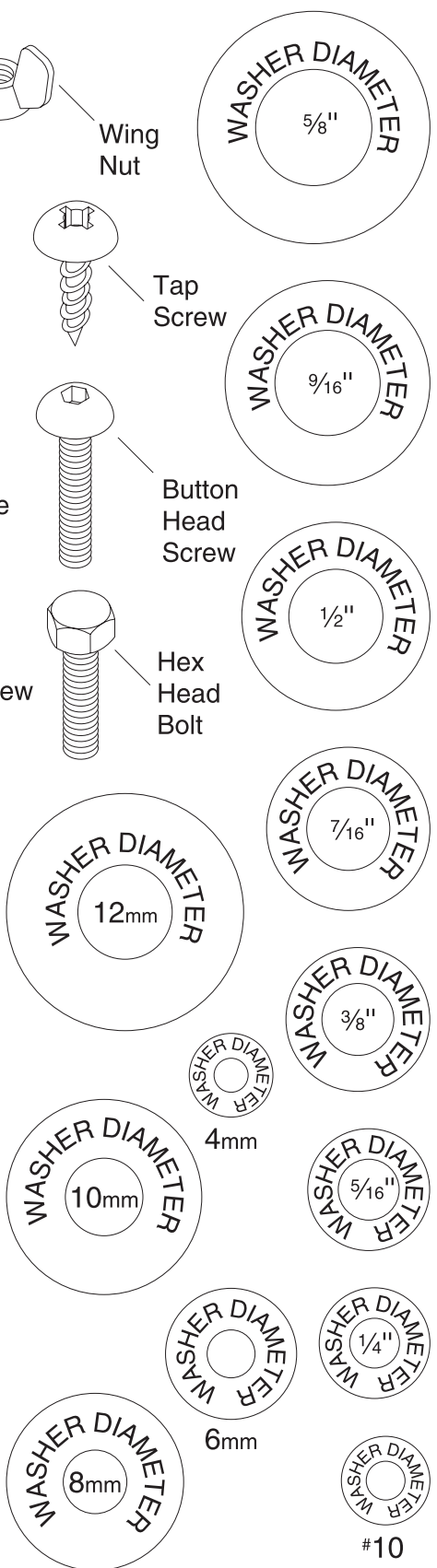
USE THIS CHART TO MATCH UP
HARDWARE DURING THE ASSEMBLY
PROCESS!

MEASURE BOLT DIAMETER BY PLACING INSIDE CIRCLE

- #10
- 1/4"
- 5/16"
- 3/8"
- 7/16"
- 1/2"
- 4mm
- 6mm
- 8mm
- 10mm
- 12mm
- 16mm




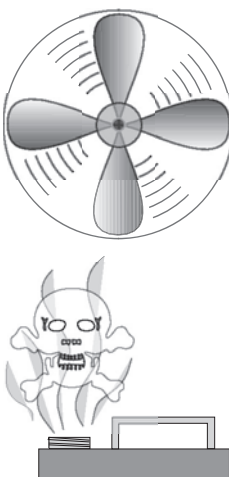
WASHERS ARE MEASURED BY THE INSIDE DIAMETER



Clean Up

The unpainted surfaces are coated with a waxy oil to protect them from corrosion during shipment. Remove this protective coating with a solvent cleaner or citrus-based degreaser such as Grizzly's G7895 Degreaser. To clean thoroughly, some parts may need to be removed. **For optimum performance from your machine, make sure you clean all moving parts or sliding contact surfaces that are coated.** Avoid chlorine-based solvents, such as acetone or brake parts cleaner, as they may damage painted surfaces should they come in contact. Always follow the manufacturer's instructions when using any type of cleaning product.

	<p>⚠ WARNING Gasoline and petroleum products have low flash points and could cause an explosion or fire if used to clean machinery. DO NOT use gasoline or petroleum products to clean the machinery.</p>
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	<p>⚠ CAUTION Many of the solvents commonly used to clean machinery can be toxic when inhaled or ingested. Lack of ventilation while using these solvents could cause serious personal health risks or fire. Take precautions from this hazard by only using cleaning solvents in a well ventilated area.</p>
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Site Considerations

Floor Load

The Model G7942 weighs 43 lbs. and has a base footprint of 12½" W x 8" D. Ensure that the stand or bench you use with the Model G7942 is capable of supporting the machine and the workpiece.

Working Clearances

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your drill press. See **Figure 5** for the minimum working clearances of the Model G7942.

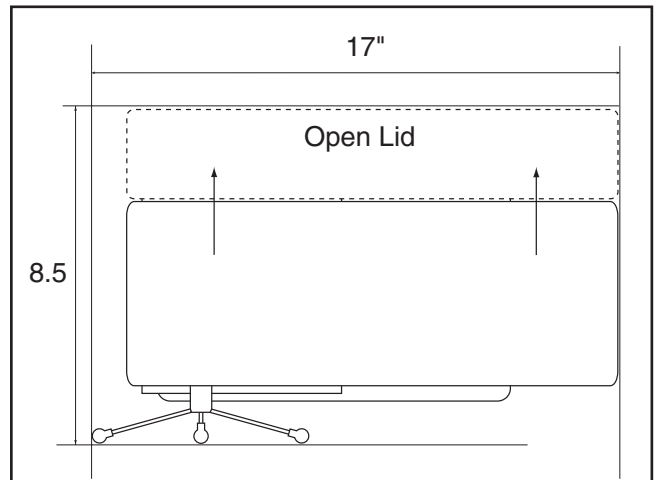


Figure 5. Model G7942 working clearances.

	<p>⚠ CAUTION Unsupervised children and visitors inside your shop could cause serious personal injury to themselves. Lock all entrances to the shop when you are away and DO NOT allow unsupervised children or visitors in your shop at any time!</p>
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Base/Column

Components and Hardware Needed:	Qty
Hex Bolts M8-1.25 x 20	3
Flat Washers 8mm	3
Base	1
Column	1
Lag Bolts M8-1.25 x 80 (Not Included)	2
Carriage Bolts $\frac{5}{16}$ -18 x 4 (Not Included)	2
Flat Washers $\frac{5}{16}$ (Not Included).....	2
Hex Nuts $\frac{5}{16}$ -18 (Not Included)	2

To mount the drill press to a table:

1. Clamp the base on a bench top capable of holding approximately 50 lbs. plus the weight of the workpiece using two clamps, as shown in **Figure 6**. Make sure the surface is flat and stable.

CAUTION

Serious injury could occur if the drill press is not mounted. The drill press could tip over, slide, or move during operation if not mounted to a stable surface.

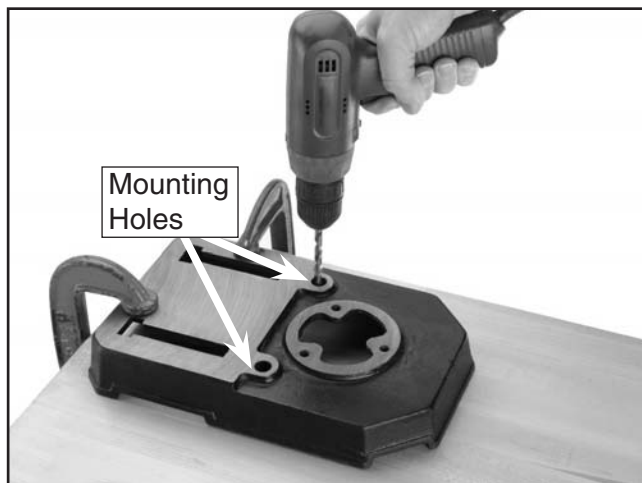


Figure 6. Using holes as a drilling guide.

2. Using two holes in the base as a guide, drill and bolt the base to the bench top using $\frac{5}{16}$ " lag bolts or $\frac{5}{16}$ " carriage bolts, flat washers, and hex nuts.
3. Place the column on the base and line up the mounting holes. Insert an 8mm flat washer and an M8-1.25 x 20 hex bolt in each column support hole and tighten, as shown in **Figure 7**.

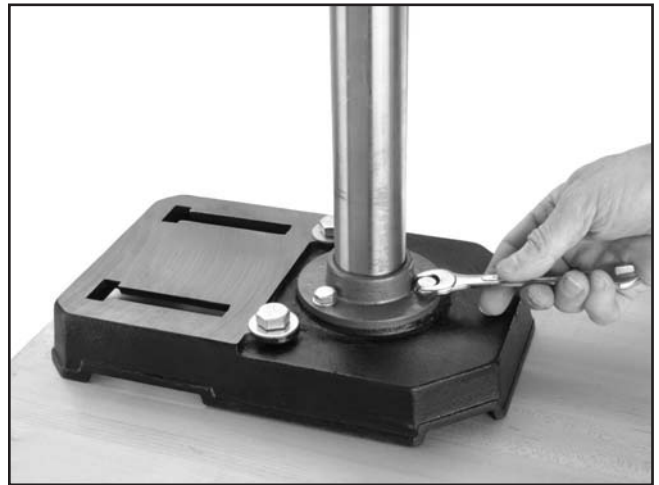


Figure 7. Installing column support.



Table Support

Components and Hardware Needed:	Qty
Support Lock Handle.....	1
Table Support.....	1

To install the table support:

1. Slide the table support assembly (**Figure 8**) down the column until it rests on the base.

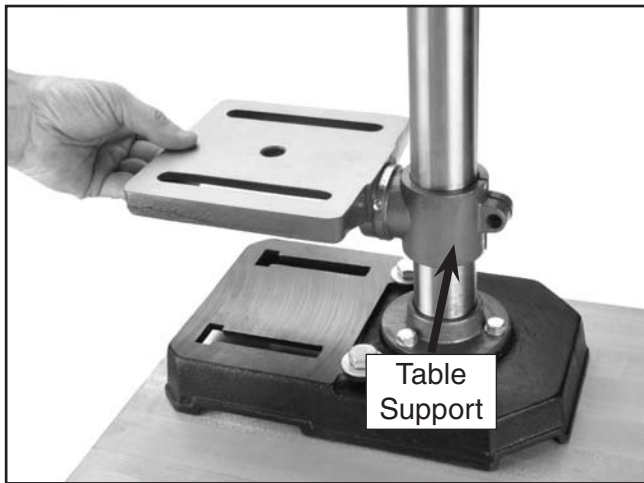


Figure 8. Installing table support.

2. Install the support lock handle on the right side of the table support as shown in **Figure 9**.

Note: If you install the handle onto the left side, it will not lock the table support.

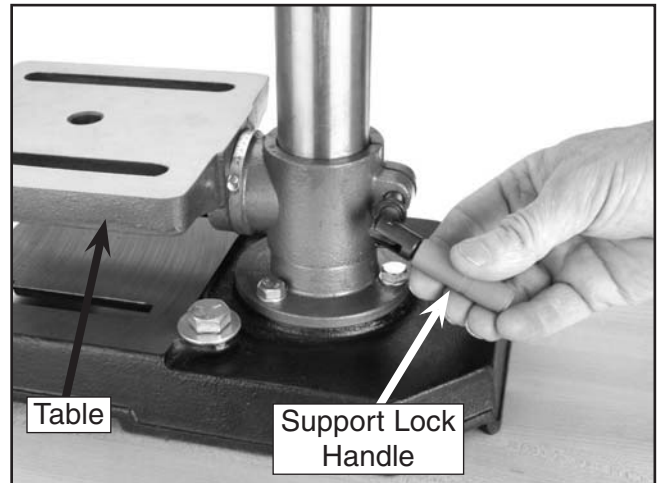


Figure 9. Installing support lock handle.

3. Slide the table up the column to a good working height and hand tighten the lock handle, as shown in **Figure 10**.



Figure 10. Securing table support.



Headstock Assembly

Components and Hardware Needed:	Qty
Headstock Assembly	1
Feed Handles	3

CAUTION

The headstock is heavy. Lift carefully when installing. If necessary, seek assistance before beginning this step.

To install the headstock assembly:

1. Lift the headstock assembly above the column, and slide it down the column as far as it will go.
2. Align the headstock with the base.
3. Tighten the two head set screws (**Figure 11**).



Figure 11. Securing headstock with set screws.

To install the feed handles:

1. Thread the three feed handles (**Figure 12**) into the holes on the feed hub and hand tighten.



Figure 12. Installing feed handle.



Chuck

Components and Hardware Needed: Qty
Chuck 1

To install the chuck:

1. With a clean cloth, remove all grease, coatings, and particles from the chuck and spindle surfaces.

Note: All oil and grease must be removed from chuck and spindle mating surfaces or the chuck will fall off during operation. If this happens, clean the mating surfaces and reinstall the chuck.

2. Rotate the chuck so the jaws are completely recessed.
3. Place a block of wood on the table and set the table just under the chuck. Use the feed handles to press the arbor onto the chuck, as shown in **Figure 13**. Or, tap the chuck with a rubber mallet or plastic-tipped hammer (**Figure 13**).

Note: To avoid damaging the chuck, do not tap it directly with a metal hammer. Also, insert the chuck onto the spindle by hand as far as it will go before tapping it with a rubber mallet.

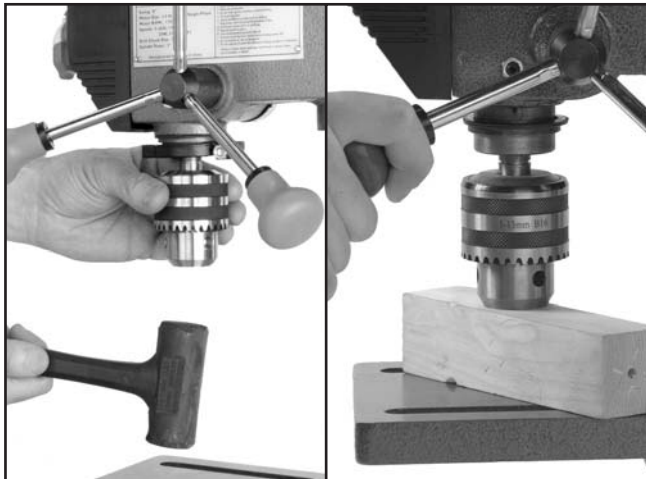


Figure 13. Installing chuck with rubber mallet or block of wood.

Test Run

Once assembly is complete and adjustments are done to your satisfaction, you are ready to test run the machine.

1. Plug the drill into the power supply.
2. Flip the ON/OFF switch **ON**.

Note: Make sure your finger is poised over the switch, just in case there is a problem.

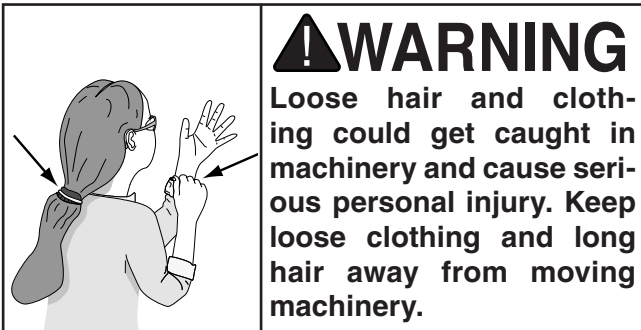
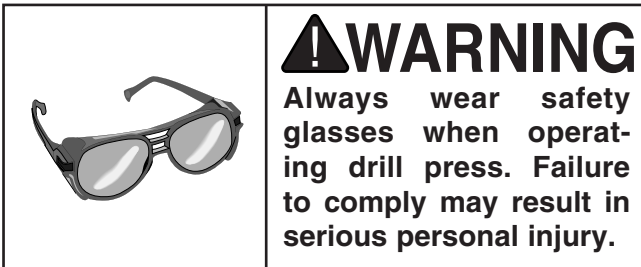
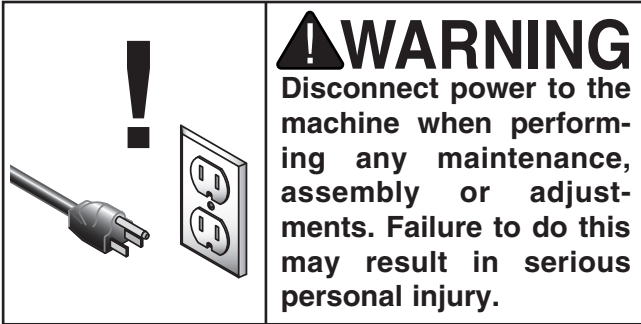
The drill press should run smoothly, with little or no vibration or rubbing noises. Strange or unnatural noises should be investigated and corrected before operating the machine further.

If you cannot easily locate the source of an unusual noise or vibration, contact our Service Department at (570) 546-9663 for help.



SECTION 4: OPERATIONS

Operation Safety



NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.



Adjusting V-Belt

Before operating the Model G7942, you should select a spindle speed and adjust the V-belt tension.

To adjust and tension the belt:

1. Unplug the drill press!
2. Open the belt housing cover.
3. Choose a spindle speed (See Spindle Speeds, Page 18).
4. Turn the belt tension knob counterclockwise to loosen the motor tension spring, as shown in Figure 14.

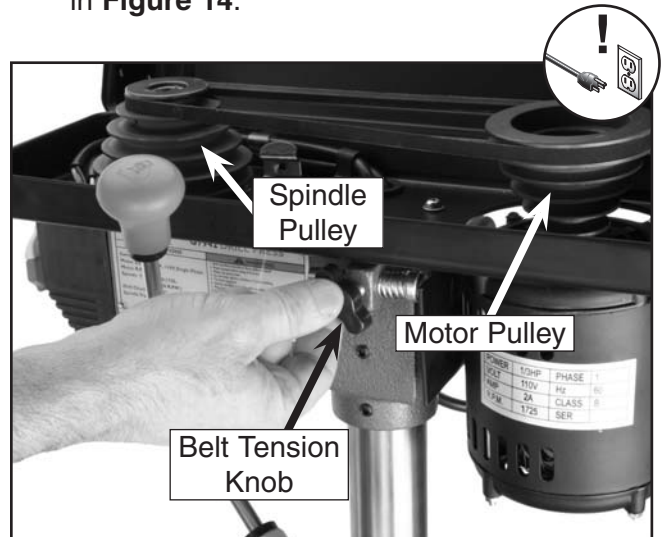


Figure 14. Loosening belt tension knob.

- Pull the motor toward the front of the drill press. This will take tension off of the V-belt.

Note: If the V-belt is tight, have an assistant pull the motor while you change drill speeds.

⚠ CAUTION

Use care when changing V-belts, as they could pinch your fingers, causing an injury.

- Move the V-belt onto the desired sheave on the motor and spindle pulleys (**Figure 15**).

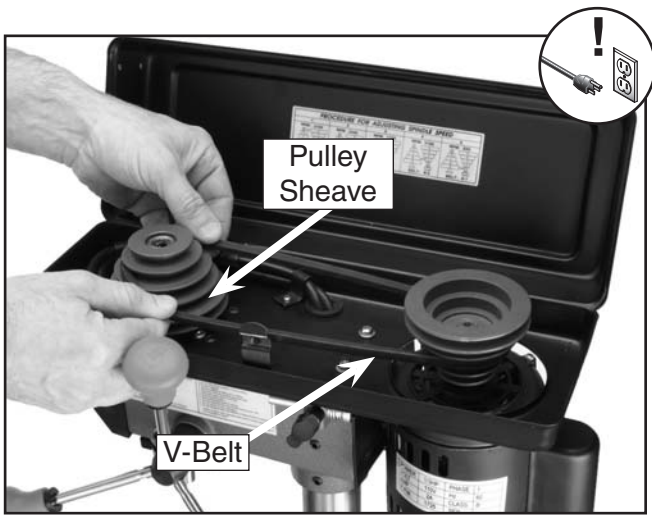


Figure 15. Adjusting belt.

- Push the motor away from the drill press to increase belt tension and tighten the tension knob.

Note: The belt should be tight enough to prevent slippage. Correct tension is set if the belt flexes about 1/2" when thumb pressure is applied at the midpoint of the belt between the pulleys.



Spindle Speeds

This drill has five spindle speeds, from 620 to 3100 RPM. Refer to the speed chart located under the belt guard or **Figure 16**.

The highest speed is obtained when the belt is positioned on the smallest spindle pulley sheave (E) and the largest motor pulley sheave (5), as shown in **Figure 16**.

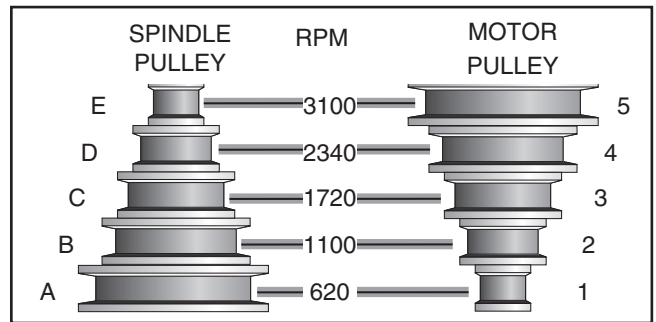


Figure 16. Spindle speed chart.



Adjusting Table

The table height and angle can be adjusted.

To move the table:

- Unplug the drill press!**
- Loosen the support lock handle, move the table to the desired position, and tighten the handle.

To adjust the table angle:

1. Loosen the bevel lock (**Figure 17**).
2. Tilt the table to the desired angle, using the tilt scale as a basic guide.
3. Secure the bevel lock.

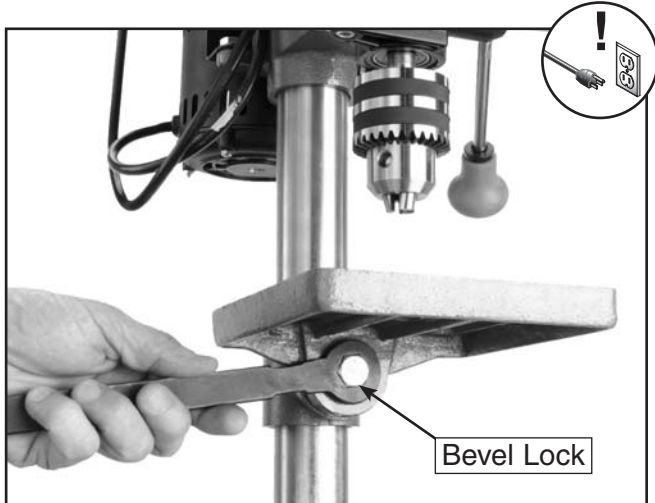


Figure 17. Loosening bevel lock.



Squaring Table to Head

To ensure your bits drill straight through workpieces, square the table to the headstock assembly.

To square the table to the head:

1. **Unplug the drill press!**
2. Place a machinist square on the table and make sure it is snug against the chuck, as shown in **Figure 18**.

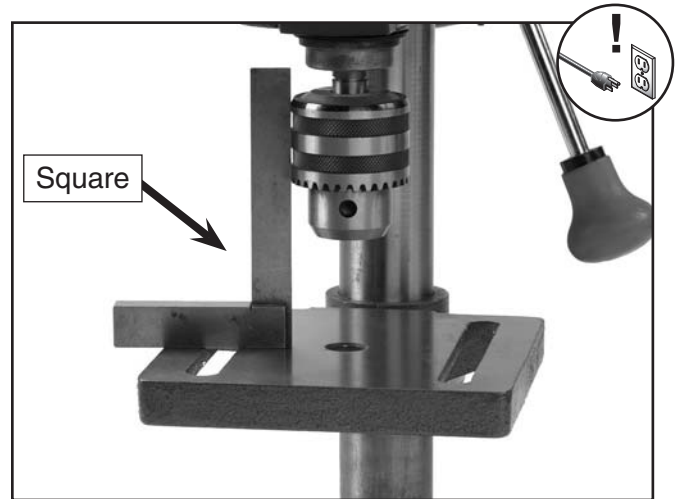


Figure 18. Squaring table to head.

3. Place a white sheet of paper behind the chuck and examine it and the square, looking for places where the square and chuck contact surfaces do not touch.
4. If one or more chuck contact surfaces do not touch the square, as shown in **Figure 19**, loosen the bevel lock (**Figure 17**) and adjust the table angle.

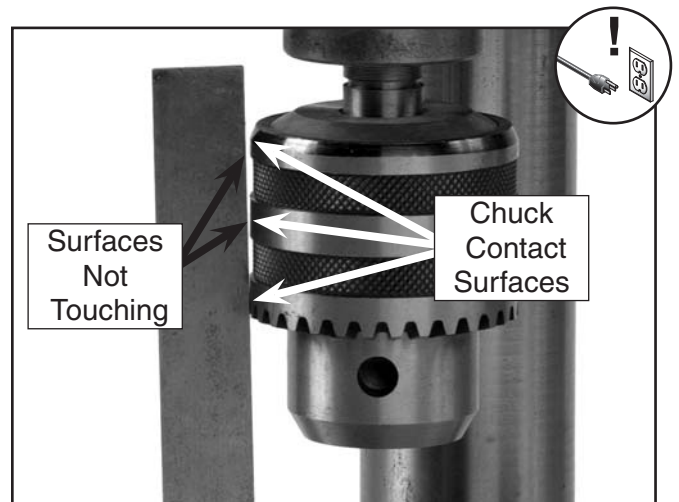


Figure 19. Chuck contact surface and square not touching.

5. Repeat **Steps 3 & 4** until the square touches all the chuck contact surfaces.
6. Tighten the bevel lock.



Adjusting Return Spring

The spindle is equipped with an auto-return mechanism, which has a spring and a notched chrome housing. The spring was properly adjusted at the factory and should not be readjusted unless absolutely necessary. Follow the steps below if the auto-return mechanism needs to be adjusted.

To adjust the return spring:

1. **Unplug the drill press!**

CAUTION

Do not remove housing nuts completely. Removing spring housing will cause spring to rapidly uncoil, likely causing injury.

2. Loosen the two housing nuts (**Figure 20**) about $\frac{1}{4}$ "; do not remove the nuts completely from the threaded shaft.

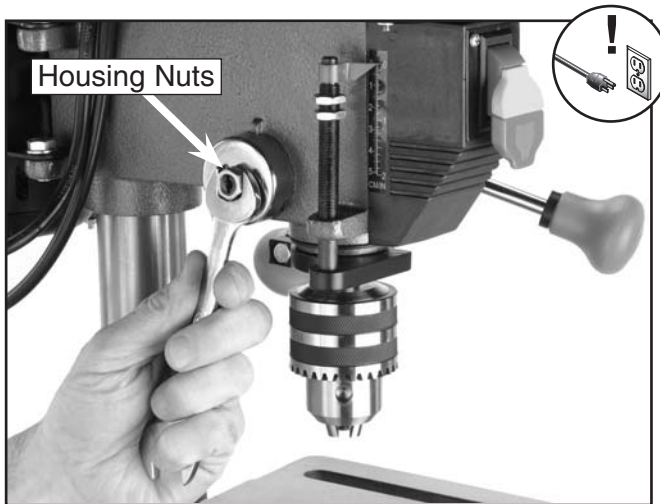


Figure 20. Loosening housing nuts.

3. Pull the spring housing out (**Figure 21**) enough to clear the boss and turn it until the next notch is engaged. To increase tension, turn the spring housing counterclockwise; to decrease tension, turn it clockwise.

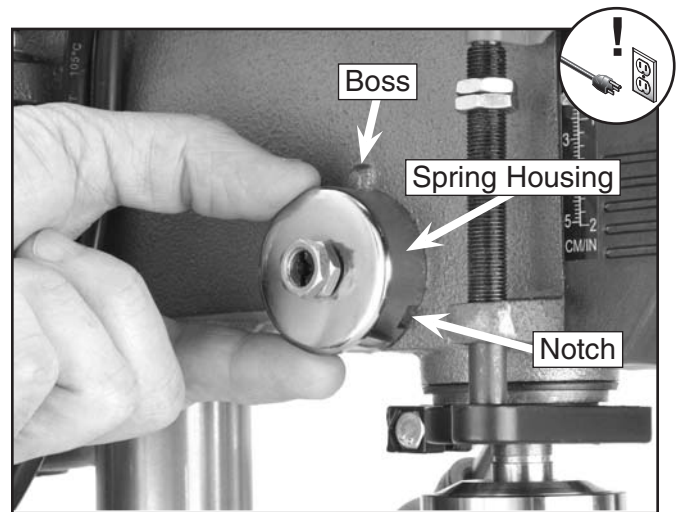


Figure 21. Adjusting spring housing.

4. Tighten the housing nuts so they touch the spring cover.



Drill Bit Changes

To insert a bit, care must be taken to secure the bit firmly in place. When changing bits, proceed as follows:

1. **Unplug the drill press!**
2. Open the chuck wide enough to accept a new bit.
3. Install a drill bit as shown in **Figure 22**. Do not allow the chuck to grab the fluted body of the drill bit. Make sure small drill bits do not get trapped between the jaw edges.



Figure 22. Installing bit.

4. Tighten the chuck with the chuck key.
5. Remove the chuck key and reconnect the power source.
6. To remove a drill bit, disconnect the drill from the power source, loosen the chuck, grasp the bit with your hand and remove it.



Depth Stop

Your drill press comes with a depth stop for use when drilling.

To set the depth stop:

1. **Unplug the drill press!**
2. Mark the side of your workpiece at the proper depth level.
3. Place the workpiece on the table and lower the spindle until the tip of the bit is even with the mark.
4. Tighten the lower stop nut until it comes into contact with the depth stop, as shown in **Figure 23**.

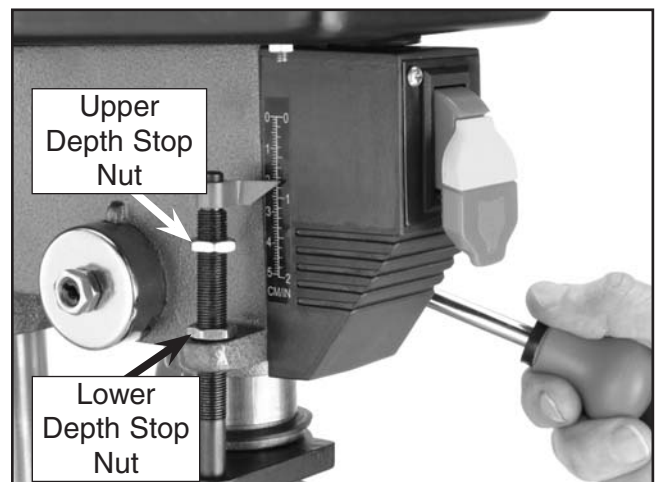


Figure 23. Setting depth stop nuts.

5. Let the spindle return to its original position and tighten the upper stop nut (**Figure 23**) until it is seated against the lower stop nut.
6. Drill a hole into scrap stock before drilling into any workpiece to insure the depth has been set correctly. If needed, repeat **Steps 2-5** to adjust the depth.



SECTION 5: ACCESSORIES

G2500—20-PC Regular Sanding Drum Set

Use on your drill press, lathe, or hand drill. This kit consists of 5 drums in popular 1/2" x 1/2", 3/4" x 1", 1" x 1", 1 1/2" x 1 1/2", and 2" x 1 1/2" sizes. Comes with 3 grits for each drum.



Figure 24. Model G2500 20-PC Sanding Drum Set.

G5749—Drill Press Vise 2 1/2"

If you use a drill press and value your fingers, you need one of these. Made from high-grade cast iron, these hefty horizontal vises offer support and stability, allowing you to keep your hands well away from fast moving bits and cutters.

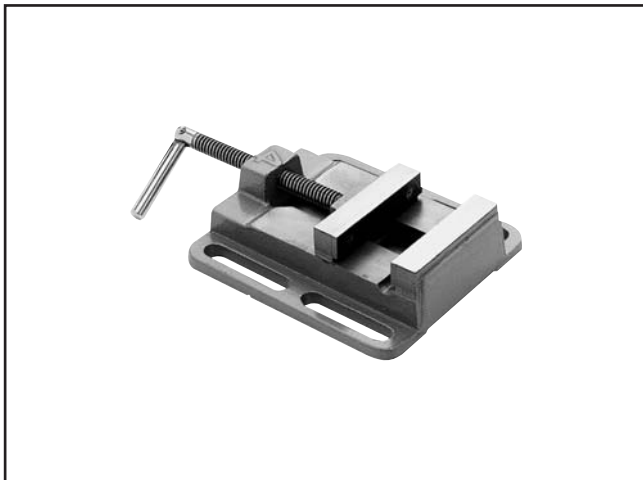


Figure 25. Model G5749 Drill Press Vise 2 1/2".

G8581—1/2" Keyless Drill Chuck, JT33

Industrial grade keyless chucks are excellent for quick bit changes. Knurled grips and exceptional accuracy make these chucks an indispensable part of any shop. Use on drill presses, lathe tailstocks and milling machines. 0-1/2" capacity with a Jacobs Taper #33 in back.



Figure 26. Model G8581 1/2" Keyless Drill Chuck, JT33

G5562—SLIPIT® 1 Qt. Gel

G5563—SLIPIT® 12 oz Spray

G2871—Boeshield® T-9 12 oz Spray

G2870—Boeshield® T-9 4 oz Spray

H3788—G96® Gun Treatment 12 oz Spray

H3789—G96® Gun Treatment 4.5 oz Spray



Figure 27. Recommended products for protecting unpainted cast iron/steel part on machinery.

Call 1-800-523-4777 To Order

- G7984—Face Shield**
- H1298—Dust Sealed Safety Glasses**
- H1300—UV Blocking, Clear Safety Glasses**
- H2347—Uvex® Spitfire Safety Glasses**
- H0736—Shop Fox® Safety Glasses**

Safety Glasses are essential to every shop. If you already have a pair, buy extras for visitors or employees. You can't be too careful when it comes to shop safety!



Figure 28. Our most popular safety glasses.

- H2499—Small Half-Mask Respirator**
- H3631—Medium Half-Mask Respirator**
- H3632—Large Half-Mask Respirator**
- H3635—Disposable Cartridge Filter Pair P100**

Wood dust is now considered a known carcinogen and has been linked to nasal cancer and severe respiratory illnesses. If you work around dust everyday, a half-mask respirator can be a lifesaver. Also compatible with safety glasses!



Figure 29. Half-mask respirator and disposable cartridge filters.

- G8865—Cobalt Alloy Drill Bits 13-PC. Set**
- G8866—Steelex® Cobalt Alloy Drill Bits 21-PC Set**
- G8867—Steelex® Cobalt Alloy Drill Bits 29-PC Set**

Cobalt Alloy bits will retain their edge sharpness longer than normal HSS bits, resulting in a significant saving of time and money in the workshop. Includes a heavy-gauge steel index case for storing. G8856: 1/16" -1/4"; G8866: 1/16"- 3/8"; G8867: 1/16"-1/2".

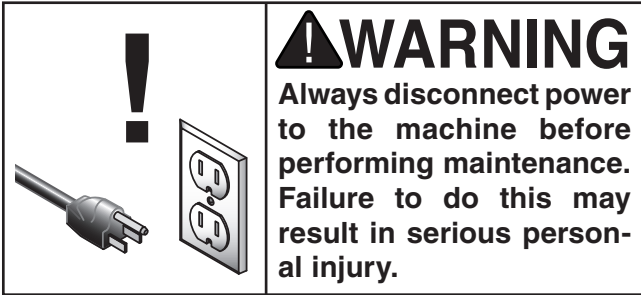


Figure 30. Model G8865 13-PC Alloy Drill Bit Set.

Call 1-800-523-4777 To Order



SECTION 6: MAINTENANCE



General

Regular periodic maintenance on your Model G7942 will ensure its optimum performance. Make a habit of inspecting your machine each time you use it. Check for the following conditions and repair or replace when necessary:

1. Loose mounting bolts.
2. Worn switch.
3. Worn or damaged cords and plugs.
4. Damaged V-belt.
5. Any other condition that could hamper the safe operation of this machine.



Cleaning

Cleaning the Model G7942 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.



Lubrication

Since all bearings are shielded and permanently lubricated, simply leave them alone until they need to be replaced. Do not lubricate them.

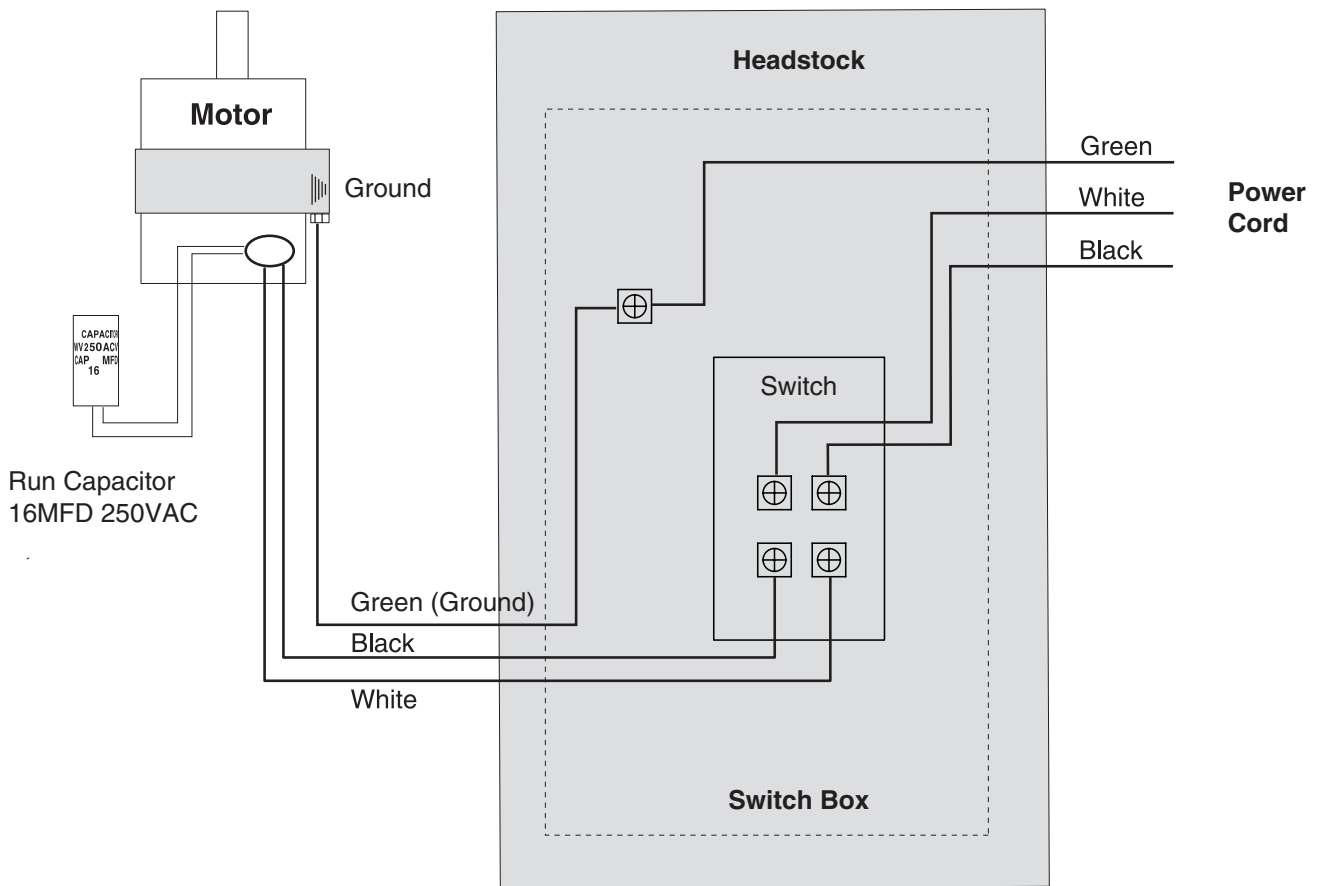


V-Belt

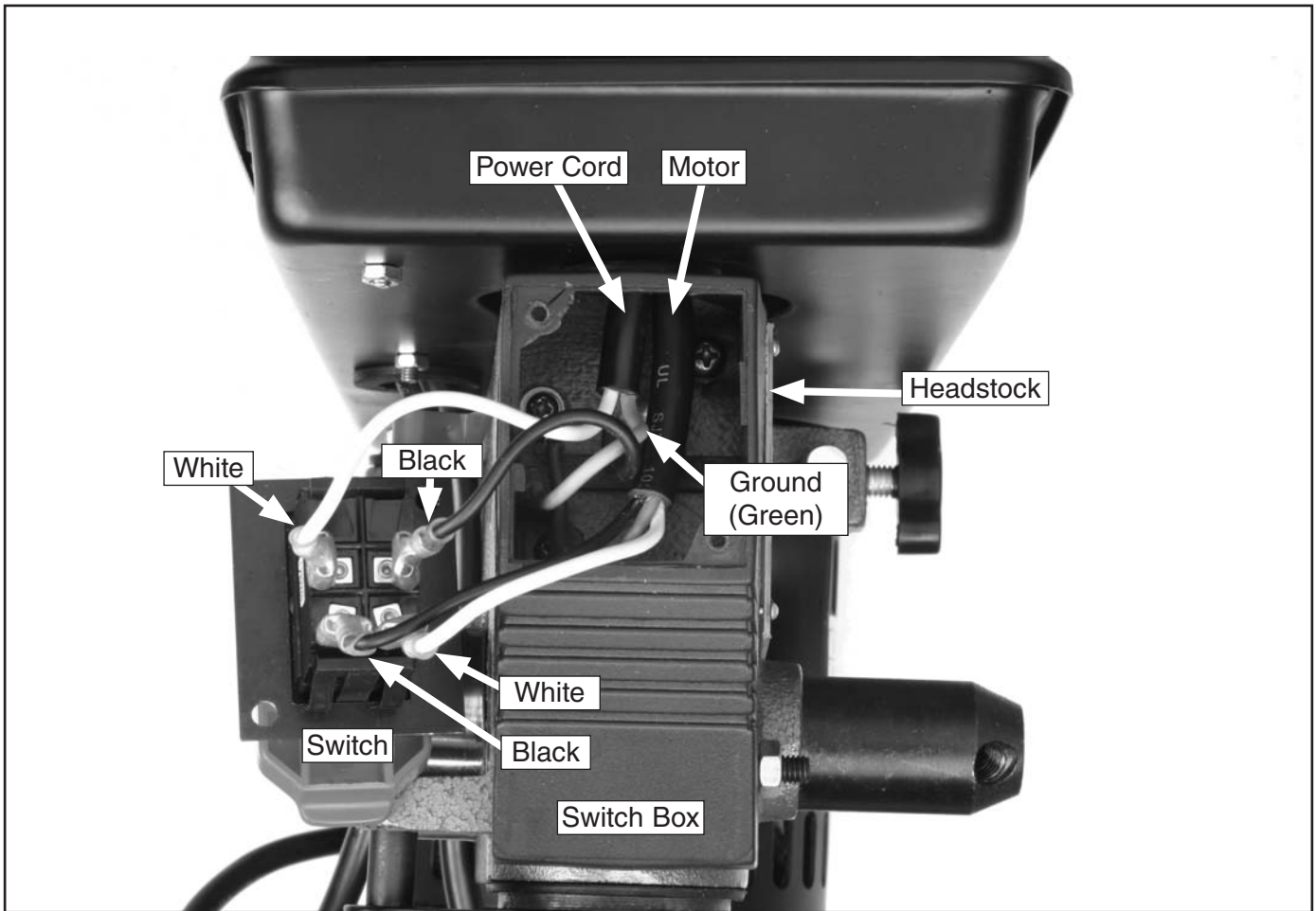
Inspect regularly for tension and wear.



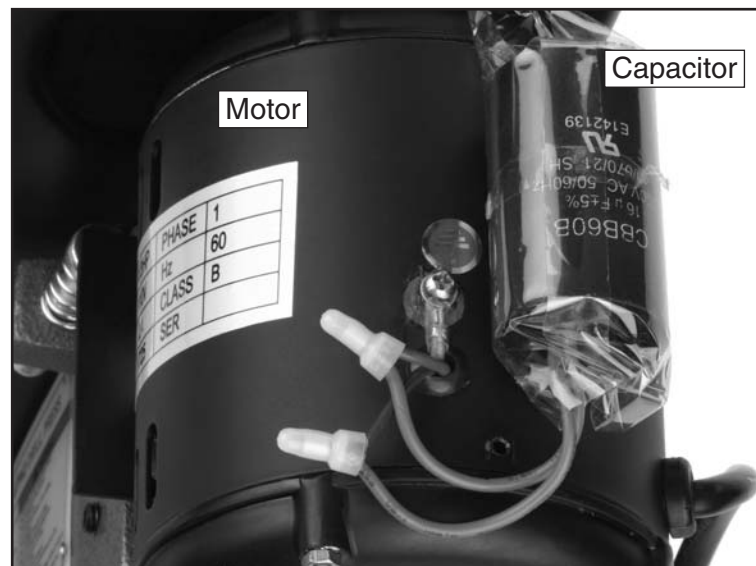
G7942 Wiring Diagram



Electrical Components

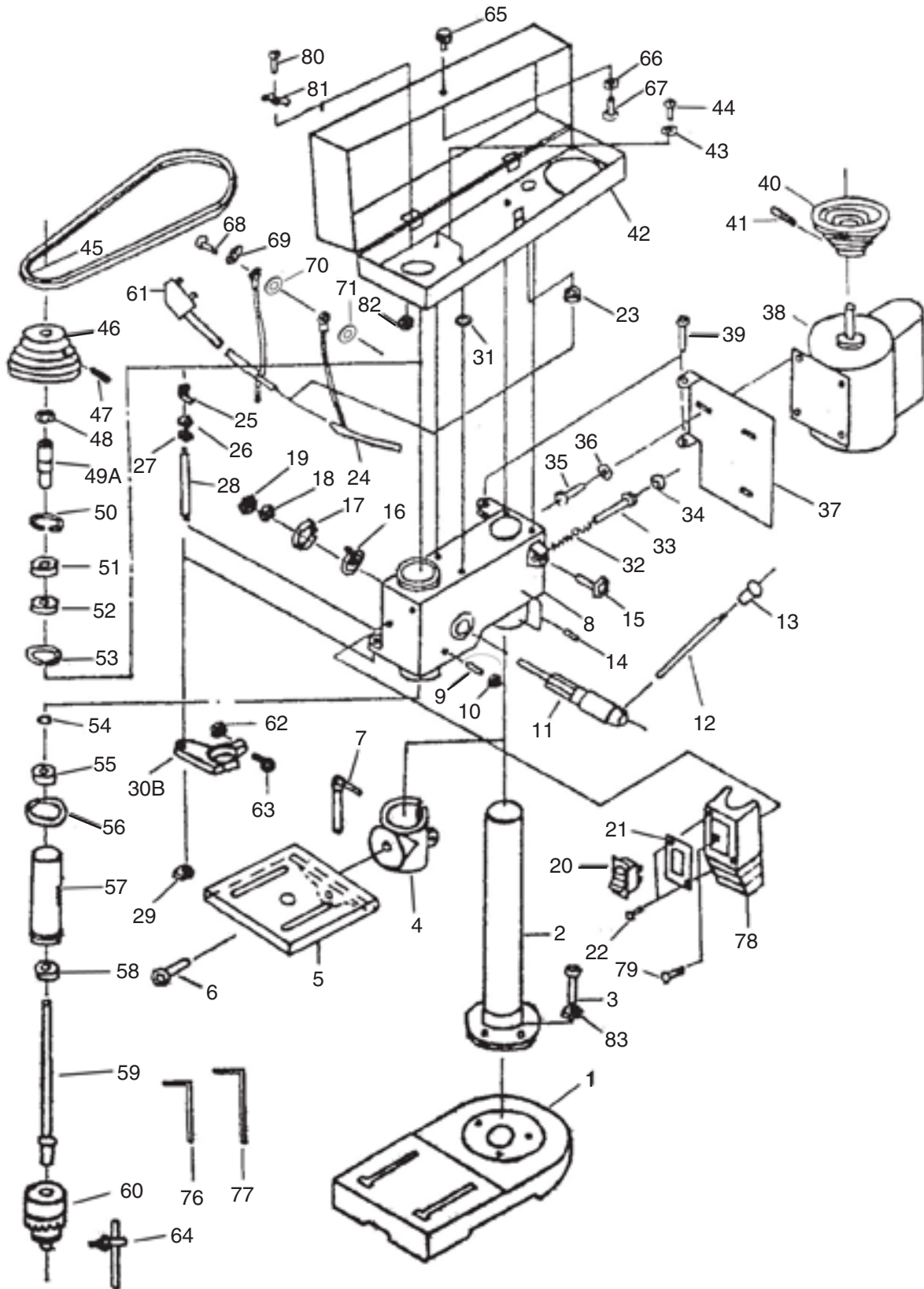


Switch Box Wiring



Motor Wiring

G7942 Parts Breakdown



G7942 Parts List

REF	PART #	DESCRIPTION
1	P7942001	BASE
2	P7942002	COLUMN
3	PB09M	HEX BOLT M8-1.25 X 20
4	P7942004	CLAMPING SLEEVE
5	P7942005	TABLE
6	PB25M	HEX BOLT M12-1.75 X 25
7	P7942007	CLAMPING LEVER
8	P7942008	HEAD CASTING
9	PSS58M	SET SCREW M6-1 X 18
10	PN01M	HEX NUT M6-1
11	P7942011	FEED SHAFT
12	P7942012	HANDLE BAR
13	P7945029	KNOB M10-1.5
14	PSS20M	SET SCREW M8-1.25 X 8
15	P7942015	KNOB M8-1.25
16	P7942016	SPRING
17	P7942017	SPRING CAP
18	PN14M	HEX NUT M10-1
19	PN14M	HEX NUT M10-1
20	P7942020	PADDLE SWITCH 110/220V WITH KEY
21	P7942021	CLAMPING SHEET
22	PS07M	PHLP HD SCR M4-.7 X 8
23	P7942023	WIRE BUSHING
24	P7942024	POWER CORD 16G 3W 24"L
25	P7942025	POINTER
26	PN14M	HEX NUT M10-1
27	PN14M	HEX NUT M10-1
28	P7942028	DEPTH STOP ROD
29	PN01M	HEX NUT M6-1
30B	P7942030B	DEPTH STOP CLAMP V2.03.05
31	P7942031	RUBBER WASHER 7MM
32	P7942032	COMPRESSION SPRING
33	P7942033	SLIDE BAR
34	P7942034	RUBBER PAD
35	PB04M	HEX BOLT M6-1 X 10
36	PW03M	FLAT WASHER 6MM
37	P7942037	MOTOR BASE
38	P7942038	MOTOR
39	PB03M	HEX BOLT M8-1.25 X 16
40	P7942040	MOTOR PULLEY

REF	PART #	DESCRIPTION
41	PSS01M	SET SCREW M6-1 X 10
42	P7942042	PULLEY COVER
43	PW03M	FLAT WASHER 6MM
44	PS68M	PHLP HD SCR M6-1 X 10
45	PVM26	V-BELT M-26 3L260
46	P7942046	SPINDLE PULLEY
47	PSS01M	SET SCREW M6-1 X 10
48	PR10M	EXT RETAINING RING 22MM
49A	P7942049A	INTERNAL SPLINE SLEEVE V2.08.05
50	PR23M	INT RETAINING RING 40MM
51	P6203ZZ	BALL BEARING 6203ZZ
52	P6203ZZ	BALL BEARING 6203ZZ
53	PR23M	INT RETAINING RING 40MM
54	PR03M	EXT RETAINING RING 12MM
55	P6201ZZ	BALL BEARING 6201ZZ
56	P7942056	COLLAR
57	P7942057	SPINDLE SLEEVE
58	P6202ZZ	BALL BEARING 6202ZZ
59	P7942059	SPINDLE
60	P7942060	CHUCK 1-13MM JT33
61	P7942061	POWER CORD 16G 3W 73"L
62	PN01M	HEX NUT M6-1
63	PB10M	HEX BOLT M6-1 X 25
64	P7942064	DRILL CHUCK KEY V2.08.06
65	P7942065	HANDLE
66	PW02M	FLAT WASHER 5MM
67	PS08M	PHLP HD SCR M5-.8 X 12
68	PS07M	PHLP HD SCR M4-.7 X 8
69	P7942069	GROUNDING SYMBOL
70	PW05M	FLAT WASHER 4MM
71	PW05M	FLAT WASHER 4MM
76	PAW03M	HEX WRENCH 3MM
77	PAW04M	HEX WRENCH 4MM
78	P7942078	SWITCH BOX
79	PHTEK5M	TAP SCREW M4 X 12
80	PS07M	PHLP HD SCR M4-.7 X 8
81	P7942081	WIRE CLAMPS
82	PN04M	HEX NUT M4-.7
83	PW01M	FLAT WASHER 8MM

WARRANTY AND RETURNS

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

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

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

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

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

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



WARRANTY CARD

Name _____
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 Model # _____ Order # _____ Serial # _____

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

1. How did you learn about us?

Advertisement Friend Catalog
 Card Deck Website Other:

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

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

3. What is your annual household income?

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

4. What is your age group?

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

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

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

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

0-2 3-5 6-9 10+

7. Do you think your machine represents a good value?

Yes No

8. Would you recommend Grizzly Industrial to a friend?

Yes No

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

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

10. Comments: _____

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