

## 34" Floor Radial Drill Press



# Operator's Manual

Record the serial number and date of purchase in your manual for future reference.

The serial number can be found on the specification label on the rear of your machine.

Serial Number: \_\_\_\_\_ Date of purchase: \_\_\_\_\_

For technical support or parts questions, email [techsupport@rikontools.com](mailto:techsupport@rikontools.com) or call toll free at (877)884-5167

# SAFETY INSTRUCTIONS

**IMPORTANT!** Safety is the single most important consideration in the operation of this equipment. **The following instructions must be followed at all times.**

There are certain applications for which this tool was designed. We strongly recommend that this tool not be modified and/or used for any other application other than that for which it was designed. If you have any questions about its application, do not use the tool until you have contacted us and we have advised you.

## General Safety Warnings

**KNOW YOUR POWER TOOL.** Read the owner's manual carefully. Learn the tool's applications, work capabilities, and its specific potential hazards.

### **⚠ DANGER**

#### **ALWAYS GROUND ALL TOOLS.**



If your tool is equipped with a three-pronged plug, you must plug it into a three-hole electric receptacle. If you use an adapter to accommodate a two-pronged receptacle, you must attach the adapter plug to a known ground. Never remove the third prong of the plug.

#### **ALWAYS AVOID DANGEROUS ENVIRONMENTS.**

Never use power tools in damp or wet locations. Keep your work area well lighted and clear of clutter.

### **⚠ DANGER**

#### **ALWAYS REMOVE THE ADJUSTING KEYS AND WRENCHES FROM TOOLS AFTER USE.**



Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.

**ALWAYS KEEP YOUR WORK AREA CLEAN.** Cluttered areas and benches invite accidents.

### **⚠ DANGER**

#### **ALWAYS KEEP VISITORS AWAY FROM RUNNING MACHINES.**



All visitors should be kept a safe distance from the work area.

#### **ALWAYS MAKE THE WORKSHOP CHILDPROOF.**

Childproof with padlocks, master switches, or by removing starter keys.

### **⚠ DANGER**



**NEVER OPERATE A TOOL WHILE UNDER THE INFLUENCE OF DRUGS, MEDICATION, OR ALCOHOL.**

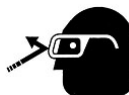
### **⚠ DANGER**



#### **ALWAYS WEAR PROPER APPAREL.**

Never wear loose clothing or jewelry that might get caught in moving parts. Rubber-soled footwear is recommended for the best footing.

### **⚠ DANGER**



#### **ALWAYS USE SAFETY GLASSES AND WEAR HEARING PROTECTION.**

Also use a face or dust mask if the cutting operation is dusty.

### **⚠ DANGER**



#### **NEVER OVERREACH.**

Keep your proper footing and balance at all times.

### **⚠ DANGER**



#### **NEVER STAND ON TOOLS.**

Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.

**▲ DANGER****ALWAYS DISCONNECT TOOLS.**

Disconnect tools before servicing and when changing accessories such as blades, bits, and cutters.

**ALWAYS AVOID ACCIDENTAL STARTING.**

Make sure switch is in "OFF" position before plugging in cord.

**NEVER LEAVE TOOLS RUNNING UNATTENDED.****▲ DANGER****ALWAYS CHECK FOR DAMAGED PARTS.**

Before initial or continual use of the tool, a guard or other part that is damaged should be checked to assure that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other damaged parts should immediately be properly repaired or replaced.



## Special Safety Rules For Drill Press

This machine is intended for the drilling of wood, composite materials, plastics, ferrous and non-ferrous metals. The permissible workpiece dimensions must be observed (see Technical Specification). Any other use not as specified, including modification of the machine or use of parts not tested and approved by the equipment manufacturer, can cause unforeseen damage and invalidate the warranty.

**ATTENTION:** Use of this drill press still presents risks that cannot be eliminated by the manufacturer. Therefore, the user must be aware that wood working machines are dangerous if not used with care and all safety precautions are adhered to.

1. Do Not operate the Drill Press until it is assembled and you have read the instructions.
2. Do Not operate the Drill Press unless you are familiar with its safe operation. If you are not familiar with the operation of a Drill Press seek advice from your supervisor, instructor or other qualified individual.
3. If you are using a bench top Drill Press, it must be securely fastened to a stand or bench.
4. If you are operating a floor Drill Press it must be securely fastened to the floor.
5. Always clear the table and work area before turning on the Drill Press.
6. Always use drill bits, cutting tools and accessories with a 1/2" shank or less.
7. Never place hands near the drill bit, cutting tool or accessory.
8. Never wear loose clothing, gloves or ties while operating the Drill Press.
9. Always have a firm footing while operating the Drill Press.
10. Always keep work surface and work areas clear of debris.
11. Never attempt to do set-up work, assembly or layout work on the Drill Press while it is in operation.
12. Never start the Drill Press with the drill bit, cutting tool or accessory in contact with the work-piece.
13. Always lock all table, column and head locks before turning on the Drill Press.
14. Never operate the Drill Press with a damaged drill bit, cutting tool or accessory.
15. Always check the drill bit, cutting tool or accessory in tight in the chuck.
16. Never operate the Drill Press with the chuck key in the chuck.
17. Always adjust the depth stop to avoid drilling into the table surface.
18. Never drill material unless it is properly supported. Non flat work-pieces require additional support.
19. Always clamp the work piece to the table.
20. Always support large work-pieces at the same height as the table.
21. Never remove the work-piece or clear the table until the Drill Press comes to a complete stop.
22. Always wear a face shield and safety glasses while operating the Drill Press.
23. Never operate the Drill Press with missing, damaged, worn, loose or defective parts.
24. Never adjust, change speeds or perform maintenance on the Drill Press while it is operating.
25. Always clean the work surface and work area when finished operating the Drill Press.
26. Always disconnect the power when adjusting or performing maintenance on the Drill Press.
27. Always disconnect the power when finished using the Drill Press to prevent accidental operation.

**SAVE THESE INSTRUCTIONS.**

**Refer to them often.**

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## SPECIFICATIONS

Type .....	Floor Model 30-251
Swing .....	17"
Motor .....	1/3 HP, TEFC
Volts, Hertz .....	120 V, 60 Hz
Amps, Phase .....	5.5 A, 1 Ph
Motor Speed (No Load) .....	1,720 RPM
Speeds .....	5
Speed Range .....	620 - 3,100 RPM
Chuck Size .....	5/8"
Chuck Taper .....	JT3
Drilling Capacity .....	5/8"
Spindle Travel .....	3-1/8"
Spindle Taper .....	MT2
Head Rotates .....	360°
Head Tilts .....	45° Right, 90° Left
Quill Diameter .....	2-3/16"
Table Size .....	11-13/16" Round
Table Tilts (Degrees) .....	45°
Table Rotates (Degrees) .....	360°
Maximum Chuck to Table .....	28-3/8"
Maximum Chuck to Base .....	47-3/4"
Column Diameter .....	2-7/8"
Overall Height .....	64"
Base Size .....	18" x 10-5/8"

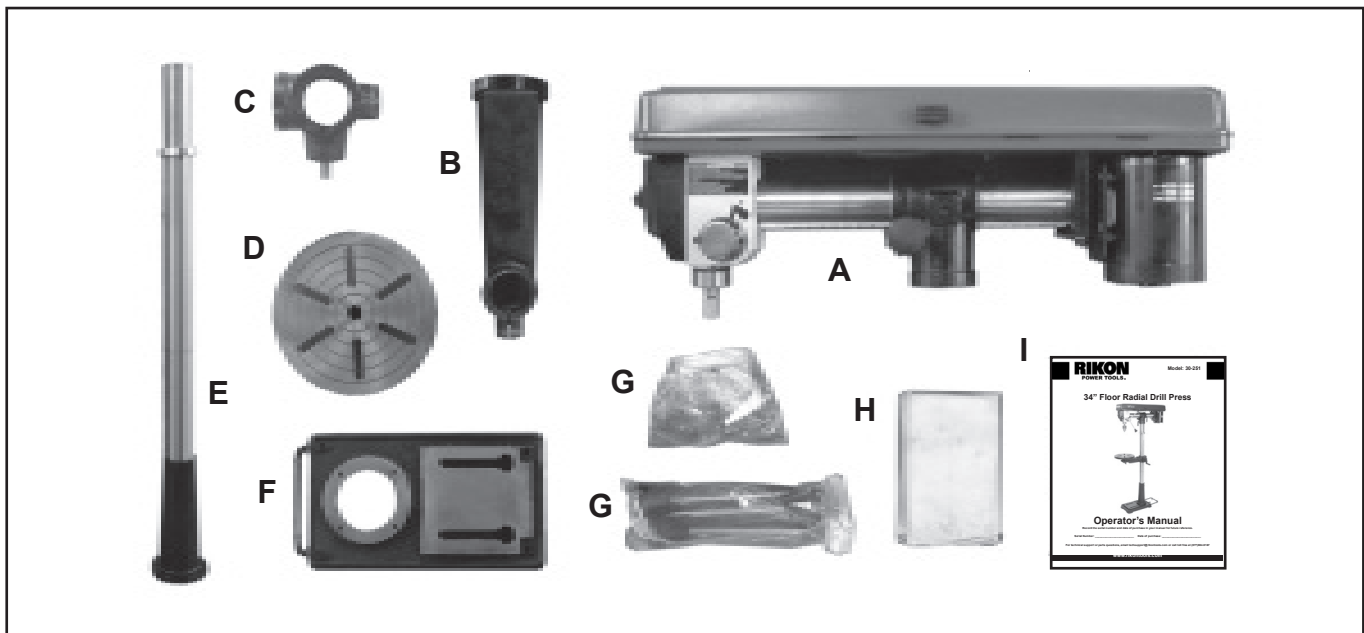
**NOTE:** The specifications, photographs, drawings and information in this manual represent the current model when the manual was prepared. Changes and improvements may be made at any time, with no obligation on the part of Rikon Power Tools, Inc. to modify previously delivered units. Reasonable care has been taken to ensure that the information in this manual is correct, to provide you with the guidelines for the proper safety, assembly and operation of this machine.

# CONTENTS OF PACKAGE

Model #30-251 34" Floor Radial Drill Press is shipped complete in one box.

## Unpacking and Clean-up

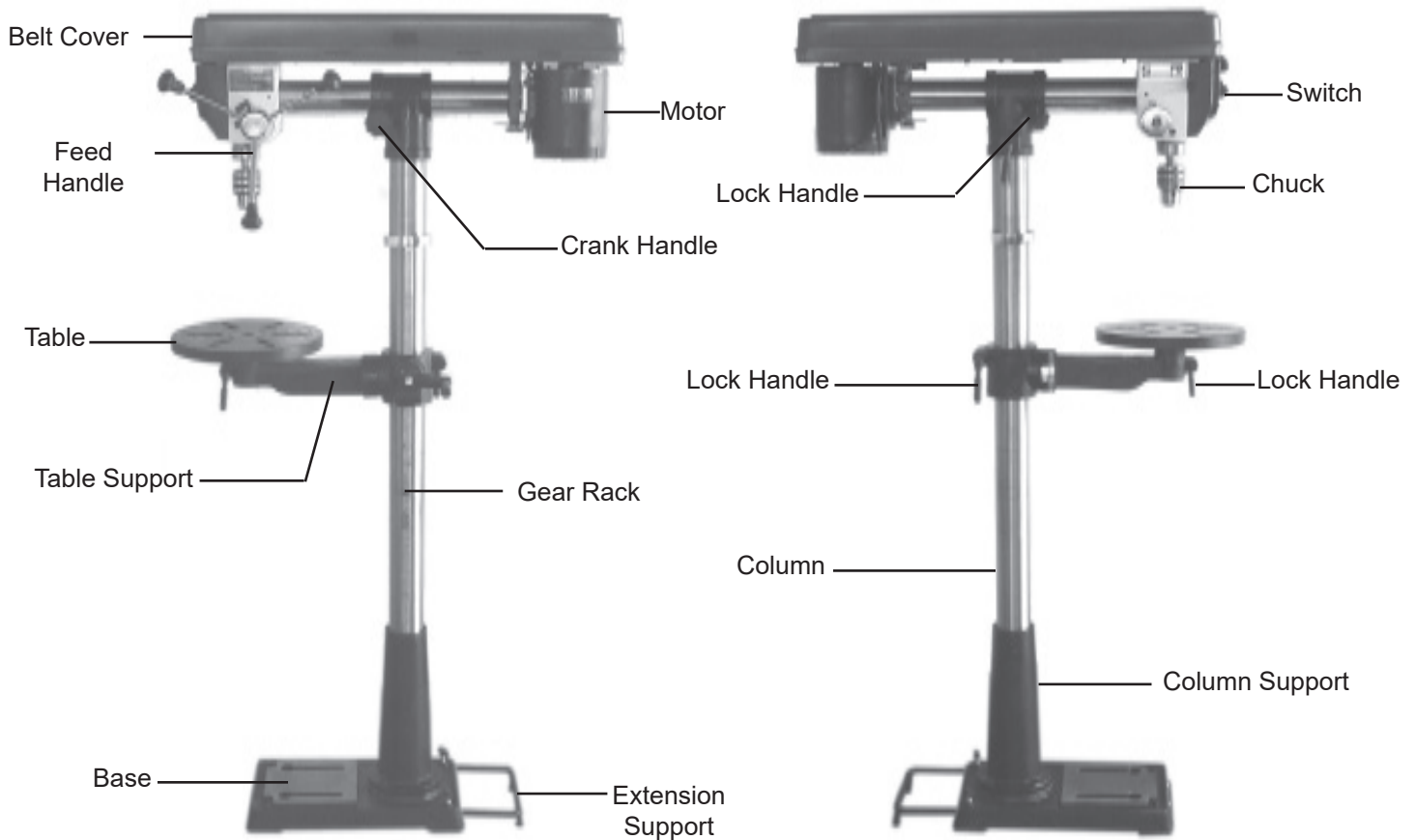
1. Carefully remove all contents from the shipping carton. With the help of another person, carefully lift the Drill Press head out of the box. Compare the contents with the list of contents to make sure that all of the items are accounted for, before discarding any packing material. Place parts on a protected surface for easy identification and assembly. If any parts are missing or broken, please call RIKON Customer Service (877-884-5167) as soon as possible for replacements. **DO NOT** turn your machine ON if any of these items are missing. You may cause injury to yourself or damage to the machine.
2. Report any shipping damage to your local distributor. Take photographs for any possible insurance claims.
3. Clean all rust protected surfaces with ordinary house hold type grease or spot remover. Do not use; gasoline, paint thinner, mineral spirits, etc. These may damage painted surfaces.
4. Apply a coat of paste wax to the table and column to prevent rust. Wipe all parts thoroughly with a clean dry cloth.
5. Set packing material and shipping carton aside. Do not discard until the machine has been set up and is running properly.



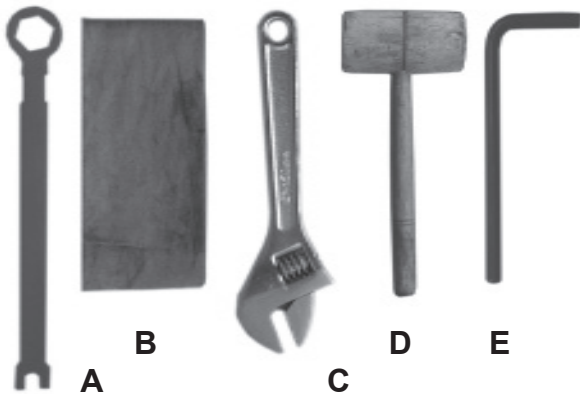
**TABLE OF LOOSE PARTS**

Item	Part Name	Qty	Item	Part Name	Qty
A	Drill Press Head	1	F	Base	1
B	Table Arm	1	G	Hardware Bags	2
C	Table Support	1	H	Chuck & Key	1
D	Table	1	I	Owner's Manual	1
E	Column Assembly	1			

## GETTING TO KNOW YOUR MACHINE




## TOOLS REQUIRED FOR ASSEMBLY



- A. Table Bolt Hex Wrench (provided)
- B. Household grease remover.
- C. Adjustable wrench or open end wrench.
- D. Rubber mallet or block of wood and hammer.
- E. Allen wrenches (provided).

### California Proposition 65 Warning

 **WARNING:** Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection.

For more information go to [www.P65Warnings.ca.gov/wood](http://www.P65Warnings.ca.gov/wood).

# INSTALLATION

## MOVING & INSTALLING THE DRILL PRESS

**CAUTION** When moving the assembled Drill Press, at least two people are needed. The machine is extremely heavy, and top heavy. Tilt the drill press backwards so that one person can hold the head section. Then the base can be lifted by the second person, and the machine moved to the desired new location.

**DO NOT** move or carry the Drill Press with the work table, chuck or operating handles, as this may damage the machine.

1. Position the machine on a solid, level foundation that is located in an area that has ample space in front and to both sides of the drill press for the moving of lumber and projects to be drilled.

2. Align the machine so that during use, any kickback will not face aisles, doorways, or other work areas that bystanders may be in. Do not locate or use the machine in damp or wet conditions.

3. If possible, secure the machine to the floor with lag screws or other fasteners (not supplied). This will ensure the stability of the machine and reduce any possible vibration during use. If this is not possible, the base can be bolted to a larger piece of plywood to help stabilize the machine. **DO NOT** use a mobile base with this machine.

4. For best power and safety, the Drill Press should be directly plugged into a dedicated grounded electrical outlet that is within the supplied cord length of the machine. The use of an extension cord is not recommended.

## ASSEMBLY

**WARNING** THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ASSEMBLY IS COMPLETE.

### BASE AND COLUMN ASSEMBLY

1. Place the base (A-Fig. 1) on a level floor where the machine will be used.

2. Attach the column (B-Fig. 1) to the base (A-Fig. 1) using four M8x20 hex bolts. Tighten all four bolts.

3. Using an Allen wrench (C-Fig. 2), make sure that the gear rack (E-Fig. 2) is secure in the column collar (D-Fig. 2).

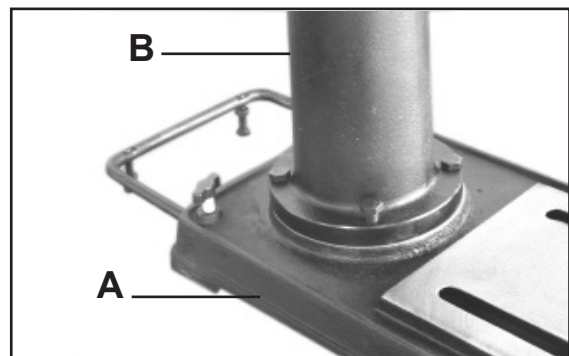


Figure 1

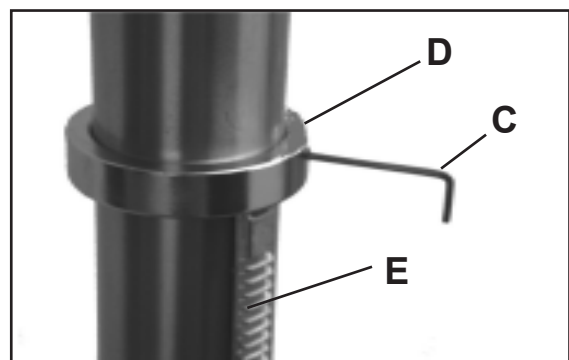


Figure 2

# ASSEMBLY

**⚠ WARNING** THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ASSEMBLY IS COMPLETE.

## HEAD ASSEMBLY

1. Place the locking shoe (part #15B) in the recessed pocket of the head. (Fig. 3)

**⚠ CAUTION** Assistance is needed for this next step.

2. Place the drill press head (A-Fig. 4) onto the column (B-Fig. 4) as far as it will go.
3. Attach the 2 clamping levers (part #30B) on the drill press column guide (part #18B). (Fig. 5)

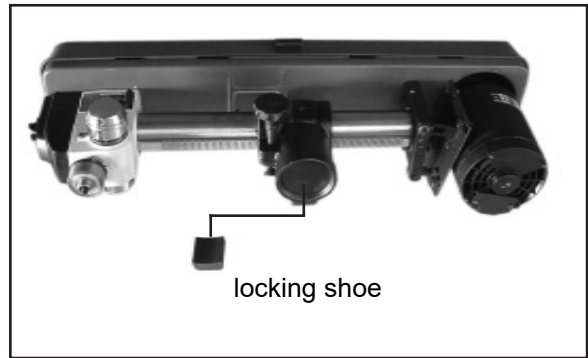


Figure 3

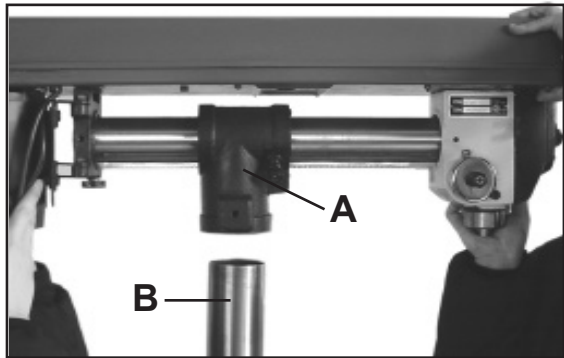


Figure 4

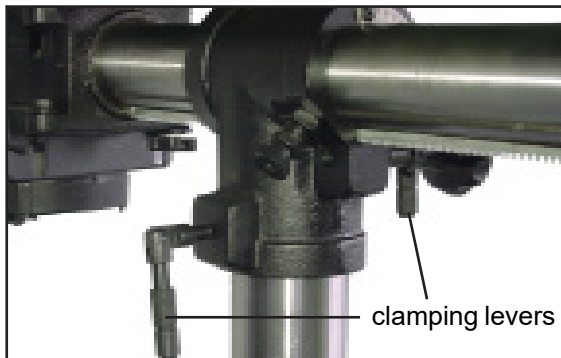


Figure 5

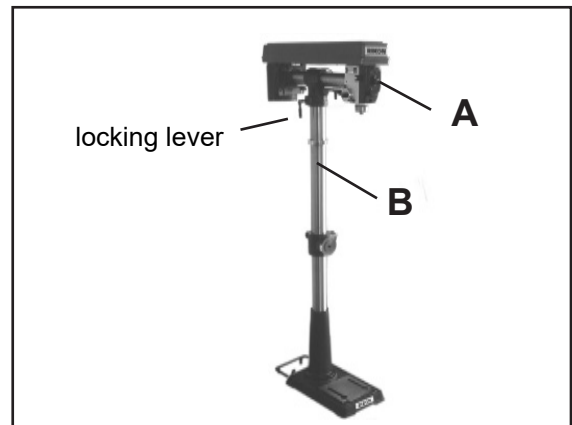


Figure 6

4. Align the drill press head (A-Fig. 6) with the base of the drill press.
5. Tighten the drill press head (A-Fig. 6) to the column (B-Fig. 8) by tightening the locking lever (part# 30B) on the left side of the guide column (part# 18B).
6. Attach the three feed handles (part# 35B) to the hub (part# 36B). Fig. 7



Figure 7



# ASSEMBLY

## INSTALLING & REMOVING THE CHUCK AND ARBOR

**IMPORTANT!** It is important that the tapered hole in the chuck, tapered hole in the spindle and both tapered ends of the arbor are free of any grease, oil, lacquer or rust protection.

These tapered surfaces must be absolutely clean for a precision fitting of the parts, so slipping of the chuck during use does not occur unless there is extreme rotational pressure during use. This is a safety feature of this type of friction fit joint.

### INSTALLING THE CHUCK AND ARBOR

1. Open the chuck jaws as wide as possible to prevent any damage. (Fig.8)
2. Insert the arbor (A-Fig.9) into the chuck (B-Fig.9) as shown.
3. Carefully insert the chuck and arbor assembly into the spindle, making sure to align the flat part of the arbor with the spindle. (Fig. 10)
4. Using a rubber mallet, or hammer with a block of wood protecting the chuck, tap the chuck with its arbor into the drill press spindle. This will securely seat the chuck in place for drilling. (Fig. 11)
5. Close the chuck jaws with the chuck key provided.

**CAUTION** NEVER HIT THE CHUCK WITH A METAL HAMMER. This could damage the chuck assembly, arbor or drill press spindle.

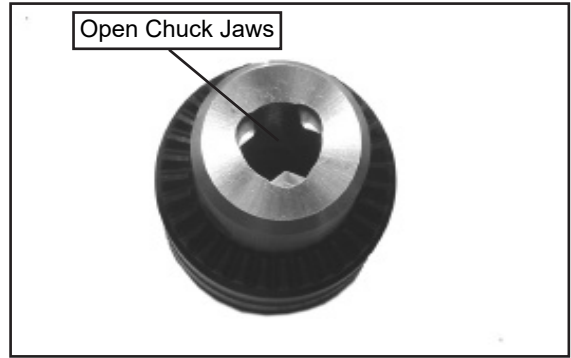


Figure 8

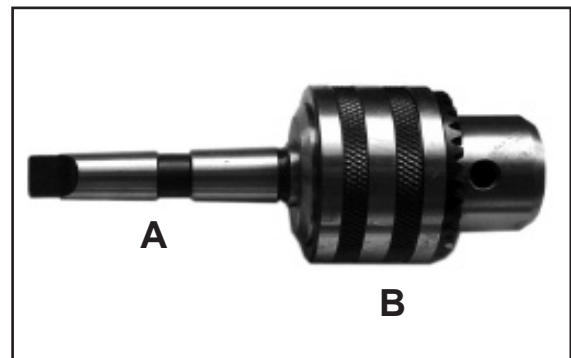


Figure 9

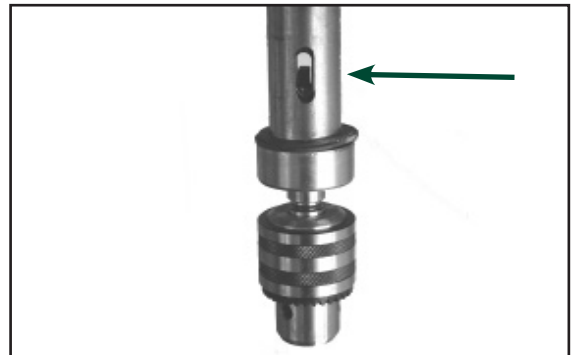


Figure 10



Figure 11

# ASSEMBLY

**⚠ WARNING** THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ASSEMBLY IS COMPLETE.

## REMOVING THE CHUCK

1. Open the chuck jaws as wide as possible to prevent damage.
2. Lower the spindle until the slot in the spindle is exposed. (Fig.12)
3. Position the table approximately 1/2" below the extended chuck.
4. Turn the chuck until a through hole is exposed in the spindle.
5. Insert the Drift-Key into the slot (Fig.13)
6. Gently tap the drift-key with a mallet to release the chuck. **NOTE:** Be prepared to catch the chuck as it is released to prevent any damage to it or the arbor.

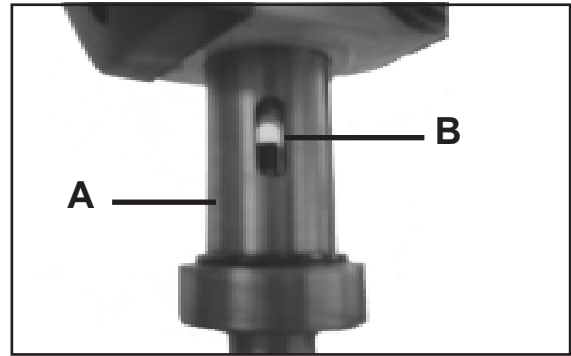


Figure 12

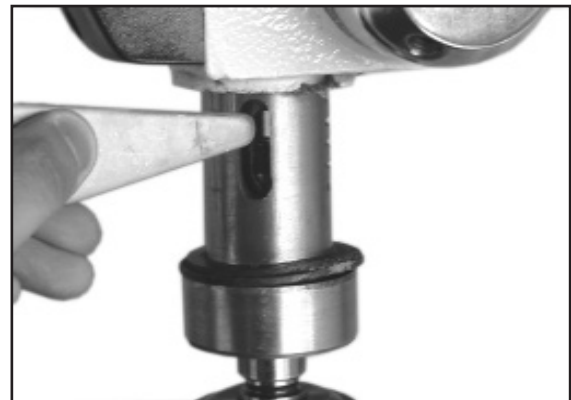


Figure 13

## INSTALLING THE TABLE

1. Install the arm onto the table support with hex bolt (A-Fig.14) and make sure the scale is on zero position (B-Fig.14). If necessary, adjust the hex socket screw (C-Fig.14) to level the table 90 degree to the spindle.

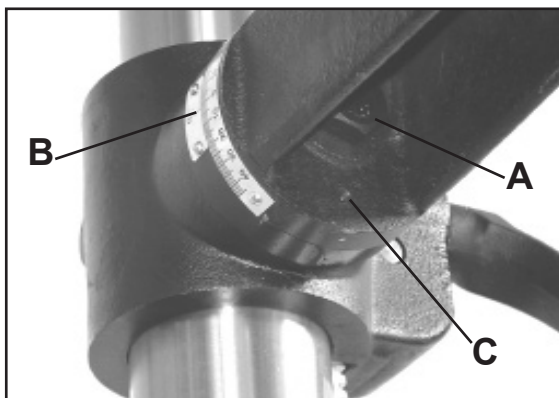


Figure 14

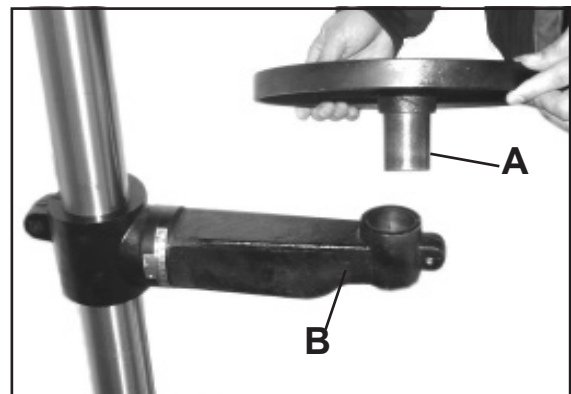


Figure 15

2. Insert the table post (A-Fig.15) into the table support bracket (B-Fig.15) as shown.
3. Tighten the locking lever (A-Fig.16) onto the table support bracket (B-Fig.16) and install the table raising/lowering handle (C-Fig.16).

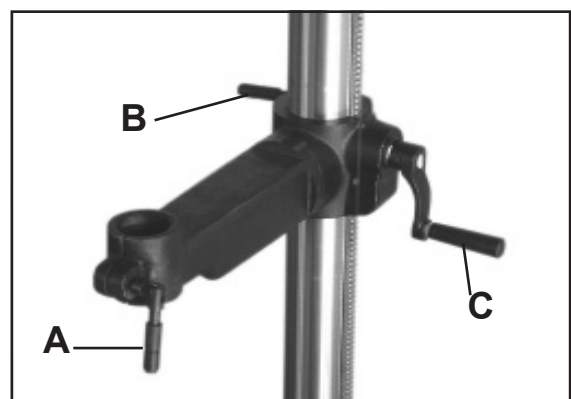


Figure 16

# ADJUSTMENTS

## HEAD ADJUSTMENTS

### Tilting the Drill Press Head 45° Clockwise and 90° Counterclockwise

1. Loosen the lock handle (A-Fig.17) on the right side of the drill press head.
2. Pull the guide pin out on the left side of the drill press head (A-Fig.18) and rotate 90°. The head may be tilted to the desired angle.
3. Tighten the lock handle.
4. To return to the original position, loosen the lock handle.
5. Move the head back to a vertical position .
6. Pull the guide pin out and rotate until it seats in the guide pin slot.
7. Tighten the lock handle.

### Adjusting the Drill Press Head Forward and Backwards

1. Loosen the lock handle on the right side of the head.
2. Turn the handle (A-Fig. 19, 20 ) to the desired position.
3. Tighten the lock handle.



**WARNING**

THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ALL ADJUSTMENTS ARE COMPLETE.

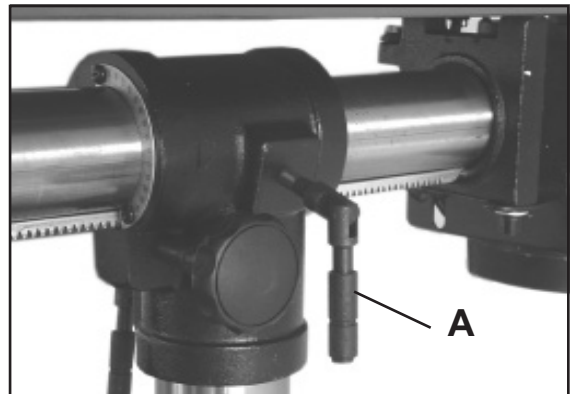


Figure 17

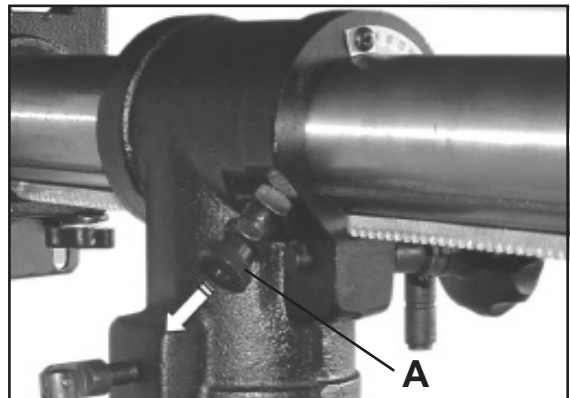


Figure 18

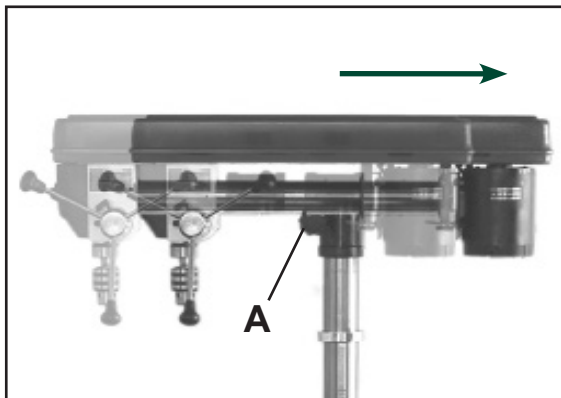


Figure 19

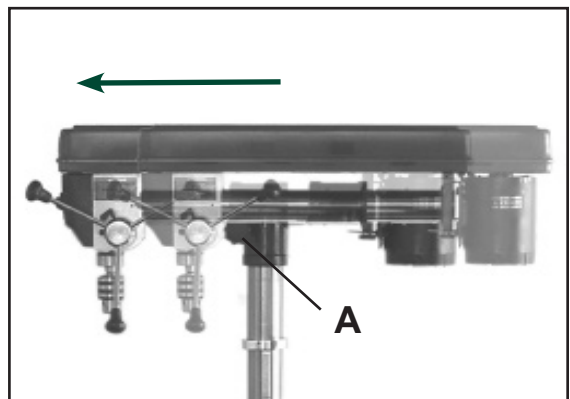


Figure 20

# ADJUSTMENTS

## TABLE ADJUSTMENTS

### Raising and Lowering the Table

1. Loosen the column lock (A-Fig.21) on the table support bracket (B-Fig.21).
2. Turn the crank to raise or lower the table to the desired height. **NOTE:** Always *raise* the table to your final height so that the gears mesh together best to prevent slippage.
3. Tighten the column lock (A-Fig.21).

The table can rotate 360° by loosening the table lock handle and turning to the desired position. (Fig. 22)

### TILTING THE TABLE

1. Loosen the nut below the table. (Fig. 23)
2. Tilt table to your desired angle.
3. A Tilt scale and pointer are provided on the bracket to indicate the table angle.
4. Tighten the nut to secure the table in place.

### CHANGING SPINDLE SPEEDS

#### **WARNING!**

**Disconnect machine from the power source.**

1. Turn off and disconnect the power to the Drill Press.
2. Open the top belt cover.
3. Release the tension on the belt by loosening the belt tension lock (A-Fig.24) and pull forward on the motor (B-Fig. 24).
4. Choose the desired speed by referring to the speed selection chart in Figure 25, page 13.

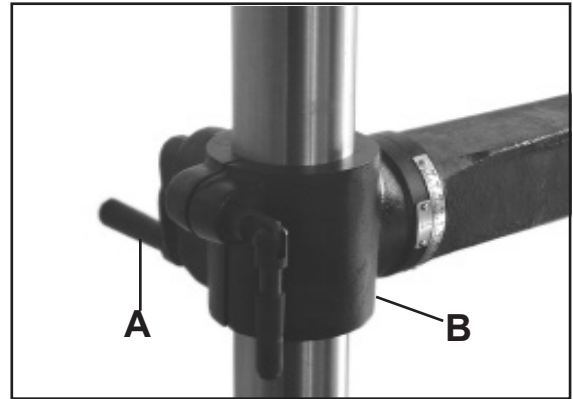


Figure 21

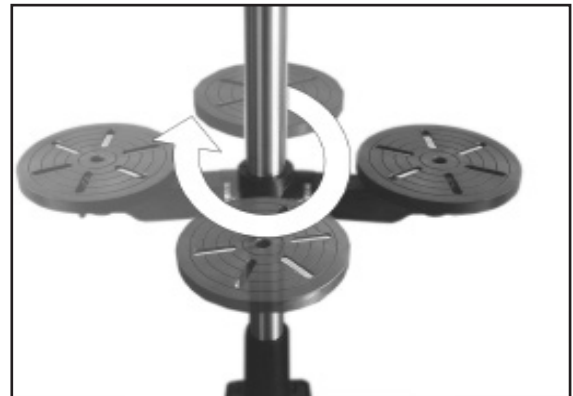


Figure 22

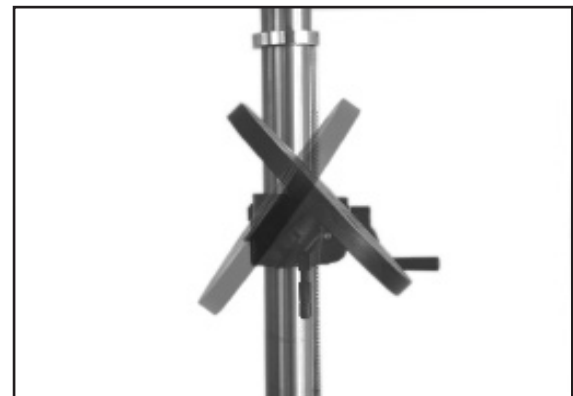


Figure 23

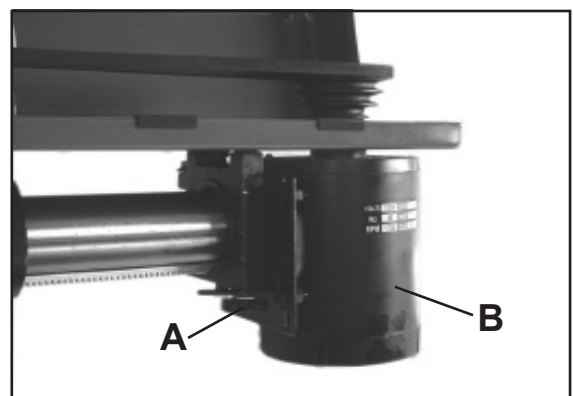


Figure 24

## ADJUSTMENTS

**⚠ WARNING** THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ALL ADJUSTMENTS ARE COMPLETE.

### CHANGING SPINDLE SPEEDS CONTINUED

5. Place the belt on the pulleys in relation to the speed chosen on the speed selection chart starting with the motor pulley first. (Fig.25)
6. Push back on the motor until there is approximately 1/2" deflection in the belt. (Fig.26)
7. Tighten the belt tension lock handle.
8. Close the belt guard.
9. Reconnect the Drill Press to the power.

### SETTING THE SPINDLE LOCK

1. Loosen the depth stop collar lock (A-Fig.27) as shown.
2. Lower the spindle to the desired depth. (Fig.28)
3. Turn the depth stop collar clockwise until the collar stops (B-Fig.27).
4. Tighten the depth stop collar lock.

**NOTE:** Figure 28 shows the spindle in the locked position, extended down from the head.

### SETTING THE DRILL DEPTH

1. With the spindle in the up position, loosen the depth stop collar lock (A-Fig.27) as shown.
2. Turn the depth stop collar clockwise until the pointer reads the desired drill depth on the scale (B-Fig.27).
3. Tighten the depth stop collar lock.

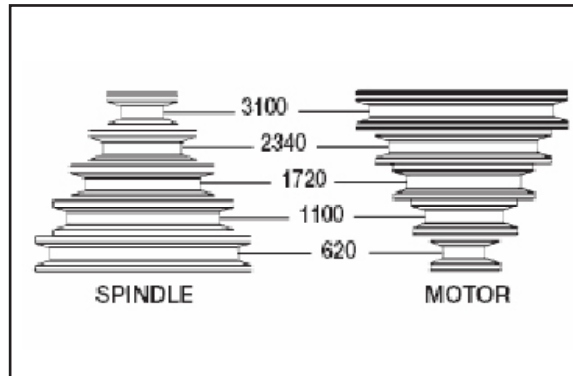


Figure 25



Figure 26

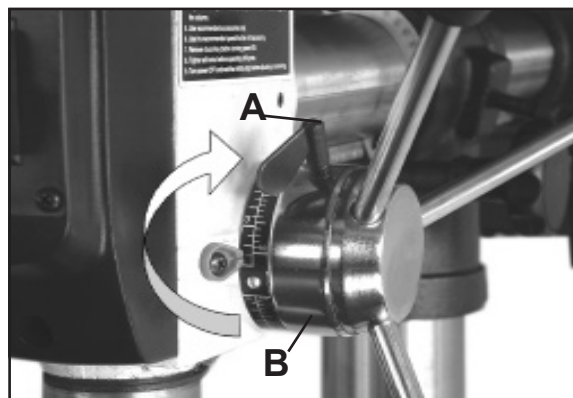


Figure 27



Figure 28

## MAINTENANCE

**⚠ WARNING:** Turn the power switch “OFF” and disconnect the plug from the outlet prior to adjusting or maintaining the machine. DO NOT attempt to repair or maintain the electrical components of the motor. Contact a qualified service technician for this type of maintenance.

1. Before each use:

- Check the power cord, plug and drive belts for any wear or damage, and replace if necessary.
- Check for any loose screws, hardware or parts.
- Check the area to make sure it is clear of any misplaced tools, lumber, cleaning supplies, etc. that could hamper the safe operation of the machine.

2. To avoid a build-up of wood dust, regularly clean all parts of the machine using a soft cloth, brush or compressed air. A general cleaning should be done after every use to avoid future problems and ensure the machine is in ready condition for its next use.

**WARNING:** If blowing sawdust, wear proper eye protection to prevent debris from blowing into eyes.

3. Keep the machined surfaces of the drill press table and base free of resin and rust. Clean them regularly with a non-flammable solvent, then coat with a light film of dry lubricant spray or wax.

4. Clean the columns on a regular basis to prevent the build-up of dust, drilling residue and rust. Treat the posts with a dry lubricant spray or a light coating of wax. Do not use ordinary oil which will collect dust and hamper the movement of parts along the column.

5. Lubricate the table bracket, locking lever bolts, worm gear in the table elevation mechanism and rack bar to keep them operating smoothly.

6. Periodically, lower the quill assembly and apply a light coating of machine oil to the quill and spindle surfaces. Raise and lower the quill a few times to distribute the oil on all of the internal surfaces.

7. Apply #2 tube grease to the worm gears in the table elevation mechanism and rack to keep them operating smoothly.

8. The ball bearings in the spindle and pulley assemblies are lifetime lubricated, sealed, and do not need any further care.

9. Keep the drive belt and pulley surfaces free of oil and grease. Periodically, check the drive belt for wear and replace if necessary.

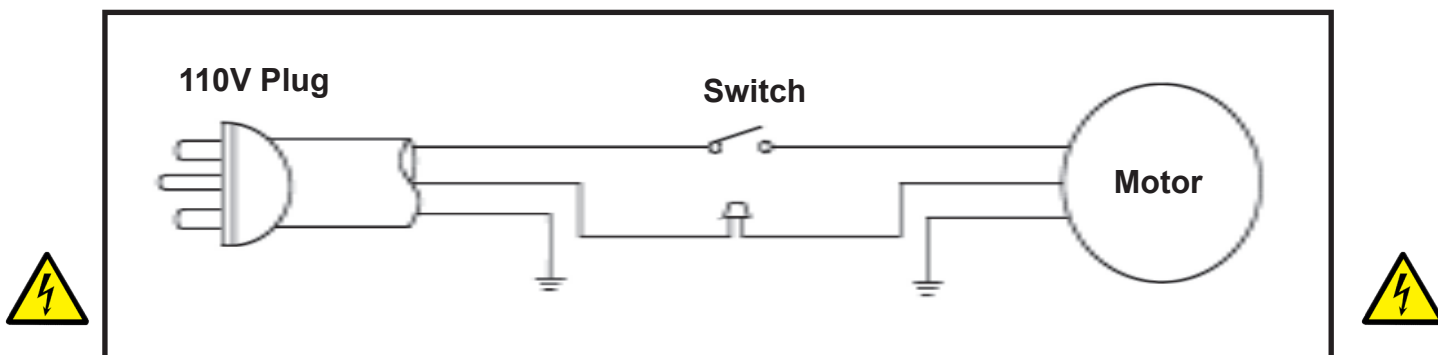
10. Keep the ventilation slots of the motor clean to prevent it from overheating.

Replacement parts can be ordered through your local RIKON Tool Distributor, or directly from RIKON.

Visit [www.rikontools.com](http://www.rikontools.com) for contact information.

## WIRING DIAGRAM

**⚠ WARNING:** This machine must be grounded. To avoid electrocution or fire, any repairs to electrical system should be done only by a qualified electrician, using genuine replacement parts.



# ELECTRICAL SAFETY

## ELECTRICAL SAFETY

**⚠ WARNING:** THIS TOOL MUST BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.

**IN THE EVENT OF A MALFUNCTION OR BREAKDOWN,** grounding provides the path of least resistance for electric current and reduces the risk of electric shock. This tool is equipped with an electric cord that has an equipment grounding conductor and requires a grounding plug (not included). The plug **MUST** be plugged into a matching electrical receptacle that is properly installed and grounded in accordance with **ALL** local codes and ordinances.

**DO NOT MODIFY ANY PLUG.** If it will not fit the electrical receptacle, have the proper electrical receptacle installed by a qualified electrician.

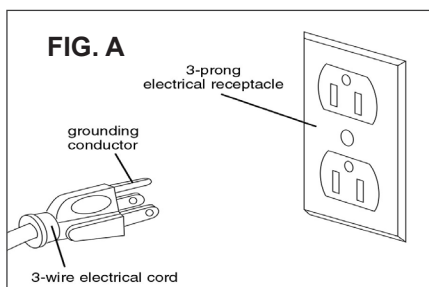
**IMPROPER ELECTRICAL CONNECTION** of the equipment grounding conductor can result in risk of electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment grounding conductor. **DO NOT** connect the equipment grounding conductor to a live terminal if repair or replacement of the electric cord or plug is necessary.

**CHECK** with a qualified electrician or service personnel if you do not completely understand the grounding instructions, or if you are not sure the tool is properly grounded when installing or replacing a plug.

**USE ONLY A 3-WIRE EXTENSION CORD THAT HAS THE PROPER TYPE OF A 3-PRONG GROUNDING PLUG THAT MATCHES THE MACHINE'S 3-PRONG PLUG AND ALSO THE 3-POLE RECEPTACLE THAT ACCEPTS THE TOOL'S PLUG. \***

**REPLACE A DAMAGED OR WORN CORD IMMEDIATELY.**

This tool is intended for use on a circuit that has an electrical receptacle as shown in **FIGURE A**. It shows a 3-wire electrical plug and electrical receptacle that has a grounding conductor. If a properly grounded electrical receptacle is not available, an adapter as shown in **FIGURE B** can be used to temporarily connect this plug to a 2-contact ungrounded receptacle. The adapter has a rigid lug extending from it that **MUST** be connected to a permanent earth ground, such as a properly grounded receptacle box. **THIS ADAPTER IS PROHIBITED IN CANADA.**



## EXTENSION CORDS

**⚠ WARNING:** THE USE OF AN EXTENSION CORD WITH THIS MACHINE IS NOT RECOMMENDED. For best power and safety, plug the machine directly into a dedicated, grounded electrical outlet that is within the supplied cord length of the machine.

If an extension cord needs to be used, it should only be for a limited operation of the machine. The extension cord should be as short as possible in length, and have a minimum gauge size of 14AWG.

**⚠ WARNING:** Check extension cords before each use. If damaged replace immediately. Never use a tool with a damaged cord, since touching the damaged area could cause electrical shock, resulting in serious injury.

Use a proper extension cord. Only use cords listed by Underwriters Laboratories (UL). Other extension cords can cause a drop in line voltage, resulting in a loss of power and overheating of tool. When operating a power tool outdoors, use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock.

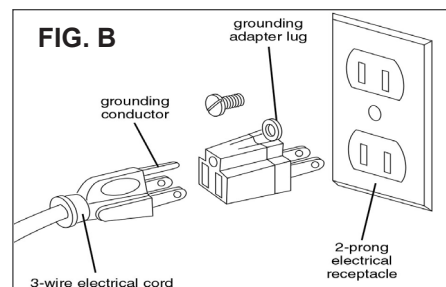
### MINIMUM RECOMMENDED GAUGE FOR EXTENSION CORDS (AWG)

120 VOLT OPERATION ONLY				
	25' LONG	50' LONG	100' LONG	150' LONG
0 to 6 Amps	18 AWG	16 AWG	16 AWG	14 AWG
6 to 10 Amps	18 AWG	16 AWG	14 AWG	12 AWG
10 to 12 Amps	16 AWG	16 AWG	14 AWG	12 AWG

**⚠ WARNING:** Keep the extension cord clear of the working area. Position the cord so that it will not get caught on lumber, tools or other obstructions while you are working with your power tool.

\* Canadian electrical codes require extension cords to be certified SJT type or better.

\*\* The use of an adapter in Canada is not acceptable.



## TROUBLESHOOTING

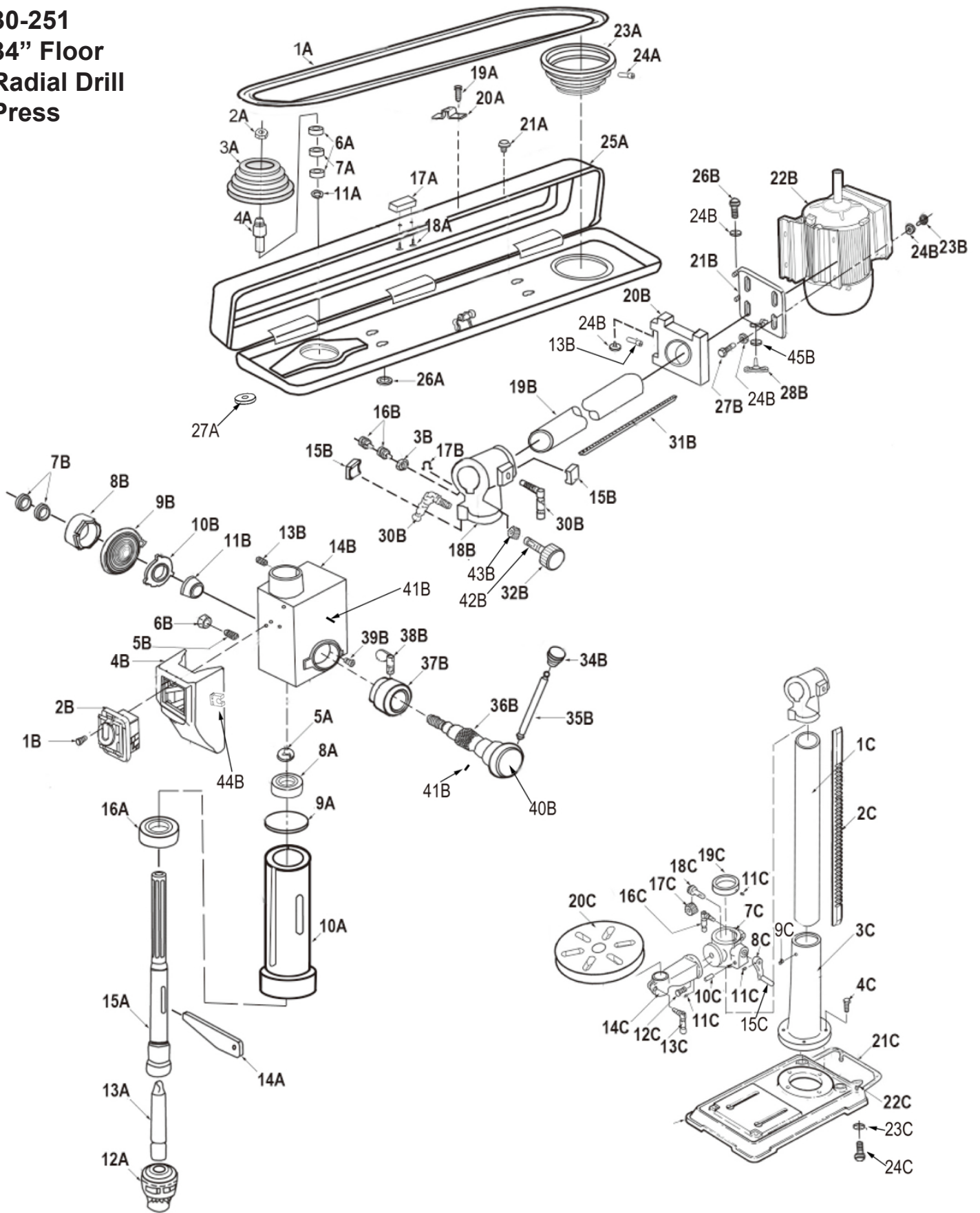
TROUBLE	PROBABLE CAUSE	REMEDY
Noisy operation	<ol style="list-style-type: none"> <li>1. Incorrect belt tension.</li> <li>2. Dry spindle.</li> <li>3. Loose spindle pulley.</li> <li>4. Loose motor pulley.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust tension.</li> <li>2. Lubricate spindle.</li> <li>3. Checking tightness of retaining nut on pulley and tighten if necessary.</li> <li>4. Tighten setscrews in pulleys.</li> </ol>
Drill bit burns material	<ol style="list-style-type: none"> <li>1. Incorrect speed.</li> <li>2. Chips not coming out of hole.</li> <li>3. Dull drill bit.</li> <li>4. Feeding too slow.</li> <li>5. Not Lubricated</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust speed.</li> <li>2. Retract drill bit frequently to clear chips.</li> <li>3. Resharpen drill bit.</li> <li>4. Faster the speed.</li> <li>5. Lubricate drill bit.</li> </ol>
Drill bit leads off, hole not round	<ol style="list-style-type: none"> <li>1. Hard grain in wood or lengths of cutting lips and/ or angles not equal.</li> <li>2. Bent drill bit.</li> </ol>	<ol style="list-style-type: none"> <li>1. Resharpen drill bit correctly.</li> <li>2. Replace drill bit.</li> </ol>
Wood splinters on underside of workpiece	<ol style="list-style-type: none"> <li>1. No "back up material" under workpiece.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use "back-up material"</li> </ol>
Wood piece pulled loose from hands	<ol style="list-style-type: none"> <li>1. Not supported or clamped properly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Support workpiece or clamp it.</li> </ol>
Drill bit binds in workpiece	<ol style="list-style-type: none"> <li>1. Workpiece pinching drill bit or excessive feed pressure.</li> <li>2. Improper belt tension, belt slips.</li> </ol>	<ol style="list-style-type: none"> <li>1. Support workpiece or clamp it.</li> <li>2. Adjust belt tension.</li> </ol>
Excessive drill bit runout or wobble	<ol style="list-style-type: none"> <li>1. Bent drill bit.</li> <li>2. Worn spindle bearings.</li> <li>3. Drill bit not properly installed in chuck.</li> <li>4. Chuck not properly installed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use a straight drill bit.</li> <li>2. Replace bearings.</li> <li>3. Install drill bit properly.</li> <li>4. Install chuck properly.</li> </ol>
Quill Returns too slow or too fast	<ol style="list-style-type: none"> <li>1. Spring has improper tension.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust spring tension.</li> </ol>
Chuck will not stay attached to spindle, it falls off when trying to install it	<ol style="list-style-type: none"> <li>1. Dirty, grease, or oil on the tapered inside surface of chuck or on the spindles tapered surface.</li> </ol>	<ol style="list-style-type: none"> <li>1. Using a household detergent clean the tapered surface of the chuck and spindle to remove all dirt, grease and oil.</li> </ol>





# PARTS DIAGRAM

## 30-251 34" Floor Radial Drill Press



# PARTS LIST

KEY NO.	DESCRIPTION	PART NO.	KEY NO.	DESCRIPTION	PART NO.
1A	V-Belt	P30-251-1A	23B	Nut M8	P30-251-23B
2A	Pulley nut	P30-251-2A	24B	Flat washer	P30-251-24B
3A	Spindle pulley	P30-251-3A	26B	Hex bolt M8X16	P30-251-26B
4A	Insert pulley	P30-251-4A	27B	Hex bolt M8X20	P30-251-27B
5A	Retaining ring	P30-251-5A	28B	Thumb nut	P30-251-28B
6A	Ball Bearing	P30-251-6A	30B	Clamping - lever	P30-251-30B
7A	Spacer 1302023	P30-251-7A	31B	Horizontal-rack	P30-251-31B
8A	Ball bearing	P30-251-8A	32B	Tension knob - seat & Tension knob - cover	P30-251-32B
9A	Washer rubber	P30-251-9A	34B	Feed-knob	P30-251-34B
10A	Tube quill	P30-251-10A	35B	Feed-rod	P30-251-35B
11A	Retaining ring	P30-251-11A	36B	Hub	P30-251-36B
12A	Chuck	P30-251-12A	37B	Ring-depth stop	P30-251-37B
13A	Arbor	P30-251-13A	38B	Lock-depth screw	P30-251-38B
14A	Drift key	P30-251-14A	39B	Pin-stop	P30-251-39B
15A	Spindle	P30-251-15A	40B	Handle seat	P30-251-40B
16A	Ball bearing	P30-251-16A	41B	Roller pin	P30-251-41B
17A	Knob	P30-251-17A	42B	Adjustable handle	P30-251-42B
18A	Pan head screw M5X6	P30-251-18A	43B	Helical gear	P30-251-43B
19A	Pan head screw M5X12	P30-251-19A	44B	Key holder	P30-251-44B
20A	Clamp cord	P30-251-20A	45B	Flat washer	P30-251-45B
21A	Screw	P30-251-21A			
23A	Motor pulley	P30-251-23A	1C	Column	P30-251-1C
24A	Socket head screw M6X10	P30-251-24A	2C	Rack	P30-251-2C
25A	Belt guard	P30-251-25A	3C	Column support	P30-251-3C
26A	Form washer	P30-251-26A	4C	Hex bolt M10X40	P30-251-4C
27A	Rubber bushing	P30-251-27A	6C	Base	P30-251-6C
1B	Tapping screw	P30-251-1B	7C	Table support	P30-251-7C
2B	NO-VOLT Switch	P30-251-2B	8C	Crank	P30-251-8C
3B	Nut	P30-251-3B	9C	Socket head screw M10X12	P30-251-9C
4B	Box switch	P30-251-4B	10C	Pin gear	P30-251-10C
5B	Screw 1302021	P30-251-5B	11C	Socket head screw M6X10	P30-251-11C
6B	Nut M8	P30-251-6B	12C	Bolt M16X35	P30-251-12C
7B	Hex nut	P30-251-7B	13C	Support clamp	P30-251-13C
8B	Cap-Spring	P30-251-8B	14C	Arm support	P30-251-14C
9B	Spring-Torsion	P30-251-9B	15C	Handle assembly	P30-251-15C
13B	Socket head screw M8X8	P30-251-13B	16C	Support clamp	P30-251-16C
14B	Head	P30-251-14B	17C	Gear - helical	P30-251-17C
15B	Locking shoe	P30-251-15B	18C	Worm-elevation	P30-251-18C
16B	Hex screw	P30-251-16B	19C	Column collar	P30-251-19C
17B	Retaining ring	P30-251-17B	20C	Table	P30-251-20C
18B	Guide-column	P30-251-18B	21C	Support frame	P30-251-21C
19B	Horizontal-tube	P30-251-19B	22C	Locking knob	P30-251-22C
20B	Mount-cover	P30-251-20B	23C	Nut M8	P30-251-23C
21B	Mount-motor	P30-251-21B	24C	Hex bolt M8X40	P30-251-24C
22B	Motor	P30-251-22B			

**NOTE:** Please reference the Manufacturer's Part Number when calling for Replacement Parts.  
For Parts under Warranty, the Serial Number of your machine is required.



For more information:  
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techsupport@rikontools.com



LINK TO RIKON WEBSITE