

17" Floor Drill Press



Operator's Manual

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

Serial Number: _____ Date of purchase: _____

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









Operator Safety: Required Reading

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

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.

Note: This owner's manual is not a teaching aid. Use of this owner's manual is intended to show assembly, adjustments, and general use.

SAVE THESE INSTRUCTIONS.
Refer to them often.

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Specifications

Model No.	30-230
Specifications	
Type	Floor
Horsepower	1 HP, TEFC
Amps	13.5
Volts	120V, 60 Hz
RPM	1,720
Speed Range (RPM)	200 - 3,630
Speeds	16
Chuck Size	5/8"
Chuck Taper	JT3
Drilling Capacity	1"
Spindle Travel	3-1/8"
Spindle Taper	MT2
Quill Diameter	3-1/8"
Overall	
Table	14" x 14"
Table Tilts	45°
Table Rotates	360°
Maximum Chuck to Table	25-1/4"
Maximum Chuck to Base	44-13/16"
Column Diameter	3-1/8"
Height	64-3/8"
Base Size	17-1/2" x 22-1/2"
Net Weight	188 lbs.
Shipping Weight	198 lbs.
Shipping Carton	55" x 21" x 9-1/2"
Warranty	5 Years

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 30-230 17" Floor Drill Press is shipped complete in one box.

Unpacking and Checking Contents

- Separate all "loose parts" from packaging materials and check each item with "Table of Loose Parts" to make sure all items are accounted for, before discarding any packaging material.
- With the help of another person, carefully lift the Drill Press head out of the box.
- Remove protective oil that is applied to the table and column before assembly. Use any ordinary house hold type grease or spot remover.
- Apply a coat of paste wax to the table and column to prevent rust. Wipe all parts thoroughly with a clean dry cloth.

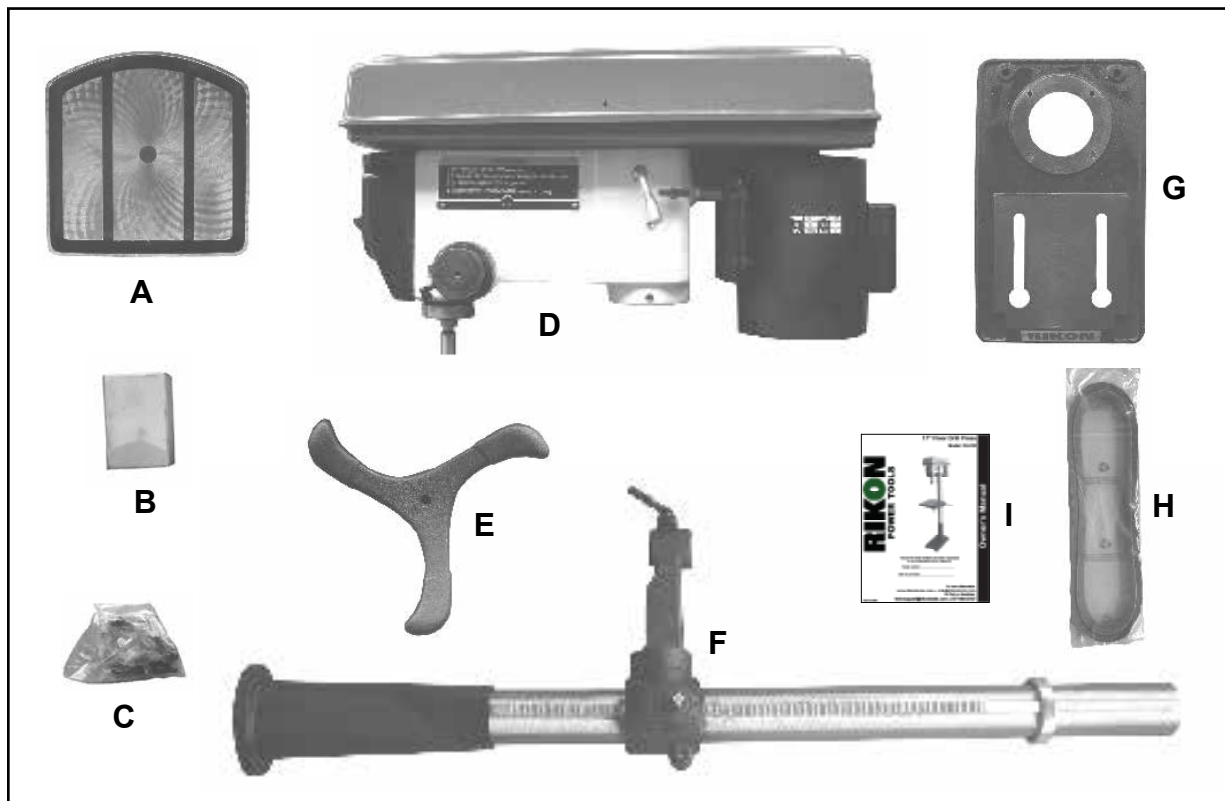
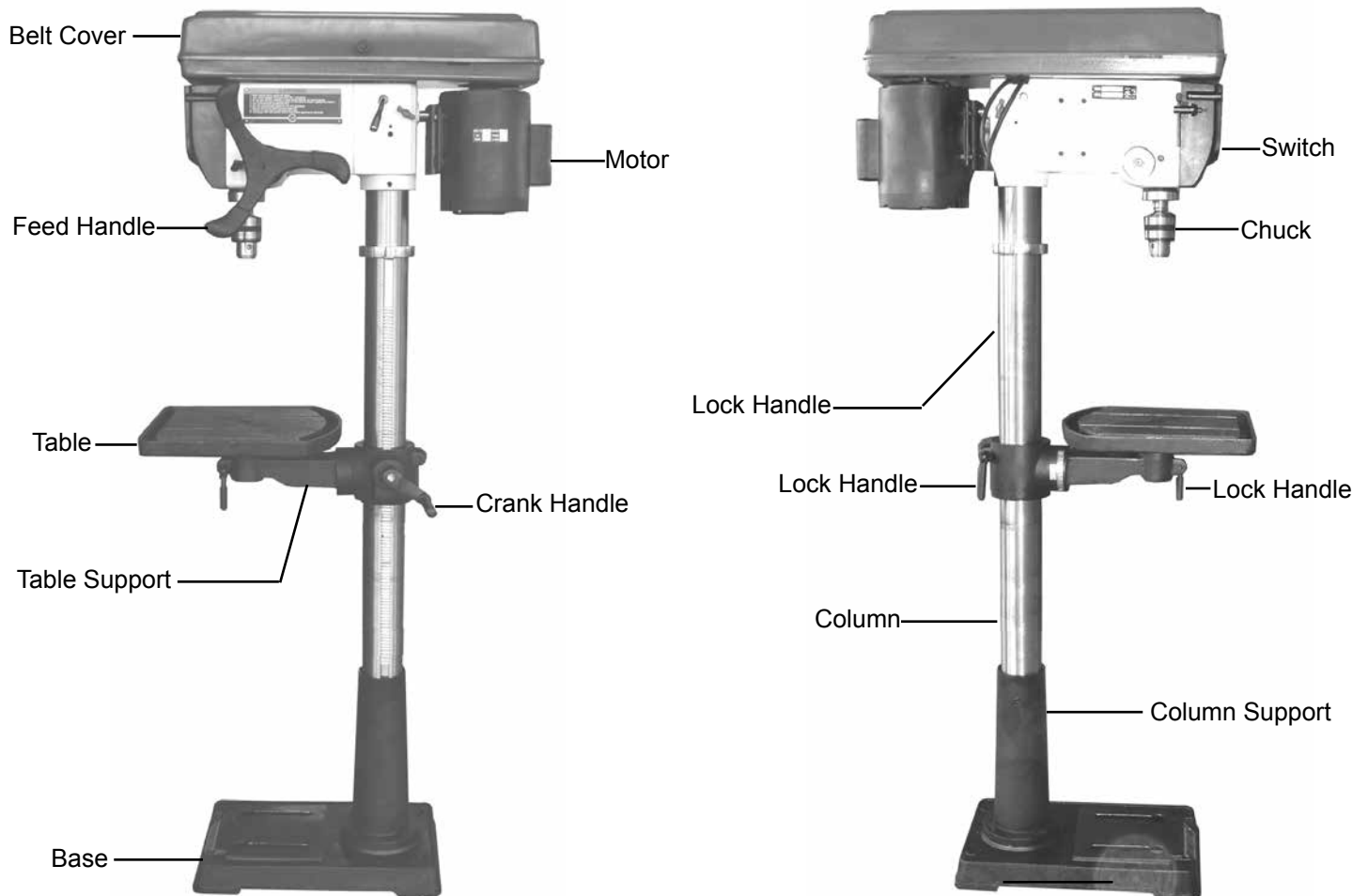


TABLE OF LOOSE PARTS

Item	Part Name	Qty
A	Table	1
B	Box of chuck	1
C	Bag of loose parts	1
D	Drill Press Head	1
E	Feed handle	1
F	Column assembly	1
G	Base	1
H	Bag of belts	1
I	Owner's manual	1

Getting to Know Your Drill Press



California Proposition 65 Warning

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

For more detailed information about California Proposition 65 visit www.rikontools.com.

Assembly

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 M10x40 hex bolts. Tighten all four bolts.

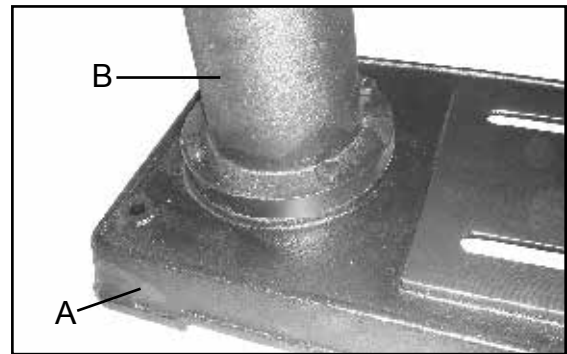


Figure 1

Head Assembly

NOTE: Assistance is needed for this next step.

1. Place the drill press head onto the column as far as it will go (Figure 2). Align the drill press head with the base of the drill press.

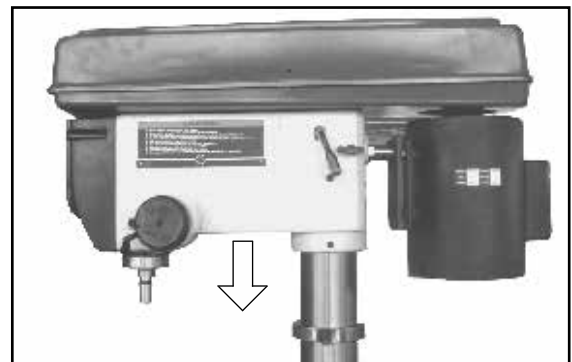


Figure 2

2. Tighten the drill press head to the column by tightening the two set screws on the right side of the head as shown (A-Figure 3).

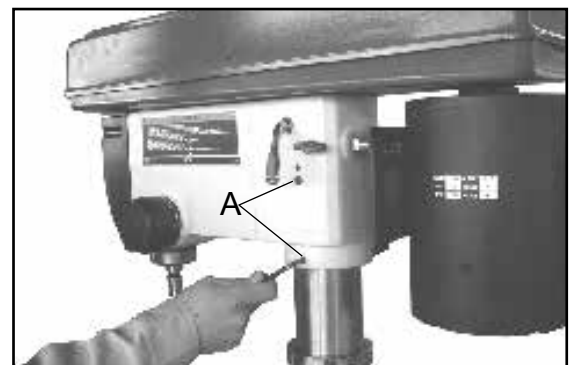


Figure 3

3. Place the feed handle to the hub. Tightening the set screw into the hub through the central hole of feed handle (Figure 4).



Figure 4

Assembly

4. Install the idler pulley and drive belts. Simply slide the pivot post of the idler pulley into the corresponding hole in the drill press head. The small drive belt (A-27) is mounted to the motor pulley and the large drive belt (A-29) is mounted to the spindle pulley (Figure 5).

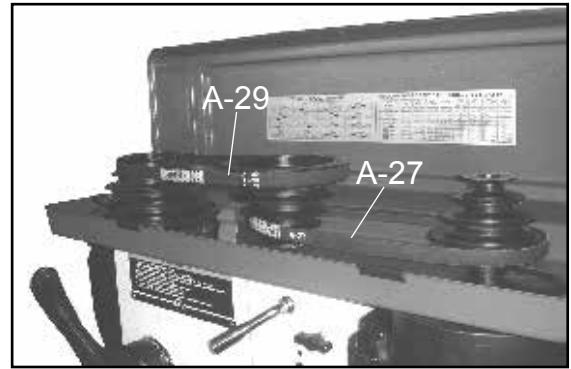


Figure 5

5. Release the locking knobs on the both sides of drill press head. Release the tension on the belt by swinging the tension lever from right to left (Figure 6).

Choose the desired speed by referring to the speed selection chart under the belt cover.



Figure 6

6. To install the belt cover handle, open the belt cover and insert the Phillips head screw through the hole in the center from the inside. Thread the handle on the outside of the belt cover and tighten with a screwdriver (Figure 7).



Figure 7

INSTALLING/REMOVING CHUCK

IMPORTANT! It is important that the chuck and arbor are free of any grease or rust protection. Use ordinary household grease remover.

INSTALLING THE CHUCK

Carefully insert the chuck into arbor, making sure to align the flat part of the chuck with the arbor (Figure 8). Using a mallet or wood hammer, drive the chuck into the arbor. This will properly seat the chuck on the arbor.



Figure 8

NOTE: NEVER HIT THE CHUCK ASSEMBLY WITH A METAL HAMMER. This could damage the chuck assembly or spindle.

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. 09)
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 Key-drift provided into the slot. (Fig. 10)
6. Gently tap the key-drift with a mallet to release the chuck.



Figure 9

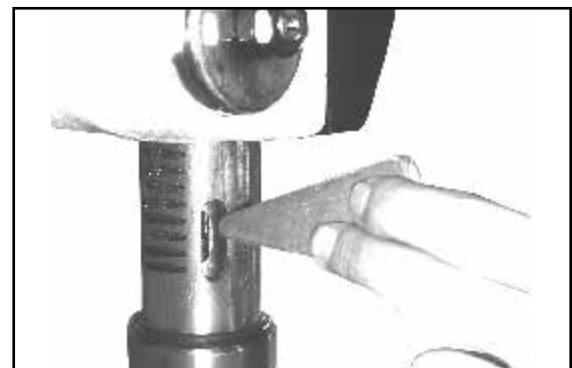


Figure 10

Assembly

INSTALLING THE TABLE

1. Install the locking lever onto the table support bracket then insert the table post (A-Fig. 11) into the table support bracket (B-Fig.11) as shown. Tighten the locking lever.

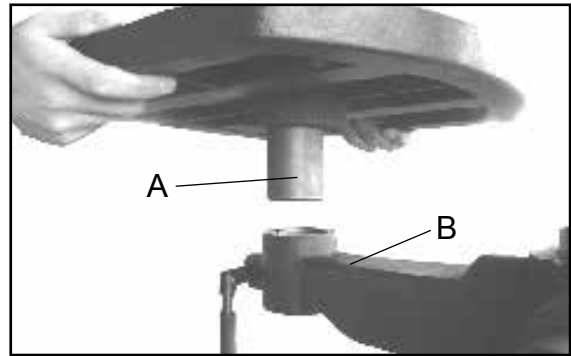


Figure 11

2. Install the raising/lowering handle with L wrench as shown (Figure 12).

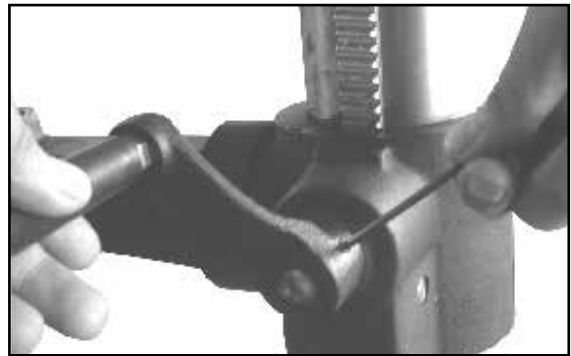


Figure 12

3. Install the locking lever onto the table support bracket and tighten the locking lever as shown (Figure 13).



Figure 13

Changing spindle speeds

WARNING!

Disconnect machine from the power source.

1. Turn off and disconnect the power to the Drill Press.
2. Open belt cover.
3. Release the locking knobs on the both sides of drill press head. Release the tension on the belt by swinging the tension lever from right to left (Figure 14).
4. Choose the desired speed by referring to the speed selection chart.
5. Place the belt on the pulleys in relation to the speed chosen on the speed selection chart starting with the motor pulley first. (Figure 15).
6. Swing back the tension lever until there is approximately 1/2" deflection in the belt.
7. Tighten the locking knob on the both sides of drill press head.
8. Close the belt guard.



Figure 14

SPINDLE SPEEDS IN R.P.M.			
200	290	350	430
500	580	640	720
800	870	1440	1630
1820	2380	2540	3630

Figure 15

Setting the spindle lock and drill depth

SETTING THE SPINDLE LOCK

1. Loosen the depth stop collar lock (A-Figure.16).
2. Lower the spindle to the desired depth. (Figure.17)
3. Turn the depth stop collar clockwise until the collar stops (B-Figure.16).
4. Tighten the depth stop collar lock.

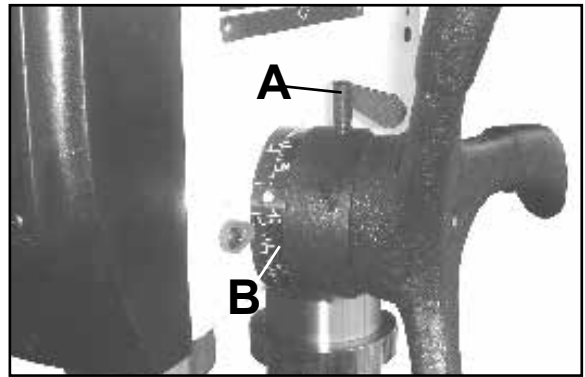


Figure 16

SETTING THE DRILL DEPTH

1. With the spindle in the up position, loosen the depth stop collar lock (A-Figure.16) as shown.
2. Turn the depth stop collar clockwise until the pointer reads the desired drill depth on the scale (B-Figure.16).
3. Tighten the depth stop collar lock.

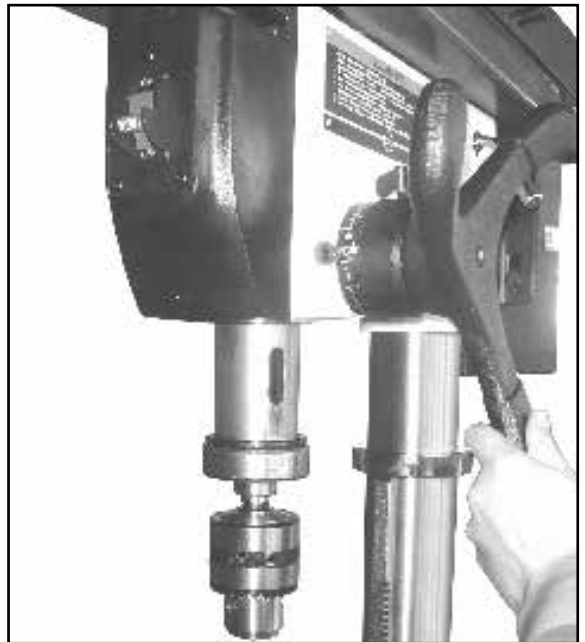


Figure 17

Maintenance

WARNING: To avoid injury due to unexpected starting, before cleaning or carrying out maintenance work, switch off and disconnect the drill press from the power source.

1. Never use water or other liquids to clean the drill press. Use a dry brush.
2. Regular maintenance of the drill press will prevent unnecessary problems.
3. Keep the table clean to ensure accurate cutting.
4. Keep the outside of the machine clean to ensure accurate operation of all moving parts and prevent excessive wear.
5. Frequently blow out any dust that may accumulate on the motor.
6. Apply paste wax to the table and column, to help keep the surface clean.
7. Check belts for wear and replace.

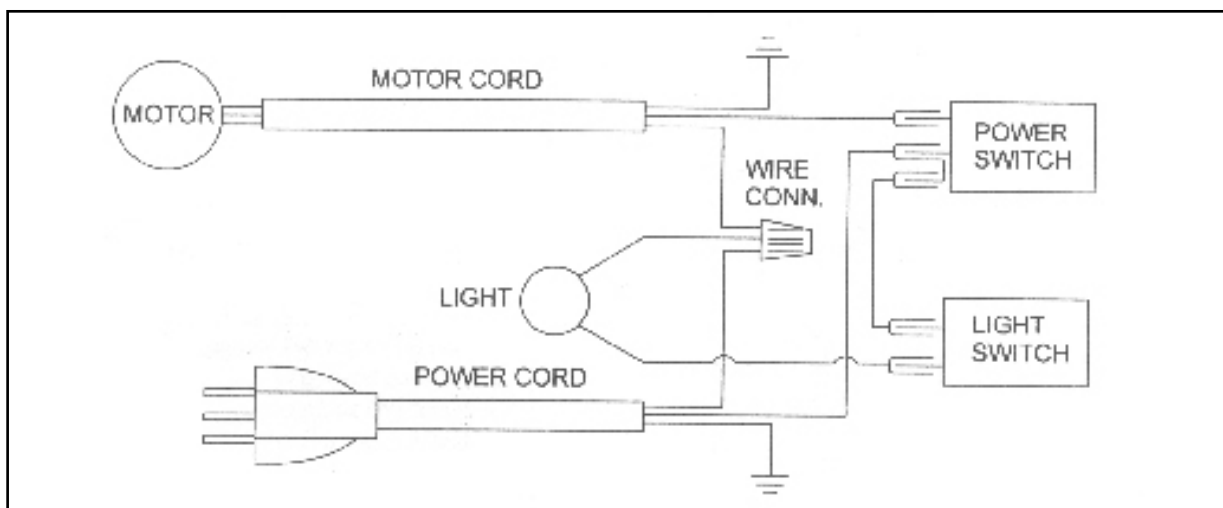
LUBRICATION

All of the ball bearings are packed with grease at the factory. They require no further lubrication.

Periodically lubricate the worm gear (part# 18A) in the table elevation mechanism, the rack bar (part# 15A), and the spline (grooves) in the spindle (part#11B). This will keep the operation of the drill press smooth.

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 Requirements

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor, with insulation having an outer surface that is green with or without yellow stripes, is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

Use only three wire extension cords that have three-prong grounding plugs and three-pole receptacles that accept the tool's plug.*

Repair or replace a damaged or worn cord immediately.

This tool is intended for use on a circuit that has an outlet that looks the one illustrated in Figure A below. The tool has a grounding plug that looks like the grounding plug as illustrated in Figure A below. A temporary adapter, which looks like the adapter as illustrated in Figure B below, may be used to connect this plug to a two-pole receptacle, as shown in Figure B if a properly grounded outlet is not available.** The temporary adapter should only be used until a properly grounded outlet can be installed by a qualified electrician. The green colored rigid ear or tab, extending from the adapter, must be connected to a permanent ground such as a properly grounded outlet box.

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

** Use of an adapter in Canada is not acceptable.

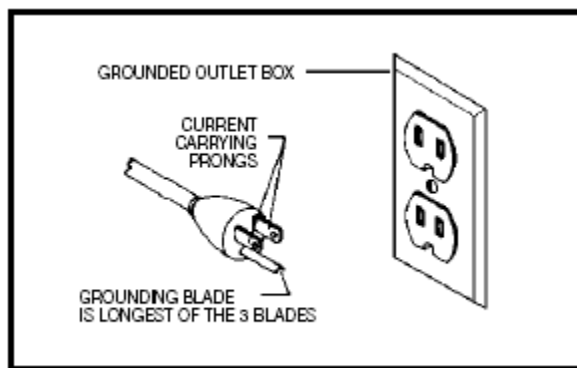


Fig. A

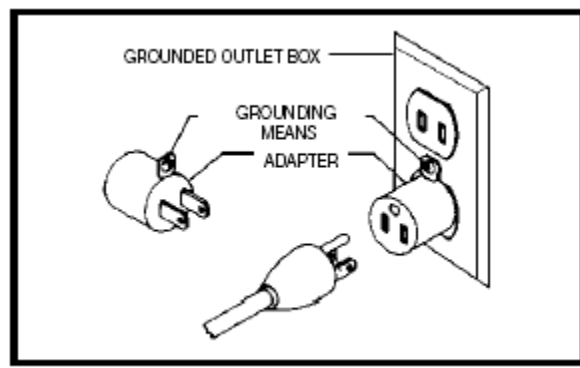
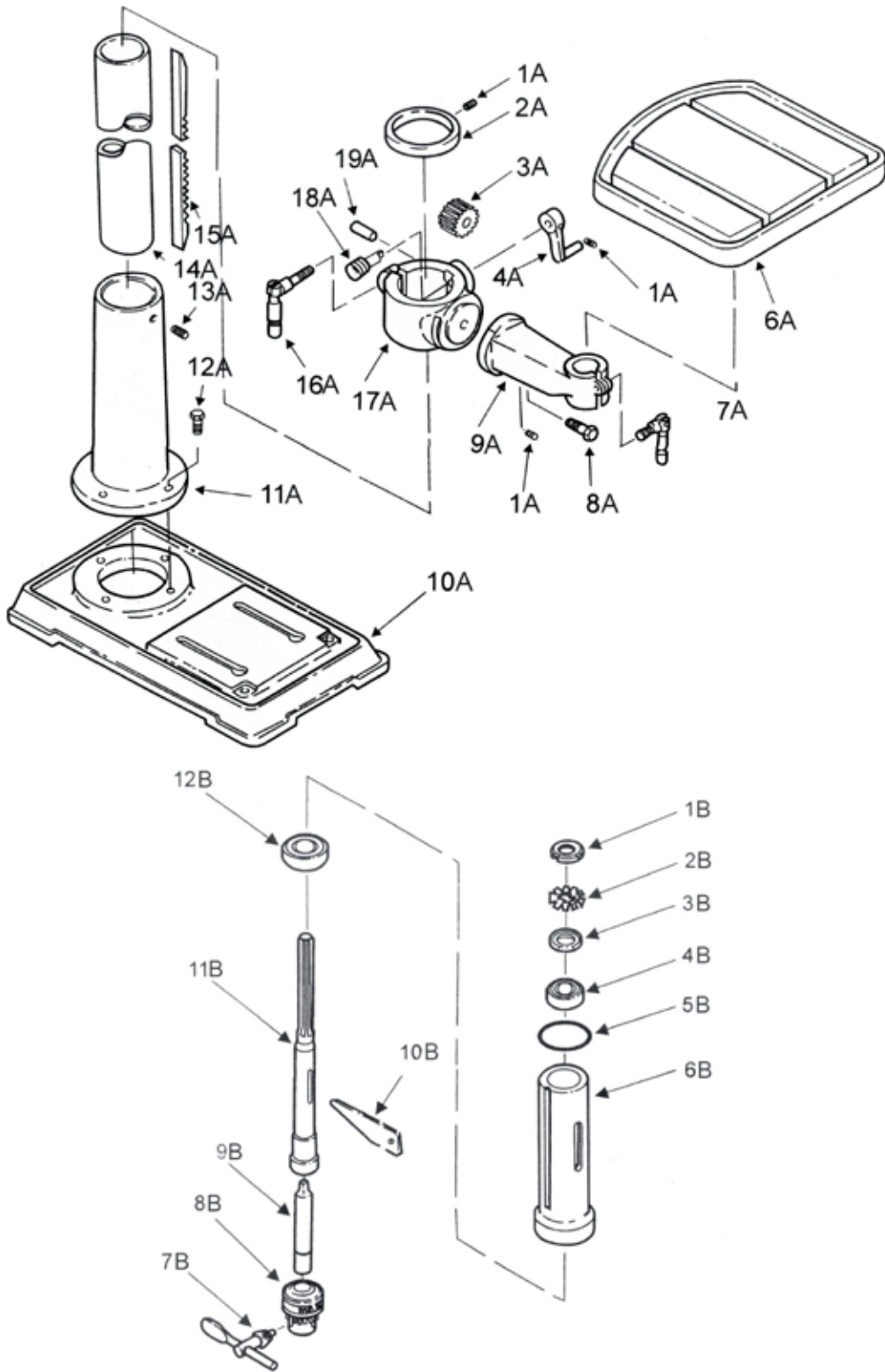


Fig. B

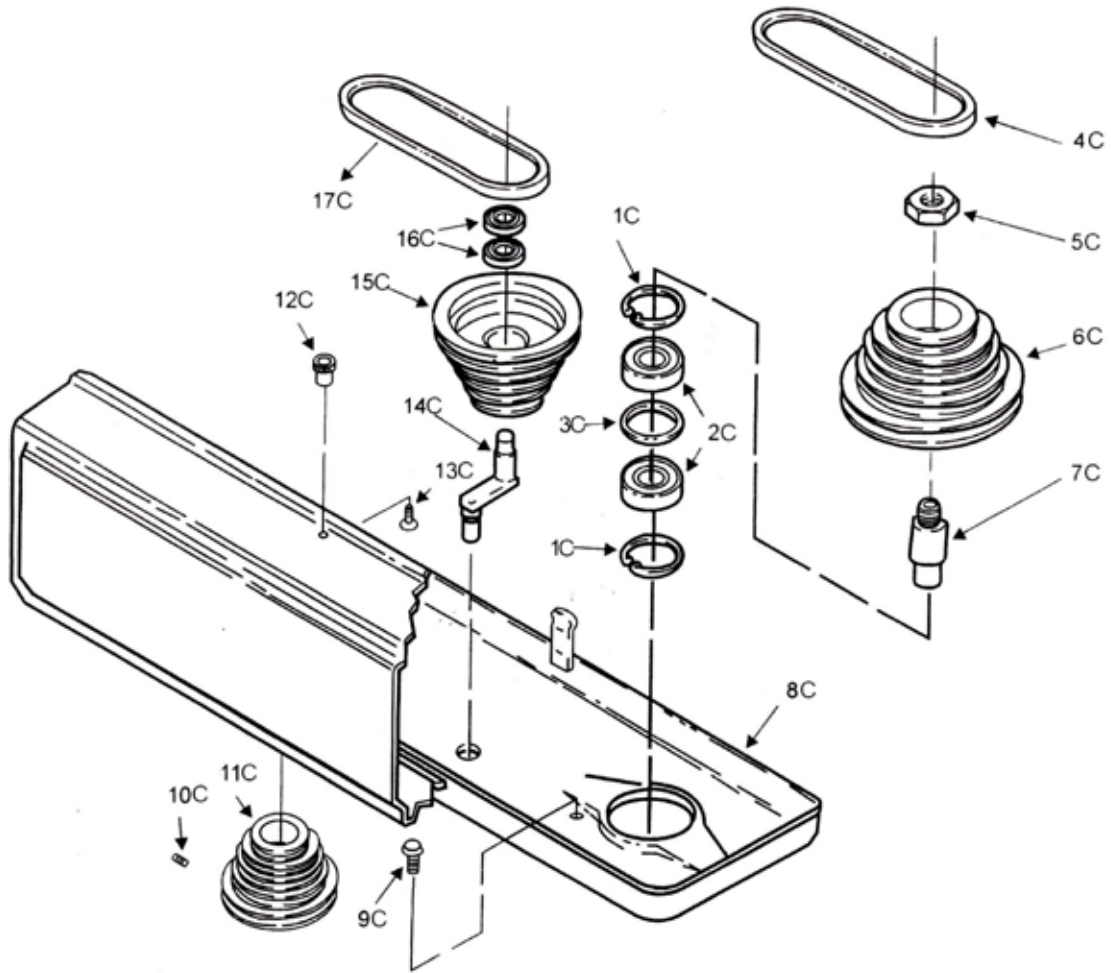
Troubleshooting

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

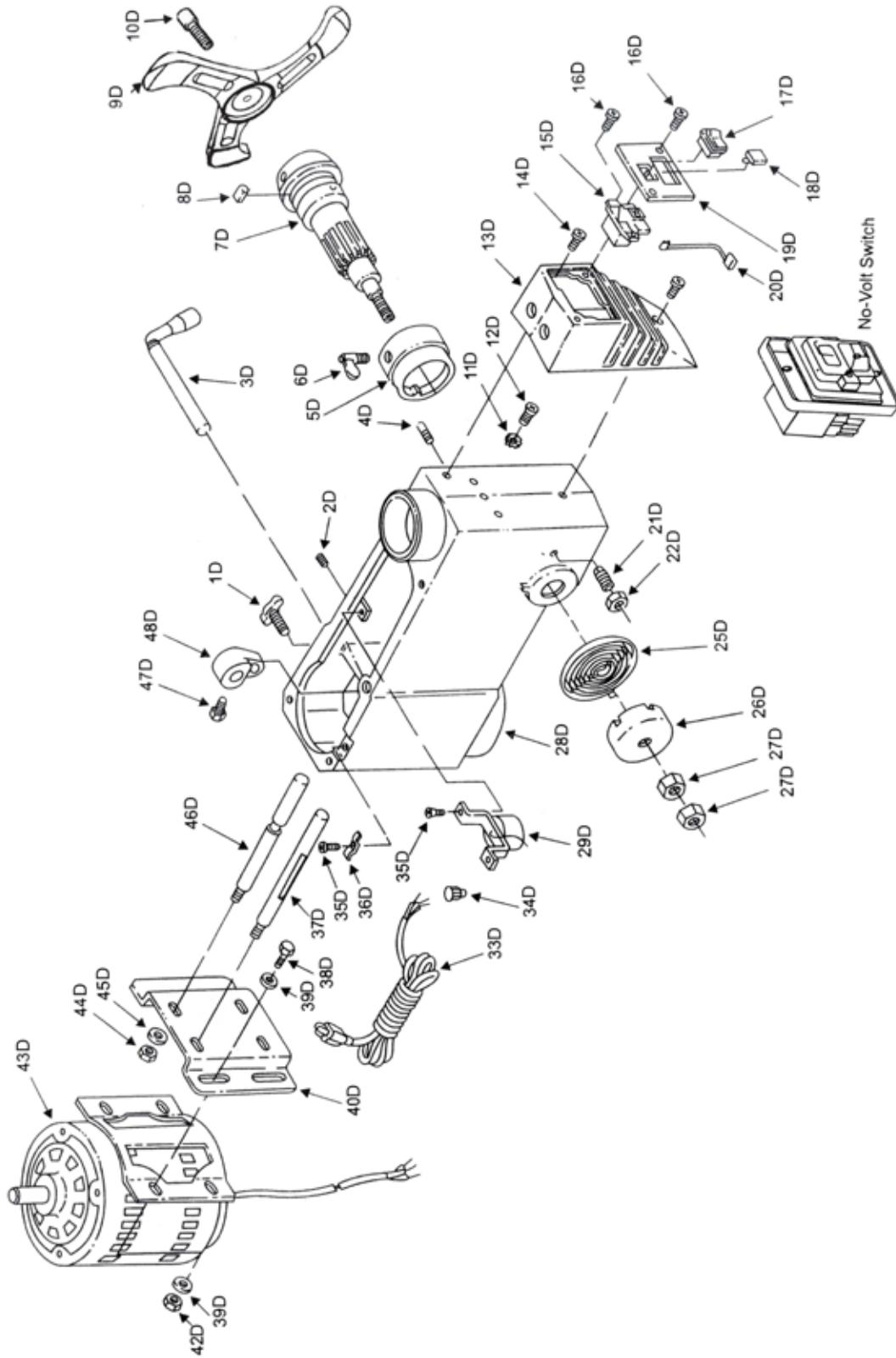
Parts Explosion



Parts Explosion



Parts Explosion



Parts List

Key No.	Description	Key No.	Description
1A	Hex. socket set screw	5D	Ring-Depth Stop w/Scale
2A	Collar-Rack	6D	Lock-Depth Screw
3A	Gear-Helical	7D	Hub
4A	Crank	8D	Guide Scale
6A	Table	9D	Knob
7A	Clamp-Table	10D	Rod
8A	Hex. head screw	11D	Lock washer-EXT M5
9A	Arm-table w/scale	12D	Screw-Pan HD M5X8
10A	Base	13D	Box Switch
11A	Support Column	14D	Screw-Pan HD M5X16
12A	Hex. head screw	15D	Switch-Locking
13A	Hex. socket set screw	16D	Screw-Pan HD M4.2x8
14A	Tube column	17D	Switch-Rocker
15A	Rack	18D	Key-Switch
16A	Clamp-column	19D	Cover-Switch Plate
17A	Support-Table w/indicator	20D	Lead-Asm.3
18A	Worm-Elevation	21D	Screw-Set Special
19A	Pin-gear	22D	Nut-Hex M10X1.5
1B	Nut-Lock	23D	Seat-Spring
2B	Ring-Locking	24D	Retainer-Spring
3B	Washer	25D	Spring-Torsion
4B	Bearing-Ball 17mm	26D	Cap-Spring
5B	Washer-Rubber	27D	Nut-Hex M12X8
6B	Tube-Quill	28D	Head w/Pointer and Trim
7B	Key-Chuck	29D	Socket-Bulb Asm.
8B	Chuck	32D	Tie-Wire
9B	Arbor	33D	Cord-Power w/Plug
10B	Key-Drift	34D	Connector-Wire
11B	Spindle	35D	Screw-Pan HD. M6X12
12B	Bearing-Ball 25mm	36D	Clamp-Cord
1C	Ring-Retaining	37D	Support-Motor bracket
2C	Bearing Ball 25mm	38D	Screw-Hex HD M8X20
3C	Spacer-Bearing	39D	Washer 8
4C	Belt-"V" 1/2X29	40D	Mount-Motor
5C	Nut-Pulley	41D	Cord-Motor
6C	Pulley-Spindle	42D	Nut-Hex M8
7C	Insert-Pulley	43D	Motor
8C	Guard-Pulley w/Labels	44D	Nut-Hex M8
9C	Screw-RD HD Washer	45D	Lockwasher 1/2
10C	Screw-Set M10X1.5-12	46D	Support-Motor Bracket
11C	Pulley-Motor	47D	Screw Hex HD M8X16
12C	Knob	48D	Lever-Adjusting
13C	Screw-Pan HD		
14C	Pivot-Idler		
15C	Pulley-Center		
16C	Bearing Ball 15mm		
17C	Belt-"V" 1/2X27		
18C	Washer Foam		
19C	Lock washer Ext.M6		
1D	Knob-Motor Adjusting		
2D	Screw-Socket Set M10X1.5-12		
3D	Handle-Belt Tension		
4D	Pin-Stop		

RIKON

POWER TOOLS

5-Year Limited Warranty

RIKON Power Tools Inc. ("Seller") warrants to only the original retail consumer/purchaser of our products that each product be free from defects in materials and workmanship for a period of five (5) years from the date the product was purchased at retail. This warranty may not be transferred.

This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs, alterations, lack of maintenance or normal wear and tear. Under no circumstances will Seller be liable for incidental or consequential damages resulting from defective products. All other warranties, expressed or implied, whether of merchantability, fitness for purpose, or otherwise are expressly disclaimed by Seller. This warranty does not cover products used for commercial, industrial or educational purposes.

This limited warranty does not apply to accessory items such as blades, drill bits, sanding discs, grinding wheels or belts and other related items.

Seller 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 proof of purchase documentation, which includes date of purchase and an explanation of the complaint, must be provided.

The Seller reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever.

To take advantage of this warranty, please fill out the enclosed warranty card and send it to:
RIKON Warranty
16 Progress Rd.
Billerica, MA 01821

The card must be entirely completed in order for it to be valid. If you have any questions please contact us at 877-884-5167 or warranty@rikontools.com.



For more information:

16 Progress Rd

Billerica, MA 01821

877-884-5167/978-528-5380

techsupport@rikontools.com