20" Floor Drill Press

Model: 30-240



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

Serial number:

Date of purchase:

For more information:

www.rikontools.com or info@rikontools.com For Parts or Questions: techsupport@rikontools.com or 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.

A 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.

A DANGER

ALWAYS KEEP VISITORS AWAY FROM RUNNING MACHINES.





ALWAYS MAKE THE WORKSHOP CHILDPROOF.

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

A DANGER



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

A 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.

A DANGER



ALWAYS USE SAFETY GLASSES AND WEAR HEARING PROTECTION.

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

A DANGER



NEVER OVERREACH.

Keep your proper footing and balance at all times.

A DANGER



NEVER STAND ON TOOLS.

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

A 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.

A 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

- Do Not operate the Drill Press until it is assembled and you have read the instructions.
- 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.

Table of Contents

Safety Warnings	2-3
Drill Press Safety Rules	3
Specifications	4
Contents of Package	5
Getting To Know Your Drill Press	
Assembly	
Changing spindle speeds	
Setting the spindle lock and drill depth	
Maintenance	
Wiring Diagram	13
Electrical Requirements	14
Troubleshooting	15
Parts Explosion	16
Parts List	17-18
Warranty	

Specifications

Туре	Floor
Swing	20"
Motor	1HP, 110V
Chuck Size	3/4"
Drilling Capacity	1"
Spindle Travel	4-3/4"
Spindle Taper	MT3
Number of Speeds	16
Speed Range	150-4,200 RPM
Quill Diameter	3"
Table	16-12" x 18-3/4"
Table Tilt	45°
Table Rotates	360°
Base Size	16" x 18-3/4"
Column Diameter	3-3/16"
Overall Height	64-3/8"
Net weight	318 lbs

Contents of Package

Model 30-240 20" Floor Drill Press is shipped complete in one box.

Unpacking and Checking Contents

- a. 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.
- b. With the help of another person, carefully lift the Drill Press head out of the box.
- c. Remove protective oil that is applied to the table and column before assembly. Use any ordinary house hold type grease or spot remover.
- d. Apply a coat of paste wax to the table and column to prevent rust. Wipe all parts thoroughly with a clean dry cloth.

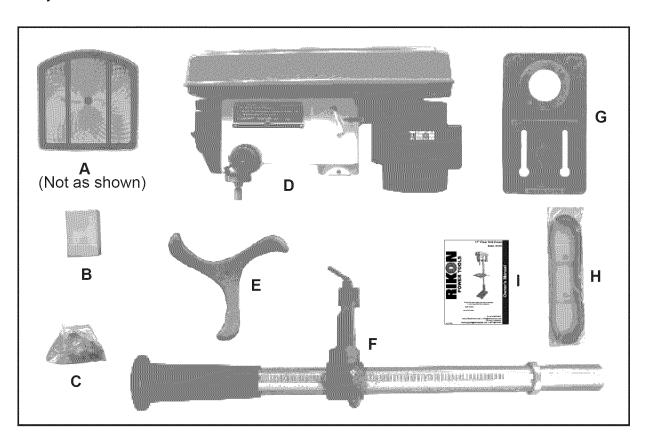
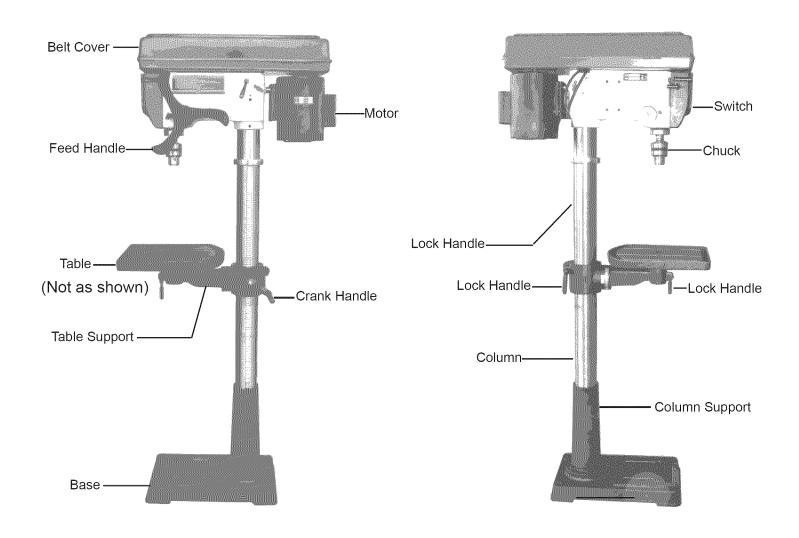


TABLE OF LOOSE PARTS

ltem	Part Name	Qty
Α	Table	1
В	Box of chuck	1
С	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
	Owner's manual	1

Getting to Know Your Drill Press



California Propsition 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 Propostion 65 visit www.rikontools.com.

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.

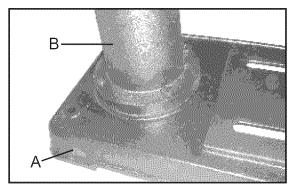
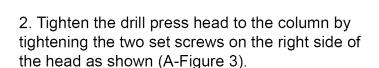


Figure 1

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.



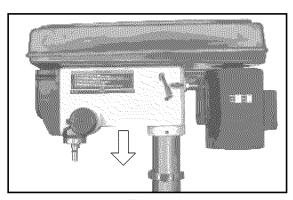


Figure 2

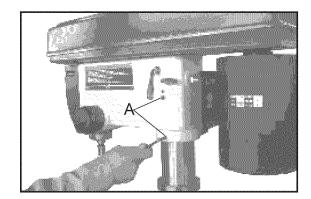
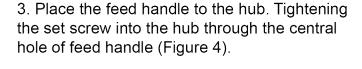


Figure 3



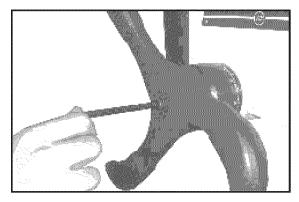


Figure 4

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).

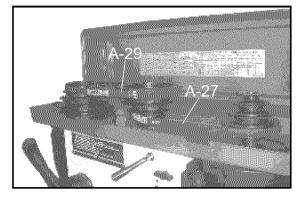


Figure 5

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 Philliips 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).

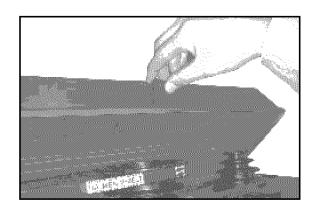


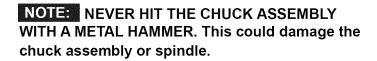
Figure 7

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.



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.

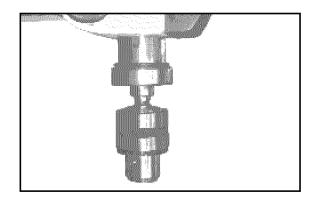


Figure 8

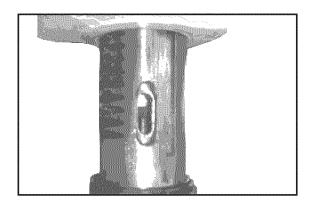


Figure 9

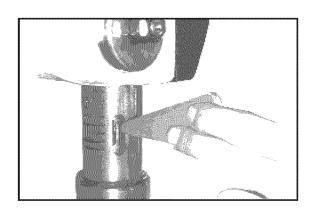


Figure 10

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.

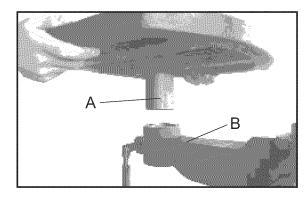


Figure 11

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

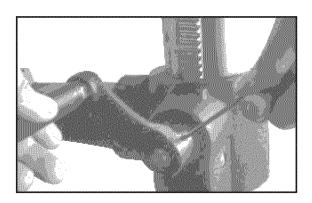


Figure 12

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

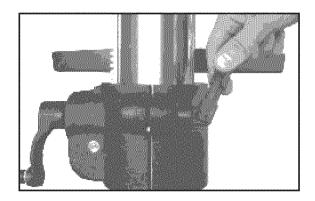


Figure 13

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

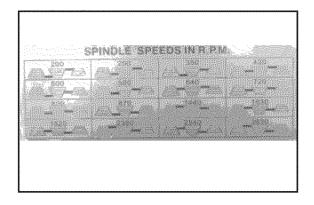


Figure 15

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.

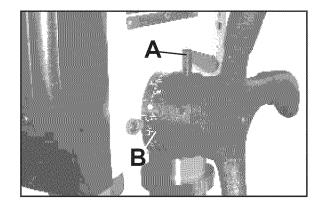


Figure 16

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.

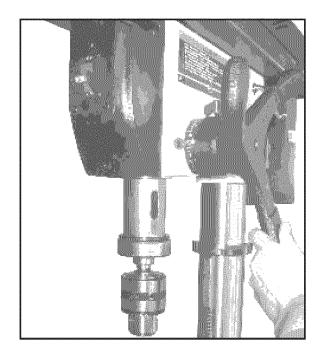


Figure 17

Maintenance

WARNING: To avoid injury due to unexpected starting, before cleaning or carring 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.

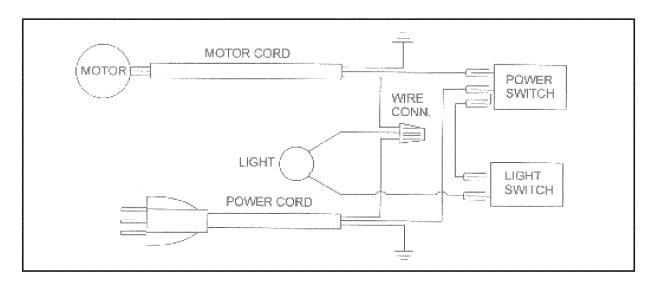
LUBRICATION

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.

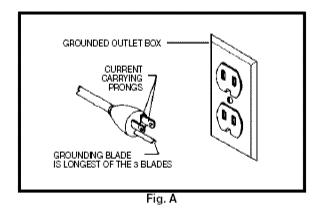
Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

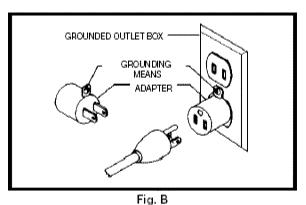
Use only three wire extension cords that have three-prong grounding plugs and three-pole receptacles that accept the tool's plug.*

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 locks 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.

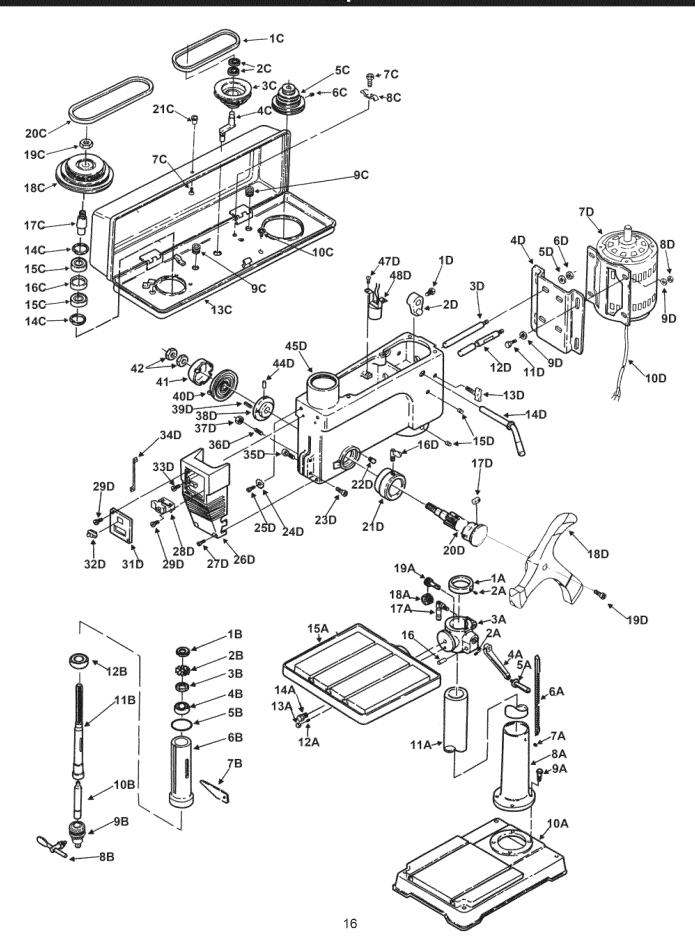




Troubleshooting

TROUBLE	PROBABLE CAUSE	REMEDY
Noisy Operation	Incorrect belt tension. Dry Spinle. Loose spindle pulley. Loose motor pulley.	Adjust tension. Lubricate spindle. Checking tightness of retaining nut on pulley and tighten if necessary. Tighten setscrews in pulleys.
Drill Bit Burns	Incorrect speed. Chips not coming out of hole. Dull drill bit. Feeding too slow. Not Lubricated	1. Change speed. 2. Retract drill bit frequently to clear chips. 3. Resharpen drill bit. 4. Faster the speed. 5. Lubricate drill bit.
Drill bit leads off*** hole not round.	Hard grain in wood or lengths of cutting lips and/ or angles not equal. Bent drill bit.	Resharpen drill bit correctly. Replace drill bit.
Wood splinters on underside.	No "back up material" under workpiece.	1. Use "back-up material"
Wood piece turn loose from hand.	Not supported or clamped properly.	Support workpiece or clamp it.
Drill bit binds in workpiece.	Workpiece pinching drill bit or excessive feed pressure. Improper belt tension.	Support workpiece or clamp it. Adjust tension.
Excessive drill bit runout or wobble.	1. Bent drill bit. 2. Worn spindle bearings. 3. Drill but not properly installed in chuck. 4. Chuck not properly installed.	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.	Spring has improper tension.	1. Adjust spring tension.
Chuck will not stay attached to spindle, it falls off when trying to install it.	Dirty, grease, or oil on the tapered inside surface of chuck or on the spindles tapered surface.	Using a household detergent clean the tapered surface of the chuck and spindle to remove all dirt, grease and oil.

Parts Explosion



Parts List

March No.	Davi Na	Decarinties
Key No.	Part No.	Description Oallan Davis
1A	1-1901011	Collar-Rack
2A	1-M6X10GB80B	Screw-Hex soc Set M6x1.0-10
3A	1-1901004-00001G	Support-Table w/Indicator
4A	1-1901009-10001G	Crank
5A	1-1501009-20001S	Handle crank
6A	1-1901010	Rack
7A	1-M10X12GB80B	Screw-Hex Soc Set M10x1.5-12
8A	1-1901002-00001G	Support-Column
9A	1-M12X40GB5781B	Screw-Hex Hd M12x1.75-40
10A	1-1901001B01001G	Base
11A	1-1901003	Tube-Column
12A	1-1901015	Pin-Table Lock
13A	1-M8GB6170	Nut-Hex Hd M8x1.25
14A	1-M20X50GB5781B	Screw-Hex Hd M20x2.5-50
15A	1-1901014-00001G	Table w/Scale
16A	1-1501001	Pin-Gear
17A	1-1501012-01001S	Clamp-column
18A	1-1501006	Gear-Helical
19A	1-1901008	Worm-Elevation
1B	1-1903005	Nut-Lock M20x1.5
2B	1-1903004	Ring-Locking
3B	1-1903003	Washer
4B	1-BRG80204GB278	Bearing-Ball 20mm
5B	1-1903006	Washer-Rubber
6B	1-1903002	Tube-Quill
7B	1-1503008	Key-Drift
8B	1-Z303520-1	Key-Chuck
9B	1-Z103520	Chuck
10B	1-Z403003	Arbor
11B	1-1903001	Spindle
12B	1-BRG80206GB278	Bearing-Ball 30mm
1C	1-1705011	Belt-"V" A29
2C	1-BRG80202GB278	Bearing-Ball 15mm
3C	1-1905006-00001G	Pulley Center
4C	1-1905007	Pivot-Idler
5C	1-1905009-00001G	Pulley-motor
6C	1-M8X12GB80B	Screw Soc Set M8x1.25-12
7C	1-M5X12GB818B	Screw Pan Hd M5x0.8-12
8C	1-1502014	Clamp-Cord
10C	1-M6X12GB9074D1Z	Screw-Rd Washer Hd M6x1.0-16
13C	1-1905000-00049W	Guard-Pulley w/Labels
14C	1-1902024	Ring-Retaining
15C	1-BRG80206GB278	Bearing-Ball 30mm
16C	1-1902023	Spacer-Bearing
17C	1-1902022	Insert-Pulley
18C	1-1905009-00001G	Pulley-spindle
19C	1-1902025	Nut-Pulley
		-··· - J

Parts List

Kov No	Part No.	Description
-		•
20C	1-1905011	Belt-"V" A33
21C	1-1505008-00001S	Knob
1D	1-M8X16GB5781B	Screw-Hex Hd M8x1.25-16
2D	1-1502006	Lever-Adjusting
3D	1-1902003	Support-Motor Bracket
4D	1-1502007-00001Y	Mount-Motor
5D	1-WSH12GB93B	Lock washer 12mm
6D	1-M12GB6170B	Nut-Hex M8x1.25
7D	1-G8812614A00001G	Motor
8D	1-M8GB6170B	Nut-Hex M8x1.25
9D	1-WSH8GB97D1B	Washer 8
10D	2-U23142600-431	Cord-Motor
11D	1-M8X20GB5781B	Screw-Hex Hd M8x1.25-20
12D	1-1902003	Support Motor Bracket
13D	1-1502005	Knob-Motor Adjusting
14D	1-1902004	Handle-Belt Tension
15D	1-M10X12GB80B	Screw-Sco Ser M10x1.5-12
16D	1-1504012	Lock depth screw
17D	1-1504004	Guide shoe
18D	1-1904011-02001Y	Cast iron handwheel
19D	1-M8X25GB70B	Hex socket screw
20D	1-1504001-02	Hub
21D	1-1504003-00001Y	Ring-Depth Stop w/Scale
22D	1-1304010	Pin-Stop
23D	1-M8X30GB70B	Screw-Soc Hd Cap M8x1.25-30
24D	1-WSH5GB862D2B	Lock washer-Ext.5
25D	1-M5X8GB818B	Screw-Pan Cr M5x0.8-6
26D	1-U1902008-00001S	Box-Switch
27D	1-M5X16GB818B	Screw-Pan Cr M6x1.0-35
28D	1-HY7B	Switch
29D	1-M6X12GB818B	Screw-Self Tap Pan Hd
31D	1-1502009-02	Cover-Switch Plate
32D	1-HF-616	Switch-Rocker
33D	1-M5X16GB818B	Switch-Pan Cr M6x1.0-15
34D	2-U13141000-636	Lead-3"
35D	1-M8X30GB70B	Screw-Sco Hd Cap M8x1.25-25
36D	1-1502021	Screw-special Set M10x1.5-27
37D	1-1504014	Nut-Hex M10x1.5
38D	1-1904006	Seat-Spring
39D	1-PIN6X16GB879B	Pin-roll 6x16
40D	1-1904008	Spring-Torsion
41D	1-1904007	Cap-Spring
42D	1-1504013	Nut-Hex M12-1.5-8
44D	1-PIN2D5X10GB879B	Pin-Roll 2.5x10
45D	1-1902001-11050B	Head w/Pointer&Trim
47D	1-M6X12GB818B	Screw-Pan Cr M6x1.0-12
48D	1-1502013-2	Socket-Bulb
70D	1 1002010-2	COUNCE DUID



2-Year Limited Warranty

RIKON Power Tools/Richen Enterprise, 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 two (2) 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 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
110 Cummings Park
Woburn, MA 01801

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: 110 Cummings Park Woburn, MA 01801

877-884-5167/781-933-8400 info@rikontools.com www.rikontools.com