WARCO

OPERATOR'S MANUAL

DRILL MODEL:1020B

Read carefully and follow all safety rules and operating instructions before first use of this product.

INDEX

GENERAL SAFETY INSTRUCTIONS

EXTREME CAUTION SHOULD BE USED IN OPERATING ALL POWER TOOLS. KNOW YOUR POWER TOOL, BE FAMILIAR WITH ITS OPERATION. READ THE OWNER'S MANUAL AND PRACTICE SAFE USAGE PROCEDURES AT ALL TIMES.

- **CONNECT** your machine **ONLY** to the matched and specified power source.
- **WEAR SAFETY GLASSES, HEARING PROTECTION** and **SAFETY SHOES** when operating heavy machinery. **Always wear safety glasses.**
- **DO NOT** wear loose clothing or jewellery when operating machinery.
- **A Safe Environment is important**. Keep the area free of dust, dirt and other debris in the immediate vicinity of the machine.
- **BE ALERT**! Do Not Use prescription or other drugs that may affect your ability or judgement to safely use this machine.
- **DISCONNECT** the power source when making other adjustments or repairs.
- **NEVER** leave an operating tool unattended.
- **NEVER** reach over the table when the tool is in operation.
- **ALWAYS** keep blades, knives or bits sharp and properly aligned.
- **ALWAYS** keep all safety guards in place and ensure their proper function.
- **ALWAYS** make sure that any tools used for adjustments are removed before operating the machine.
- **ALWAYS** secure your work with the appropriate clamps or vises.
- **ALWAYS** keep bystanders safely away while operating machinery.
- **THINK SAFETY. WORK SAFELY.** Never attempt a procedure if it does not feel safe or comfortable.

SPECIFIC SAFETY INSTRUCTIONS

- Always make certain that you clamp down any object that you are drilling into.
- When drilling, make sure that you are using the correct speed for the material being drilled.
- Clear the drill press table of all objects before turning the tool on.
- Keep hands and fingers safely away from the spinning drill bits.
- **NEVER** start the drill press with the drill bit in contact with the work piece.
- Make certain that the drill bit is securely tightened into the drill chuck.
- **NEVER** wear gloves while operating a drill press.
- Make certain that the table lock is securely tightened before using the drill press.
- **Never** attempt to drill any material that is not flat without using a secure jig for that specific work piece.
- Always remove the drill bit before leaving the machine.

DRILL FEATURES

We are proud to offer the1020B Drill The 1020B is a professional tool and like all power tools, proper care and safety procedures should be adhered to.

This drill features solid cast iron construction, depth stop adjustment . Comes complete with pulleys, belts, arbor, drill chuck and motor.

Specifications
Size: 8"
Motor: 370W, please view nameplate
Chuck: 13MM
Spindle: B16
Speeds: 5
Height: 23"
Weight: 20kg.
Carton size: 14" x 8 1/2" x 17 1/2"

GROUNDING INSTRUCTIONS

In the event of a malfunction or breakdown, grounding provides the path of least resistance for electrical current and reduces the risk of electrical shock. This tool is equipped with an electrical cord that has an equipment grounding conductor and a grounding plug. The plug **MUST** be plugged into a matching outlet that has been properly installed and grounded in accordance with **ALL** local codes and ordinances.

DO NOT MODIFY THE PLUG PROVIDED. If the provided plug will not fit the electrical outlet, have the proper outlet installed by a qualified licensed electrician.

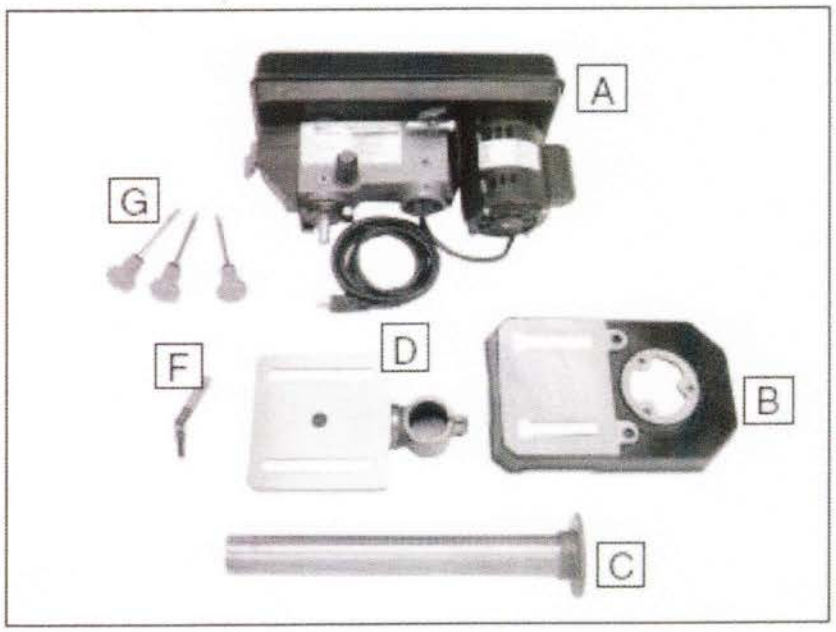
IMPROPER CONNECTION of the equipment grounding conductor can result in risk of electrical shock. The conductor wire with the green insulation (with or without yellow stripes) is the equipment-grounding conductor. If repair or replacement of the electrical cord or plug is required, **DO NOT** connect the equipment grounding conductor to a live terminal.

If in doubt about these instructions consult a qualified, licensed electrician.

UNPACKING AND CLEANING

Carefully unpack your drill press and all of its parts. Compare the carton contents with the illustration below. Do not discard any packing material until the drill press is completely assembled and operating properly.

Your drill press and some of its parts have been coated with a protective lubricant that should be removed before the machine is assembled. This can be done with a soft cloth moistened with non-corrosive kerosene or mineral spirits.



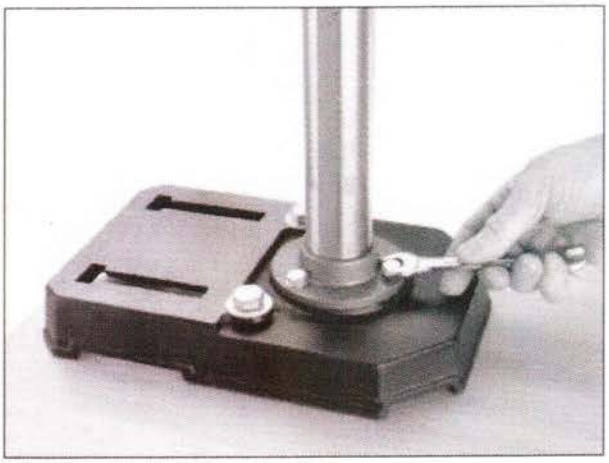
ASSEMBLY

MOUNTING THE DRILL PRESS

Your drill press must be securely fastened to prevent the machine from tipping, sliding or walking during operation. There are two base holes provided for this.

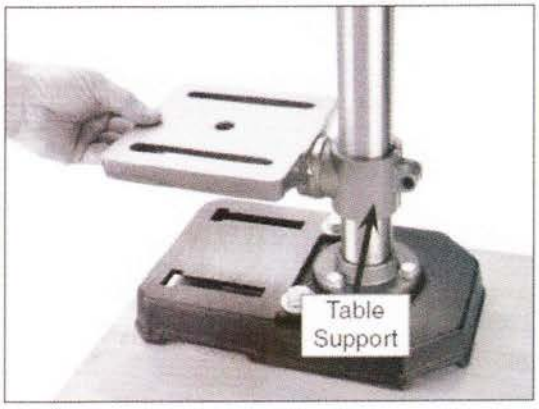
BASE TO COLUMN

Select the base and the drill press column from the loose parts. Select the three bolts from the parts bag. Align the holes of the post flange to the threaded holes in the base. Insert the bolts and tighten securely.



INSTALL THE TABLE SUPPORT

Slide the table support assembly down the column until it rests on the base.



ASSEMBLY

DRILL PRESS HEAD TO COLUMN.

Lift the drill press head carefully and position it over the column.

The column fits into the drill press mounting hole. Make certain the mounting hole is properly seated on the column. Line the drill press head up with the table and base and then tighten the two set-screws using the supplied hex wrench.

FEED HANDLE.

Fit the feed handle onto the shaft.

PULLEY COVER

Insert washer and screw through the hole in the pulley cover, thread the knob onto the screw and then tighten.

Adjustments

CHANGING SPINDLE SPEEDS

Disconnect the drill press from its power source.
Open the pulley cover.
Loosen the slide bar knob
Move the motor to the front to loosen the tension on both belts.
Relocate the belts to the pulley steps appropriate to the required spindle speed
To tighten the belt tension, move the motor toward the rear of the drill press.
Tighten the slide bar knob
Close the pulley cover.
Test run the drill press to check the belts for proper tension.

TABLE ADJUSTMENTS

To tilt the table from 0 degrees to 45 degrees left or right, loosen the table locking bolt, tilt the table to the desired angle and tighten the bolt.
When returning the table to 0 degrees tighten the bolts.

ADJUSTMENTS

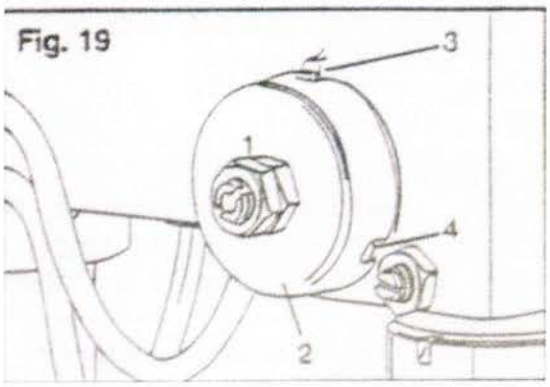
DRILLING DEPTH

Your drill press has been equipped with a new type depth adjustment. To set the depth stop, loosen the depth locking nuts and rotate them to the desired depth as indicated on the scale.

SPINDLE RETURN SPRING

The spindle is equipped with an auto-return mechanism. The main components of which are a spring and a notched chrome housing. The spring was properly adjusted at the factory and should not be readjusted unless absolutely necessary. If required, proceed as follows:

- ***Unplug the drill press.***
- Loosen the two housing nuts (1) approximately 1/4".
- Firmly hold the spring housing (2) and pull it out so it clears the raised notch (3).
- Turn it until the next notch is engaged with the boss. To increase the tension, turn it clockwise and counter-clockwise to decrease the tension.
- Tighten the two nuts.
- Do not over-tighten the nuts, as it will make the spindle handle sluggish.



OPERATION

Note: As with any new piece of equipment, the owner/operator should use scrap material in order to become accustomed to it.

DRILLING SPEEDS

The following is intended to be a general rule-of-thumb, not specific information. Important drilling speed factors are the type of material, hole size, the type of drill bit/cutter and the desired cut quality. The smaller the drill bit, the higher the speed required and soft materials generally require a higher speed while hard materials a slower speed.

METAL WORKING

A metal workpiece (like all work) should be firmly clamped to the drill press table and the table securely locked. NEVER hold the workpiece with your bare hands. The drill bit may grab and cause serious personal injury.
Flat metal pieces should be backed with scrap wood and clamped.
Irregular-shaped pieces should be blocked and clamped.

WOODWORKING

Metal-piercing twist drills may be used on wood but the preferred choice is brad-point bits .
Do not use auger bits, as they will tend to lift off the table.
To prevent tear-out when drilling through a workpiece, back it with a piece of scrap wood.

FEEDING

Be aware of the sound of the drill press motor when drilling.
Do not rotate the feed handles too quickly as the belts may slip or the motor may stall.
Feeding too slowly may cause the drill bit to heat up and possibly burn the workpiece.

MAINTENANCE

Disconnect the Power Cord before Working on the Machine

Although machines such as this drill press are designed to work in wood shops and metal shops, sawdust and metal shavings are not friendly to electrical motors.

The owner should routinely (once a month) blow out or vacuum metal shavings and sawdust from around the motor cover, the pulley housing, the drill press table and other surfaces.

The drill press table should be cleaned after each use.

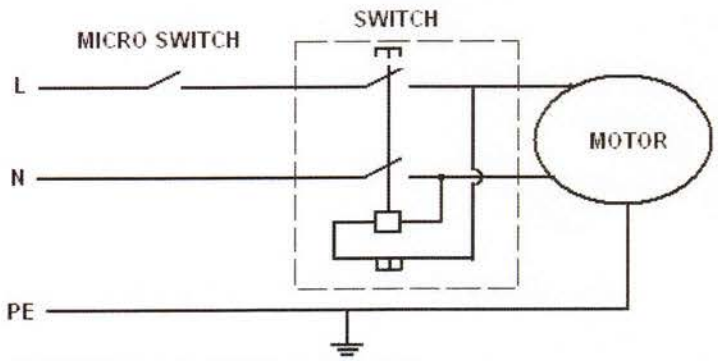
The application of a light coat of paste wax on drill press column and the table will help keep these surfaces clean and rust-free.

The bearings in the quill and V-belt assembly are permanently greased and sealed.

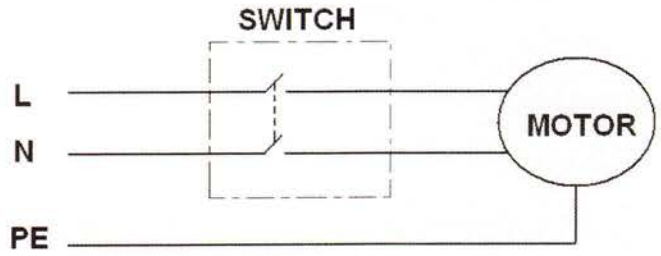
A light application of oil to the quill every three months is recommended.

Lubricate other moving parts as well to keep the drill press well maintained.

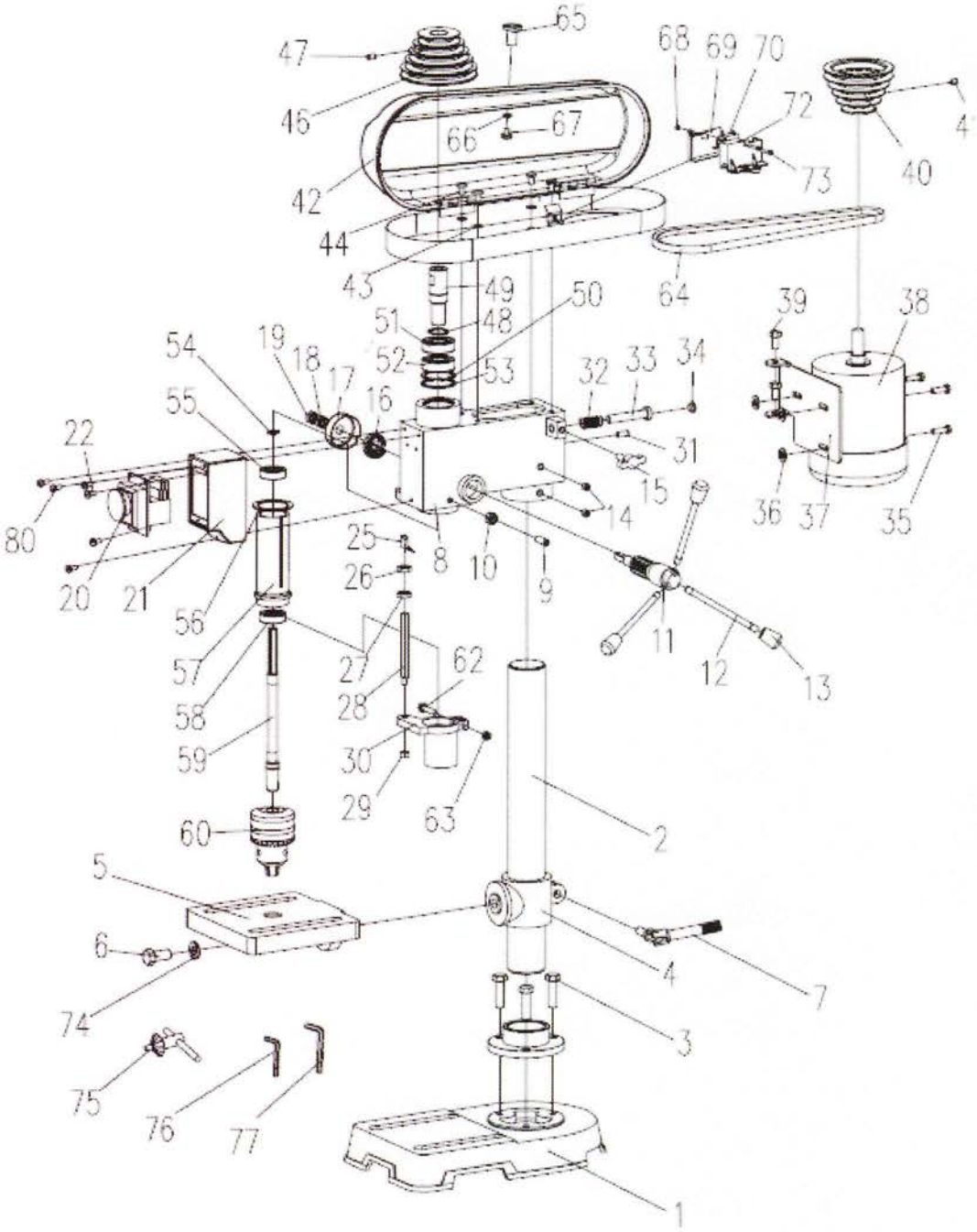
WIRING DIAGRAM (220V-240V/50Hz, 1 phase)



WIRING DIAGRAM (110V-120V/60Hz, 1 phase)



PART DIAGRAM



PART LIST

NO	DESCRIPTION	Q'TY	NO	DESCRIPTION	Q'TY
1	BASE	1	31	PINS	1
2	COLUMN	1	32	SPRING	1
3	BOLT M8X20	3	33	ADJUSTING BAR	1
4	TABLE BRACKET	1	34	RUBBER PAD	1
5	SQUARE TABLE	1	35	BOLT	3
6	BOLT M12X25	1	36	WASER	3
7	CLAMPING LEVER	1	37	MOTOR BASE	1
8	BODY	1	38	MOTOR	1
9	SCREW M6X18	1	39	BOLT M8X16	2
10	NUT M6	1	40	MOTOR PULLEY	1
11	FEED SHAFT	1	41	HEADLESS SET SCREW	1
12	HANDLE BAR	3	42	PULLEY COVER	1
13	KNOB	3	43	WASER	4
14	HEADLESS SET SCREW	2	44	SCREW M6X10	4
15	SHIFTER BAR	1	46	SPINDLE PULLEY	1
16	SPRING SEAT	1	47	HEADLESS SET SCREW	1
17	SPRING CAP	1	48	RETAIN RING	1
18	NUT	1	49	INTERNAL SPLINE SLEEVE	1
19	NUT	1	50	RETAIN RING	1
20	SWITCH	1	51	BALL BEARING 6203-2RZ/Z1	1
21	SWITCH BOX	1	52	BALL BEARING 6203-2RZ/Z1	1
22	SCREW	3	53	RETAIN RING	1
25	POINTER	1	54	RETAIN RING	1
26	NUT	1	55	BALL BEARING 6201-2RZ-Z1	1
27	NUT	1	56	WASER	1
28	LIMIT BOLT	1	57	SPINDLE SLEEVE	1
29	NUT	1	58	BALL BEARING 6201-2RZ-Z1	1
30	CHUCK GUARD	1	59	SPINDLE	1

PART LIST

NO	DESCRIPTION	Q'TY	NO	DESCRIPTION	Q'TY
60	DRILL CHUCK	1	72	SUPPORT PLATE (OPTIONAL)	1
62	BOLT M6X25	1	73	SCREW M3X18 (OPTIONAL)	2
63	NUT	1	74	SPRING WASHER	1
64	V-BELT	1	75	CHUCK KEY	1
65	HANDLE	1	76	HEX KEY 3 mm	1
66	WASER	1	77	HEX KEY 4 mm	1
67	SCREW	1	80	SCREW M4X10	4
68	NUT M3 (OPTIONAL)	2			
69	PLATE (OPTIONAL)	1			
70	MICRO SWITCH (OPTIONAL)	1			