

SAVE THIS MANUAL
FOR FUTURE REFERENCE

SEARS

*owners
manual*

**MODEL NO.
113.213832**

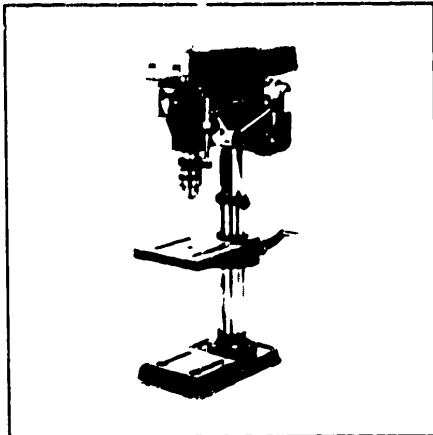
**DRILL PRESS WITH
1/4 HP MOTOR**

Sears
Number

Model and serial number
may be found at the rear of
the head.

You should record both
model and serial number in
a safe place for future use.

CAUTION:
Read GENERAL
and ADDITIONAL
SAFETY
INSTRUCTIONS
carefully



CRAFTSMAN.

**MOTORIZED
10 INCH
BENCH MODEL DRILL PRESS**

- **assembly**
- **operating**
- **repair parts**

FULL ONE YEAR WARRANTY ON CRAFTSMAN DRILL PRESS

If within one year from the date of purchase this Craftsman Drill Press fails due to a defect in material or workmanship, Sears will repair it, free of charge.

WARRANTY SERVICE IS AVAILABLE BY RETURNING THE CRAFTSMAN DRILL PRESS TO THE NEAREST SEARS RETAIL CATALOG STORE OR SERVICE CENTER DEPARTMENT IN THE UNITED STATES.

THIS WARRANTY APPLIES ONLY WHILE THIS PRODUCT IS IN USE IN THE UNITED STATES.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

SEARS ROEBUCK AND CO. Sears Tower BSC 41-3 Chicago, IL 60684

general safety instructions for power tools

- 1. KNOW YOUR POWER TOOL**
Read and understand the instructions and warnings that apply to the power tool you are using. Always use the proper technique and accessories for the job.
- 2. GROUND ALL TOOLS**
Tools should be grounded to prevent electric shock. Do not use tools that are not grounded.
- 3. KEEP GUARDS IN PLACE**
Always use the guard provided with the tool. Do not remove or adjust the guard.
- 4. REMOVE ADJUSTING KEYS AND WRENCHES**
Form a habit of checking to see that keys and adjusting wrenches are removed before turning on the tool.
- 5. KEEP WORK AREA CLEAN**
Cluttered areas and benches invite accidents. Keep work area well lighted. Provide adequate surrounding work space.
- 6. AVOID DANGEROUS ENVIRONMENT**
Do not use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted. Provide adequate surrounding work space.
- 7. KEEP CHILDREN AWAY**
All visitors should be kept a safe distance from work area.
- 8. MAKE WORKSHOP KID-PROOF**
Use padlocks, master switches, or by removing state keys.
- 9. DON'T FORCE TOOL**
It will do the job better and safer at the rate for which it was designed.
- 10. USE RIGHT TOOL**
Don't force tool or attachment to do a job it was not designed for.
- 11. WEAR PROPER APPAREL**
Do not wear loose clothing, gloves, neckties, or jewelry. Avoid hair to get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair. Roll long sleeves above the elbow.
- 12. USE SAFETY GOGGLES (Head Protection)**
Wear safety goggles when using any power tool. Do not use safety goggles that have not been tested to meet the ANSI safety standards. Always use proper eye protection when using any power tool.
- 13. SECURE WORK**
Use clamps or other means to hold work when possible. Do not use hands to hold work. Do not use hands to hold work when using a power tool.
- 14. DON'T OVERREACH**
Keep proper footing and balance at all times.
- 15. MAINTAIN TOOLS WITH CARE**
Keep tools sharp and clean for best and safest performance. Follow instructions for operating and changing accessories.
- 16. DISCONNECT TOOLS**
Before servicing, when changing accessories such as blades, bits, cutters, etc.
- 17. AVOID ACCIDENTAL STARTING**
Make sure switch is in OFF position before plugging in.
- 18. USE RECOMMENDED ACCESSORIES**
Consult the owner's manual for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards.
- 19. NEVER STAND ON TOOL**
Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.
Do not store materials above or near the tool such that it is necessary to stand on the tool to reach them.
- 20. CHECK DAMAGED PARTS**
Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure 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 part that is damaged should be properly repaired or replaced.

21 DIRECTION OF FEED

22 NEVER LEAVE TOOL RUNNING UNATTENDED

additional safety instructions for drill presses

WARNING For your own safety, do not attempt to operate your drill press until it is completely assembled and installed according to the instructions and until you have read and understand the following

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|---|------|
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| 1 General Safety Instructions for Power Tools | 2 |
| 2 Getting to Know Your Drill Press | 12 |
| 3 Basic Drill Press Operation | 16 |
| 4 Adjustments | 18 |
| 5 Maintenance | 19 |

- 6 Stability of Drill Press
 - a. If any part of the drill press, including machine, has been damaged or broken, do not use as the machine will be in an unsafe condition. A safety device of the government or a local operating authority may require the particular part properly repaired or replaced.
 - b. Never place your fingers in a position where they could contact the drill bit while rotating. If the workplace should unexpectedly shift or your hand should slip.
 - c. To avoid injury from parts thrown by the spring from instructions read fully as you adjust when adjusting spring tension of quill.
- 7 Location
 - a. Do not use the drill press in an area where the operator will be in the line of fire of the tool.
 - b. Do not use the drill press in an area where the operator will be in the line of fire of the tool.
- 8 Kickback
 - a. Do not use the drill press in an area where the operator will be in the line of fire of the tool.
 - b. Do not use the drill press in an area where the operator will be in the line of fire of the tool.
- 9 Protection Eyes Hands Face Ears and Body
 - WARNING** To avoid being pulled into the spinning tool —
 - 1 Do NOT wear
 - gloves
 - necktie
 - loose clothing
 - jewelry
 - 2 Tie back long hair

- 10 Use only accessories designed for this drill press to avoid serious injury from thrown broken parts or work pieces
 - a. Hand saws must NEVER be operated on this drill press at a speed greater than 600 RPM.
 - b. Drum sanders must NEVER be operated on this drill press at a speed greater than 1800 RPM.
- 11 Note and Follow the Safety Warnings and Instructions that Appear on the Panel on the Left Side of the Head
 - a. Do not operate at a speed greater than the length of the drill bit. Do not use a drill bit that is longer than the length of the workpiece.
 - b. Do not use workpieces that are not supported at both ends by the table or the drill press.
- 12 This Drill Press has 1 speed for use with the following RPMs:
 - 480 RPM
 - 1200 RPM
 - 1800 RPM
 - 2400 RPM

additional safety instructions for drill presses

- 1 Do not operate at a speed greater than the length of the drill bit. Do not use a drill bit that is longer than the length of the workpiece.
- 2 Do not use workpieces that are not supported at both ends by the table or the drill press.
- 3 Do not use accessories that are not designed for use on this drill press.
- 4 Do not operate at a speed greater than the length of the drill bit. Do not use a drill bit that is longer than the length of the workpiece.
- 5 Do not use workpieces that are not supported at both ends by the table or the drill press.

13 Think Safety Safety is a combination of operator common sense and alertness at all times when the drill press is being used.

WARNING Do not allow familiarity (gained from frequent use of your drill press) to become commonplace. Always remember that a carefree fraction of a second is sufficient to inflict severe injury.

The operator of any power tool can easily become preoccupied with the work being done, and the eyes, which are the most vulnerable part of the body, can be easily injured. Always wear safety goggles when operating a power tool. Operator safety goggles are available at most retail stores.

- DANGER**
- FOR YOUR OWN SAFETY**
- 1 READ AND UNDERSTAND OWNERS MANUAL BEFORE OPERATING MACHINE
 - 2 WEAR SAFETY GOGGLES
 - 3 DO NOT WEAR GLOVES, NECKTIE OR LOOSE CLOTHING, TIE BACK LONG HAIR
 - 4 SECURELY CLAMP WORK TO TABLE IF IT IS TOO SHORT TO CONTACT THE COLUMN WHEN IN OPERATING POSITION
 - 5 USE RECOMMENDED SPEED FOR DRILL ACCESSORY AND WORKPIECE MATERIAL
 - 6 SECURELY LOCK HEAD AND SUPPORT TO COLUMN ARM TO SUPPORT AND TABLE TO ARM BEFORE OPERATING DRILL PRESS
 - 7 USE ONLY RECOMMENDED ACCESSORIES



See right side of Head for location of adjustment of belt on pulleys.

unpacking and checking contents

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UNPACKING AND CHECKING CONTENTS

Model No. 113-2138-32 is shipped (with plug) in one carton and includes a 1/4 HP, 1725 RPM motor.

Separate all parts from packing materials and check against the Table of Loose Parts to make certain all parts are accounted for before disassembling the unit.

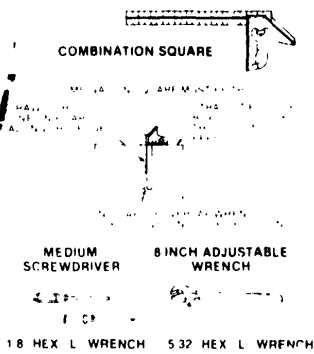
WARNING: For your own safety, if any parts are missing, do not attempt to assemble the drill press plug in the power cord or turn the switch on until the missing parts are obtained and installed correctly.

Read the manual for the motor, and follow the instructions for the motor, and the instructions for the drill press.

WARNING: To avoid fire or toxic reaction, never use gasoline, naphtha or similar highly volatile solvents.

Apply the proper care and use of the tool. Do not use the tool for anything other than its intended purpose.

TOOLS NEEDED



TABLES OF LOOSE PARTS

| Item | Description | Qty |
|------|-----------------------------------|-----|
| A | Tool Box Assembly | 1 |
| B | Motor Assembly | 1 |
| C | Table Support Assembly | 1 |
| D | Base | 1 |
| E | Owners Manual | 1 |
| | Black Motor Adapter | 1 |
| | Spring Bolt 8-16 x 1 1/2 | 1 |
| | Crossing Pin 4 x 4 x 1/2 | 1 |
| | Clamp | 1 |
| | Ball Head | 1 |
| | Subplate | 1 |
| | Clamp Key 3MM | 1 |
| | Table Clamp Assembly | 1 |
| | Screw Pan Hd 10-32 x 1 1/2 | 1 |
| | Plate | 1 |
| | Black Hex Hd 3/8-16 x 1 1/2 | 4 |
| | Lock Washer 3/8 | 4 |
| | Hex Set. Set Screw 5-16 1/8 x 1/2 | 2 |
| | Switch Key | 1 |
| | Screw Flat Hd 10-32 x 7/8 | 1 |
| | Knob - Belt Guard | 1 |
| | Screw Pan Head 1/4-20 x 1/2 | 1 |

* Parts Contained in Loose Parts Bag Part No. 113-30A

motor specifications and electrical requirements

MOTOR SPECIFICATIONS

This drill press is designed to use a 1725 RPM motor only. Do not use any motor that runs faster than 1725 RPM. It is wired for operation on 110-120 volts, 60 Hz alternating current.

WARNING: To avoid injury from unexpected start-up, do not use blower or washing machine motors or any motor with an automatic reset overload protector.

CONNECTING TO POWER SOURCE OUTLET

The plug must be properly inserted into the outlet to protect the plug from overheating.

The plug will not insert if it is not properly inserted. If the plug does not insert, do not force it. It may be necessary to contact a qualified electrician for assistance.

NOT ALL OUTLETS ARE PROPERLY GROUNDED IF YOU ARE NOT SURE THAT YOUR OUTLET AS PICTURED BELOW IS PROPERLY GROUNDED HAVE IT CHECKED BY A QUALIFIED ELECTRICIAN.

WARNING: Do not permit fingers to touch the terminals of plugs when installing or removing the plug to or from the outlet.

WARNING: If not properly grounded this power tool can incur the potential hazard of electrical shock, particularly when used in damp locations in proximity to plumbing. If an electrical shock occurs there is the potential of a secondary hazard such as your hands contacting the cutting tool.

If power cord is worn or cut, or damaged in any way, have it replaced immediately to avoid shock or fire hazard.

This power tool is equipped with a 3-conductor cord and grounding type plug which has a grounding prong approved by Underwriters Laboratories and the Canadian Standards Association. The ground prong is in a green jacket and is attached to the tool housing at one end and to the ground prong in the attachment plug at the other end.

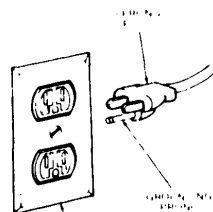
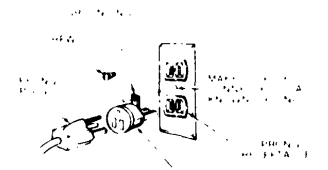
This plug requires a mating 3-conductor ground type outlet as shown.

If the outlet you are planning to use for this power tool is of the two-prong type, DO NOT REMOVE OR ALTER THE GROUNDING PRONG IN ANY MANNER. Use an adapter as shown and always connect the grounding prong to known ground.

It is recommended that you use a separate circuit for repairs to the TWO prong outlet with a properly grounded THREE prong outlet.

An adapter as shown between the power tool plug and the TWO prong outlet must be used.

WARNING: The green grounding lug extending from the adapter must be connected to a permanent ground such as to a properly grounded outlet box.



NOTE: The adapter illustrated is for use only if you already have a properly grounded 2-prong receptacle. An adapter is not allowed in Canada by the Canadian Electrical Code.

The use of any extension cord will cause some loss of power. To keep this to a minimum and to prevent overheating and motor burn-out, use the table below to determine the minimum wire size (A.W.G.) extension cord. Use only 3-wire extension cords which have 3-prong grounding type plugs and 3-pole receptacles which accept the tool's plug.

| Extension Cord Length | Wire Size A.W.G. |
|-----------------------|------------------|
| Up to 100 Ft | 16 |
| 100-200 Ft | 14 |
| 200-400 Ft | 10 |

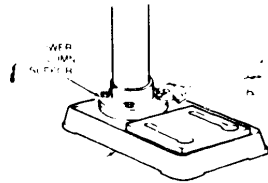
If your unit is for use on less than 150 volts, it has a plug that looks like the above.

assembly

WARNING For your own safety, never connect plug to power source outlet until all assembly steps are completed.

ASSEMBLY OF BASE COLUMN

- 1 Position base on floor.
- 2 Remove protective sleeve from column tube and discard. Place column assembly on base, and align holes in column support with holes in base.
- 3 Locate four (4) 3/8 16x1 1/2 bolts and four (4) 3/8 lock washers among loose parts bag.
- 4 Install a lockwasher and bolt in each hole through column support and base, and tighten with adjustable wrench.

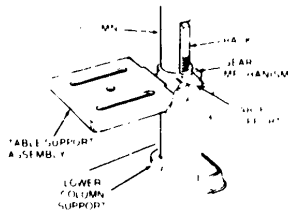


INSTALLATION OF TABLE SUPPORT ASSEMBLY AND HARDWARE

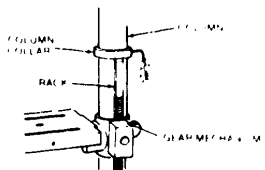
- 1 Locate two (2) 5/16 18x1 1/2 HEX L WRENCH set screws among loose parts bag.



- 2 With the smooth end of rack pointing upward, slide rack down through large round opening in table support. Engage rack in gear mechanism found inside opening of table support.
- 3 While holding rack and table support in an engaged position, slide both down over column. Slide rack down column until rack is positioned against lower column support.



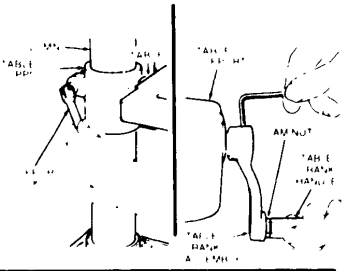
- 4 Replace column collar and position it over rack. Tighten setscrew in collar with 1/8 HEX L wrench. Collar should sit loosely over rack and should not be angled on the column. Only tighten setscrew enough to keep collar in place; rack should still slide freely in collar.



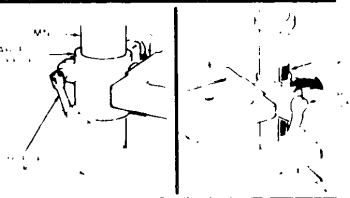
CAUTION: To avoid column tube or collar damage, do not over tighten setscrew.

assembly

- 5 Locate table crank assembly and support lock among loose parts.
- 6 Install table crank assembly (as illustrated) onto shaft extending out of table support. Tighten set screw against flat side of shaft using 1/8 HEX L WRENCH.
- 7 Install support lock from left side into table support and tighten by hand.
- 8 Table crank handle should turn freely when raising/lowering table. If adjustment is needed, loosen jam nut then with a screwdriver tap end of handle into there is play between jam nut and handle. Tighten jam nut securely when heading back to step 6.



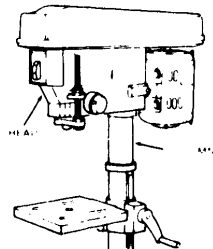
- 9 Loosen support lock and raise table support by turning table crank clockwise until support is at a working height. Tighten support lock.



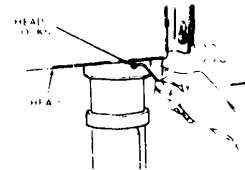
INSTALLING THE HEAD

CAUTION: The head assembly weighs about 45 pounds. Carefully lift head.

- 1 Remove protective bag from head assembly and discard. Carefully lift head above column tube and slide it onto column making sure head slides down over column as far as possible. Align head with table and base.

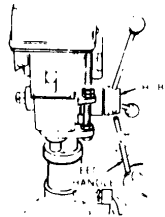


- 2 Locate two (2) 5/16 18x1 1/2 set screws among loose parts bag.
- 3 Install one set screw on each side of head to lock head into position, and tighten with 5/32 HEX L WRENCH.

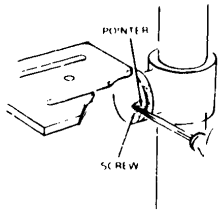


INSTALLING FEED HANDLES

1. Locate three (3) feed handles among loose parts.
2. Screw the feed handles into the threaded holes in the hub and tighten.

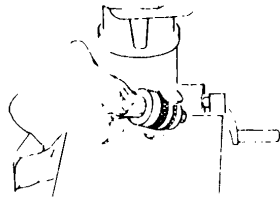


1. Locate one (1) 10-32x1/4 pan hd. screw and one (1) pointer among loose parts bag.
4. Install screw through pointer and adjustable support. Tighten screw with screwdriver.

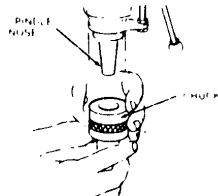


INSTALLING THE CHUCK

1. Locate chuck and one (1) 10-32x7/8 flat hd. screw among loose parts.
 2. Clean out the TAPERED HOLE in the chuck as illustrated. Clean the spindle nose with a clean cloth. Make sure there are no foreign particles striking to the surfaces. The slightest piece of dirt on the spindle nose or in the chuck will prevent the chuck from seating properly. This will cause the drill to wobble.
- NOTE:** If TAPERED HOLE in the chuck is extremely dirty, use a cleaning solvent on the clean cloth.

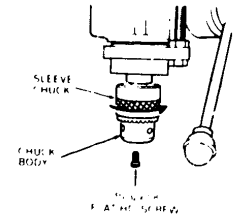


3. Push the chuck up on the spindle nose as far as it will go.
4. Lightly tap the nose of the chuck with a piece of wood to insure proper seating of the chuck on the spindle.



assembly

5. Open the jaws of the chuck as wide as they will go by turning the chuck sleeve.
6. Insert screw inside chuck and tighten onto spindle nose with screwdriver.



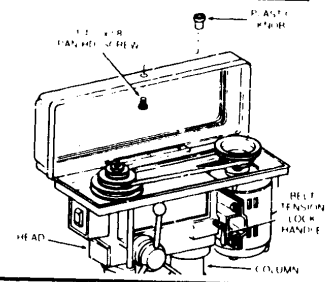
INSTALLATION OF BELT GUARD KNOB

1. Locate knob and 1/4 20x3/8 pan head screw in loose parts bag. Install screw in hole located in the guard and attach knob turning until tight.

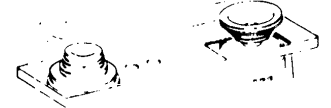
TENSIONING BELT

NOTE: The Drill Press is shipped with the belt installed but it should be properly tensioned before use.

1. Lift belt guard from right side and leave open on hinge.
2. Release Belt Tension Lock Handles located on each side of Drill Press head.

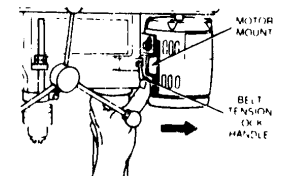


3. Choose speed for drilling operation, and move belt to correct position for desired speed.
- NOTE:** Refer to chart on side of Drill Press for Recommended Drilling Speeds.



4. Adjust belt tension by pushing against motor mount moving motor toward rear (see illustration).
5. Tighten Belt Tension Lock Handles.

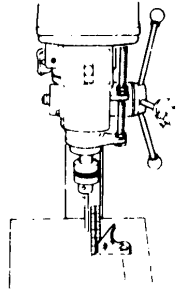
- NOTE:** Belt SHOULD deflect approximately 1/2" by thumb pressure at mid point of belt between pulleys.
6. Close belt guard.
 7. If belt slips while drilling, readjust belt tension.



ADJUSTING THE TABLE SQUARE TO HEAD

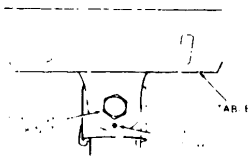
NOTE: The combination square must be held in the drill and press chuck and kept square to the work setting.

1. Insert a piece of round steel in the applicable work and clamp the chuck and tighten.
2. With the table set to work height and the work set to cutting depth, combine square to the table and work.



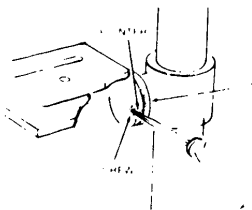
3. Place a straight edge vertically on the table and adjust the table with the BEVEL LOCK. The table and table bevel lock nut will be square with the work. The straight edge will be parallel to the table.

4. A. If the table is square to the table, tighten the lock.
5. Retighten table bevel lock nut.
6. Retighten lock screw.

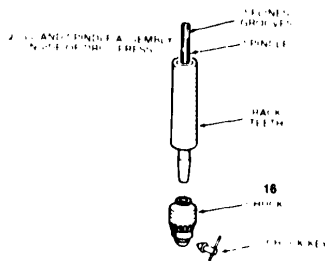
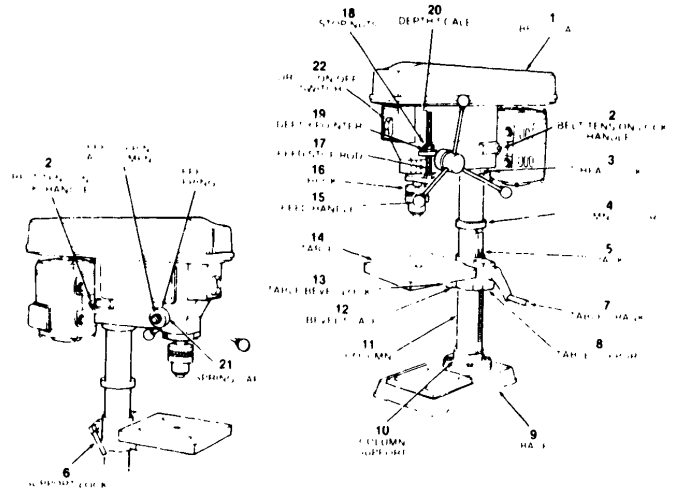


ADJUSTING POINTER

1. With the table squared to the head, the table bevel pointer should be adjusted.
2. Loosen screw in pointer with screw driver, and move pointer to 0 position on scale. Retighten screw.



getting to know your drill press



This Drill Press has 4 speeds as listed below:

- 480 RPM
- 930 RPM
- 1750 RPM
- 3000 RPM

See right side of Head for specific placement of belts on Pulleys.

| SPINDLE SPEEDS IN R.P.M. | |
|--------------------------|-------------|
| 480 RPM | 930 RPM |
| 1750 RPM | 3000 RPM |

1. BELT GUARD - Covers pulleys and belt during operation of Drill Press.

BELT TENSION LOCK HANDLES - Tightening handles for belts to prevent slipping and belt slippage problems.

2. HEAD LOCK - Locks the head to the column. ALWAYS have it locked in place when operating the Drill Press.

3. COLUMN COLLAR - Holds the table to the column. Rack remains movable in rear to permit table's support movements.

4. RACK - Combines with gear mechanism to provide easy elevation of table and to permit table's rack.

5. SUPPORT LOCK - Tightening lock table support to column. Always have it locked in place while operating the Drill Press.

6. TABLE CRANK - Turn to allow table to rotate. Support lock must be released before rotating crank.

7. TABLE SUPPORT - Rides on rollers to support table.

8. BASE - Supports Drill Press. Four sets of stability holes are provided in base to lock Drill Press to bench. (See Additional Safety Instructions for Drill Press).

9. COLUMN SUPPORT - Supports column, guides rack, and provides mounting holes for column to base.

10. COLUMN - Column holds table and quill. It supports the head, rack, column and table movement.

11. BEVEL SCALE - Shows degree of rotation for tilting of quill. It is mounted on table's support.

12. TABLE BEVEL LOCK - Locks the table to any position from 0 to 45°.

13. TABLE - Provides working surface to support workpiece.

14. FEED HANDLE - For moving the quill up or down. One or two may be removed if necessary when using the workpieces of such unusual shape that interfere with the handles.

15. CHUCK - Holds drill bit or other recommended accessories to perform desired operations.

16. FEED STOP ROD - Holds stop nuts for drilling to specific depths.

17. STOP NUTS - Limits the downward movement of the quill at any desired point with its travel and prevents the pointer from moving upward.

18. DEPTH POINTER - Indicates drilling depth and located between stop nuts.

19. DEPTH SCALE - Shows depth of hole being drilled in inches and millimeters.

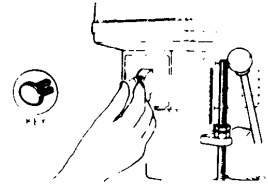
20. SPRING CAP - Provides means to adjust quill spring tension.

21. SPRING CAP - Provides means to adjust quill spring tension.

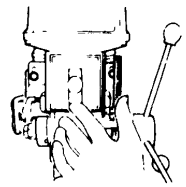
getting to know your drill press

22. ON-OFF SWITCH - Has locking feature. THIS FEATURE IS INTENDED TO PREVENT UNAUTHORIZED AND POSSIBLE HAZARDOUS USE BY CHILDREN AND OTHERS. Insert KEY into switch.

NOTE: Key is made of yellow plastic.

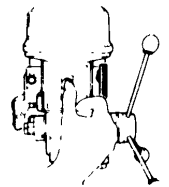


To turn drill ON - Push quill down. Push up and pull switch lever and pull.



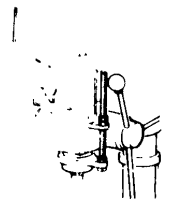
To turn drill OFF - Push quill up.

In an emergency - If the drill bit BINDS or STALLS STOP! - or binds to near the workpiece, those you can QUICKLY turn the drill OFF by falling the catch with the palm of your hand.



To lock switch in OFF position - hold switch IN with one hand - REMOVE key with other hand.

WARNING: For your own safety, always lock the switch "OFF" when Drill Press is not in use. Remove key and keep it in a safe place. Also, in the event of a power failure (all of your lights go out) or blown fuse or tripping circuit breaker, turn switch off - Lock it and remove the key. This will prevent the Drill Press from starting up again when the power comes back on.



CHUCK KEY This is a self-aligning key which will pop out of the Chuck when you attempt to adjust the jaws designed for supporting the work. This Chuck Key is removed from the Chuck when the motor is ON. Do not use any other key as it will damage the jaws and damaged work.

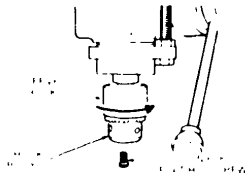
BELT TENSION Refer to the Assembly and Operating Instructions Belt Page 1.

REMOVING THE CHUCK

1. Open jaws of Chuck. Adjust the Work Piece to the desired depth.
2. Insert the Work Piece into the Chuck.
3. Turn the Tip of Chuck to the left. This will allow the work to be pulled out of the Chuck.
4. Pull the Work Piece out of the Chuck.

DRILLING SPEED It can be changed by pulling the handle on the STEERING JOY of the controls. See the controls panel for more information.

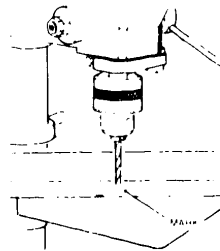
1. Refer to the appropriate instructions for the correct use of the SPEED of the controls.



DRILLING TO DEPTH

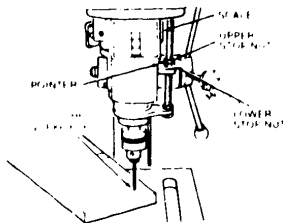
To drill a BLIND hole in a work piece, follow the following steps:

1. Mark the depth of the hole on the side of the work piece.
2. With the switch OFF, bring the drill down until the TIP of the drill is at the MARK.
3. Spin the lower nut down to contact the depth stop on the Head.
4. Move the POINTER all the way down.
5. Spin the upper nut down and tighten against the pointer.



ANOTHER WAY – DEPTH SCALE

1. With the switch OFF, bring the drill down until the TIP touches the TOP of the WORKPIECE.
2. Adjust the nuts so the Pointer is set to the desired DEPTH. TIGHTEN the UPPER NUT against the Pointer. For example, if you want to drill a hole one-inch deep, set the pointer at the one-inch mark on the scale.



basic drill press operation

Follow the following instructions for operating your drill press. Read the basic instructions to minimize the risk of personal injury.

WARNING For your own safety, always observe the safety precautions here and on pages 2, 3 and 4.

1 Protection: Eyes, Hands, Face, Ears and Body
WARNING To avoid being pulled into the spinning tool –

1. Do NOT wear
 - gloves
 - necktie
 - loose clothing
 - jewelry
2. Tie back long hair.

3. If the tip of your tool penetrates the work piece, do not pull the tool back. Turn the power OFF and pull the motor SWITCH to the OFF position. Do not touch the work piece until the power is OFF. Do not touch the work piece until the power is OFF.
4. Never place your fingers or palms where they could contact the drill or other cutting tool if the work piece should unexpectedly shift or your hand should slip.
5. To prevent injury from the spinning work piece, always use proper work practices. Do not adjust the work piece or adjust the speed of rotation until the power is OFF.
6. To prevent the work piece from being torn from your hands, spinning of the tool, shattering the tool or being thrown, always properly support your work so it won't shift or bend on the tool.

Always provide BACKUP MATERIAL (use dowels) through the work piece to contact the left side of the column.

Whenever possible, position the WORKPIECE to contact the left side of the column. If it is too short or the table is tilted, clamp securely to the table. Use table slots or clamping edge around the outside edge of the table.

- A. The press VICE must always be fastened to the table.

Never perform any operation FREE HAND (hand holding workpiece) rather than supporting it on the table, except when positioning.

Securely lock Head and Support to Column, Table Arm to support, and Table to Table Arm before operating the press.

Never move the Head or Table when the tool is running.

Before starting the operation, set the motor switch to remain OFF. Do not start drilling.

The drill press does not have excessive speed controls or cause vibration.

If a work piece overhangs the table, such that it will fall or tip if not held, clamp it to the table. It provides auxiliary support.

Use features for auxiliary operations, including hole, guide and position work pieces.

Use the SPINDLE SPEED to minimize risk of the spindle operation, and workpiece material. Check the panel on the left side of the head for operating information. For a complete list of the instructions, refer to the instructions provided with the accessories.

7. Never comb into the drill press. Table it could break or pull the motor press down on you.
8. Turn the motor SWITCH OFF and put away the Switch Key when leaving the drill press.
9. To avoid injury from thrown work or tool contact, do NOT perform layout, assembly or tool contact on the table while the cutting tool is rotating.

2 Use only accessories designed for this drill press to avoid serious injury from thrown broken parts or work pieces.

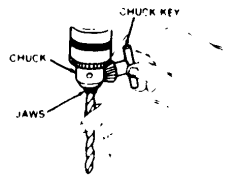
- a. Holesaws must NEVER be operated on this drill press at a speed greater than 400 RPM.
- b. Drum sanders must NEVER be operated on this drill press at a speed greater than 1800 RPM.
- c. Do not install or use any drill that exceeds 7/8" length or extends 6" below the chuck jaws. They can suddenly bend outward or break.
- d. Do not use wire wheels, router bits, shaper cutters, circle (fly) cutters or rotary planers on the drill press.

INSTALLING DRILLS

Insert drill into chuck far enough to obtain maximum GRIPPING of the CHUCK JAWS. The jaws are approx. 1/8" long. When using a smaller drill, do not insert it so far that the jaws touch the flutes (spiral grooves) of the drill.

Make sure that the drill is CENTERED in the chuck before tightening the chuck with the key.

Tighten the drill sufficiently so that it does not slip when drilling.



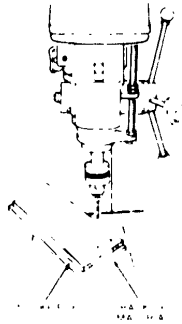
basic drill press operation

POSITIONING TABLE AND WORKPIECE

Position the table and workpiece in a position so that the height of the workpiece is equal to the above height of the workpiece.

Always use a piece of **BACK UP MATERIAL** with the workpiece in the table underneath the workpiece. The workpiece and the back up material should be clamped to the table. The workpiece and the back up material should be clamped to the table. The workpiece and the back up material should be clamped to the table.

WARNING To prevent the workpiece or the backup material from being torn from your hand while drilling, position them against the left side of the column. If the workpiece or the backup material are not long enough to reach the column, clamp them to the table. Failure to do this could result in personal injury.



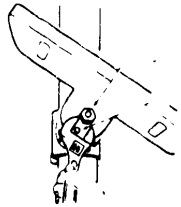
The vise must be clamped or bolted to the table to avoid injury from spinning work and vise or tool breakage.

WARNING The vise must be clamped or bolted to the table to avoid injury from spinning work and vise or tool breakage.



TILTING TABLE

To tilt the table, adjust the table height and the workpiece height. The workpiece and the back up material should be clamped to the table. The workpiece and the back up material should be clamped to the table.



basic drill press operation

WARNING To avoid injury from spinning work or tool breakage, always clamp workpiece and backup material securely to table before operating Drill Press with the table tilted.

1. The table and workpiece should be positioned so that the height of the workpiece is equal to the above height of the workpiece.

SOLE LOCATION

Make sure the workpiece is positioned so that the height of the workpiece is equal to the above height of the workpiece.

Before turning the switch ON, bring the drill down to the workpiece and stop it up with the hand crank.

FEEDING

Push down on the feed handle with steady enough effort to cut the workpiece.

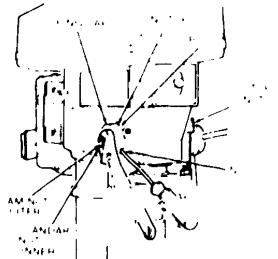
Feeding TOO SLOWLY will cause the drill to burn. Feeding TOO RAPIDLY will cause the drill to break. Use the correct amount of force to feed the workpiece.

adjustments

WARNING For your own safety turn switch OFF and remove plug from power source outlet before making any adjustments. To avoid injury from thrown parts due to spring release, follow instructions carefully.

QUILL RETURN SPRING

1. Move the stop nut and depth pointer to the workpiece and lock in place with the hand crank while adjusting the spring.
2. Lower table for adjustment.
3. Work from left side of the Drill Press.
4. Place screwdriver on the workpiece and hold it in place while loosening and removing jam [outer] nut only.
5. With screwdriver remaining in notch, insert large standard lined nut up from hole. Do NOT REMOVE THIS NUT.
6. Carefully turn screwdriver counter clockwise and engage next notch in boss. DO NOT REMOVE SCREWDRIVER.
7. Tighten standard nut with wrench only enough to engage boss. Do not over-tighten as this will restrict quill movement. Remove screwdriver.
8. Move stop nuts and depth pointer to upper most position and check tension while turning feed handle.
9. If there is not enough tension on spring, repeat steps 4-8 requiring only ONE not-fourth turn and checking tension after EACH repetition.
10. Proper tension is achieved when the return spring is fully up piston when released from 4-4 stop.



11. When there is enough tension after checking, replace jam nut and tighten to standard nut. BUT do not over-tighten against standard nut.
12. Check quill while feeding to have smooth and unrestricted movement. If movement is too tight, loosen jam nut and SLIGHTLY loosen standard nut until unrestricted. Retighten jam nut.

maintenance

WARNING For your own safety turn switch OFF and remove plug from power source outlet before maintaining or lubricating your drill press

Frequency of maintenance should be determined by the user.

For more information refer to the maintenance section of the user manual.

WARNING To avoid shock or fire hazard if the power cord is worn or cut or damaged in any way have it replaced immediately

lubrication

Always use the recommended lubricant with your machine. The use of other lubricants may damage the machine. For more information refer to the user manual. The use of other lubricants may damage the machine. For more information refer to the user manual.

recommended accessories

WARNING Use only recommended accessories. Follow instructions that accompany accessories. Use of improper accessories may cause hazards.

| | | | |
|---------------------------|----------------|-------------------------------------|-------------|
| Dr. Bits | See Catalog | Buffer Wheel, up to 4 inch max. | See Catalog |
| Mini Dr. Attachment | 9-2457 | Power Wheel, 1 1/2 inch | 9-2458 |
| Dr. Press Vise | See Catalog | Power Tool, Know How Repair Service | |
| Dr. Press Workholding Kit | 9-2957-1 | Ratchet Saw | 9-2911 |
| 5 Pin Slip Clutch Set | 9-6706-3 | Table Saw | 9-2918 |
| Sanding Drum | 9-2447, 9-2498 | | |

The recommended accessories listed here are optional and were available at the time this manual was printed.

trouble shooting

WARNING For your own safety, turn switch OFF and always remove plug from power source outlet before trouble shooting

• CONSULT YOUR LOCAL DEALERS FOR THE ENTERESTING AND REPAIRABLE ITEMS WILL NOT BE

| TROUBLE | PROBABLE CAUSE | REMEDY |
|---|--|---|
| Noisy Operation | <ol style="list-style-type: none"> 1. Incorrect lubrication 2. Dry Spindle 3. Loose spring pulley 4. Loose timing pulley | <ol style="list-style-type: none"> 1. Adjust tension. See section ASSEMBLY TENSIONING BELT 2. Lubricate spindle. See Lubrication section. 3. Check tightness of retaining nut on pulley and tighten. If necessary, try 4. Tighten set screws on pulleys. |
| Drill Burns | <ol style="list-style-type: none"> 1. Incorrect speed 2. Chip load too high 3. Dull drill 4. Feeding too slow 5. Not lubricated | <ol style="list-style-type: none"> 1. Change speed. See section Getting To Know Your Drill Press (GETTING SPEED) 2. Retract drill to clear chip with back up. 3. Resharpen drill. 4. Feed fast enough - allow back cut. Lubricate drill. See Basic Drill Press Operation section. |
| Drill leads off hole not round | <ol style="list-style-type: none"> 1. Hard grain wood or lengths of cutting lips and/or angles not equal | <ol style="list-style-type: none"> 1. Resharpen drill correctly. |
| 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. See Basic Drill Press Operation section. |
| Workpiece torn 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. See Basic Drill Press Operation section. |
| Drill binds in workpiece | <ol style="list-style-type: none"> 1. Workpiece pinching drill or excessive feed pressure 2. Improper belt tension | <ol style="list-style-type: none"> 1. Support workpiece or clamp it. See Basic Drill Press Operation section 2. Adjust tension. See section ASSEMBLY TENSIONING BELT |
| Excessive drill runout or wobble | <ol style="list-style-type: none"> 1. Bent drill 2. Worn spindle bearings 3. Drill not properly installed in chuck 4. Chuck not properly installed | <ol style="list-style-type: none"> 1. Use a straight drill 2. Replace bearings 3. Install drill properly. See Basic Drill Press Operation section 4. Install chuck properly refer to Unpacking and Assembly Instructions INSTALLING THE CHUCK |
| 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. See section Adjustments Quill Return Spring |