

Save This Manual  
For Future Reference

**SEARS**

owner's  
manual

MODEL NO.  
113.213150

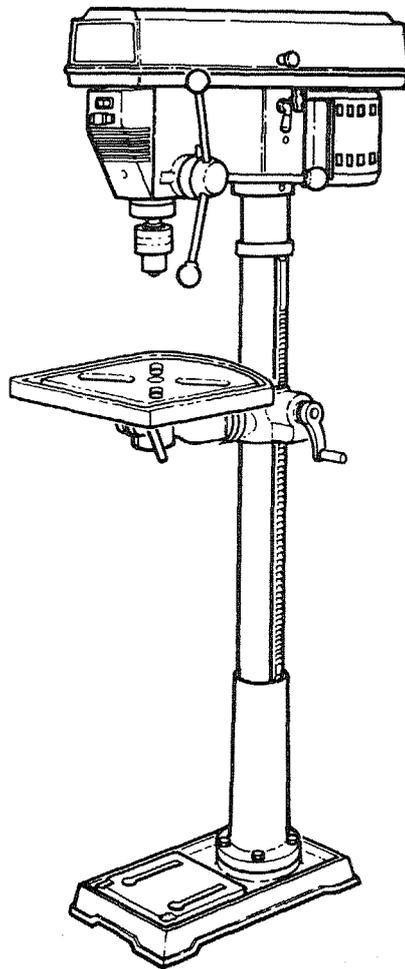
DRILL PRESS WITH  
MAXIMUM DEVELOPED  
1 HP MOTOR

Serial  
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 ALL  
INSTRUCTIONS  
CAREFULLY



**CRAFTSMAN**

**MOTORIZED  
15-INCH  
FLOOR MODEL DRILL PRESS**

- assembly
- operating
- repair parts

Sold by SEARS, ROEBUCK AND CO., Chicago, IL 60684 U.S.A.

Part No. SP5187

Printed in Taiwan

## 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 SIMPLY CONTACTING THE NEAREST SEARS SERVICE CENTER/DEPARTMENT THROUGHOUT THE UNITED STATES.

This warranty applies only while this product is used 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., Dept. 698/731A, Sears Tower, Chicago, IL 60684

## GENERAL SAFETY INSTRUCTIONS FOR POWER TOOLS

- 1. KNOW YOUR POWER TOOL**  
Read and understand the owner's manual and labels affixed to the tool. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.
- 2. GROUND ALL TOOLS**  
This tool is equipped with an approved 3-conductor cord and a 3-prong grounding type plug to fit the proper grounding type receptacle. The green conductor in the cord is the grounding wire. Never connect the green wire to a live terminal.
- 3. KEEP GUARDS IN PLACE**  
In working order, and in proper adjustment and alignment.
- 4. REMOVE ADJUSTING KEYS AND WRENCHES**  
Form a habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- 5. KEEP WORK AREA CLEAN**  
Cluttered areas and benches invite accidents. Floor must not be slippery due to wax or sawdust.
- 6. AVOID DANGEROUS ENVIRONMENT**  
Don't 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 CHILD-PROOF**  
With padlocks, master switches, by removing starter keys, or storing tools where children can't get them.
- 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 tools or attachment to do a job it was not designed for.
- 11. WEAR PROPER APPAREL**  
Do not wear loose clothing, gloves, neckties, or jewelry (rings, wrist watches) to get caught in moving parts. NONSLIP 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 (must comply with ANSI Z87.1) at all times. Everyday eyeglasses are not safety glasses. They only have impact resistant lenses. Also, use face or dust mask if cutting operation is dusty, and ear protectors (plugs or muffs) during extended periods of operation.
- 13. SECURE WORK**  
Use clamps or a vise to hold work when practical. It frees both hands to operate 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 lubricating 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 OR ITS STAND**  
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 or its stand 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 or moving parts, breakage of parts, mounting, and any other conditions that should be properly repaired or replaced.
- 21. DIRECTION OF FEED**  
Feed work into a blade or cutter against direction of rotation of the blade or cutter only.
- 22. NEVER LEAVE TOOL RUNNING UNATTENDED**  
Turn power off. Don't leave tool until it comes to a complete stop.

# additional safety instructions for drill presses

**WARNING: FOR YOUR OWN SAFETY, DO NOT USE YOUR DRILL PRESS UNTIL IT IS COMPLETELY ASSEMBLED AND INSTALLED ACCORDING TO THE INSTRUCTIONS . . . AND UNTIL YOU HAVE READ AND UNDERSTAND THE FOLLOWING:**

1. General Safety Instructions for Power Tools . 2
2. Getting to Know Your Drill Press . . . . . 17
3. Basic Drill Press Operation . . . . . 23
4. Adjustments . . . . . 25
5. Maintenance . . . . . 26
6. Stability of Drill Press

If there is any tendency of the drill press to tilt or move during any use, bolt it to the floor or a flat piece of 1/2" exterior plywood large enough to stabilize the drill press. Bolt the plywood to the underside of the Base, so it extends at least to both sides. Make sure the plywood won't trip the operator. **Do not use pressed wood panels**—they can break unexpectedly.

If the workpiece is too large to easily support with one hand, provide an auxiliary support.

## 7. Location

Use the drill press in a well lit area and on a level surface clean and smooth enough to reduce the risk of trips, slips, or falls. Use it where neither the operator nor a casual observer is forced to stand in line with a potential kickback.

## 8. Kickback

A kickback occurs when the workpiece is suddenly thrown in the OPPOSITE direction to the DIRECTION OF FEED: THIS CAN CAUSE SERIOUS INJURY. Kickbacks are most commonly caused by use of accessories NOT recommended for this 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. Do tie back long hair
- a. If any part of your drill press is missing, malfunctioning, has been damaged or broken . . . such as the motor switch, or other operating control, a safety device or the power cord . . . cease operating immediately until the particular part is properly repaired or replaced.
  - b. Never place your fingers in a position where they could contact the drill or other cutting tool if the workpiece should unexpectedly shift or your hand should slip.
  - c. To avoid injury from parts thrown by the spring, follow instructions exactly as given and shown in adjusting spring tension of quill.

- d. To prevent the workpiece 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 bind on the tool:
    - Always position BACKUP MATERIAL (use beneath the workpiece) 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 solidly to the table. Use table slots or clamping ledge around the outside edge of the table.
    - When using a drill press VICE, always fasten it to the table.
    - Never do any work "FREEHAND" (hand-holding workpiece rather than supporting it on the table), except when polishing.
    - Securely lock Head and Support to Column, Table Arm to support, and Table to Table Arm before operating drill press.
    - Never move the Head or Table while the tool is running.
    - Before starting the operation, jog the motor switch to make sure the drill or other cutting tool does not wobble or cause vibration.
    - If a workpiece overhangs the table such that it will fall or tip if not held, clamp it to the table or provide auxiliary support.
    - Use fixtures for unusual operations to adequately hold, guide and position workpiece.
    - Use the SPINDLE SPEED recommended for the specific operation and workpiece material—check the label inside the Belt Guard for drilling information; for accessories, refer to the instructions provided with the accessories.
  - e. Never climb on the drill press Table, it could break or pull the entire drill press down on you.
  - f. Turn the motor Switch Off and put away the Switch Key when leaving the drill press.
  - g. To avoid injury from thrown work or tool contact, do NOT perform layout, assembly, or setup work on the table while the cutting tool is rotating.
- ## 10. 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" in 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 this drill press.

**11. Note and Follow the Safety Warnings and Instructions that Appear on the Panel on the Right Side of the Head:**

**• DANGER FOR YOUR OWN SAFETY: •**

Know This Tool! Read and Understand Owner's Manual before Using this Machine.  
Use Recommended Drill Speed—See Chart Inside Pulley Cover.

<ul style="list-style-type: none"> <li>■ Always wear safety goggles that comply with ANSI Z87.1.</li> <li>■ Do not wear gloves, necktie or loose clothing. Tie back long hair.</li> <li>■ Securely clamp work to table if it is too short to contact the column when in operating position.</li> </ul>	<ul style="list-style-type: none"> <li>■ Securely lock head and support to column, arm to support, and table to arm before operating drill press.</li> <li>■ Use only recommended accessories.</li> </ul>
--	---




**12. This Drill Press has 12 speeds as listed below:**

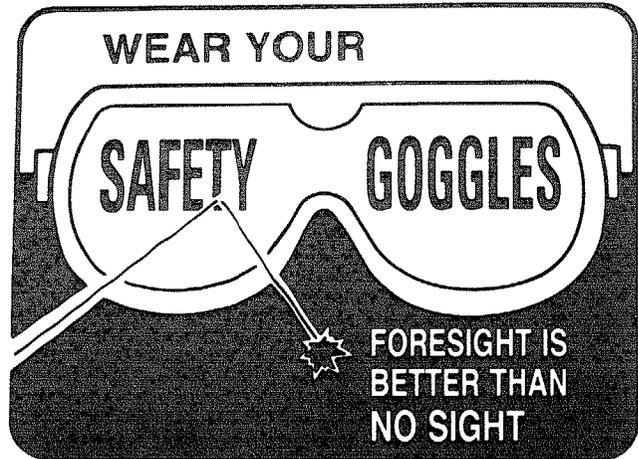
250 RPM	990 RPM
340 RPM	1550 RPM
390 RPM	1620 RPM
510 RPM	1900 RPM
600 RPM	2620 RPM
650 RPM	3100 RPM

See inside of belt guard for specific placement of belt on pulleys.

**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 CARELESS FRACTION OF A SECOND IS SUFFICIENT TO INFLICT SEVERE INJURY.**

The operations of any power tool can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear safety goggles comply with ANSI Z87.1 (shown on Package) before commencing power tool operation. Safety Goggles are available at Sears retail or catalog stores.



# glossary of terms

**1. Workpiece**

The item on which the cutting operations is being performed.

**2. Drill**

The cutting tool used in the drill press to make holes in a workpiece.

**3. Backup Material**

A piece of wood placed between the workpiece and table . . . . it prevents wood in the workpiece from splintering when the drill passes through the back-side of the workpiece . . . . also prevents drilling into the table top.

**4. Revolution Per Minute (R.P.M.)**

The number of turns completed by a spinning object in one minute.

**5. Spindle Speed**

The RPM of the spindle.

Glossary  
of Terms

# table of contents

Table of  
Contents

<b>Page</b>		<b>Page</b>	
General Safety Instructions for Power Tools . . . . .	2	Adjusting the Table Square to Head . . . . .	16
Additional Safety Instructions for Drill Presses . . . . .	3	Bevel Scale . . . . .	16
Glossary of Terms . . . . .	5	Getting to Know Your Drill Press . . . . .	17
Table of Contents . . . . .	5	On-Off Switch . . . . .	19
Motor Specifications and Electrical Requirements . . . . .	6	Drilling to a Specific Depth . . . . .	20
Unpacking and Checking Contents . . . . .	7	Locking Chuck Desired Depth . . . . .	20
Table of Loose Parts . . . . .	8	Removing Chuck and Arbor . . . . .	21
Location and Function of Controls . . . . .	9	<b>Re-Installing The Chuck and Arbor.</b> . . . . .	22
Assembly . . . . .	10	Basic Drill Press Operation . . . . .	23
Assembly of Column and Table Hardware . . . . .	10	Installing Drills . . . . .	23
Installing the Table . . . . .	11	Positioning Table and Workpiece . . . . .	24
Installing the Head . . . . .	11	Tilting Table . . . . .	25
Mounting Motor . . . . .	12	Hole Location . . . . .	25
Installing Motor Pulley . . . . .	12	Feeding . . . . .	25
Tensioning Belt . . . . .	12	Adjustments . . . . .	25
Installing Belt Guard Knob . . . . .	13	Quill Return Spring . . . . .	25
Motor Connections . . . . .	14	Maintenance . . . . .	26
Installing Feed Handles . . . . .	14	Lubrication . . . . .	26
Installing the Chuck . . . . .	14	Recommended Accessories . . . . .	26
Installing Light Bulb . . . . .	16	Trouble Shooting . . . . .	27
		Repair Parts . . . . .	28

# 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 STARTUP, DO NOT USE BLOWER OR WASHING MACHINE MOTORS OR ANY MOTOR WITH AN AUTOMATIC RESET OVERLOAD PROTECTOR.**

## CONNECTING TO POWER SOURCE OUTLET

This machine must be grounded while in use to protect the operator from electric shock.

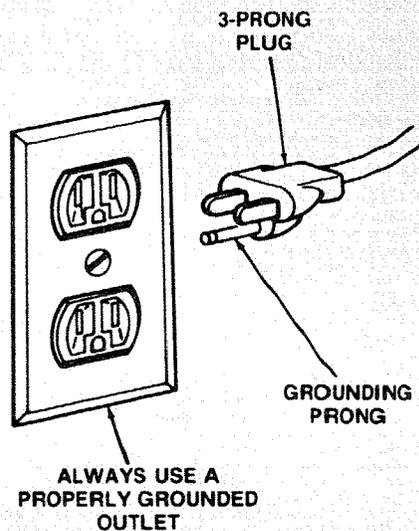
Plug power cord into a 110-120V properly grounded type outlet protected by a 15-amp. dual element time delay or Circuit breaker.

**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: TO AVOID ELECTRIC SHOCK, DO NOT TOUCH THE METAL PRONGS ON THE PLUG, WHEN INSTALLING OR REMOVING THE PLUG TO OR FROM THE OUTLET.**

**WARNING: FAILURE TO PROPERLY GROUND THIS POWER TOOL CAN CAUSE ELECTRICUTION OR SERIOUS SHOCK, PARTICULARLY WHEN USED IN DAMP LOCATIONS, OR NEAR METAL PLUMBING. IF SHOCKED, YOUR REACTION COULD CAUSE YOUR HANDS TO HIT 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.**



Your unit is for use on 120 volts. It has a plug that looks like the one above.

This power tool is equipped with a 3-conductor cord and grounding type plug, approved by Underwriters' Laboratories and the Canadian Standards Association. The ground conductor has 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.

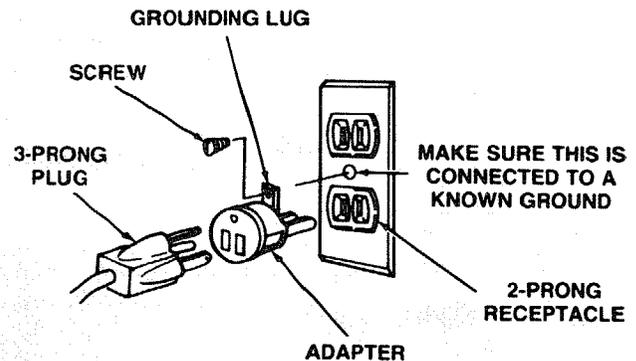
This plug requires a mating 3-conductor grounded type outlet as shown.

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 lug to known ground.

It is recommended that you have a qualified electrician replace the TWO prong outlet with a properly grounded THREE prong outlet.

An adapter as shown below is available for connecting plugs to 2-prong receptacles.

**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. 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 tools plug.

Extension Cord Length	Wire Size A.W.G.
0-25 Feet	16
26-50 Feet	14
51-100 Feet	12

# unpacking and checking contents

**WARNING: TO AVOID INJURY FROM UNEXPECTED STARTING OR ELECTRICAL SHOCK, DO NOT PLUG THE POWER CORD INTO A SOURCE OF POWER. THIS CORD MUST REMAIN UNPLUGGED WHENEVER YOU ARE WORKING ON THE DRILL PRESS.**

Model 113.213150 Drill Press is shipped complete in one box.

## 1. 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 packing material. Some loose parts are contained inside the belt guard. Open the belt guard cover to find them.

**WARNING: IF ANY PARTS ARE MISSING, DO NOT ATTEMPT TO ASSEMBLE DRILL PRESS, PLUG IN THE POWER CORD, OR TURN THE SWITCH ON UNTIL THE MISSING PARTS ARE OBTAINED AND ARE INSTALLED CORRECTLY.**

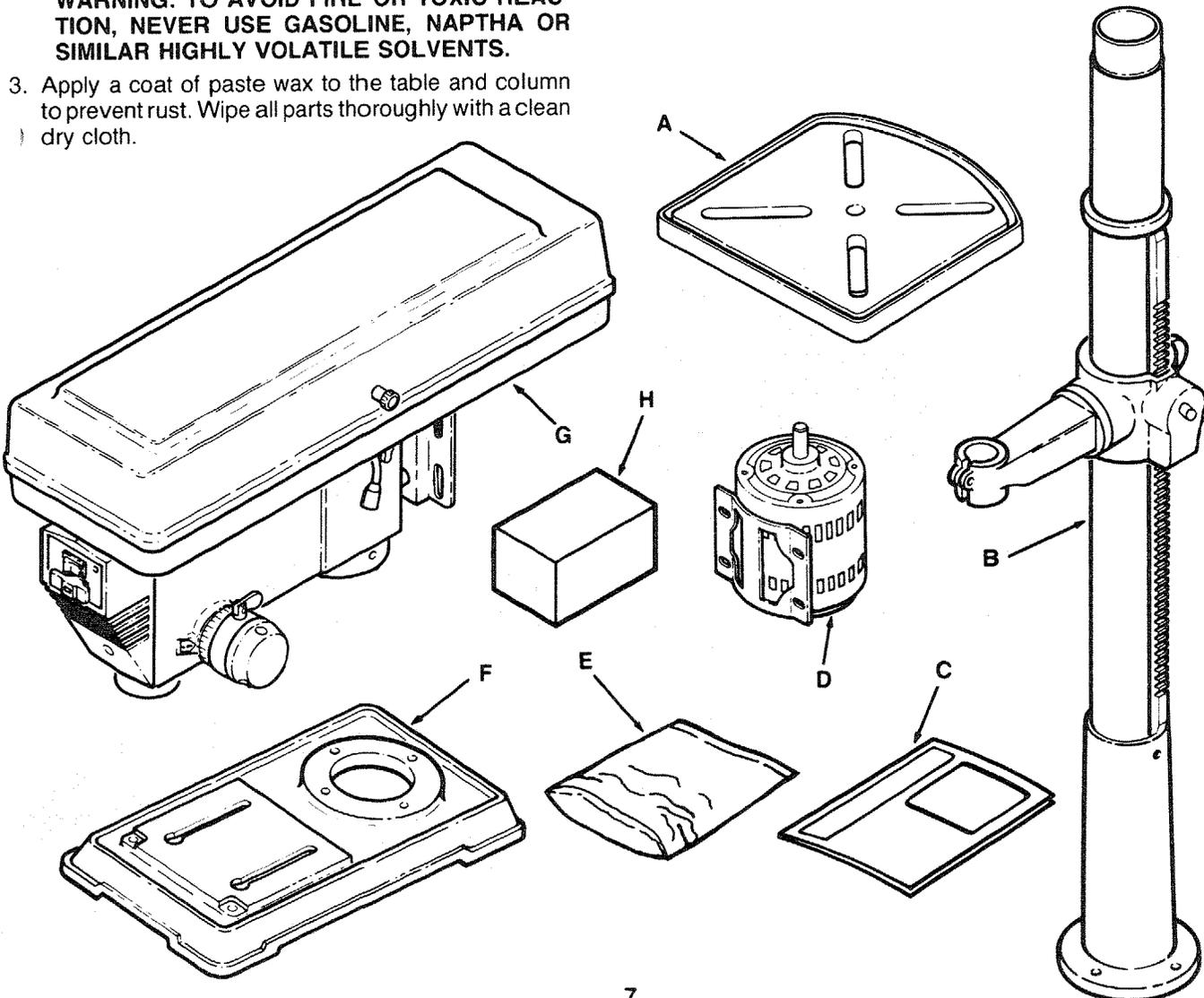
2. Remove the protective oil that is applied to the table and column. Use any ordinary household type grease and spot remover.

**WARNING: TO AVOID FIRE OR TOXIC REACTION, NEVER USE GASOLINE, NAPHTHA OR SIMILAR HIGHLY VOLATILE SOLVENTS.**

3. 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

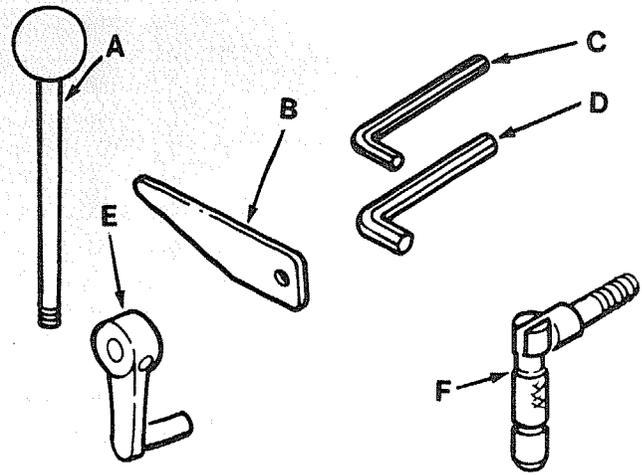
Item	Description	Qty.
A	Table	1
B	Column Support Asm.	1
C	Owner's Manual	1
D	Motor	1
E	Bag of Loose Parts	2
F	Base	1
G	Head Asm.	1
H	Box of Loose Parts	1



Unpacking and Checking Contents

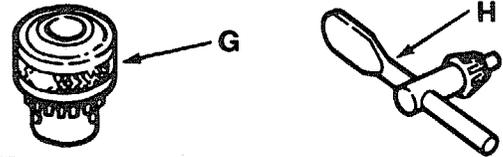
List of Loose Parts in Bag 507886

Item	Description	Qty.
A	Feed Handle	3
B	Key Drift	1
C	Wrench Hex "L" 3mm	1
D	Wrench Hex "L" 5mm	1
E	Crank	1
F	Clamp Column	1



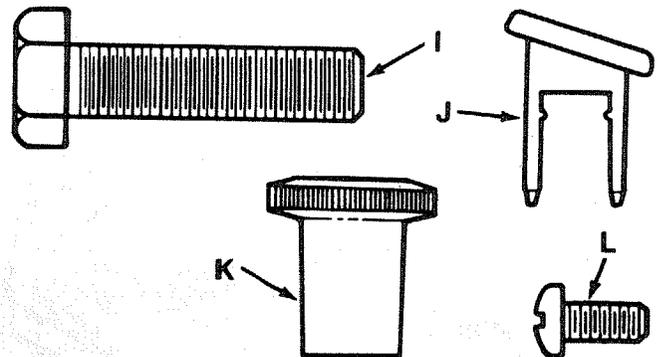
List of Loose Parts in Box 507887

Item	Description	Qty.
G	Chuck	1
H	Chuck Key	1



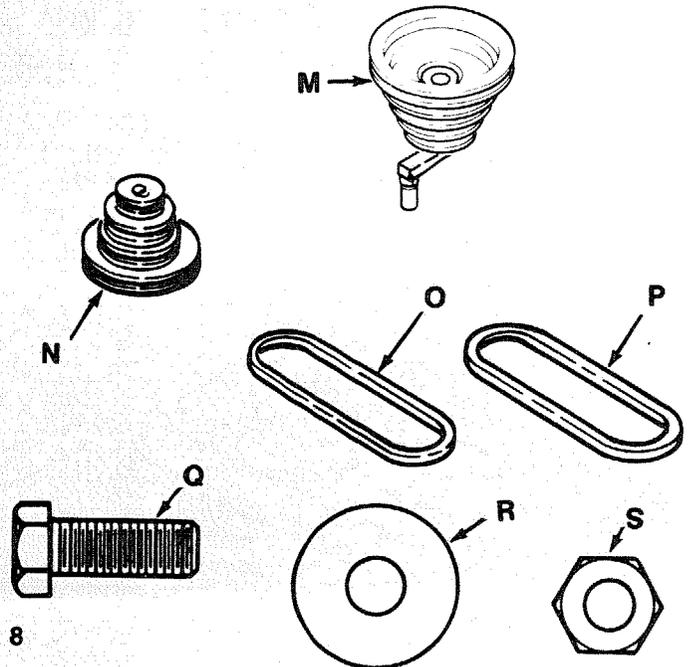
List of Loose Parts in Bag 507888

Item	Description	Qty.
I	Screw Hex HD. M10 x 1.5-40	4
J	Key-Switch	1
K	Knob (Guard)	1
L	Screw Pan HD. M5 x 0.8-12	1



List of Loose Parts in Bag 507889

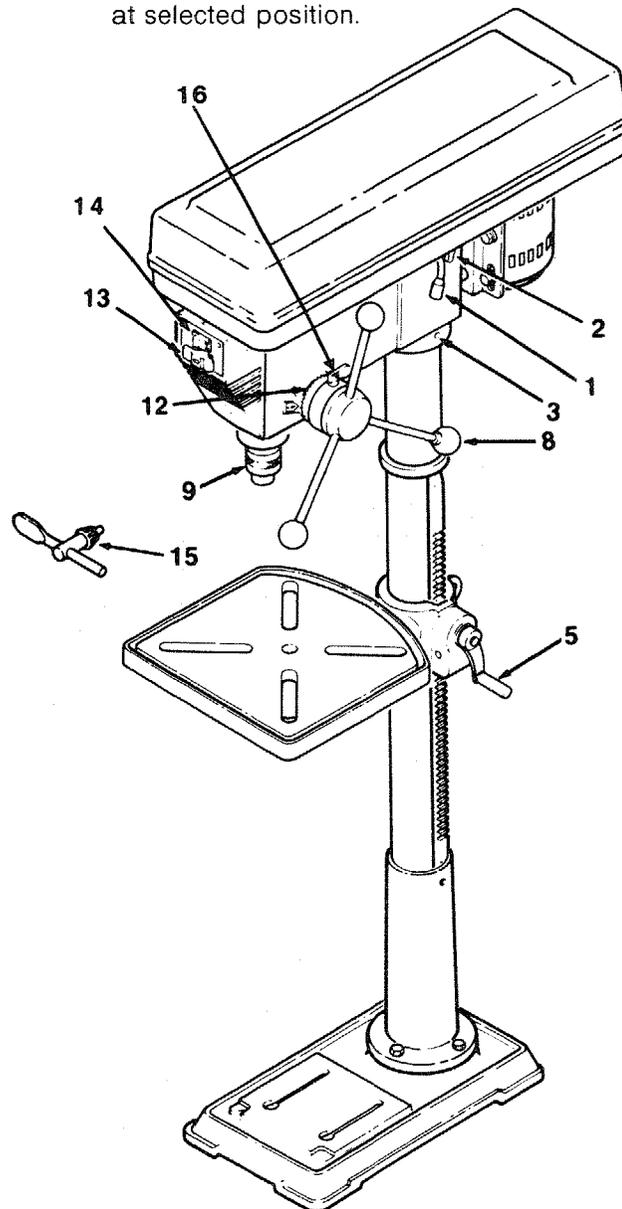
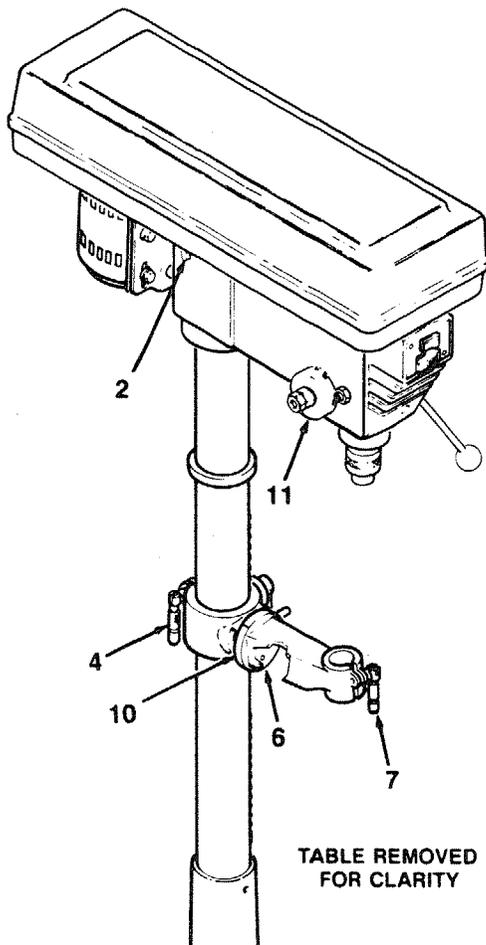
Item	Description	Qty.
M	Idler Pulley Assembly	1
N	Pulley-Motor	1
O	Belt "V" 3/8 x 24	1
P	Belt "V" 3/8 x 26	1
Q	Screw-Hex HD. M8 x 1.25-20	4
R	Washer 5/16 x 3/4 x 1/8	8
S	Nut-Hex M8 x 1.25	4



# location and function of controls

1. **BELT TENSION HANDLE** . . . Turn handle counter clockwise to apply tension to belt, turn handle clockwise to release belt tension.
2. **BELT TENSION LOCK HANDLES** . . . Tightening handles locks motor bracket support and **BELT TENSION HANDLE** to maintain correct belt distance and tension.
3. **HEAD LOCKS** . . . Lock the head to the column. ALWAYS have them locked in place while operating the drill press.
4. **SUPPORT LOCK** . . . Tightening locks table support to column. Always have it locked in place while operating the Drill Press.
5. **TABLE CRANK** . . . Turn clockwise to elevate table. Support lock must be released before operating crank.
6. **TABLE BEVEL LOCK** . . . Locks the table in any position from 0°-45°.
7. **TABLE LOCK** . . . Allows table to be rotated in various positions and locked.
8. **FEED HANDLE** . . . For moving the quill up or down. One or two may be removed if necessary whenever the workpiece is of such unusual shape that it interferes with the handles.

9. **CHUCK** . . . Holds drill bit or other recommended accessory to perform desired operations.
10. **BEVEL SCALE** . . . Shows degree table is tilted for bevel operations. Scale is mounted on side of arm.
11. **SPRING CAP** . . . Provides means to adjust quill spring tension.
12. **DEPTH SCALE** . . . Allows operator to adjust drill press to drill to a desired depth.
13. **DRILL "ON-OFF" SWITCH** . . . Turns drill press on and off . . . also used to lock drill press in off position.
14. **LIGHT "ON-OFF" SWITCH** . . . Turns the light on and off.
15. **CHUCK KEY** . . . Used to tighten drill in the chuck and also to loosen the chuck for drill removal.
16. **DEPTH SCALE LOCK** . . . Locks the depth scale at selected position.



Location and Function of Controls

# assembly

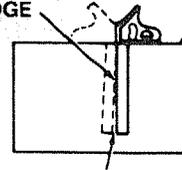
**WARNING: FOR YOUR OWN SAFETY, NEVER CONNECT PLUG TO POWER SOURCE OUTLET UNTIL ALL ASSEMBLY STEPS ARE COMPLETED.**

**FRAMING SQUARE MUST BE TRUE.**

Check its accuracy as illustrated below.

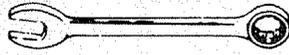
DRAW LIGHT LINE ON BOARD ALONG THIS EDGE

STRAIGHT EDGE OF BOARD 3/4" THICK—THIS EDGE MUST BE PERFECTLY STRAIGHT



SHOULD BE NO GAP OR OVERLAP WHEN SQUARE IS FLIPPED OVER IN DOTTED POSITION

## TOOLS NEEDED



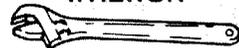
15/16" BOX END WRENCH

MEDIUM SCREWDRIVER



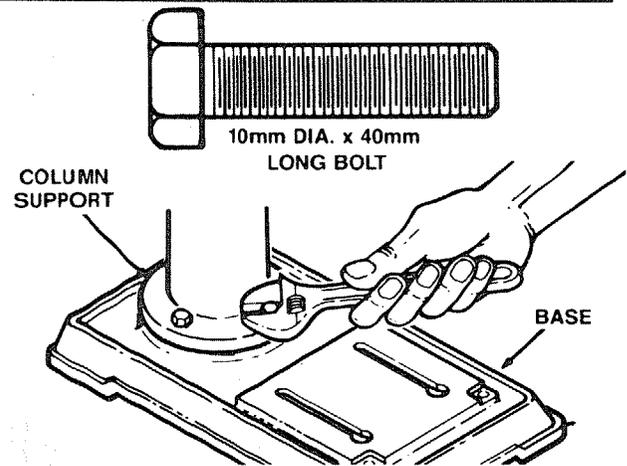
COMBINATION SQUARE

8-INCH ADJUSTABLE WRENCH

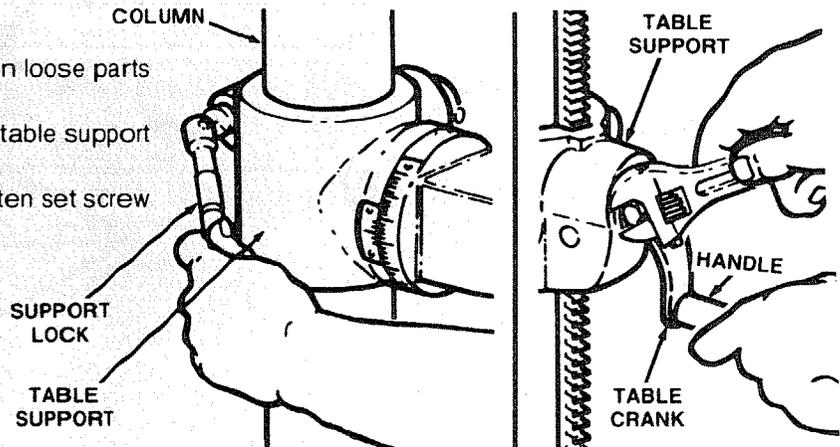


## ASSEMBLY OF COLUMN AND TABLE HARDWARE

1. Position base on floor. Remove protective covering and discard.
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 (4) four 10mm Dia. x 40mm long bolts (see illustration) in loose parts bag.
4. Install a bolt in each hole through column support and base and tighten with adjustable wrench.

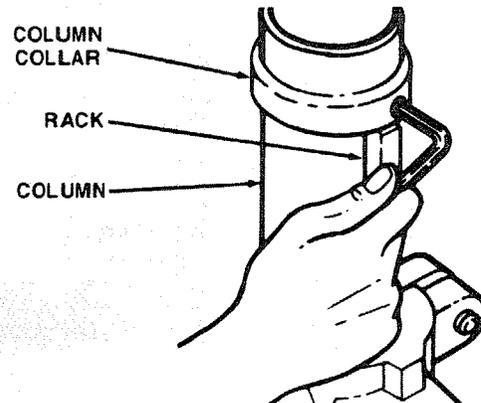


5. Locate table crank and support lock in loose parts bag.
6. Install support lock from left side into table support and tighten by hand.
7. Install table crank assembly and tighten set screw with an adjustable wrench.



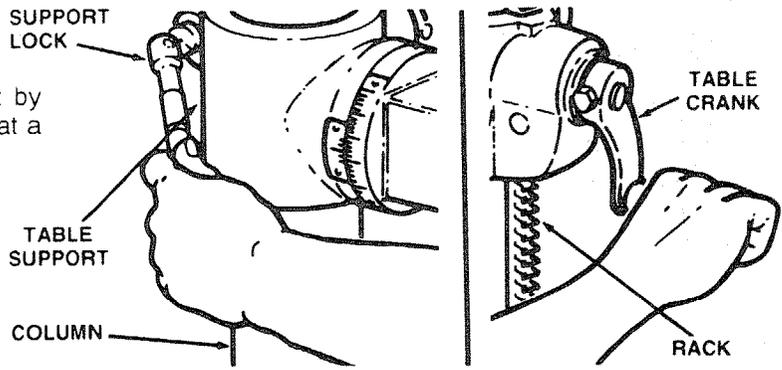
8. Position column collar over rack and tighten set screw in collar, using 3mm HEX "L" wrench, supplied in loose parts bag. Collar should not be angled on the column. Only tighten set screw enough to keep collar in place; rack should still slide freely in collar.

**CAUTION: To avoid column or collar damage, do not overtighten set screw.**

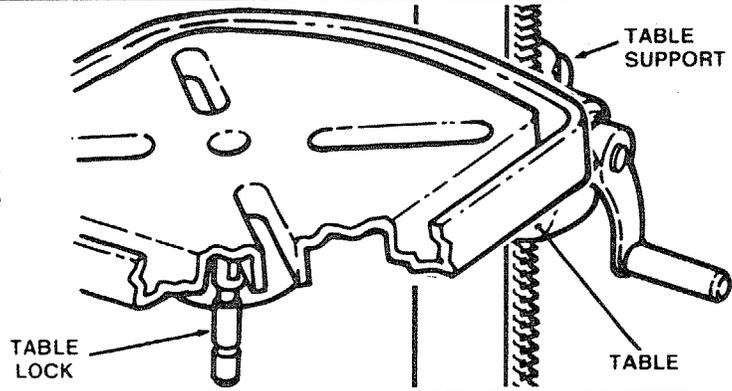


## INSTALLING THE TABLE

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



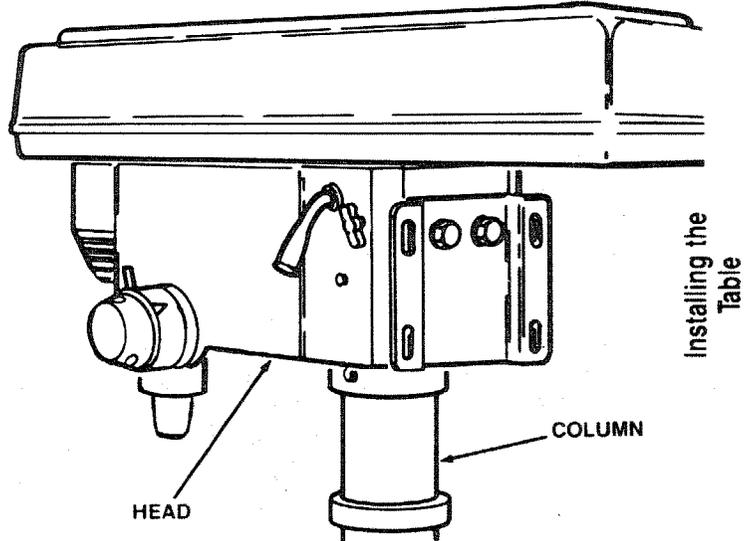
2. Remove protective covering from table and discard. Place table in table support and tighten table lock (located under table) by hand.



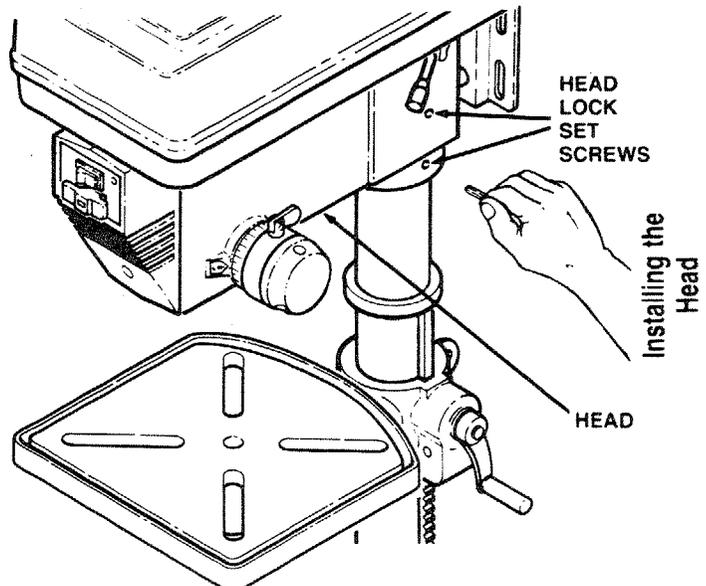
## INSTALLING THE HEAD

**CAUTION:** The head assembly weighs about 55 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. Using a 5mm HEX "L" wrench tighten the two head lock set screws on the right side of the head.



## MOUNTING MOTOR

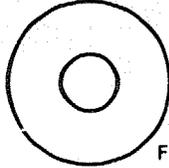
1. Locate four (4) 8mm Dia x 20mm long hex head bolts, eight (8) flat washers, and four (4) hex nuts among loose parts.
2. Install hex head bolts through motor bracket on head.
3. Place motor in position so motor base slots line up with motor bracket slots. Install flat washers and hex nuts as illustrated. (Do not tighten)
4. Motor shaft should be as close as possible to center of round opening in belt guard.



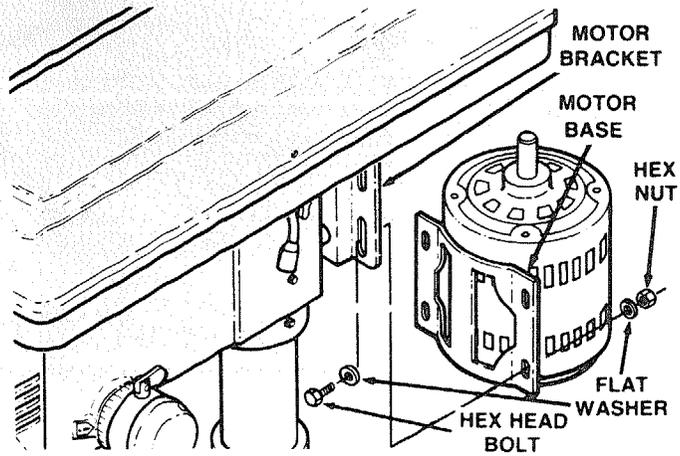
8mm DIA. x 20mm LONG BOLT



HEX NUT

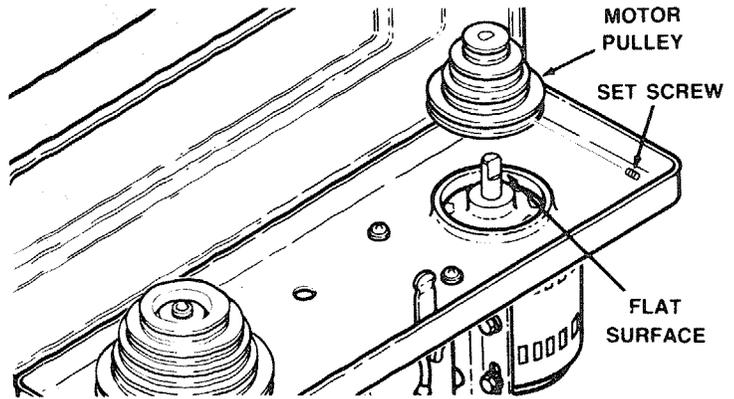


FLAT WASHER



## INSTALLING MOTOR PULLEY

1. Find the motor pulley in loose parts bag.
2. Slide pulley onto motor shaft. Line up the flat surface on the motor shaft with the set screw in pulley.
3. Make sure the pulley does not rest on the lower guard.
4. Tighten the set screw using a 3mm HEX "L" wrench.



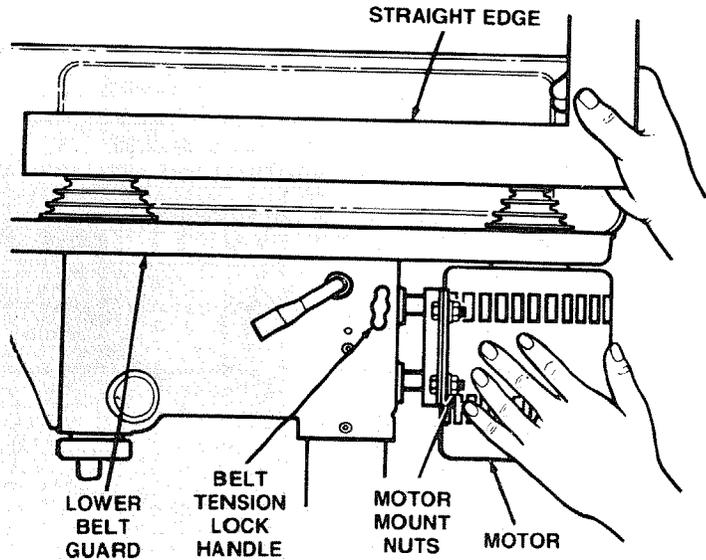
## INSTALLING AND TENSIONING BELT

**WARNING: TO AVOID INJURY DUE TO ACCIDENTAL STARTING ALWAYS TURN DRILL PRESS OFF AND REMOVE SWITCH KEY BEFORE MAKING BELT ADJUSTMENTS.**

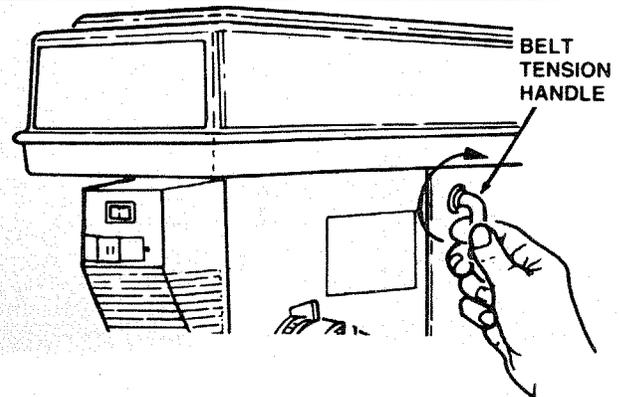
1. Place a straight edge such as a piece of wood, metal, or framing square across the top of pulleys.
2. Move the motor upward until the pulleys are in line. Tighten the motor mount nuts using an adjustable wrench.

**NOTE:** To avoid rattles or other noise, motor frame must not touch lower belt guard.

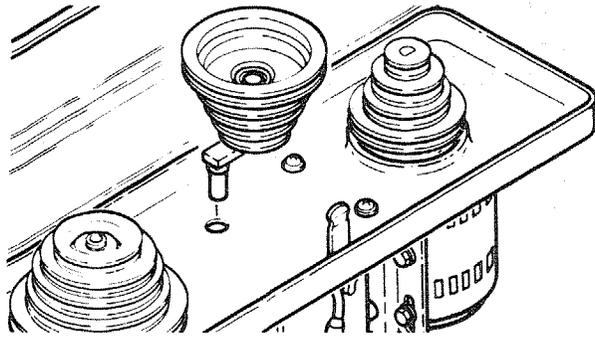
3. Release Belt Tension Lock handles located on each side of Drill Press head by turning them counterclockwise.



4. Loosen Belt Tension handle by turning clockwise.



5. Locate center pulley assembly in loose parts bag and place in proper hole.



6. Locate two (2) V-belts in the loose parts bag.
7. Use speed chart inside belt guard to choose speed for drilling operation. Install belts in correct position for desired speed. The **longer** of the two belts is always positioned between the spindle pulley and idler pulley.

**NOTE:** Refer to chart inside belt guard for Recommended Drilling Speeds.

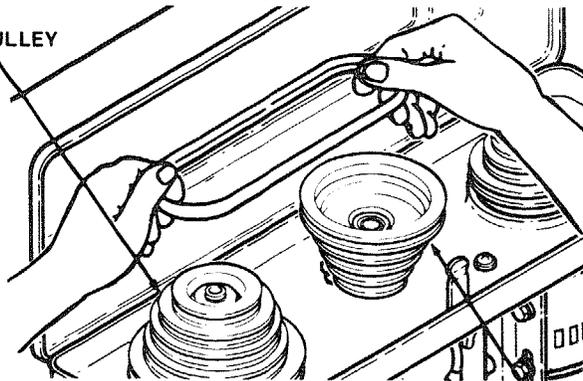
8. Apply tension to belt by turning Belt Tension Handle counter clockwise until belt deflects approximately 1/2 inch by thumb pressure at its center.

9. Tighten Belt Tension Lock Handles.

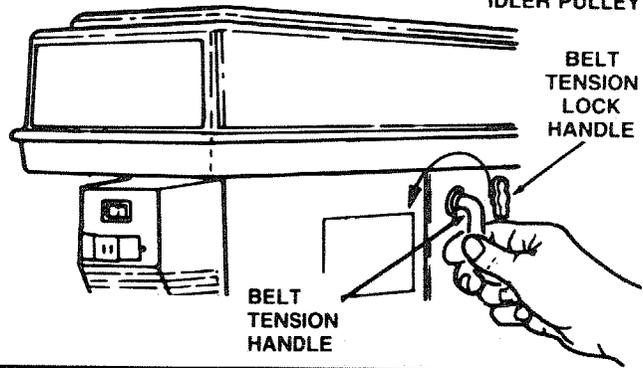
**CAUTION:** Over tensioning belt may cause motor not to start or damage bearings.

10. If belt slips while drilling, readjust belt tension.

SPINDLE PULLEY

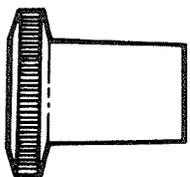


IDLER PULLEY



BELT TENSION LOCK HANDLE

BELT TENSION HANDLE



BELT GUARD KNOB

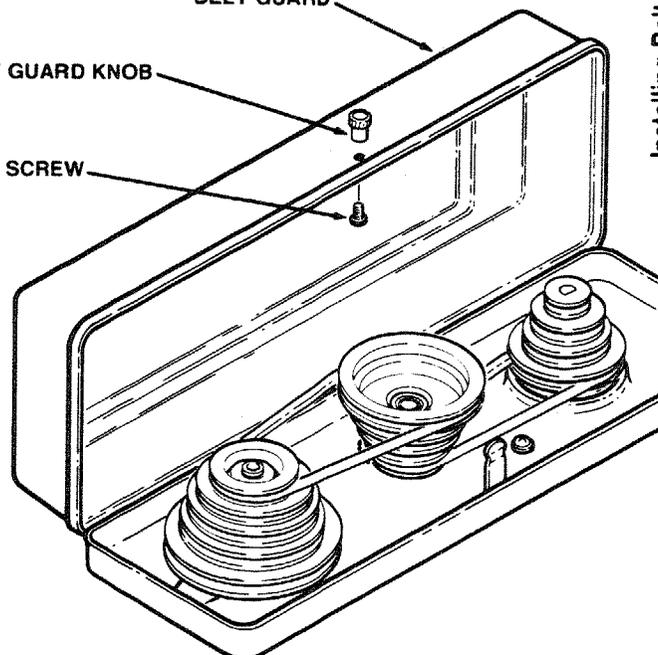


5mm DIA. x12mm LONG SCREW

BELT GUARD

BELT GUARD KNOB

PAN HD. SCREW



Installing Belt Guard Knob

### INSTALLING BELT GUARD KNOB

1. To attach belt guard knob, locate knob and 5mm Dia. x12mm long pan hd. screw in loose parts bag. Install screw in hole located in guard and attach knob turning until tight.

**WARNING:** TO AVOID POSSIBLE INJURY KEEP GUARD IN PLACE AND IN PROPER WORKING ORDER WHILE OPERATING.

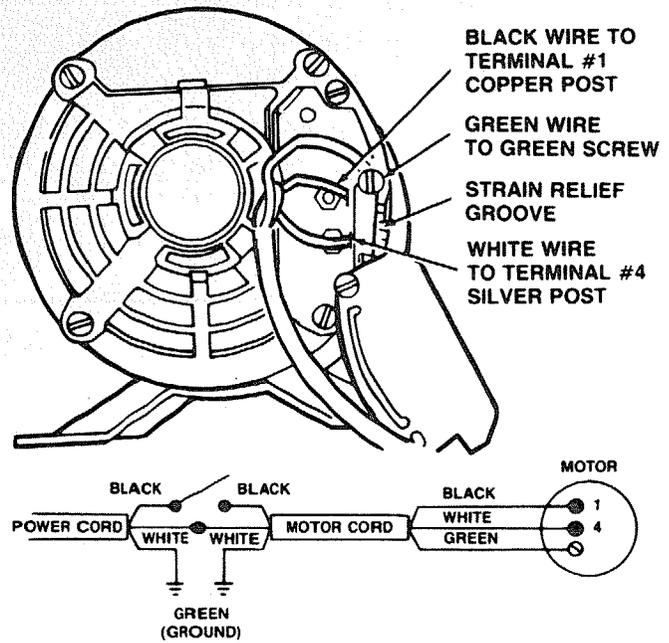
## MOTOR CONNECTIONS

**WARNING: FOR YOUR OWN SAFETY, NEVER CONNECT PLUG TO POWER SOURCE OUTLET UNTIL ALL ASSEMBLY STEPS ARE COMPLETED.**

1. Open motor connector box cover located on underside of motor using a flat blade screwdriver.

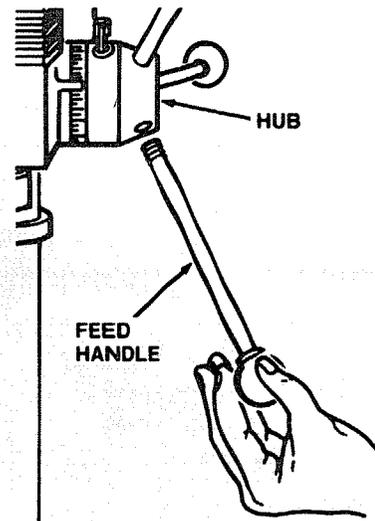
**WARNING: TO AVOID ELECTROCUTION, NEVER CONNECT ANYTHING BUT THE GROUND WIRE (COLORED GREEN) TO THE GREEN SCREW.**

2. Remove GREEN SCREW and insert through round metal terminal on the end of the GREEN wire of power cord.
3. Reinsert GREEN SCREW in threaded hole that it was removed from and tighten securely.
4. Insert terminal end of WHITE wire on spade terminal (next to silver post) marked #4 on the motor. Push terminal firmly until seated.
5. Insert terminal end of BLACK wire on spade terminal (next to copper post) marked #1 on the motor. Push terminal firmly until seated.
6. Close motor connector box being sure that power cord is seated in strain relief groove and tighten box cover screws.
7. Do not plug in power cable.



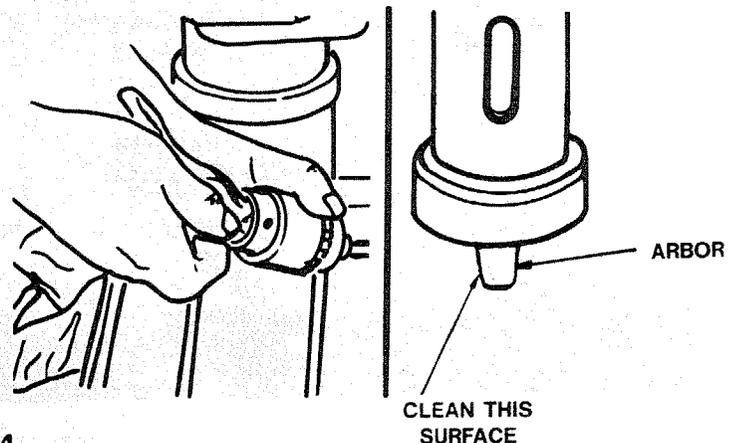
## INSTALLING FEED HANDLES

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

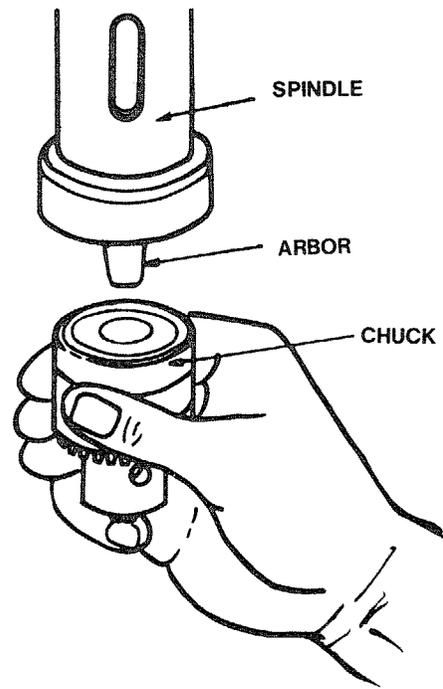


## INSTALLING THE CHUCK

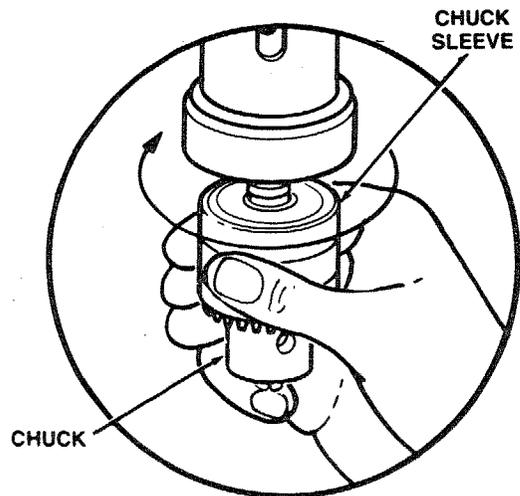
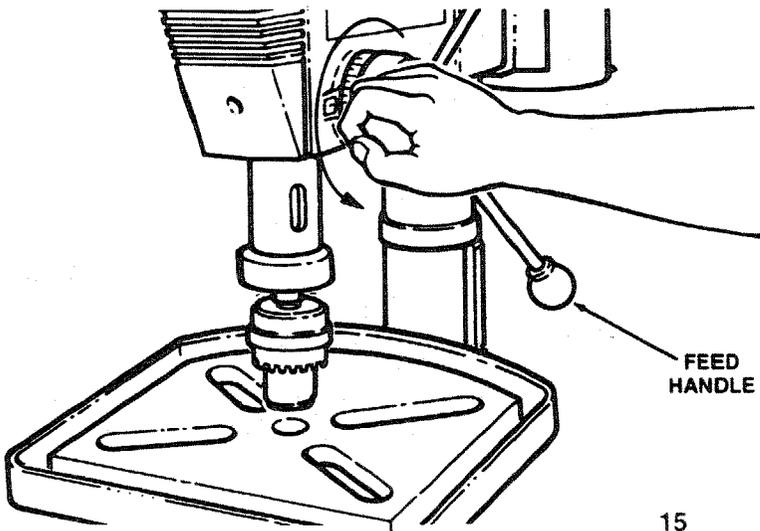
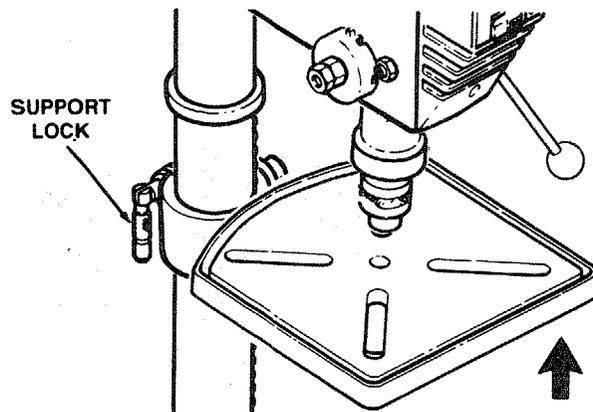
1. Clean out the TAPERED HOLE in the chuck. Clean the tapered surface on the arbor with a clean cloth. Make sure there are no foreign particles sticking to the surfaces. The slightest piece of dirt on any of these surfaces will prevent the chuck from seating properly. This will cause the drill to "wobble."



2. Slide the chuck up over the arbor as illustrated.

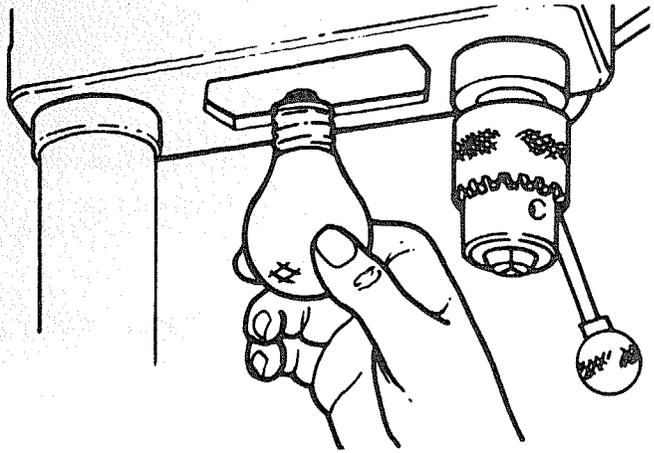


4. Unlock support lock and raise table so its about two (2) inches below tip of chuck.
5. Turn chuck sleeve clockwise and open jaws in chuck completely.
6. Turn feed handles counterclockwise and force chuck against table until chuck is secure.



## INSTALLING LIGHT BULB

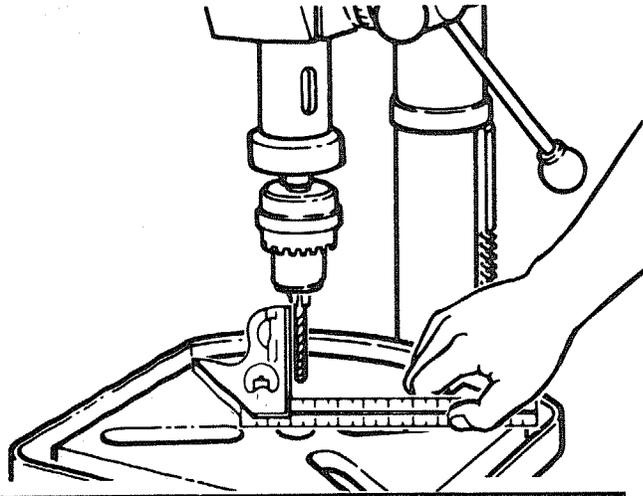
1. Install a light bulb (not larger than 60 watt) into the socket inside the head.



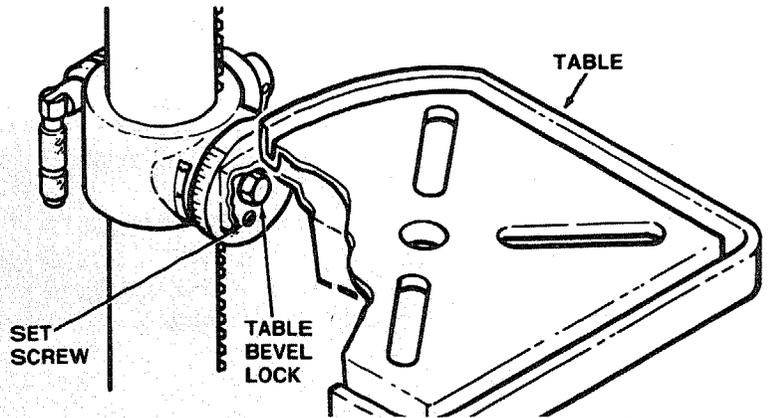
## ADJUSTING THE TABLE SQUARE TO HEAD

**NOTE:** The combination square must be "true." See "Unpacking and Checking Contents" section for method.

1. Insert a precision ground steel rod approximately 3" long into chuck and tighten.
2. With table raised to working height and locked on column, place combination square flat on table beside rod.



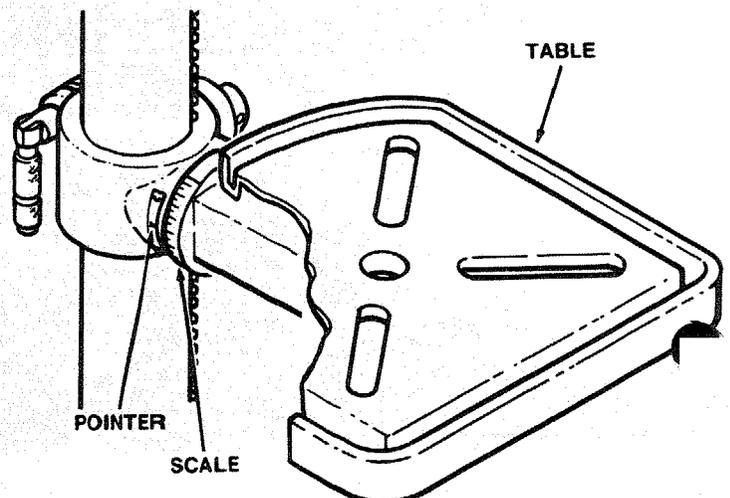
3. If an adjustment is necessary, loosen the set screw under bevel lock with 3mm Hex "L" wrench, then loosen the table bevel lock with a 15/16" wrench. (These adjustments are located under the table).
4. Align the table square to the rod by rotating the table until the square and rod are in line.
5. Retighten table bevel lock.
6. Retighten set screw.



## BEVEL SCALE

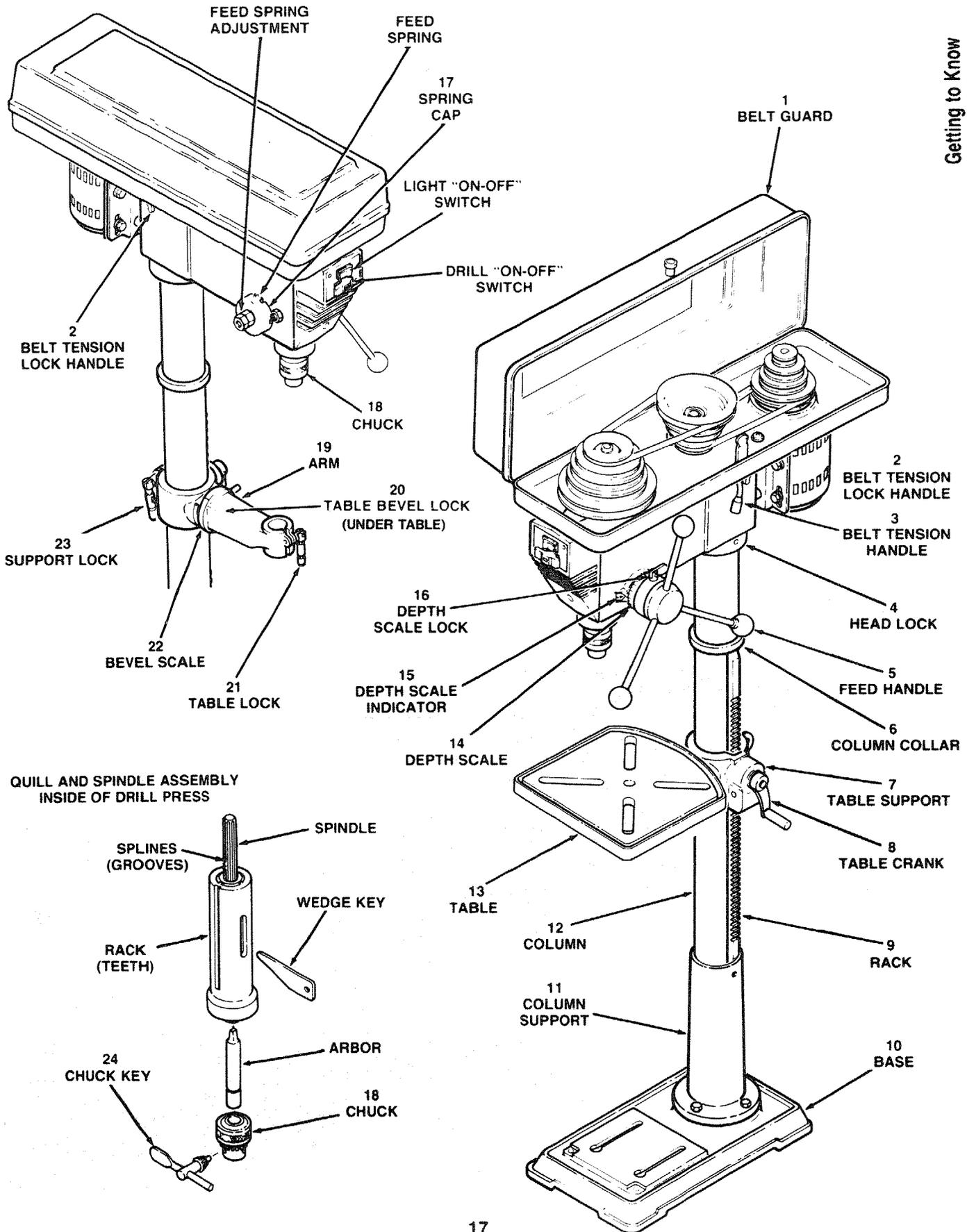
**NOTE:** The bevel scale has been included to provide a quick method for beveling the table to approximate angles. If precise accuracy is necessary, a square, or other precision measuring tool should be used to position the table.

1. To use the bevel scale do the following:
  - a. Loosen set screw and table bevel lock (see step 3 above).
  - b. Move table so desired angle on bevel scale is straight across from zero line on table support.
  - c. Retighten table bevel lock and set screw.



# getting to know your drill press

Getting to Know  
Your Drill Press



This Drill Press has 12 speeds as listed below:

250 RPM	990 RPM
340 RPM	1550 RPM
390 RPM	1620 RPM
510 RPM	1900 RPM
600 RPM	2620 RPM
650 RPM	3100 RPM

See inside of belt guard for specific placement of belts on pulleys.

## SPINDLE SPEEDS IN R.P.M.

250 	340 	390 	510 
600 	650 	990 	1550 
1620 	1900 	2620 	3100 

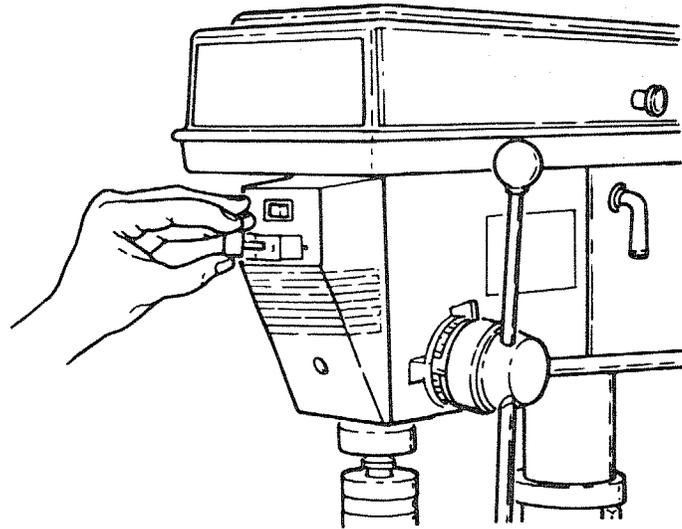
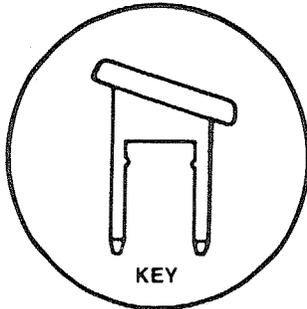
1. **BELT GUARD ASSEMBLY** . . . Covers pulleys and belt during operation of drill press.
2. **BELT TENSION LOCK HANDLES** . . . Tightening handles locks motor bracket support and BELT TENSION HANDLE to maintain correct belt distance and tension.
3. **BELT TENSION HANDLE** . . . Turn handle counter clockwise to apply tension to belt, turn handle clockwise to release belt tension.
4. **HEAD LOCKS** . . . Lock the head to the column. ALWAYS have them locked in place while operating the drill press.
5. **FEED HANDLE** . . . For moving the quill up or down. One or two may be removed if necessary whenever the workpiece is of such unusual shape that it interferes with the handles.
6. **COLUMN COLLAR** . . . Holds the rack to the column. Rack remains movable in collar to permit table support movements.
7. **TABLE SUPPORT** . . . Rides on column to support arm and table.
8. **TABLE CRANK** . . . Turn clockwise to elevate table. Support lock must be released before operating crank.
9. **RACK** . . . Combines with gear mechanism to provide easy elevation of table by hand operated table crank.
10. **BASE** . . . Supports Drill Press. For additional stability, holes are provided in base to bolt Drill Press to floor. (See "Additional Safety Instructions for Drill Presses.")
11. **COLUMN SUPPORT** . . . Supports column, guides rack, and provides mounting holes for column to base.
12. **COLUMN** . . . Connects head, table, and base on a one-piece tube for easy alignment and movement.
13. **TABLE** . . . Provides working surface to support workpiece.
14. **DEPTH SCALE** . . . Shows depth of hole being drilled.
15. **DEPTH SCALE INDICATOR** . . . Indicates drilling depth selected on depth scale.
16. **DEPTH SCALE LOCK** . . . Locks the depth scale to selected depth.
17. **SPRING CAP** . . . Provides means to adjust quill spring tension.
18. **CHUCK** . . . Holds drill bit or other recommended accessory to perform desired operations.
19. **ARM** . . . Extends beyond table support for mounting and aligning the table.
20. **TABLE BEVEL LOCK** . . . Locks the table in any position from 0°-45°.
21. **TABLE LOCK** . . . Table can be rotated in various positions and locked.
22. **BEVEL SCALE** . . . Shows degree table is tilted for bevel operations. Scale is mounted on side of arm.
23. **SUPPORT LOCK** . . . Tightening locks table support to column. Always have it locked in place while operating the Drill Press.
24. **CHUCK KEY** . . . It is a self-ejecting chuck key which will "pop" out of the chuck when you let go of it. This action is designed to help prevent throwing of the chuck key from the chuck when power is turned "ON". Do not use any other key as a substitute, order a new one if damaged or lost.
25. **BELT TENSION** . . . Refer to section "Assembly-Installing and Tensioning Belt"
26. **DRILLING SPEED** . . . Can be changed by placing the belt in any of the STEPS (grooves) in the pulleys. See Spindle Speed inside belt guard.

To determine the approximate drilling speed, refer to the table inside the belt guard.

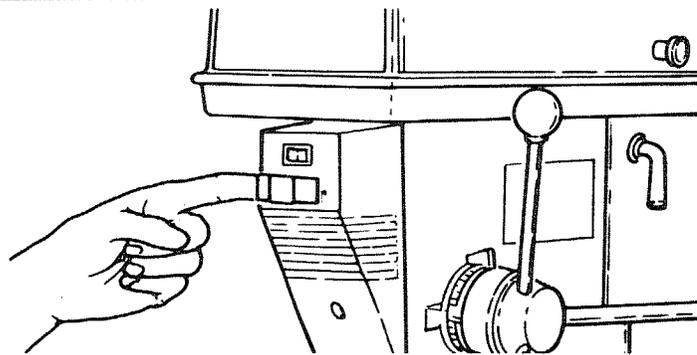
27. **DRILL "ON-OFF" SWITCH . . .** Has locking feature. THIS FEATURE IS INTENDED TO HELP PREVENT UNAUTHORIZED AND POSSIBLE HAZARDOUS USE BY CHILDREN AND OTHERS.

Insert KEY into switch.

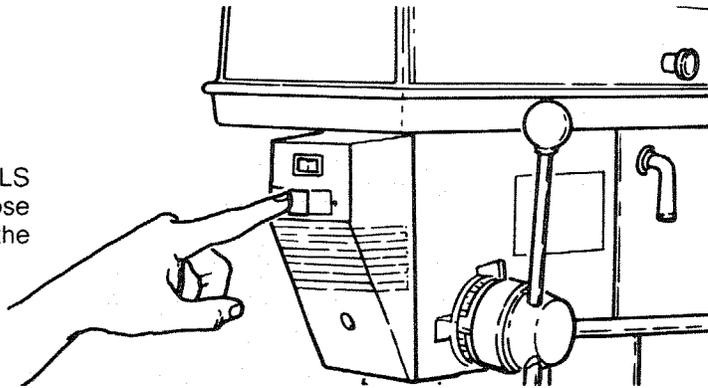
**NOTE:** Key is made of yellow plastic.



To turn drill ON . . .  
Insert finger under switch lever and pull.

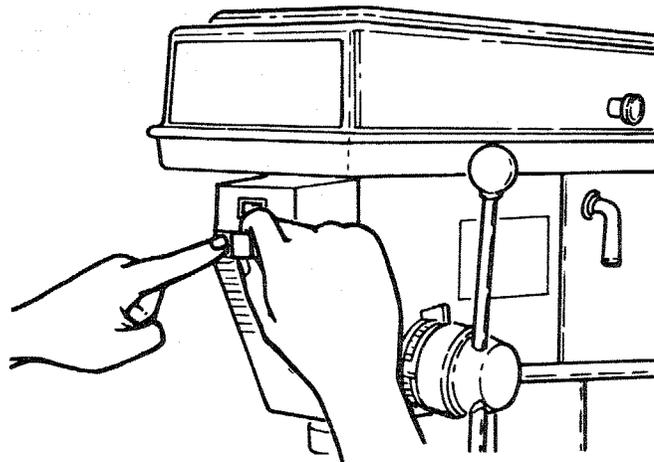


To turn drill OFF . . . Push lever in.  
In an emergency: . . . the drill bit BINDS . . . STALLS . . . STOPS . . . or tends to tear the workpiece loose . . . you can QUICKLY turn the drill OFF by hitting the switch with the palm of your hand.



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

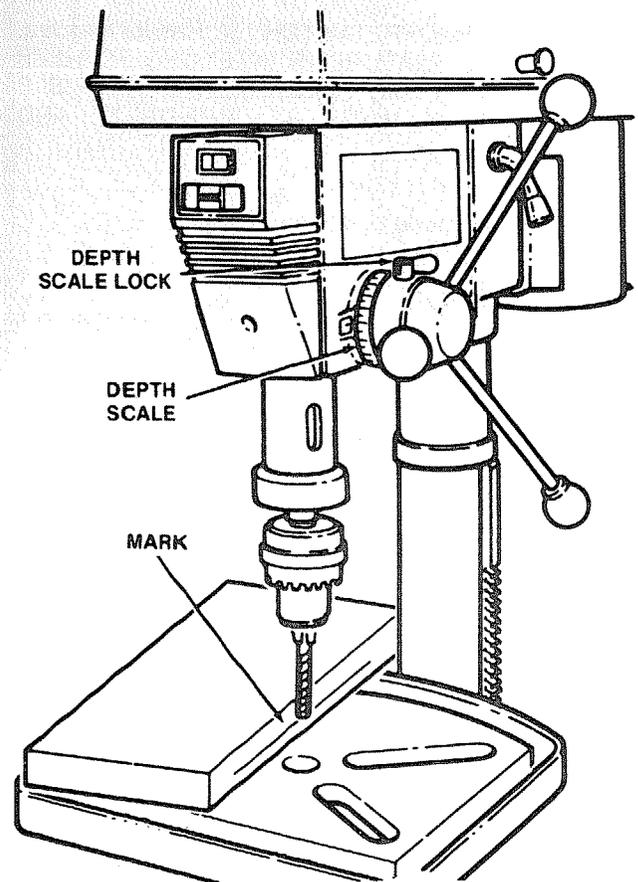
**WARNING: FOR YOUR OWN SAFETY, ALWAYS LOCK THE SWITCH "OFF" WHEN DRILL PRESS IS NOT IN USE . . . REMOVE KEY AND KEEP IT IN A SAFE PLACE . . . ALSO . . . IN THE EVENT OF A POWER FAILURE (ALL OF YOUR LIGHTS GO OUT) OR BLOWN FUSE OR TRIPPED CIRCUIT BREAKER, TURN SWITCH OFF . . . LOCK IT AND REMOVE THE KEY. THIS WILL PREVENT THE DRILL PRESS FROM STARTING UP AGAIN WHEN THE POWER COMES BACK ON.**



## DRILLING TO A SPECIFIC DEPTH

To drill a BLIND hole (not all the way through) to a given depth, proceed as follows.

1. Mark the depth of the hole on the side of the work-piece.
2. Loosen the depth scale lock.
3. With the switch OFF, bring the drill down until the TIP or lips of the drill are even with the Mark.
4. Turn the depth scale counterclockwise until it stops moving.
5. Tighten the depth scale lock.
6. The drill will now be stopped at this depth until the depth scale is readjusted.

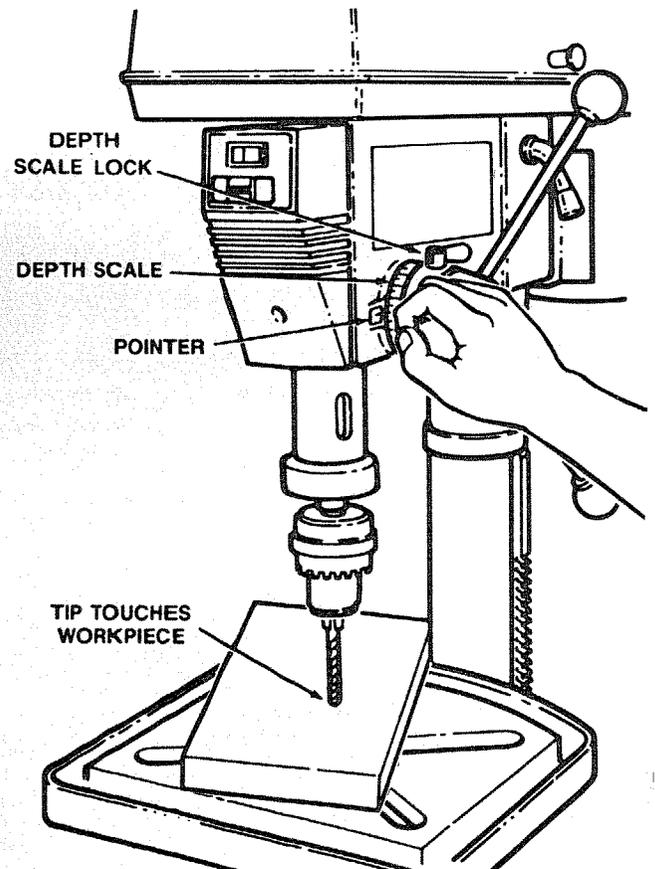


## ANOTHER WAY — DEPTH SCALE

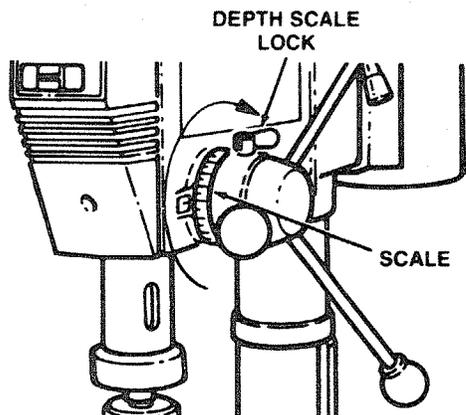
1. With the switch OFF, loosen the depth scale lock.
2. Turn the depth scale clockwise until the depth scale indicator points to the desired drilling depth on the depth scale.
3. Tighten the depth scale lock.
4. The chuck or drill will now be stopped after traveling downward the distance selected on the depth scale.

## LOCKING CHUCK DESIRED DEPTH

1. With the switch off—loosen the depth scale lock.
2. Turn the feed handles until the chuck is at the desired depth. Hold feed handles at this position.



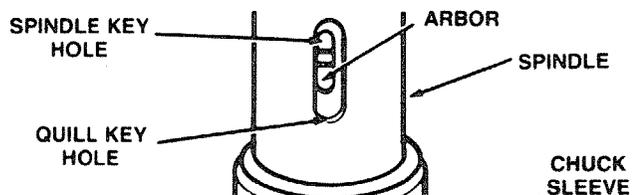
3. Turn the depth scale clockwise until it stops.
4. Tighten the depth scale lock.
5. The chuck will now be held at this depth when the feed handles are released.



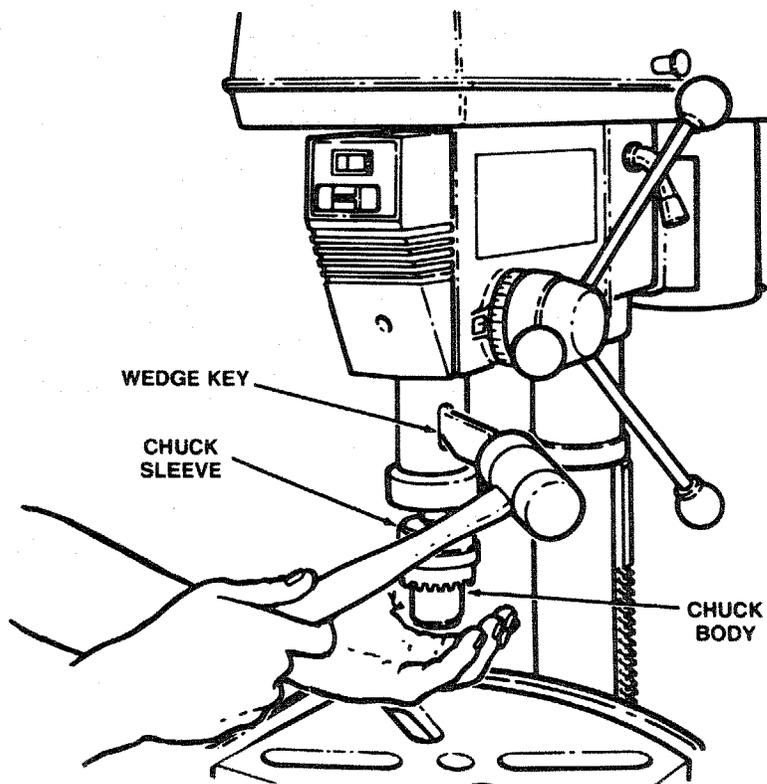
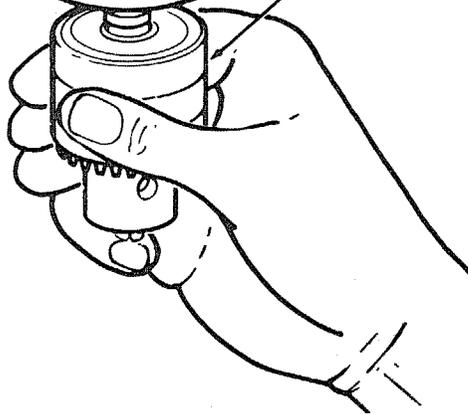
### REMOVING CHUCK AND ARBOR

1. With switch off — adjust depth scale to hold drill at a depth of (3) three inches. (See instructions for "Locking chuck at desired depth").
2. Align key holes in spindle and quill by rotating the chuck by hand. (See illustration)
3. Insert key wedge into key holes.
4. Tap key wedge lightly until the chuck and arbor fall out of spindle.

**NOTE:** Place one hand below chuck to catch it when it falls out.



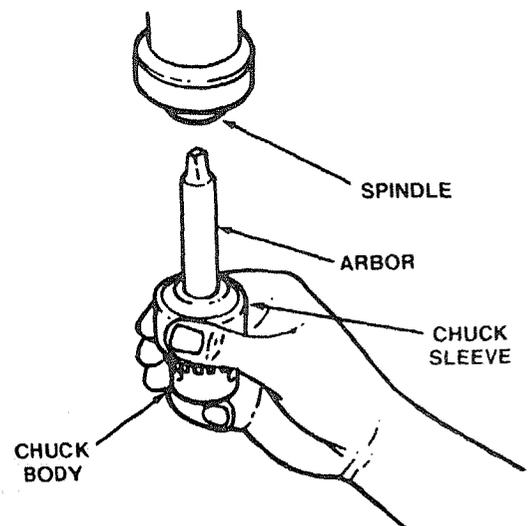
Removing Chuck and Arbor



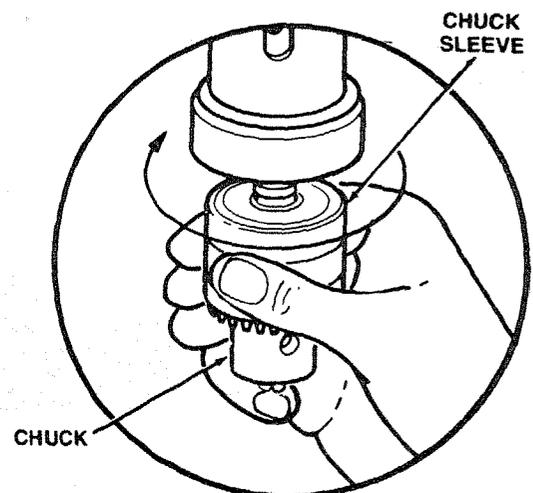
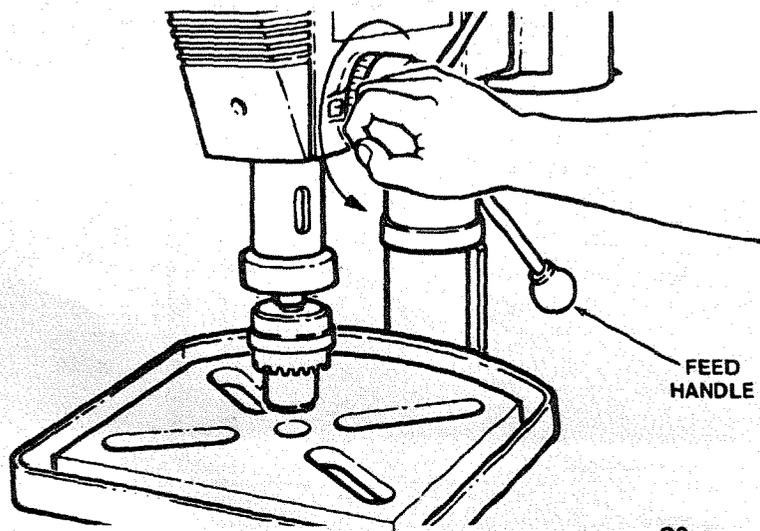
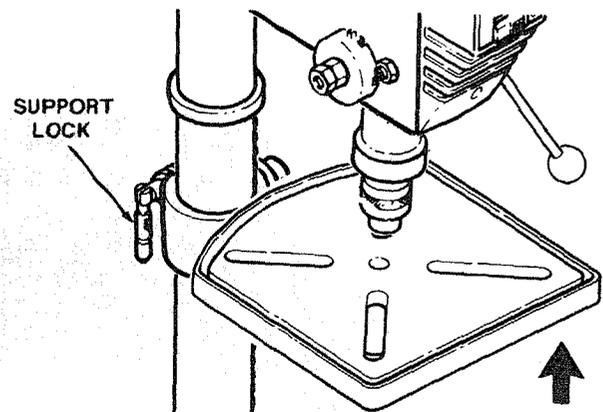
## RE-INSTALLING THE CHUCK AND ARBOR

1. Clean the tapered surface on the arbor with a clean cloth. Make sure there are no foreign particles sticking to the surface. The slightest piece of dirt on this surface will prevent the arbor from seating properly. This will cause the drill to "wobble."
2. Slide arbor into spindle on drill press.
3. Push up on chuck/arbor assembly as you rotate them. You will feel rectangular end of arbor slip into a notch in the spindle.

**WARNING:** Make sure the rectangular end of the arbor has slipped into the notch in the spindle before going on to Step 4. Failure to follow this direction may allow the chuck to come loose during operation, fly out, and hit the operator.



4. Unlock support lock and raise table so its about two (2) inches below tip of chuck.
5. Turn chuck sleeve clockwise and open jaws in chuck completely.
6. Turn feed handles counterclockwise and force chuck against table until arbor is secure.



# basic drill press operation

Follow the following instructions for operating your drill press to get the best results and to minimize the likelihood 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. Do tie back long hair

- a. If any part of your drill press is missing, malfunctioning, has been damaged or broken . . . such as the motor switch, or other operating control, a safety device or the power cord . . . cease operating immediately until the particular part is properly repaired or replaced.
- b. Never place your fingers in a position where they could contact the drill or other cutting tool if the workpiece should unexpectedly shift or your hand should slip.
- c. To avoid injury from parts thrown by the spring, follow instructions exactly as given and shown in adjusting spring tension of quill.
- d. To prevent the workpiece 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 bind on the tool:
  - Always position **BACKUP MATERIAL** (use beneath the workpiece) 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 solidly to the table. use table slots or clamping ledge around the outside edge of the table.
  - When using a drill press **VICE**, always fasten it to the table.

- Never do any work "FREEHAND" (hand-holding workpiece rather than supporting it on the table), except when polishing.
- Securely lock Head and Support to Column, Table Arm to support, and Table to Table Arm before operating drill press.
- Never move the Head or Table while the tool is running.
- Before starting the operation, jog the motor switch to make sure the drill or other cutting tool does not wobble or cause vibration.
- If a workpiece overhangs the table such that it will fall or tip if not held, clamp it to the table or provide auxiliary support.
- Use fixtures for unusual operations to adequately hold, guide and position workpiece.
- Use the **SPINDLE SPEED** recommended for the specific operation and workpiece material—check the panel inside of the guard cover for drilling information; for accessories, refer to the instructions provided with the accessories.
- f. Never climb on the drill press Table, it could break or pull the entire drill press down on you.
- g. Turn the motor Switch Off and put away the Switch Key when leaving the drill press.
- h. To avoid injury from thrown work or tool contact, do NOT perform layout, assembly, or setup work 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" in 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.

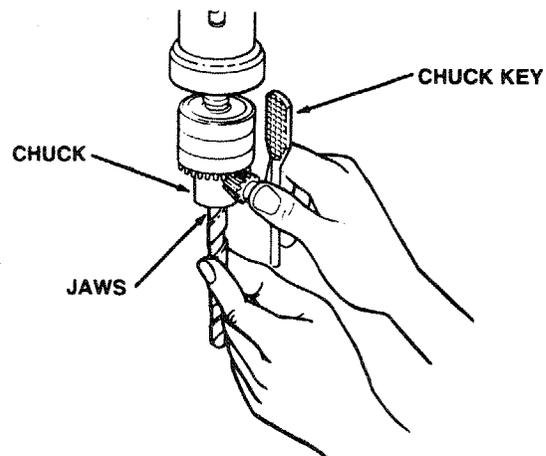
## INSTALLING DRILLS IN CHUCK

With the switch off and the key removed, insert drill into chuck far enough to obtain maximum **GRIPPING** of the **CHUCK JAWS** . . . the jaws are approx. 1" long. When using a small 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** while drilling.

Turn the chuck key clockwise to tighten—counterclockwise to loosen.

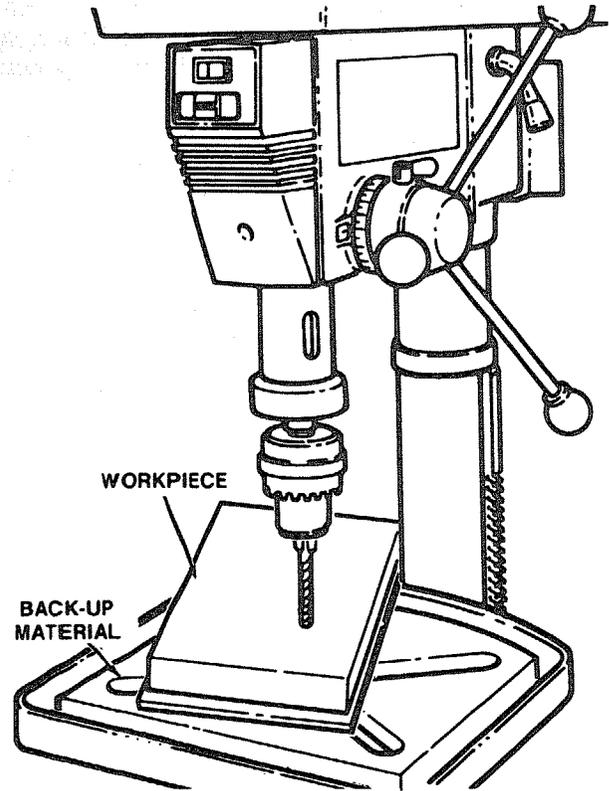


## POSITIONING TABLE AND WORKPIECE

Lock the table to the column in a position so that the tip of the drill is just a little above the top of the workpiece.

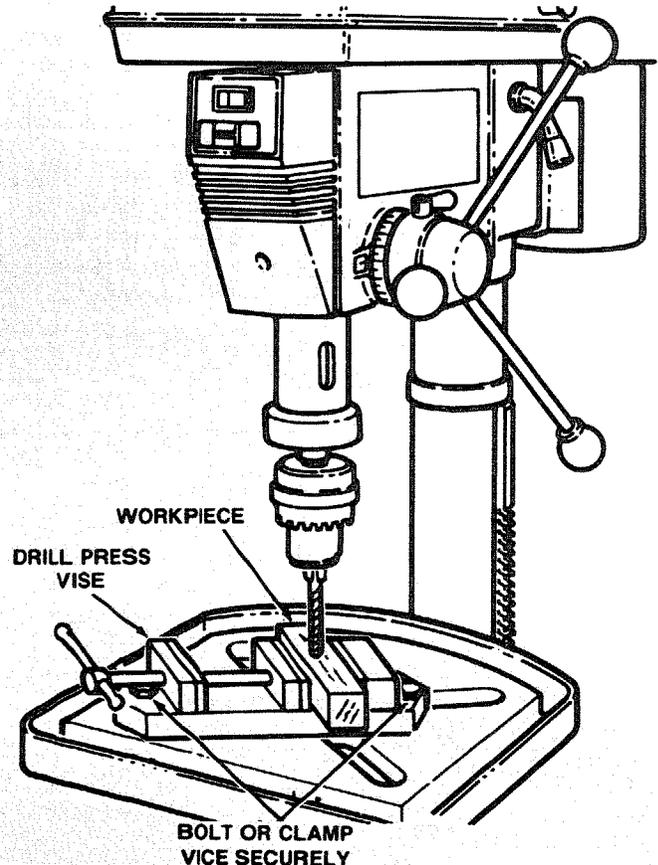
Always place a piece of BACK-UP MATERIAL (wood, plywood . . .) on the table underneath the workpiece. This will prevent "splintering" or making a heavy burr on the underside of the workpiece as the drill breaks through. To keep the backup material from spinning out of control, it must contact the left side of the column, as illustrated.

**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.**



For small pieces that cannot be clamped to the table, use a drill press vise (Optional accessory.)

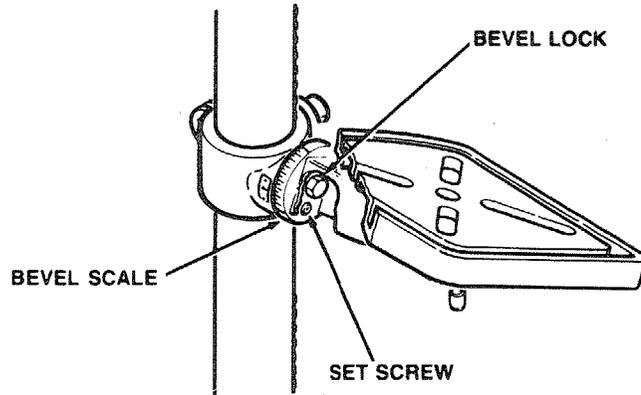
**WARNING: THE VISE MUST BE CLAMPED OR BOLTED TO THE TABLE TO AVOID INJURY FROM SPINNING WORK AND VISE OR TOOL BREAKAGE.**



## TILTING TABLE

To use the table in a bevel (tilted) position, loosen the set screw under table bevel lock with Hex "L" wrench. Loosen bevel lock with 15/16" wrench.

Tilt table to desired angle by reading bevel scale. Retighten bevel lock and set screw.



**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.**

To return table to original position: loosen set screw and bevel lock, tilt table back to 0° on bevel scale, and retighten set screw—then tighten bevel lock.

## HOLE LOCATION

Make a DENT in the workpiece where you want the hole . . . using a CENTER PUNCH or a SHARP NAIL.

Before turning the switch ON, bring the drill down to the workpiece lining it up with the hole location.

## FEEDING

Pull down on the feed handles with only enough effort to allow the drill to cut.

Feeding TOO SLOWLY might cause the drill to burn . . . Feeding TOO RAPIDLY might stop the motor . . . cause the belt or drill to SLIP . . . tear the workpiece LOOSE or BREAK the drill bit.

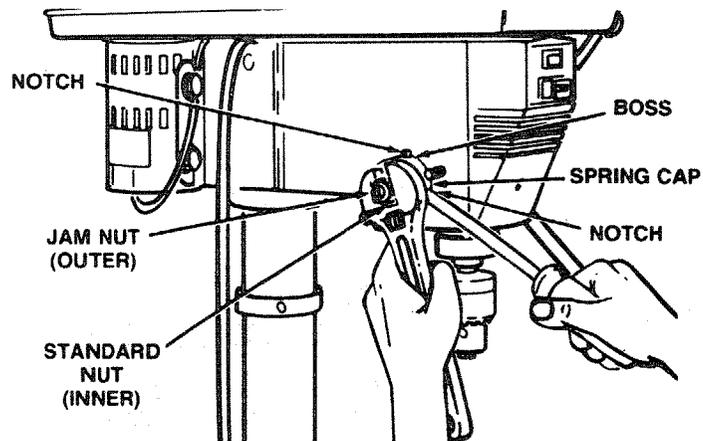
When drilling metal, it may be necessary to lubricate the tip of the drill with motor oil to prevent burning the drill tip.

## 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, AND WEAR EYE GOGGLES.**

### QUILL RETURN SPRING

1. With the chuck at its highest possible position, turn the depth scale clockwise until it stops and tighten the depth scale lock. This will prevent the quill dropping while tensioning the spring.
2. Lower table for additional clearance.
3. Work from left side of Drill Press.
4. Place screwdriver in lower front notch of spring cap, and hold it in place while loosening and removing jam [outer] nut only.
5. With screwdriver remaining in notch, loosen large standard [inner] nut (approximately 1/8") until notch disengages from boss on head. 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 overtighten as this will restrict quill movement.



8. Unlock depth scale lock and check tension while turning feed handles.
9. If there is not enough tension on spring, repeat steps 4–8 moving only ONE notch each time and checking tension after EACH repetition.
10. Proper tension is achieved when quill returns gently to full up position when released from 3/4" depth.
11. When there is enough tension after checking, replace jam nut and tighten to standard nut, BUT do not overtighten 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.**

Frequently blow out any dust that may accumulate inside the motor.

A coat of automobile-type paste wax when applied to the table and column will help to keep the surfaces clean.

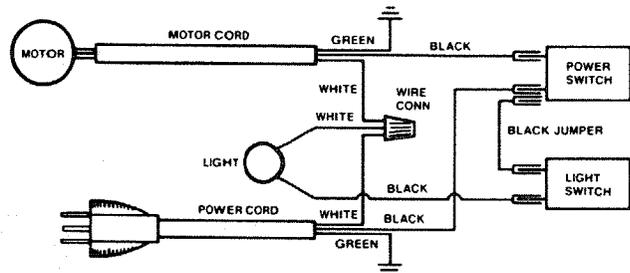
**WARNING: TO AVOID SHOCK OR FIRE HAZARD, IF THE POWER CORD IS WORN OR CUT, OR DAMAGED IN ANY WAY, HAVE IT REPLACED IMMEDIATELY.**

---

## Lubrication

All of the BALL BEARINGS are packed with grease at the factory. They require no further lubrication.

Periodically lubricate the gear and rack, table elevation mechanism, the SPLINES (grooves) in the spindle, and the RACK (teeth of the quill). See "Getting to Know Your Drill Press"



**WIRING DIAGRAM**

---

## recommended accessories

**WARNING: USE ONLY RECOMMENDED ACCESSORIES. FOLLOW INSTRUCTIONS THAT ACCOMPANY ACCESSORIES. USE OF IMPROPER ACCESSORIES MAY CAUSE HAZARDS.**

Drill Bits . . . . . See Catalog  
Hold-Down and Guide . . . . . 9-2457  
Drill Press Vises . . . . . See Catalog  
Rotary Table . . . . . 9-2495  
Drill Press Mortising Kit . . . . . 9-29506  
Hole Saw up to 2 1/2" dia. max. . . . . See Catalog  
5 pc. Stop Collar Set . . . . . 9-67063

Sanding Drums . . . . . 9-2497 — 9-2498  
Buffing Wheels up to 4" dia. max. . . . . See Catalog  
Polishing Wheel, 1 1/2" x 1" . . . . . 9-64991  
Power Tool Know-How Handbooks  
Radial Saw . . . . . 9-2917  
Table Saw . . . . . 9-2918

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

# trouble shooting

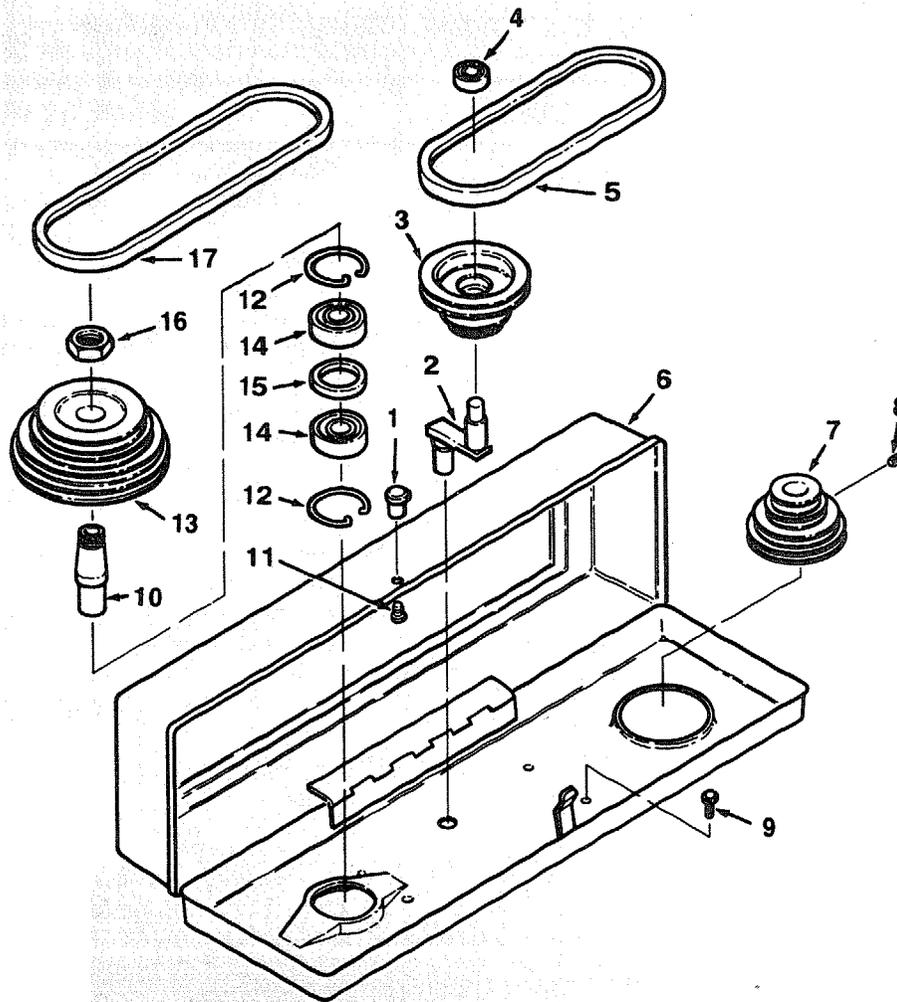
**WARNING: FOR YOUR OWN SAFETY, TURN SWITCH "OFF" AND ALWAYS REMOVE PLUG FROM POWER SOURCE OUTLET BEFORE TROUBLE SHOOTING.**

- CONSULT YOUR LOCAL SEARS SERVICE CENTER IF FOR ANY REASON MOTOR WILL NOT RUN.

TROUBLE	PROBABLE CAUSE	REMEDY
<b>Noisy Operation</b>	<ol style="list-style-type: none"> <li>1. Incorrect belt tension.</li> <li>2. Dry Spindle.</li> <li>3. Loose spindle pulley.</li> <li>4. Loose motor pulley.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust tension. See section "ASSEMBLY – TENSIONING BELT."</li> <li>2. Lubricate spindle. See "Lubrication" section.</li> <li>3. Check tightness of retaining nut on pulley, and tighten if necessary.</li> <li>4. Tighten setscrews in pulleys.</li> </ol>
<b>Drill Burns</b>	<ol style="list-style-type: none"> <li>1. Incorrect speed.</li> <li>2. Chips not coming out of hole.</li> <li>3. Dull Drill.</li> <li>4. Feeding too slow.</li> <li>5. Not lubricated.</li> </ol>	<ol style="list-style-type: none"> <li>1. Change speed. See section "Getting To Know Your Drill Press"... DRILLING SPEED.</li> <li>2. Retract drill frequently to clear chips.</li> <li>3. Resharpen drill.</li> <li>4. Feed fast enough... allow drill to cut.</li> <li>5. Lubricate drill. See "Basic Drill Press Operation" section.</li> </ol>
<b>Drill leads off... hole not round.</b>	<ol style="list-style-type: none"> <li>1. Hard grain in wood or lengths of cutting lips and/or angles not equal.</li> <li>2. Bent drill bit.</li> </ol>	<ol style="list-style-type: none"> <li>1. Resharpen drill correctly.</li> <li>2. Replace drill bit.</li> </ol>
<b>Wood splinters on underside.</b>	<ol style="list-style-type: none"> <li>1. No "back-up material" under workpiece.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use "back-up material"... See Basic Drill Press Operation" section.</li> </ol>
<b>Workpiece torn loose from hand.</b>	<ol style="list-style-type: none"> <li>1. Not supported or clamped properly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Support workpiece or clamp it... See "Basic Drill Press Operation" section.</li> </ol>
<b>Drill Binds in workpiece.</b>	<ol style="list-style-type: none"> <li>1. Workpiece pinching drill or excessive feed pressure.</li> <li>2. Improper belt tension.</li> </ol>	<ol style="list-style-type: none"> <li>1. Support workpiece or clamp it... See "Basic Drill Press Operation" section.</li> <li>2. Adjust tension... See section "ASSEMBLY – TENSIONING BELT."</li> </ol>
<b>Excessive drill runout or wobble.</b>	<ol style="list-style-type: none"> <li>1. Bent drill.</li> <li>2. Worn spindle bearings.</li> <li>3. Drill not properly installed in chuck.</li> <li>4. Chuck not properly installed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use a straight drill.</li> <li>2. Replace bearings.</li> <li>3. Install drill properly... See "Basic Drill Press Operation" section.</li> <li>4. Install chuck properly... refer to "Unpacking and Assembly Instructions... INSTALLING THE CHUCK."</li> </ol>
<b>Quill Returns too slow or too fast.</b>	<ol style="list-style-type: none"> <li>1. Spring has improper tension.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust spring tension... See section. "Adjustments – Quill Return Spring."</li> </ol>

# repair parts

## PARTS LIST FOR CRAFTSMAN 15" DRILL PRESS MODEL NO. 113.213150



Always order by Part Number—Not by Key Number

FIGURE 1 PARTS LIST

Key No.	Part No.	Description
1	817325	Knob
2	817334	Pivot-Idler
3	817544	Pulley-Center
4	STD315225	*Bearing-Ball 15mm
5	STD303240	*Belt-"V" 3/8 x 24
6	817779-3	Guard w/Labels
7	817543	Pulley-Motor
8	817548	Screw-Hex Soc. Set M6x1.0-8

Key No.	Part No.	Description
9	817358-1	Screw-Wash HD. M6 x 1.0-16
10	817534	Insert-Pulley
11	816755-4	Screw-PN HD. M5 x 0.8-12
12	817537	Ring-Retaining
13	817545	Pulley-Spindle
14	STD315245	*Bearing-Ball 20mm
15	817536	Spacer
16	817327	Nut-Pulley
17	817511-2	*Belt-"V" 3/8 x 26

\* Standard Hardware Item — May Be Purchased Locally.

repair parts

PARTS LIST FOR CRAFTSMAN 15" DRILL PRESS  
MODEL NO. 113.213150

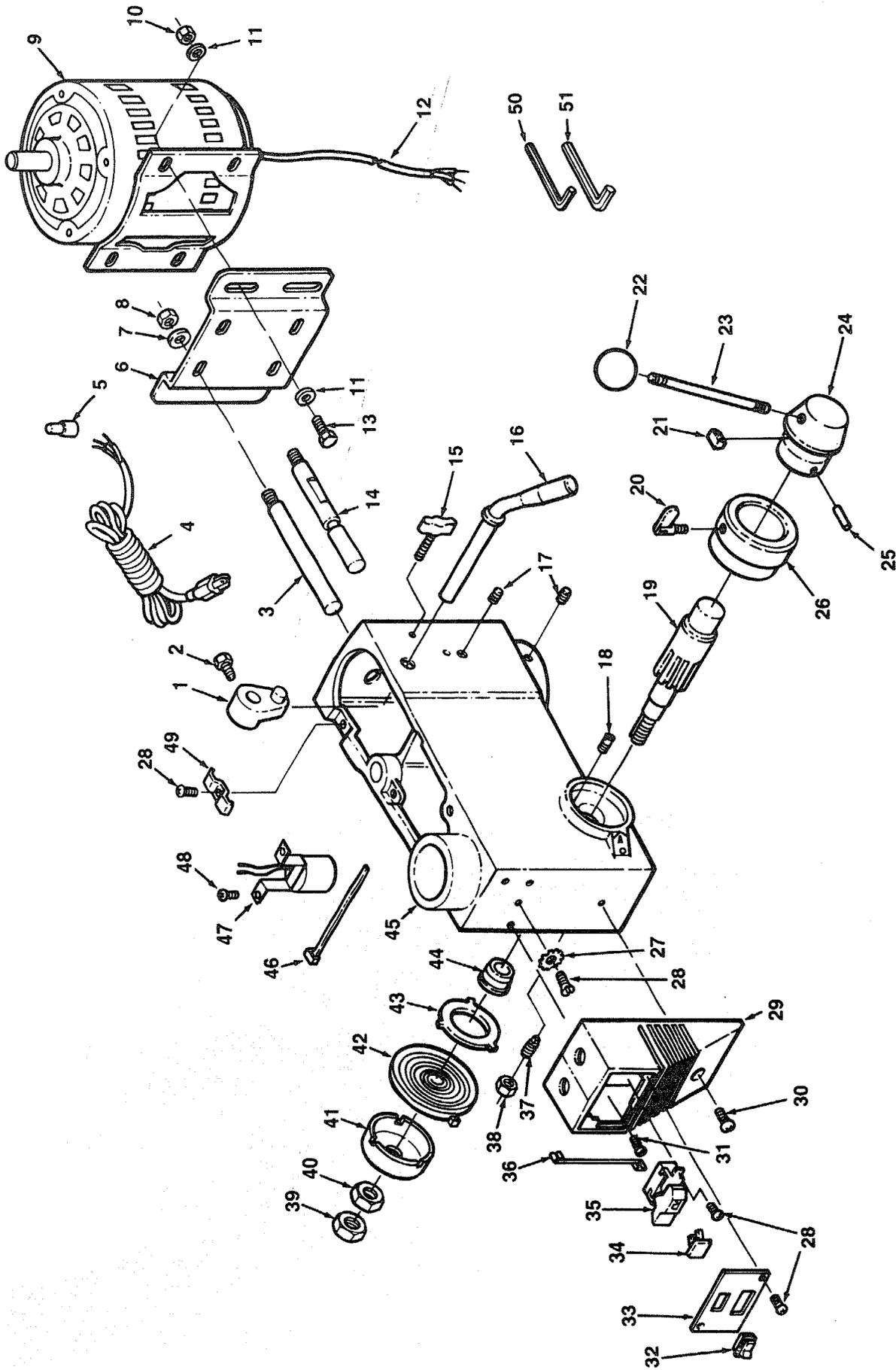


FIGURE 2

**PARTS LIST FOR CRAFTSMAN 15" DRILL PRESS  
MODEL NO. 113.213150**

Always order by Part Number—Not by Key Number

**FIGURE 2 PARTS LIST**

Key No.	Part No.	Description
1	817317	Lever-Adjusting
2	817390	Screw-Hex HD. M8 x 1.25-16
3	817495	Support-Motor Bracket
4	817329-2	Cord-Power
5	STD375008	* Connector-Wire
6	817336	Mount-Motor
7	STD551150	* Lockwasher 1/2
8	813164-10	Nut-Hex M12
9	817557	Motor
10	817551	Nut-Hex M8 x 1.25-6.5
11	STD551031	* Washer-5/16 x 3/4 x 1/8
12	817328-2	Cord-Motor
13	817390-6	Screw-Hex HD. M8 x 1.25-20
14	817516	Support-Motor Bracket
15	817320	Knob-Motor Adjusting
16	817494	Handle-Belt Tension
17	817391	Screw-Hex Soc. Set M10 x 1.5-12
18	817303	Pin-Stop
19	817347	Shaft-Pinion
20	817343	Lock-Depth Screw
21	817300	Guide-Scale
22	817546	Knob
23	817344	Rod
24	817346	Hub
25	813249-128	Pin-Roll 5 x 16
26	817774	Ring-Depth Stop w/Scale
27	813314-8	Lockwasher-Ext. M5
28	816755-4	Screw-Pan CR. M5 x 0.8-8
29	817552	Box-Switch
30	816755-5	Screw-Pan CR. M5 x 0.8-18

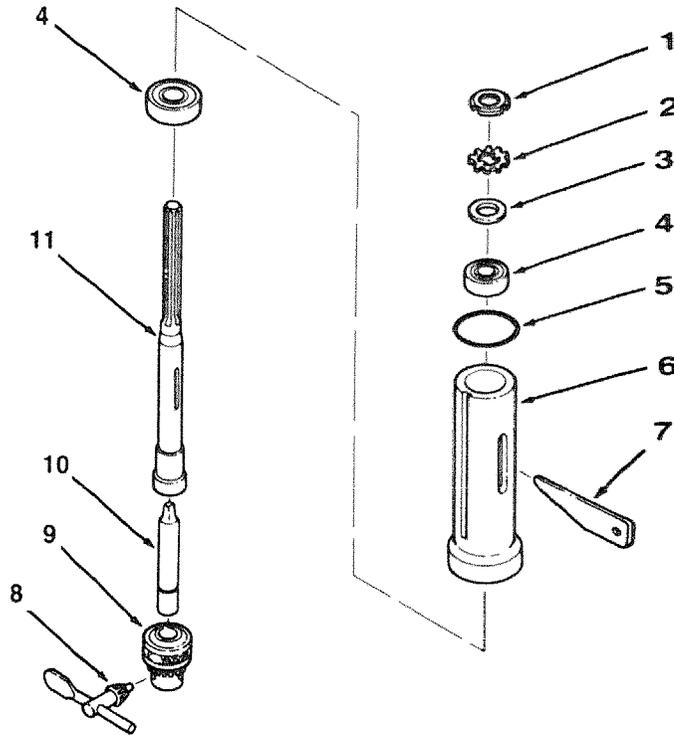
  

Key No.	Part No.	Description
31	816755-6	Screw-Pan CR. M5 x 0.8-16
32	817354	Switch-Rocker
33	817547	Cover-Switch Plate
34	815863	Key-Switch
35	816113	Switch-Locking
36	63837	Lead
37	817308	Screw-SL. Special 10 x 1.5-27
38	817621	Nut-Hex M10 x 1.5-8
39	STD541350	* Nut-Hex Jam 1/2 x 20
40	STD541150	* Nut-Hex 1/2 x 20
41	817307	Cap-Spring
42	817306	Spring-Torsion
43	817305	Retainer-Spring
44	817304	Seat-Spring
45	817778-2	Head w/Pointer & Trim
46	60475	Tie-Wire
47	817321	Socket-Bulb Asm.
48	816755-3	Screw-Pan CR. M5 x 0.8-12
49	63418	Clamp-Cord
50	813317-6	Wrench Hex "L" 3mm
51	813317-8	Wrench Hex "L" 5mm
—	507887	Bag of Loose Parts (Not Illustrated)
—	507888	Bag of Loose Parts (Not Illustrated)
—	507889	Bag of Loose Parts (Not Illustrated)
—	507886	Box of Loose Parts (Not Illustrated)
—	SP5187	Owners Manual (Not Illustrated)

\* Standard Hardware Item — May Be Purchased Locally.

# repair parts

## PARTS LIST FOR CRAFTSMAN 15" DRILL PRESS MODEL NO. 113.213150



Always order by Part Number—Not by Key Number

FIGURE 3 PARTS LIST

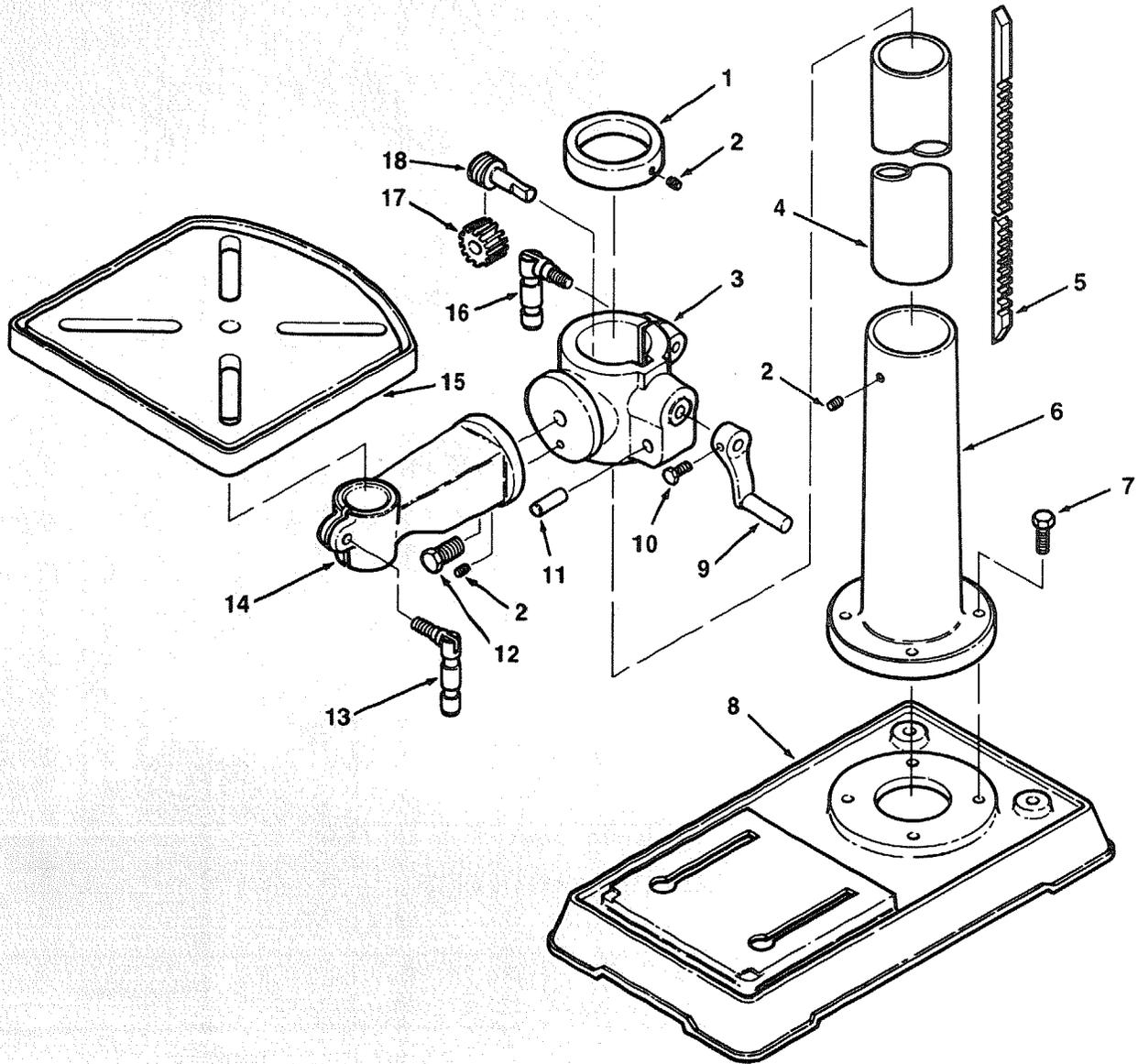
Key No.	Part No.	Description
1	817309	Locknut M17 x 1.0
2	817310	Ring-Locking
3	817311	Washer
4	STD315235	*Bearing-Ball 17mm
5	817535	Gasket-Quill
6	817532	Tube-Quill

Key No.	Part No.	Description
7	817326	Key-Drift
8	817339	Key-Chuck
9	817340	Chuck
10	817341	Arbor
11	817531	Spindle

\* Standard Hardware Item — May Be Purchased Locally.

# repair parts

## PARTS LIST FOR CRAFTSMAN 15" DRILL PRESS MODEL NO. 113.213150



Always order by Part Number—Not by Key Number

FIGURE 4 PARTS LIST

Key No.	Part No.	Description
1	817478	Collar-Rack
2	817391-1	Screw-Hex Soc. Set M6 x 1.0-10
3	817776	Support-Table w/Indicator
4	817475	Tube-Column
5	817351	Rack
6	817476	Support-Column
7	817390-2	Screw-Hex HD. M10 x 1.5-40
8	817577	Base
9	817348	Crank

Key No.	Part No.	Description
10	817390-5	Screw-Hex HD. M6 x 1.0-12
11	817288	Pin-Gear
12	817392	Screw-Hex HD. 5/8-11 x 1-1/4
13	817290	Clamp-Table
14	817777-1	Arm-Table w/Scale
15	817575	Table
16	817294	Clamp-Column
17	817350	Gear-Helical
18	817349	Worm-Elevation







**SEARS**

**owner's  
manual**

**SERVICE**

**MODEL NO.  
113.213150**

**DRILL PRESS WITH  
MAXIMUM  
DEVELOPED  
1 HP MOTOR**

**HOW TO ORDER  
REPAIR PARTS**

**MOTORIZED  
15-INCH  
FLOOR MODEL DRILL PRESS**

Now that you have purchased your 15-inch Drill Press, should a need ever exist for repair parts or service, simply contact any Sears Service Center and most Sears, Roebuck and Co. stores. Be sure to provide all pertinent facts when you call or visit.

The model number of your 15-inch Drill Press will be found on a plate attached to the rear of the head.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

<b>PART NUMBER</b>	<b>PART DESCRIPTION</b>
<b>MODEL NUMBER 113.213150</b>	<b>NAME OF ITEM MOTORIZED 15-INCH FLOOR MODEL DRILL PRESS</b>

All parts listed may be ordered from any Sears Service Center and most Sears stores. If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for handling.

**Sold by SEARS, ROEBUCK AND CO., Chicago, IL 60684 U.S.A.**