

SEARS

Owner's Manual

**MODEL NO.
149.213340**

SERIAL
OR CODE
NUMBER: _____

Model and code number may be found
on the right side of Spindle Housing.

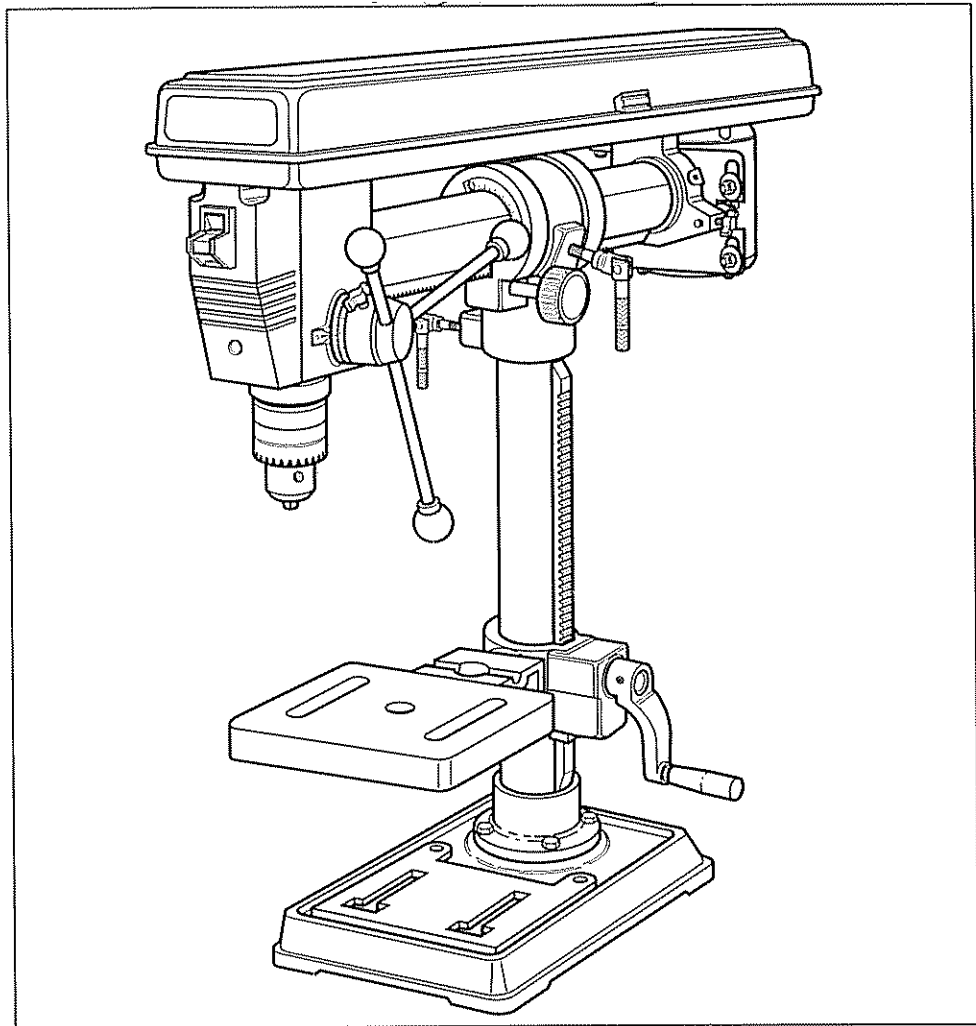
You should record both model and serial
number and retain in a safe place for
future use.

CALIFORNIA OWNERS: a unique serial
code number is stamped inside the
Pulley Cover.

CAUTION:

**Read All Instructions
Carefully Before Start-
ing Assembly and Use.**

**Save This Manual For
Future Reference.**



SEARS / CRAFTSMAN®

34-INCH RADIAL DRILL PRESS

- **Assembly**
- **Operation**
- **Repair Parts**
- **Warranty**



SEARS, ROEBUCK AND CO., Hoffman Estates, IL 60179, U.S.A.

FULL ONE-YEAR WARRANTY ON CRAFTSMAN RADIAL DRILL PRESS

If within one year from date of purchase, this Craftsman **RADIAL DRILL PRESS** fails due to a defect in material or workmanship, Sears will repair it, free of charge.

WARRANTY SERVICE IS AVAILABLE BY CONTACTING THE NEAREST SEARS STORE OR SERVICE CENTER IN THE UNITED STATES.

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

Sears, Roebuck and Co., D/817 WA, Hoffman Estates, IL 60179.



GENERAL SAFETY RULES FOR POWER TOOLS



1. KNOW YOUR POWER TOOL

For your own safety, read the owner's manual carefully. Learn the application and limitations as well as the specific hazards peculiar to this tool.

2. GROUNDING INSTRUCTIONS

A. All grounded, cord-connected tools:

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

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

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

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

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 that have 3-prong grounding plugs, and 3-pole receptacles that accept the tool's plug.

Extension Cord Length	Wire Size, A.W.G.
25 Feet	16
50 Feet	16
100 Feet	14

Extension Cords suitable for use with your Radial Drill Press are available at your nearest Sears Catalog Order or Retail Store.

Repair or replace damaged or worn cord immediately.

B. Grounded, cord-connected tools intended for use on a supply circuit having a nominal rating less than 150 volts:

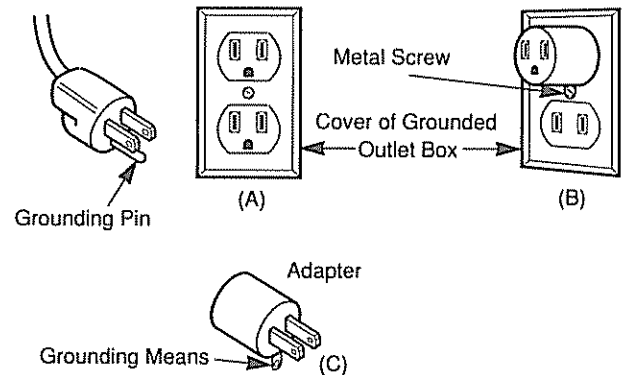


Figure 1 - Wiring Methods

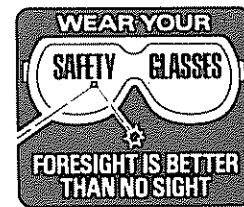
This tool is intended for use on a circuit that has an outlet that looks like the one illustrated in Sketch A in Figure 1. The tool has a grounding plug that looks like the plug illustrated in Sketch A in Figure 1. A temporary adapter, which looks like the adapter illustrated in Sketches B and C, may be used to connect this plug to a 2-pole receptacle as shown in Sketch B if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green-colored rigid ear, lug, etc. extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.

3. KEEP GUARDS IN PLACE

in working order and in proper adjustment and alignment.

4. REMOVE ADJUSTING KEYS AND WRENCHES
Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning on.
5. KEEP WORK AREA CLEAN
Cluttered areas and benches invite accidents.
6. DON'T USE IN DANGEROUS ENVIRONMENT
Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well illuminated.
7. KEEP CHILDREN AWAY
All visitors should be kept a safe distance from work area.
8. MAKE WORKSHOP KID PROOF
with padlocks, master switches, or by removing starter keys.
9. DON'T FORCE TOOL
It will do the job better and be safer at the rate for which it was designed.
10. USE RIGHT TOOL
Don't force tool or attachment to do a job for which it was not designed.
11. WEAR PROPER APPAREL
No loose clothing, gloves, neckties, rings, bracelets, or jewelry to get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
12. ALWAYS WEAR SAFETY GLASSES
Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses. They are NOT safety glasses.
13. SECURE WORK
Use clamps or a vise to hold work when practical. It's safer than using your hand and frees both hands to operate tool.
14. DON'T OVERREACH
Keep your proper footing and balance at all times.
15. MAINTAIN TOOLS IN TOP CONDITION
Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. DISCONNECT TOOLS FROM POWER SOURCE
before servicing and when changing accessories such as blades, bits, cutters, or when mounting and re-mounting motor.

17. REDUCE RISK OF UNINTENTIONAL STARTING
Make sure switch is in "OFF" position before plugging in cord.
18. USE RECOMMENDED ACCESSORIES
Consult the owner's manual for recommended accessories. Use of improper accessories may be hazardous.
19. NEVER STAND ON TOOL
Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
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
Feed work into a blade or cutter against the 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.



The operation 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 complying with ANSI Z87.1 before commencing power tool operation. Safety Goggles are available at Sears retail or catalog stores.



SAFETY RULES FOR DRILL PRESSES

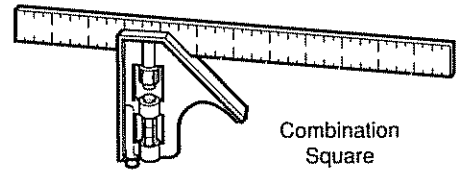
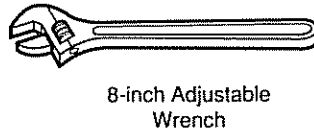


1. DO NOT USE until unit is completely assembled and installed according to instructions.
2. USE ONLY CHUCK KEY PROVIDED WITH YOUR **RADIAL DRILL PRESS**. It is equipped with a self-ejecting pin that eliminates hazard of leaving key in chuck.
3. ALWAYS WEAR EYE PROTECTION
4. DO NOT WEAR Gloves, necktie or loose fitting clothing.
5. BE SURE DRILL BIT or cutting tool is securely locked in chuck
6. USE RECOMMENDED SPEED for drill accessory and workpiece material.
7. ADJUST TABLE OR DEPTH STOP to prevent drilling into table work surface.
8. NEVER USE YOUR HANDS TO HOLD workpiece during drilling. Clamp it to work surface or use a vise to secure workpiece and prevent rotation.
9. NEVER OPERATE drill press if any part is damaged or broken until it is properly repaired or replaced.
10. NEVER PLACE YOUR FINGERS in a position where drill or cutting tool could contact them if part should shift unexpectedly.
11. NEVER PERFORM LAYOUT, assembly or setup work on drill press with cutting tool rotating
12. SHUT OFF POWER, remove drill or cutting tool, and clean table before leaving machine

TABLE OF CONTENTS

WARRANTY.....	2	Rotating Drill Head.....	10
GENERAL SAFETY RULES FOR POWER TOOLS	2, 3	Moving Drill Head In or Out	10
SAFETY RULES FOR DRILL PRESSES	4	Adjusting Spindle Perpendicular to Table	11
TOOLS REQUIRED	5	Alignment of Motor Pulley to Spindle Pulley	11
UNPACKING AND CHECKING CONTENTS.....	5	OPERATION	12
TABLE OF LOOSE PARTS.....	5	Correct Drilling Speeds.....	12
ASSEMBLY.....	6, 7	Drilling Wood.....	12
INSTALLING RADIAL DRILL PRESS	7	Drilling Metal.....	12
CONTROLS AND ADJUSTMENTS	8-11	MAINTENANCE	12
On/Off Switch.....	8	ACCESSORIES.....	13
Table Adjustment.....	8	REPAIR PARTS	14, 15
Depth Stop Adjustment.....	8	TROUBLESHOOTING	16
Spindle Return Spring Adjustment.....	8, 9	HOW TO ORDER REPLACEMENT PARTS	16
Spindle Speeds.....	9		
Changing Speeds.....	9		
Belt Tension Adjustment.....	9, 10		
Tilting Drill Head.....	10		

TOOLS REQUIRED



UNPACKING AND CHECKING CONTENTS

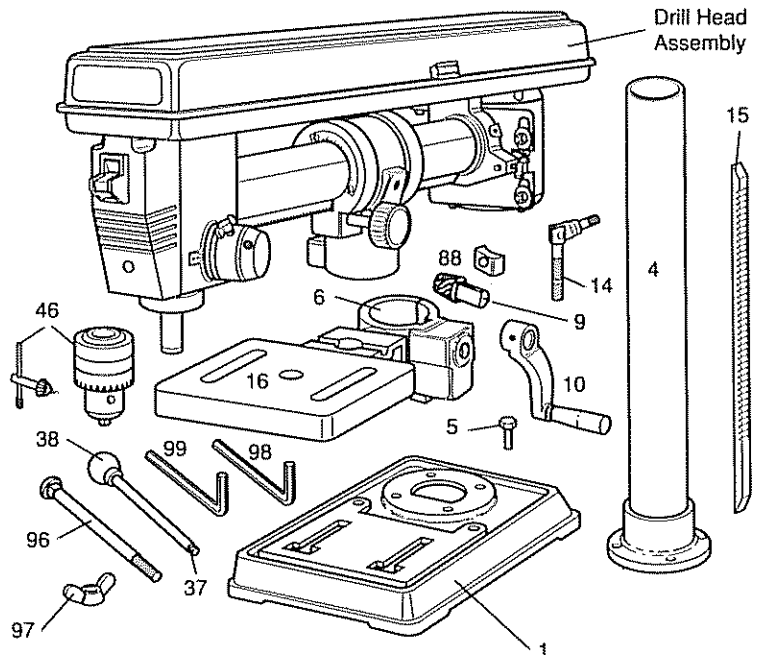
Model 149.213340 Radial Drill Press is shipped complete in one carton. Carefully unpack and separate parts from packing material. Check loose parts against Table of Loose Parts on page 5 and parts list on page 15. If any parts are missing or damaged, do not attempt to assemble Radial Drill Press, plug in power cord or turn on power switch until replacement parts are obtained and properly installed.

Some parts such as the table and base are coated with rust preventive that can be removed with a soft cloth soaked in kerosene. Do not use acetone, gasoline, or lacquer thinner; these are dangerous and may also damage the plastic and rubber parts of the Radial Drill Press.

Apply a coating of paste wax to the table and base work surfaces.

TABLE OF LOOSE PARTS

REF NO.	DESCRIPTION	QTY.
1	Base Assembly	1
4	Column and Flange Assembly	1
5	M8 x 25mm Hex Head Bolts	4
6 & 16	Table Bracket and Table	1
9	Worm Pinion	1
15	Vertical Rack	1
10	Lift Handle	1
—	Drill Head Assembly	1
14	Lock Handles	3
37 & 38	Handle Bars and Knobs	3
46	Chuck and Key	1
96	5/16-18 x 5" Carriage Bolts	2
97	5/16-18 Wing Nuts	2
95	Owner's Manual (not shown)	1
98	5/32" Hex Handle	1
99	3mm Hex Handle	1
88	Lock Shoe with Recess	1



ASSEMBLY

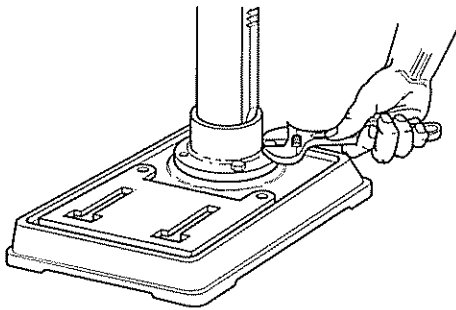


WARNING: For your own safety, NEVER CONNECT THE RADIAL DRILL PRESS TO A POWER SOURCE UNTIL ALL ASSEMBLY STEPS ARE COMPLETE, AND YOU HAVE READ AND UNDERSTOOD SAFETY AND OPERATIONAL INSTRUCTIONS.



CAUTION: Do NOT ALLOW BRAKE FLUIDS, GASOLINE, PENETRATING OILS, ETC., TO COME IN CONTACT WITH PLASTIC PARTS. THESE SOLUTIONS CONTAIN CHEMICALS THAT CAN DAMAGE AND/OR DESTROY PLASTICS.

1. Assemble Column and Flange Assembly (REF 4) to Base Assembly (REF 1) using four 8mm x 25mm bolts (REF 5).



2. Slide Worm Pinion (REF 9) into Table Bracket (REF 6) until shaft extends from hole and teeth engage with Table Lift Gear (REF 7) Lower Vertical Rack (REF 15) into Table

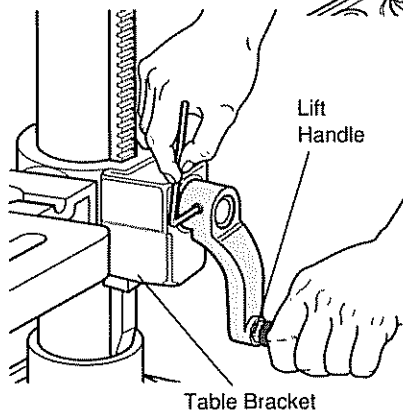
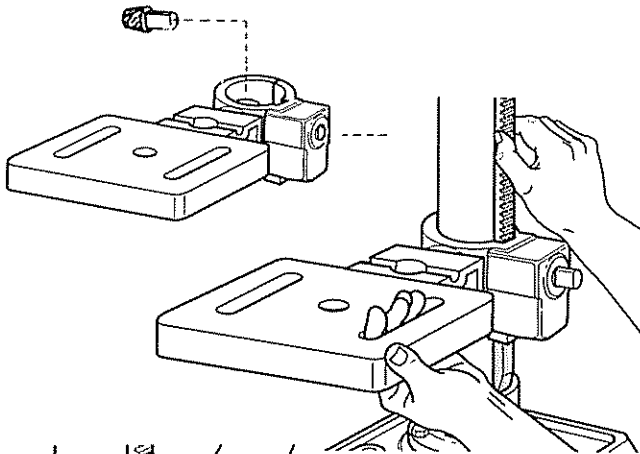


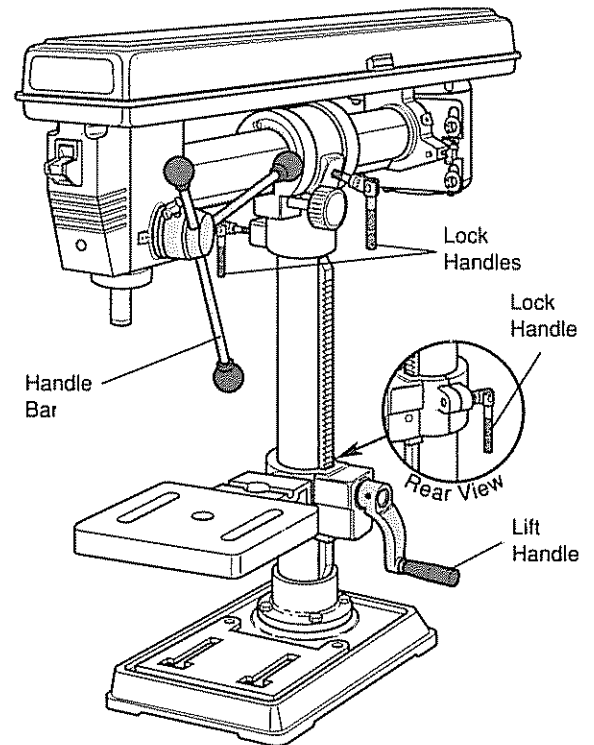
Table Bracket

Bracket making sure that the teeth are engaged in the Table Lift Gear inside bracket Slide rack and bracket assembly onto column until angled end at bottom of rack fits into top of column flange.

3. Place Lift Handle (REF 10) on Worm Pinion Shaft extending from Table Bracket Align flat on pinion shaft with set screw (REF 11) and tighten

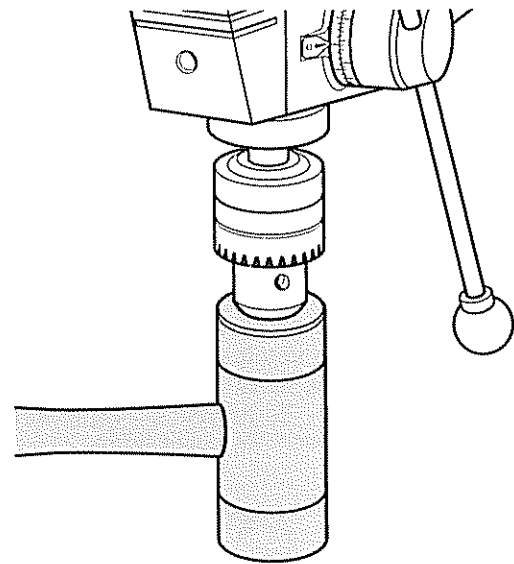
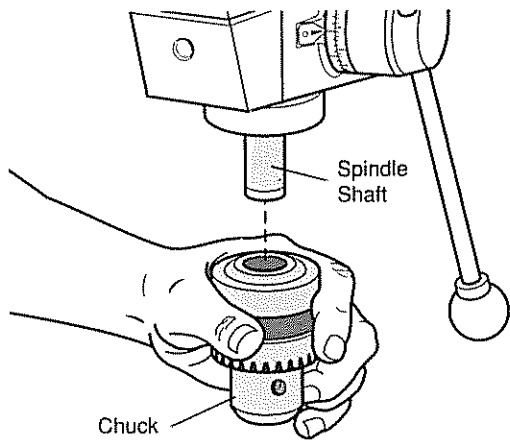
NOTE: Before installing drill head assembly, find a permanent location for radial drill press and fasten base down using Carriage Bolts (REF 96) and Wing Nuts (REF 97) provided. BE SURE BOLTS PASS ENTIRELY THROUGH MOUNTING SURFACE. (See Installing Radial Drill Press section on page 7.)

4. Place Lock Shoe (REF 88) from loose parts bag into cast pocket in Column Head Assembly (REF 83) then slide Column Head Assembly with Drill Head Assembly down onto Column as shown. Be very careful to hold Lock Shoe in place during assembly to prevent it from falling down inside column. Be sure to engage Vertical Rack with angle on bottom of Column Head. Drill head should rotate freely around column.



5. Attach one Lock Handle (REF 14) to Table Bracket and two Lock Handles to Column Head.

6. Attach three Handle Bars (REF 37) into threaded holes on head of Feed Shaft Assembly (REF 34).



7. Make sure bottom of Spindle Shaft (REF 42) and bore of Chuck (REF 46) are clean and free of grease. Press Chuck up onto Spindle Shaft.

NOTE: To avoid damage to Chuck, rotate Chuck barrel until jaws are fully open.

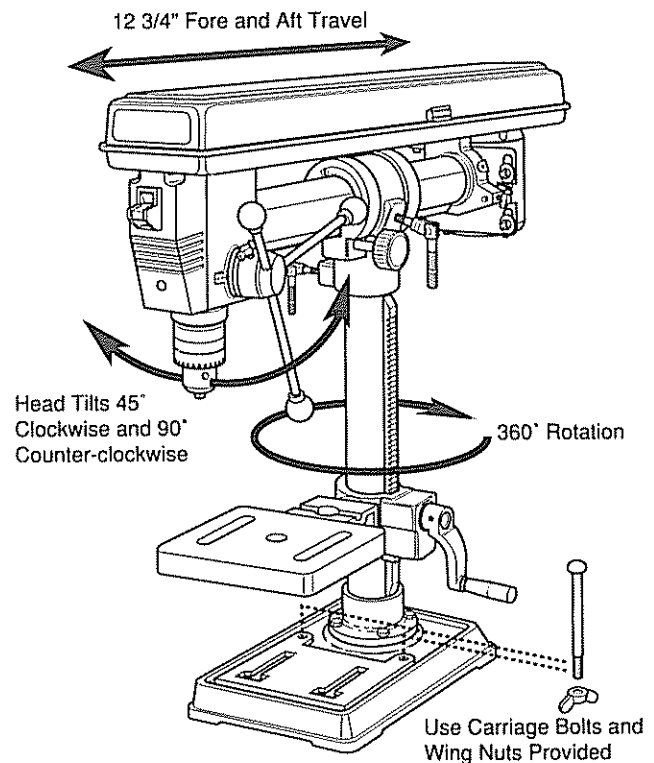
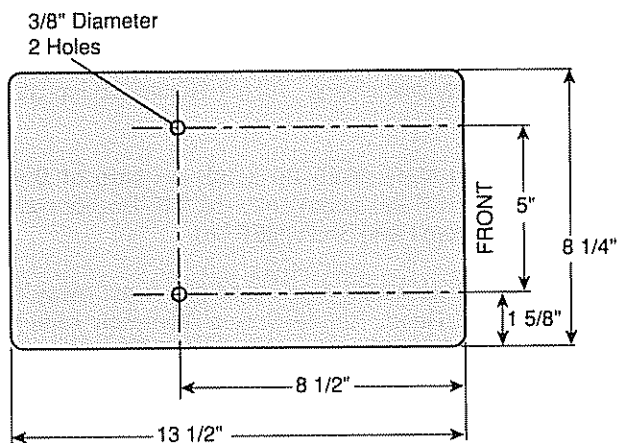
- 8 Using a mallet or a block of wood and hammer, firmly tap Chuck upward into position onto Spindle Shaft.

INSTALLING RADIAL DRILL PRESS



WARNING: BEFORE USING RADIAL DRILL PRESS, MAKE SURE IT IS ATTACHED TO A FIRM AND STABLE SUPPORT SURFACE USING CARRIAGE BOLTS AND WING NUTS PROVIDED.

1. Choose an area that allows sufficient clearance to take full advantage of the Radial Drill Press's lateral, rotational, and tilt motions.
2. Bolt Radial Drill Press to a firm and stable surface using Carriage Bolts and Wing Nuts provided. Be sure bolts pass entirely through mounting surface and are at least 5/16-18 standard strength. Tighten all bolts and wing nuts securely.



CONTROLS AND ADJUSTMENTS



WARNING: MAKE SURE SWITCH IS IN OFF POSITION AND POWER CORD IS UNPLUGGED BEFORE PERFORMING CHECKS, ADJUSTMENTS, OR SETUP PROCEDURES.

On-Off Switch

The ON-OFF switch (REF 59) is located on front of Drill Head and has operating positions clearly marked. Push switch up to turn tool ON and down to turn it OFF. The switch has a Switch Key (REF 60) that, when removed, allows switch to be locked in OFF position. To activate locking feature, push switch to OFF and pull Switch Key out of switch.

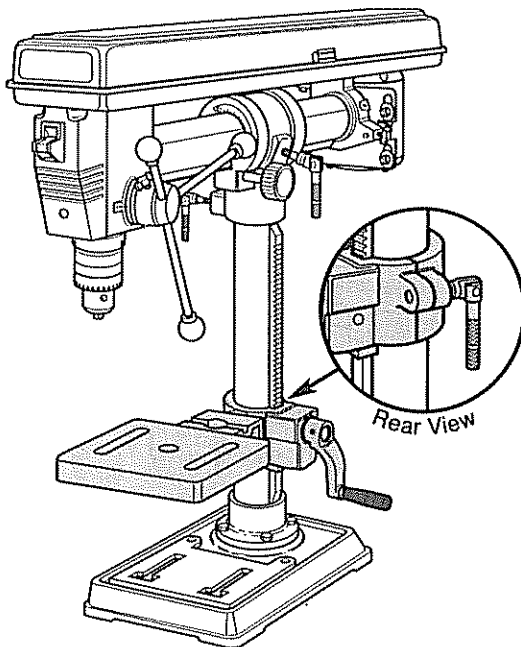
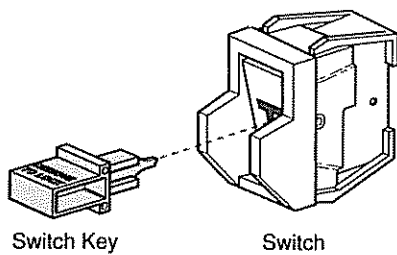


Table Adjustment

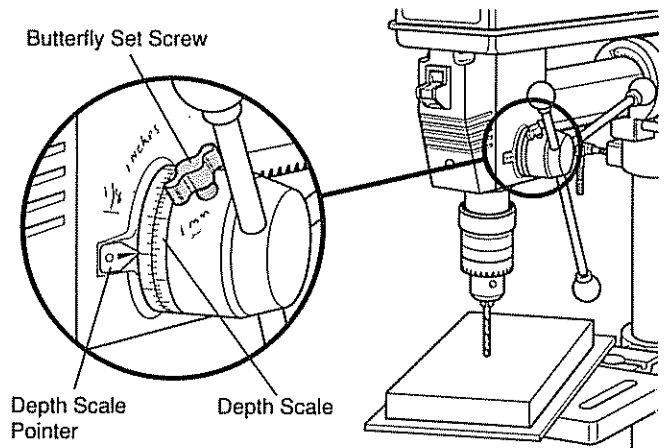
1. Table Height - To raise or lower Table, loosen Lock Handle on back of Table Bracket. Crank Lift Handle to raise or lower Table, then lock position with Lock Handle.

2. Table Rotation - To rotate table, first loosen Lock Handle. The table can be rotated from side to side or completely out from under Spindle Shaft to allow work surface on base to support workpiece.

Depth Stop Adjustment

When it is desirable to drill holes to an exact depth, the built-in depth stop can be set.

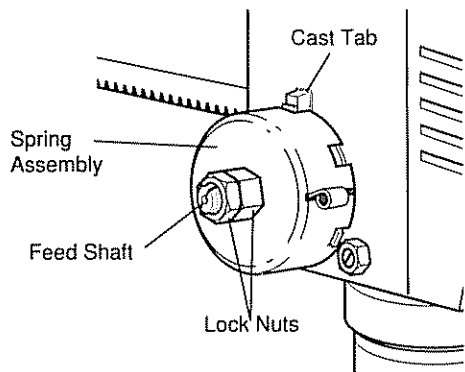
1. With Radial Drill Press turned OFF, adjust table height until drill bit barely touches workpiece at spot to be drilled, and lock into position.
2. Loosen Depth Stop Butterfly Set Screw (REF 36) and rotate Depth Gauge Assembly (REF 35) until desired drill depth on Scale aligns with Pointer on Spindle Housing (REF 25). Tighten Butterfly Set Screw.



Spindle Return Spring Adjustment

An automatic spindle Return Spring (REF 28) is installed in Drill Head to return spindle to full up position. This spring was preset at the factory and should not be readjusted unless absolutely necessary. Adjust Return Spring as follows:

1. Loosen two Nuts (REF 29 & 30) on side of Spring Assembly (REF 28) about 1/4". NOTE: Do not remove these nuts from Feed Shaft (REF 34).
2. Hold Spring Assembly firmly and pull it out away from side of Drill Head. Rotate Spring Assembly until next notch engages with cast tab on side of Drill head.



3. Check operation of Return Spring for proper tension and full return.
4. Nuts must be tightened before use. Be very careful; the nuts hold Spring Assembly in position and should **NOT** be tightened flush against Spring Assembly. A small gap is necessary for proper operation of Spindle Housing. Lock the two nuts together using separate wrenches and make sure Spindle Housing moves freely up and down.

Spindle Speeds

Your Radial Drill Press has a 1725 RPM motor with five spindle speeds available through a pulley/belt drive. The various

spindle speeds are required for different materials, different types and sizes of drills, and different cutting tools.

Refer to the V-belt placement illustration on this page for the five available spindle speeds. Maximum speed is obtained when V-belt is on largest step of pulley at motor end and smallest step of pulley at spindle end.

Changing Speeds



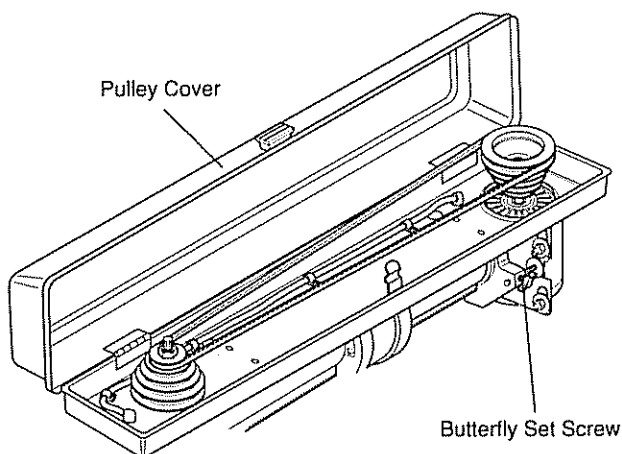
WARNING: DISCONNECT RADIAL DRILL PRESS FROM POWER SOURCE BEFORE CHANGING SPEEDS.

1. Open Pulley Cover (REF 48)
2. Position V-belt (REF 73) on desired steps of Spindle Pulley (REF 19) and Motor Pulley (REF 71). When positioning V-belt, always start by moving the end of the belt that will go from a larger step to a smaller step first.
3. A chart (REF 51) of drill speeds and pulley steps is provided below and inside Pulley Cover for convenience.

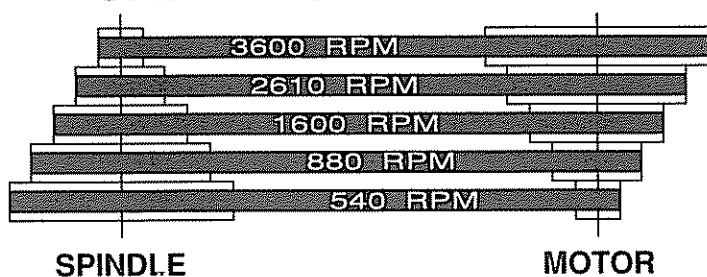
Belt Tension Adjustment

NOTE: The Radial Drill Press is shipped with the V-belt installed. Check V-belt adjustment for proper tension before use.

1. Open Pulley Cover (REF 48).
2. Loosen belt tension Butterfly Set Screw (REF 36) located on right side of Cover Mount (REF 75).
3. Select speed for drilling operation by referring to Speed Chart (REF 51) inside Pulley Cover or on bottom of page. Move V-belt to correct position for desired speed.
4. Push motor towards rear of machine until V-belt sides are straight between pulleys.



SPINDLE SPEED CHART

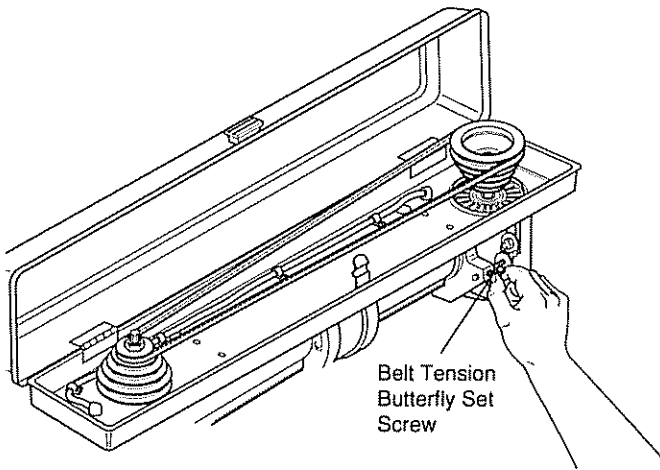


MATERIAL SPEED CHART

FOR USE WITH HIGH SPEED TWIST DRILLS ONLY

Drill Diameter Inches	Material						Drill Diameter mm
	Aluminum	Rubber Plastic	Hardwood*	Softwood*	Cast Iron	Mild Steel	
1/16	3600						2
1/8	3600						4
3/16			2610				6
1/4							8
5/16							10
3/8							12
7/16	2610		1600				14
1/2							16
9/16	1600			880		540	
5/8						N/A	

* Speed should vary with type of bit, hole diameter, depth of hole and type of wood. Speeds listed here are general guidelines for use with standard high speed twist drills. Always use care and test a new application on a piece of scrap material first.

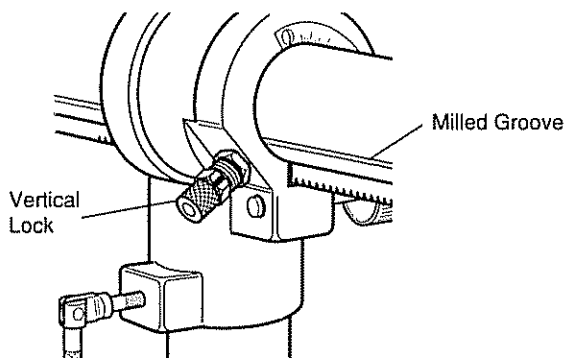
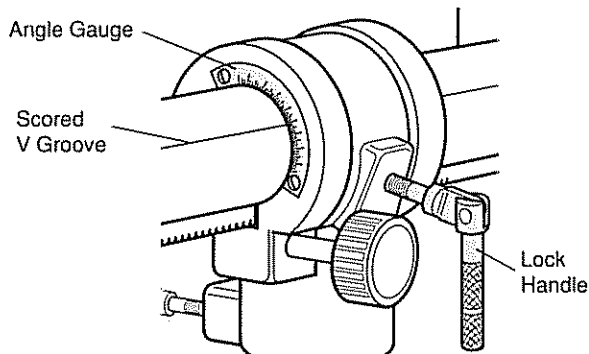


NOTE: When properly tensioned, V-belt should deflect about 1/2" under thumb pressure at mid-point between pulleys.

5. Tighten belt tension Butterfly Set Screw and close Pulley Cover.

Tilting Drill Head

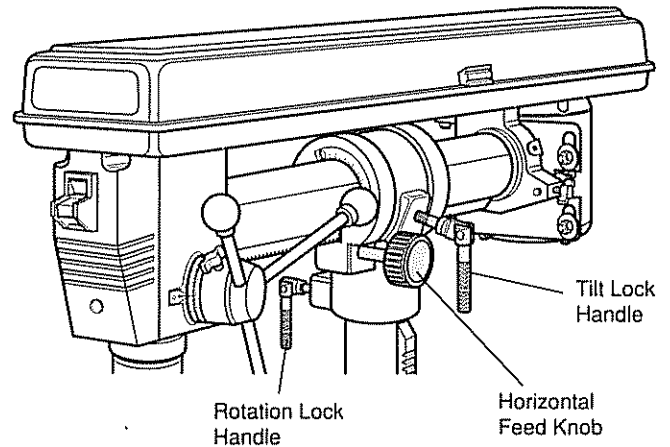
The Drill head can be tilted to drill up to 45 degrees clockwise and 90 degrees counter-clockwise of vertical. To tilt Drill head, loosen Lock Handle on right side of Column head and pull out and turn plunger of Vertical Lock (REF 87). Use



Angle Gauge (REF 85) on Column head and full length scored V groove on Horizontal Tube (REF 81) to set desired angle. Lock in position using Lock Handle. When returning to vertical position, turn Vertical Lock plunger and allow it to snap down onto Horizontal Tube. When vertical position is reached, plunger will pop into milled slot on Horizontal Tube. Tighten Lock Handle to lock position.

Rotating Drill Head

The Drill head can rotate 360 degrees around the Column. Take care when mounting Radial Drill Press to allow sufficient clearance for full use of this feature. Loosen Lock Handle on left lower area of Column Head. Rotate to desired position and lock in place with Lock Handle.



Moving Drill Head In or Out

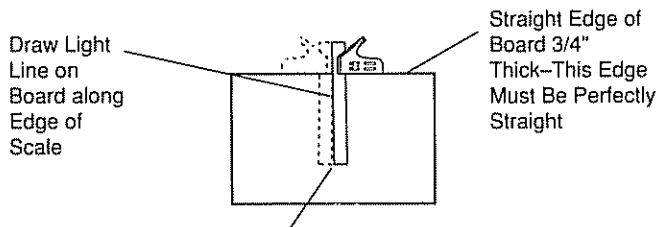
The Drill head can move in or out along Horizontal Tube (REF 81) to drill large objects or move between holes without unclamping workpiece. Loosen same Lock Handle as for tilting Drill head above. Use Horizontal Feed Knob (REF 89) to move Drill head in or out to desired position. Lock in place with Lock Handle before drilling to prevent drill bit from "walking" along the workpiece surface.

Adjusting Spindle Perpendicular to Table

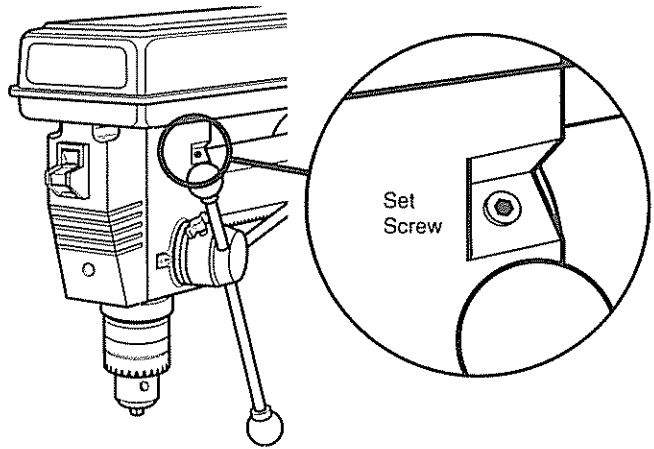
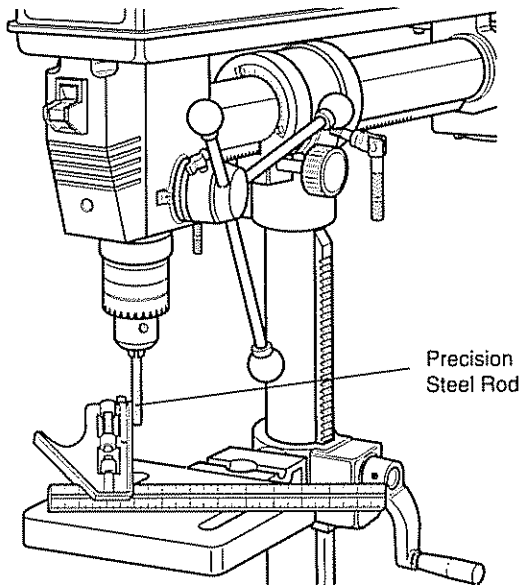
The Radial Drill Press was factory-adjusted and set with Spindle Housing perpendicular to table. No further adjustment should be necessary. However, normal shipping and handling may have changed the setting. Check and adjust as follows:

1. **DISCONNECT FROM POWER SOURCE!** Never make any adjustments while the tool is plugged in.
2. Be sure the Vertical Lock plunger (REF 87) is engaged in Horizontal Tube slot (REF 81).
3. Mount a 3" long precision round steel rod or a large, straight drill bit into Chuck and place a combination square on Table. Check alignment between rod and Table as shown.

NOTE: Combination square must be "true." Check for accuracy as illustrated below.



Flip Square Over to Dotted Position—Edge of Scale Should Align Perfectly with Drawn Line



4. If out of square, loosen two Set Screws (REF 26) that attach Spindle Housing Assembly (REF 25) to Horizontal Tube. Tilt Spindle Housing Assembly until rod is exactly 90 degrees to Table. Tighten both Set Screws.
5. Check V-belt tension after this adjustment and readjust if required.

Alignment of Motor Pulley to Spindle Pulley

Check pulley alignment by sighting between tops of Spindle Pulley (REF 19) and Motor Pulley (REF 71).

1. Should they need adjustment, loosen screws on Cover Mount (REF 75) and turn motor assembly until pulleys align.
2. Tighten screws and adjust V-belt tension if needed.

OPERATION

Correct Drilling Speeds

See "Changing Speeds" section under "Controls and Adjustments" and Speed Chart inside Pulley Cover for correct drilling speeds. Always disconnect tool from power source before making any adjustments. Care must be taken when setting speed for any cutting tool or accessory not listed on chart. Read and follow any speed instructions supplied with cutting tool or accessory. Rules for judging drilling speed for materials not listed in chart are:

1. A small size drill requires faster cutting speeds than a larger size.
2. Soft material requires faster speeds than hard material.

See "Accessories" section for a listing of items authorized for use with this tool.

Drilling Wood

Many types of drill bits designed for drilling or boring wood can be used with this machine. Standard high speed twist drills intended primarily for metal drilling work very well on wood. Spur bits, sometimes referred to as forstner bits, are best for woodworking because they cut a clean-sided, flat

bottomed hole. Be careful **NOT** to use any **SCREW TIP** hand drill bit. At even the slowest drill press speeds, this style will lift the workpiece from the table and could easily cause injury.

Feed bit slowly through wood. As bit is about to cut through bottom surface, slow feed even more to prevent splintering or a burr to bottom face of workpiece. Always use a piece of scrap wood under workpiece to reduce splintering and to protect drill bit and work table.

Use of clamps or a work vise is recommended for most drilling operations. If a method of clamping is not used, brace back-up material against left side of column to prevent workpiece from spinning.

Drilling Metal

Although primarily a woodworking tool, this Radial Drill Press can be used to drill metal. **Always firmly clamp or use a drill press vise bolted to work table when drilling metal.**



WARNING: NEVER HOLD A METAL WORKPIECE IN A BARE HAND DURING DRILLING. FIRMLY CLAMP WORKPIECE TO TABLE OR USE A DRILL PRESS VISE BOLTED TO TABLE WHENEVER DRILLING METAL. FAILURE TO DO THIS COULD RESULT IN PERSONAL INJURY.

MAINTENANCE



WARNING: FOR YOUR OWN SAFETY, TURN OFF POWER AND DISCONNECT TOOL FROM POWER SOURCE BEFORE PERFORMING ANY MAINTENANCE.

Periodically clean dust accumulation from machine. Apply a light coat of paste wax to table, base work surfaces, and vertical and horizontal columns. This will help to keep them clean and working smoothly.

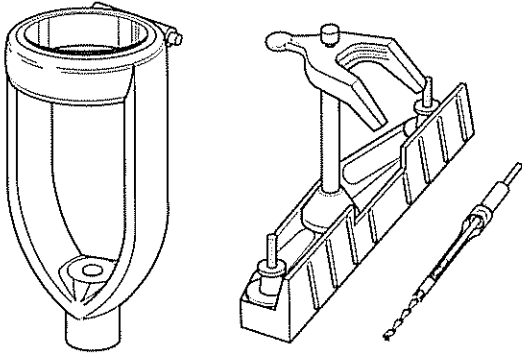
All of the ball bearings are packed with grease at the factory and require no further lubrication. The Quill and Spindle Rack

should be lubricated periodically with a light machine or penetrating oil. Open Pulley Cover and spray a light coat of oil on Spindle Shaft splines (REF 42) as you move spindle up and down. Avoid getting any oil on the drive belt. Also, with spindle in fully down position, spray a light coat of oil on Quill (REF 40). A small amount of grease on Table Lift Gear (REF 7) and Horizontal Feed Gear (REF 90) will keep these two mechanisms moving freely. Wipe excess grease from racks to prevent dust buildup in teeth.

ACCESSORIES

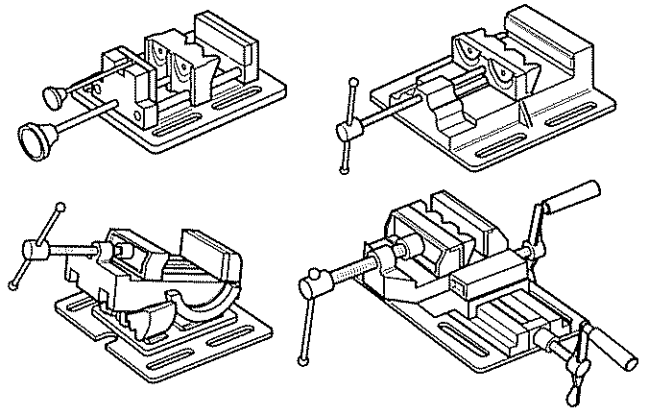
Mortising Kit

Although not designed specifically for mortising, the variety of possible drill angles and feed lengths with the Radial Drill Press make possible some formerly impossible operations. Use Sears Model 9 BT 25255 Mortising Chisel Housing and Model 9 BT 29506 Drill Press Mortising Kit with the accompanying made-to-fit bits available through Sears Catalog and Retail Stores.



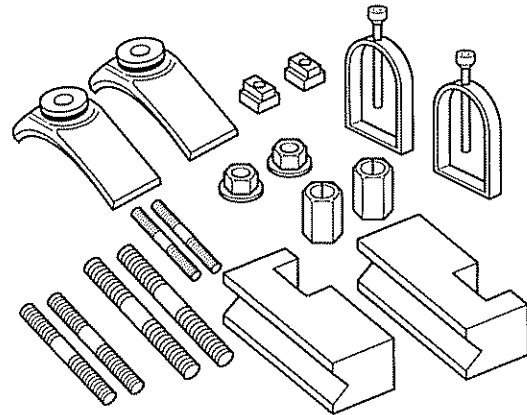
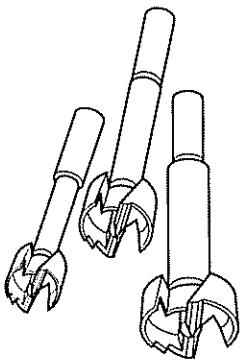
Vises and Clamps

A large variety of sizes and types of drill press vises and clamps are available through Sears Catalog and Retail Stores. The work table has slots that will align with most vises.



Forstner Bits

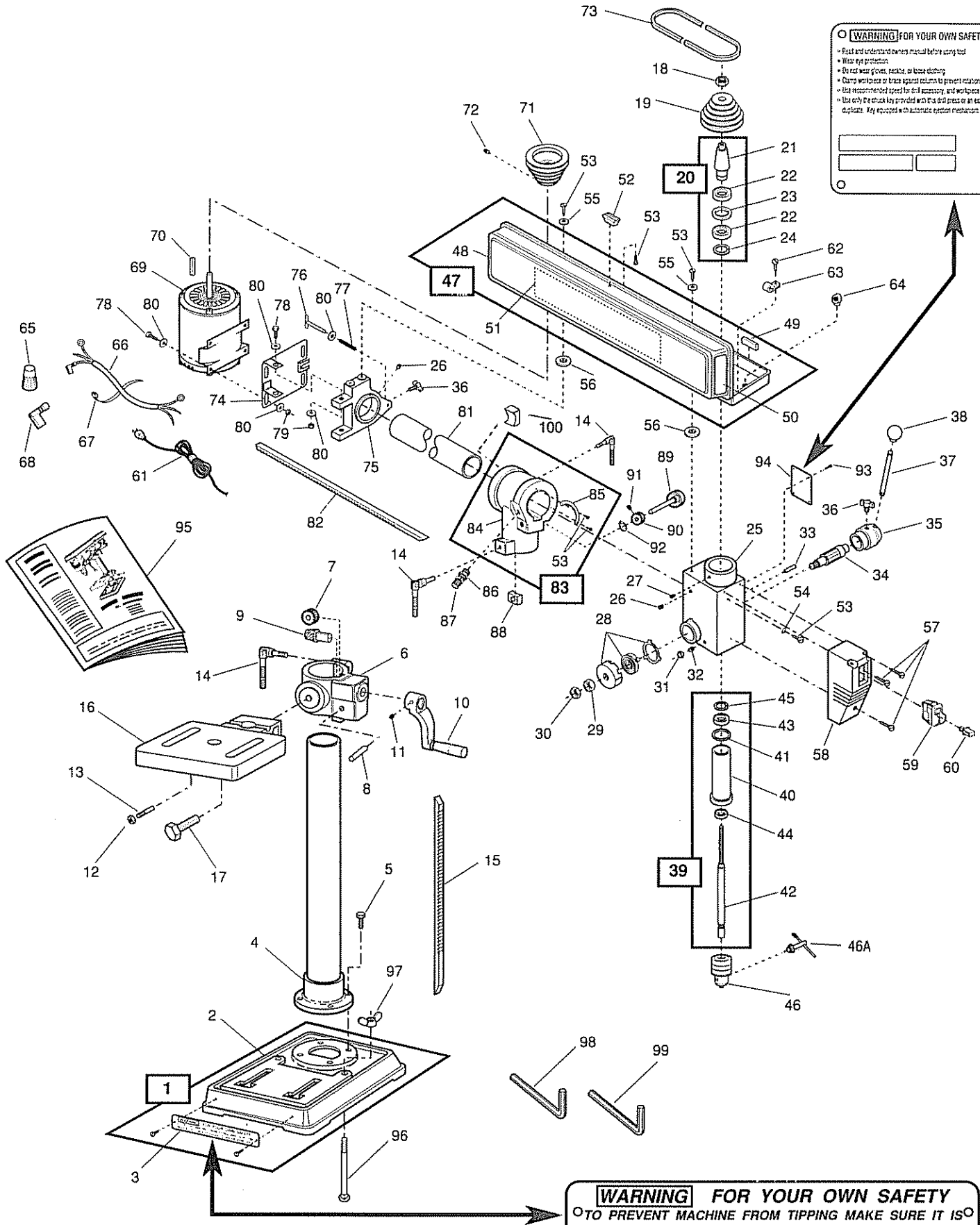
A selection of standard size forstner bits is available to fit the 1/2" capacity chuck of the Radial Drill Press. Sears Check with your local Catalog and Retail Stores.



CRAFTSMAN 34-INCH RADIAL DRILL PRESS MODEL No. 149.213340 REPAIR PARTS

WARNING FOR YOUR OWN SAFETY

- Read and understand owners manual before using tool
- Wear eye protection
- Do not wear gloves, necktie, or loose clothing
- Guard work area or brace against column to prevent rotation
- Use recommended speed for drill accessory and workpiece material
- Use only the chuck key provided with this drill press or an exact duplicate. Key equipped with automatic ejection mechanism.



WARNING FOR YOUR OWN SAFETY
 ○ TO PREVENT MACHINE FROM TIPPING MAKE SURE IT IS ○
 PROPERLY SECURED TO A STABLE STAND OR WORK TABLE.

CRAFTSMAN 34-INCH RADIAL DRILL PRESS MODEL No. 149.213340

PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	4910-001-95	BASE ASSEMBLY (INCLUDES 2 & 3)	1
2	4910-001-70	BASE	1
3	4910-252-70	TIPPING WARNING LABEL	1
4	4910-162-70	COLUMN AND FLANGE ASSEMBLY	1
5	1737-200-00	M8 X 25mm HEX HEAD BOLTS	4
6	4910-013-70	TABLE BRACKET	1
7	4910-014-70	GEAR TABLE LIFT	1
8	4910-015-70	GEAR SHAFT	1
9	4910-016-70	WORM PINION	1
10	4910-053-70	LIFT HANDLE	1
11	1709-004-00	M6 X 10mm SOCKET HEAD SET SCREW	1
12	STD541025	1/4-20 HEX NUT	1
13	1726-050-00	1/4-20 X 1 1/8" STUD	1
14	4910-057-70	LOCK HANDLE	2
15	4910-164-70	VERTICAL RACK	1
16	4910-012-70	TABLE	1
17	STD525010	1/2" X 1" HEX HEAD BOLT	1
18	1784-007-00	PULLEY SET NUT	1
19	4910-081-70	SPINDLE PULLEY	1
20	4910-049-90	DRIVE SLEEVE ASSEMBLY (INCLUDES 21-24)	1
21	4910-094-70	DRIVE SLEEVE	1
22	STD315235	BALL BEARINGS (6203Z)	2
23	4910-097-70	BEARING SPACER COLLAR	1
24	1695-069-00	EXTERNAL RETAINING RING (A-17)	1
25	4910-095-70	SPINDLE HOUSING ASSEMBLY	1
26	STD503102	5/16-18 X 1/4" SET SCREWS	4
27	1737-130-00	M8 X 8mm SOCKET HEAD SET SCREW	1
28	4910-123-70	SPRING, CAP, AND RETAINER ASSEMBLY	1
29	STD541350	1/2-20 HEX NUT (SPRING JAM NUT)	1
30	STD541150	1/2-20 HEX NUT (SPRING NUT)	1
31	1784-200-00	M8 HEX NUT	1
32	1737-185-00	M8 X 22mm DOG POINT SET SCREW	1
33	4910-124-70	STOP PIN	1
34	4910-096-70	FEED SHAFT ASSEMBLY	1
35	4910-062-70	DEPTH GAUGE ASSEMBLY	1
36	4910-054-70	M8 BUTTERFLY SET SCREWS	2
37	4910-055-70	HANDLE BARS	3
38	4910-056-70	HANDLE BAR KNOBS	3
39	4910-091-90	QUILL ASSEMBLY (INCLUDES 40-45)	1
40	4910-091-70	QUILL	1
41	4910-092-70	RUBBER WASHER	1
42	4910-093-70	SPINDLE SHAFT	1
43	STD315215	BALL BEARING (6201Z)	1
44	STD315225	BALL BEARING (6202Z)	1
45	1695-062-00	EXTERNAL RETAINING RING (A-11)	1
46	4910-190-70	CHUCK AND KEY (WITH EJECTION PIN)	1
46A	4910-192-70	CHUCK KEY (ORDER FOR KEY ONLY)	1
47	4920-041-90	PULLEY COVER ASSEMBLY (INCLUDES 48-51)	1
48	4920-042-70	PULLEY COVER	1
49	4910-045-70	RUBBER BUMPERS	2
50	4920-251-00	CRAFTSMAN LABEL	1

REF. NO.	PART NO.	DESCRIPTION	QTY.
51	4910-253-00	BELT SPEED LABEL	1
52	4920-050-70	PULLEY COVER KNOB	1
53	STD511003	#10-24 X 3/8" PAN HEAD SCREWS	8
54	STD551210	#10 STARWASHER	1
55	STD551010	#10 FLATWASHERS	4
56	1789-015-00	#10 RUBBER WASHERS	4
57	STD511007	#10-24 X 3/4" PAN HEAD SCREWS	3
58	4920-040-70	SWITCH COVER	1
59	2292-067-00	DPST SWITCH (INCLUDES 60)	1
60	2292-068-00	SWITCH KEY (ORDER FOR KEY ONLY)	1
61	STD364949	POWER CORD	1
62	1708-100-00	M5 X 8mm PAN HEAD SCREWS	3
63	4910-350-00	WIRE CLAMPS (HEYCO #3355)	3
64	4910-351-00	RIGHT ANGLE BUSHING (HEYCO #1327)	2
65	STD375005	WIRE NUT	1
66	4910-353-70	SWITCH CORD	1
67	4910-354-00	CABLE TIES	2
68	4910-355-00	FULL INSUL FEMALE TERM, 90 DEG FLAG	1
69	4910-220-00	MOTOR, EMERSON 1/3 HP MAXIMUM	1
70	STD580100	1/8 X 1" SQUARE DRIVE KEY	1
71	4910-080-70	MOTOR PULLEY	1
72	1709-125-00	M6 X 6mm SOCKET HEAD SET SCREW	1
73	STD303590	V-BELT	1
74	4910-031-70	MOTOR BRACKET	1
75	4910-030-09	COVER MOUNT	1
76	4910-050-70	PUSH TEE	1
77	4910-120-70	SPRING	1
78	STD523110	5/16-17 X 1" HEX HEAD BOLTS	6
79	STD541431	5/16-18 HEX LOCK NUTS	6
80	STD551031	5/16 FLAT WASHERS	13
81	4910-161-70	HORIZONTAL TUBE	1
82	4910-166-70	HORIZONTAL RACK	1
83	4910-020-95	COLUMN HEAD ASSEMBLY (INCLUDES 53, 84, 85)	1
84	4910-020-09	COLUMN HEAD	1
85	4910-021-70	ANGLE GAUGE	1
86	1785-050-00	M16 HEX JAM NUT	1
87	4910-059-70	VERTICAL LOCK	1
88	1175-000-00	LOCK SHOE WITH RECESS	1
89	4910-051-70	HORIZONTAL FEED KNOW ASSEMBLY	1
90	4910-017-70	HORIZONTAL FEED GEAR	1
91	STD501002	#10-24 X 1/4" SOCKET SET SCREW	1
92	STD582037	EXTERNAL RETAINING RING	1
93	1697-010-00	#4 X 1/4" DRIVE SCREWS	4
94	4920-250-00	WARNING LABEL/DATA PLATE	1
95	4920-252-00	OWNER'S MANUAL	1
96	STD533150	5/16-18 X 5" CARRIAGE BOLTS	2
97	STD541631	5/16-18 WING NUTS	2
98	2288-000-00	5/32" HEX HANDLE	1
99	4910-191-00	3mm HEX HANDLE	1
100	1175-001-00	LOCK SHOE	1

TROUBLESHOOTING CHART

TROUBLE	PROBABLE CAUSE	REMEDY
Noisy operation	<ol style="list-style-type: none"> 1. Incorrect V-belt tension. 2. Dry spindle shaft. 3. Loose Spindle shaft or Motor Pulley. 	<ol style="list-style-type: none"> 1. Adjust tension. 2. Lubricate spindle shaft. See "Maintenance" section. 3. Tighten Lock Nut (left hand thread) or pulley set screw.
Bit burns or smokes	<ol style="list-style-type: none"> 1. Incorrect spindle speed. 2. Chips not coming out of hole. 3. Dull bit. 4. Feed rate too slow. 5. Bit not lubricated (metal working). 	<ol style="list-style-type: none"> 1. Change spindle speed. 2. Retract bit frequently to clear chips. 3. Sharpen or replace bit. 4. Feed faster. 5. Lubricate bit.
Excessive drill bit runout or wobble	<ol style="list-style-type: none"> 1. Bent bit. 2. Chuck not properly installed. 3. Bit not properly installed. 4. Worn or loose chuck. 5. Worn spindle bearings. 	<ol style="list-style-type: none"> 1. Replace bit. 2. Remove chuck and install properly. 3. Remove bit and install properly. 4. Replace chuck. 5. Replace bearings.
Drill binds in workpiece	<ol style="list-style-type: none"> 1. Improper V-belt tension. 2. Workpiece twisting or moving. 3. Excessive feed pressure. 	<ol style="list-style-type: none"> 1. Adjust V-belt tension. 2. Support or clamp workpiece. 3. Reduce pressure and clamp workpiece.
Workpiece torn loose from hands	<ol style="list-style-type: none"> 1. Not properly supported or clamped. 	<ol style="list-style-type: none"> 1. Support and clamp workpiece.

SEARS

**Owner's
Manual**

SERVICE

**MODEL NO.
149.213340**

SEARS / CRAFTSMAN®

34-INCH RADIAL DRILL PRESS

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

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- PART NUMBER
- PART DESCRIPTION
- MODEL NUMBER
149.213340
- NAME OF ITEM:
34-INCH RADIAL DRILL PRESS

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.

SEARS, ROEBUCK AND CO., Hoffman Estates, IL 60179, U.S.A.