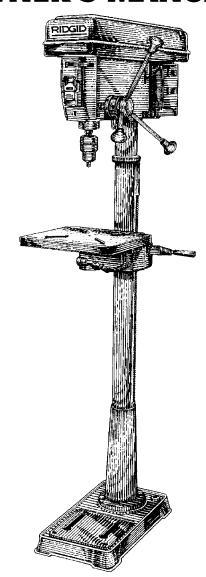


DP1500 OWNER'S MANUAL



15 INCH FLOOR MODEL DRILL PRESS

- Assembly
- Operation
- Repair Parts

For Your Safety: Read all instructions carefully

QUESTIONS OR COMMENTS?

CALL 1-800-4-RIDGID

Part No. SP6158 Printed in U.S.A.

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Safety Instructions For Drill Press

Safety is a combination of common sense, staying alert and knowing how your drill press works. Read this manual to understand this drill press.

Safety Signal Words

DANGER: means if the safety information is not followed someone will be seriously injured or killed.

WARNING: means if the safety information is not followed someone **could** be seriously injured or killed.

CAUTION: means if the safety information is not followed someone may be injured.

Before Using The Drill Press

WARNING: To reduce the risk of mistakes that could cause serious, permanent injury, do not plug the drill press in until the following steps have been satisfactorily completed.

- Completely assemble and align drill press (See "Assembly" section).
- Learn the use and function of the ON-OFF switch. (See "Getting to Know Your Drill Press" section).
- · Review and understand all safety instructions and operating procedures in this manual.
- Review the maintenance methods for this drill press (See "Maintenance" section).
- Find and read all the warning labels found on the drill press (shown at right).

AWARNING

Read manual before using drill press. Wear safety goggles that meet ANSI Z87.1 or in Canada CSA Z94-3-M88 standards.

Do not wear gloves, neckties or loose fitting clothing. Tie back long hair.

To prevent work piece rotation, clamp it to the table or brace it against the column.

Use recommended accessories only.

Use the recommended speed for the drill accessory.

Remove chuck key before turning power ON.
Tighten all locks before operating drill press.
Turn power OFF and wait for drill to stop before adjusting or servicing.

Do not expose to rain or use in a damp location.

 Plug power cord into a properly grounded outlet protected by a 15 amp circuit breaker or time delay fuse, in Canada use time delay fuse marked "D".

When Installing Or Moving The Drill Press

Reduce the Risk of Dangerous Environment.

- Use the drill press in a dry, indoor place protected from rain.
- Keep work area well lighted.
- Use recommended accessories. The use of improper accessories may cause risk of injury to persons.

To reduce the risk of injury from unexpected drill press movement.

If there is any tendency of the drill press to tilt or

- move during any use, bolt it to the floor. If the workpiece is too large to easily support with one hand, provide an auxiliary support.
- To reduce the risk of injury from electrical shock, make sure your fingers do not touch the plug's metal prongs when plugging in or unplugging the drill press.
- Never Stand On Tool. Serious injury could occur if the tool tips or you accidentally hit the cutting tool. Do not store anything above or near the tool where anyone might stand on the tool to reach them.

Before Each Use

Inspect your drill press.

- To reduce the risk of injury from accidental starting, turn the switch off, unplug the drill press, and remove the switch key before raising the guard, changing the cutting tool, changing the setup, or adjusting anything. Make sure switch is in OFF position before plugging in.
- Check for alignment of moving parts, binding of moving parts, breakage of parts, drill press stability, and any other conditions that may affect the way the drill press works.
- If any part is missing, bent or broken in any way, or any electrical part does not work properly, turn the drill press off and unplug the drill press.
- Replace damaged or missing parts before using the drill press again.
- Remove adjusting keys and wrenches. Form a habit of checking for and removing keys and adjusting wrenches from table top before turning drill press on.
- Make sure all clamps and locks are tight and no parts have excessive play.

Use Only Accessories Designed For This Drill Press To Reduce The Risk of Serious Injury From Thrown Broken Parts Or Work Pieces

- When cutting large diameter holes:
- Clamp the workpiece firmly to the table. Otherwise the cutting may grab and spin it at high speed.
- Use only one piece, cup-type, hole cutters.
- **Do not** use fly cutters or multi-part hole cutters as they can come apart or become unbalanced in use.
- Keep speed below 1500 R.P.M.
- Drum sanders must **never** be operated on this drill press at a speed greater than 1800 R.P.M.
- 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.
- Do not use wire wheels, router bits, shaper cutters, circle (fly) cutters or rotary planers on this drill press.

Kickback

- Kickback is the grabbing of the workpiece by the rotating tool. The workpiece can be thrown at very high speed in the direction of rotation. This Can Cause Serious Injury. To reduce the possibility of injury from kickback:
- Clamp the workpiece firmly to the table whenever possible.
- Buffing or sanding wheels or drums should be contacted on the side moving away from you, not the side moving toward you.
- Use only recommended accessories and follow the instructions supplied with the accessory.

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 guard for specific placement of belt on pulleys.

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.

Plan Your Work

- Don't force the tool. It will do the job better and safer at the rate for which it was designed.
- Use the right tool. Don't force tool or attachment to do a job it was not designed to do.
- 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, turn the drill press off and unplug it until the particular part is properly repaired or replaced.
- 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.

Safety Instructions For Drill Press (continued)

- To reduce the risk of injury from parts thrown by the spring, follow instructions exactly as given and shown in adjusting spring tension of quill.
- 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 vise, always fasten it to a table.
 - Never do any work "Freehand" (hand holding workpiece rather than supporting it on the table), except when polishing.
 - Securely lock head to column, table support to column and table to table support 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 inside of the belt guard for drilling information; for accessories, refer to the instructions provided with the accessories.
- Never climb on the drill press table, it could break or pull the entire drill press down on you.
- Turn the motor switch off and put away the switch key when leaving the drill press.
- To reduce the risk of injury from thrown work or tool contact, do not perform layout, assembly or setup work on the table while the cutting tool is rotating.
- Don't overreach. Keep proper footing and balance at all times.
- Maintain tools with care. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

Plan Ahead To Protect Your Eyes, Hands, Face and Ears

Dress for safety

- Do not wear loose clothing, gloves, neckties or jewelry (rings, wrist watches). They can get caught and draw you into moving parts.
- · Wear nonslip footwear.
- Tie back long hair.
- Roll long sleeves above the elbow.
- Noise levels vary widely. To reduce the risk of possible hearing damage, wear ear plugs or muffs when using drill press for hours at a time.
- Any power tool can throw foreign objects into the eyes. This can result in permanent eye damage. Always wear safety goggles, not glasses complying with ANSI Z87.1 (or in Canada CSA Z94-3-M88) shown on package. Everyday eyeglasses have only impact resistant lenses. They are not safety glasses. Safety goggles are available at many local retail stores. Glasses or goggles not in compliance with ANSI or CSA could seriously hurt you when they break.



 For dusty operations, wear a dust mask along with safety goggles.

Reduce the Risk of Accidental Starting.

 Make sure switch is "OFF" before plugging drill press into a power outlet.

WARNING: Don't allow familiarity (gained from frequent use of your drill press) to cause a careless mistake. Always remember that a careless fraction of a second is enough to cause a severe injury.

Keep Children Away

- Keep all visitors a safe distance from the drill press.
- Make sure bystanders are clear of the drill press and workpiece.

Before Leaving The Drill Press

- Turn the drill press off.
- Wait for tool bit to stop spinning.
- Unplug the drill press.
- Make workshop child-proof. Lock the shop. Disconnect master switches. Remove the yellow switch key. Store it away from children and others not qualified to use the tool.

Glossary of Terms

Workpiece

The item on which the cutting operation is being performed.

Drill Bit or Drill

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

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 backside of the workpice...also prevents drilling into the table top.

Revolutions Per Minute (R.P.M.)

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

Spindle Speed

The R.P.M. of the spindle.

Backlash

The amount of handle movement or play between adjacent moving parts.

Motor Specifications and Electrical Requirements

Power Supply and Motor Specifications

WARNING: To reduce the risk of electrical hazards, fire hazards or damage to the tool, use proper circuit protection. Your tool is wired at the factory for operation using the voltage shown. Connect tool to a power line with the appropriate voltage and a 15-amp branch circuit. Use a 15-amp time delay type fuse or circuit breaker. To reduce the risk of shock or fire, if power cord is worn or cut, or damaged in any way, have it replaced immediately.

The A-C motor used on this tool is an induction nonreversible type, having the following specifications:

Rated H.P	1/2
Voltage	110-120
Amperes	8.2
Hertz (Cycles)	60
Phase	Single
RPM	1725
Rotation of Shaft	Clockwise

General Electrical Connections

DANGER: To reduce the risk of electrocution:

- 1. Use only identical replacement parts when servicing. Servicing should be performed by a qualified service technician.
- 2. Do not use in rain or where floor is wet.

 This tool is intended for indoor residential use only.

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

110-120 Volt, 60 Hz. Tool Information

NOTE: The plug supplied on your tool may not fit into the outlet you are planning to use. Your local electrical code may require slightly different power cord plug connections. If these differences exist refer to and make the proper adjustments per your local code before your tool is plugged in and turned on.

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, as shown. 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.

A temporary adapter may be used to connect this plug to a 2-prong outlet, as shown, if a properly grounded three prong outlet is not available. This temporary adapter should be used only until a properly grounded three prong outlet can be installed by a qualified electrician. The green colored rigid ear, lug and the like, extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.

NOTE: In Canada the use of a temporary adapter is not permitted by the Canadian electrical code.

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.

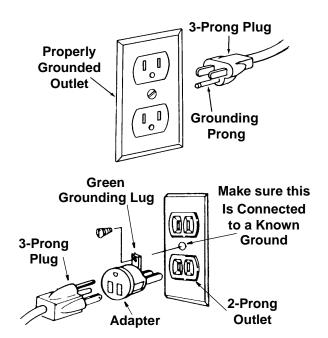
Motor Specifications and Electrical Requirements (continued)

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

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

NOTE: The adapter illustrated is for use only if you already have a properly grounded 2-prong outlet.

NOTE: In Canada the use of a temporary adapter is not permitted by the Canadian Electrical Code.



Motor Safety Protection

IMPORTANT: To avoid motor damage, this motor should be blown out or vacuumed frequently to keep sawdust from interfering with normal motor ventilation.

- Connect this tool to a power source with the appropriate voltage for your model and a 15-amp branch circuit with a 15-amp time delay fuse or circuit breaker. Using the wrong size fuse can damage the motor.
- 2. If the motor won't start, turn the switch off immediately and unplug the tool. Check the quill to make sure it turns freely. If the quill is free, try to start the motor again. If the motor still does not start, refer to the "Motor Troubleshooting Chart."
- 3. Fuses may "blow" or circuit breakers may trip frequently if:

- a. Motor Is Overloaded-Overloading can occur if you feed too rapidly or make too many start/stops in a short time.
- b. Line voltages should not be more than 10% above or below the nameplate voltage. For heavy loads, however, the voltage at motor terminals must equal the voltage specified for your model.
- c. Improper or dull drill bit is used.
- 4. Most motor troubles may be traced to loose or incorrect connections, overload, low voltage (such as small size wire in the supply circuit) or to overly long supply circuit wire. Always check the connections, the load and the supply circuit whenever motor doesn't work well. Check wire sizes and length with the Wire Size Chart shown.

Wire Sizes

NOTE: Make sure the proper extension cord is used and is in good condition.

The use of any extension cord will cause some loss of power. To keep this to a minimum and to prevent overheating and motor burnout, use the table at right 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	Gauge
Length	(A.W.G.)
0-25	16
25-50	14

Unpacking and Checking Contents

Tools Needed









Combination Square Must be True

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

Unpacking

WARNING: To reduce the risk of 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.

The Drill Press is shipped complete in one box.

 Separate all "loose parts" from packing materials and check each item with illustration and "Table of Loose Parts."

WARNING: To reduce the risk of injury, if any parts are missing, do not attempt to assemble the drill press, plug in the power cord, or turn the switch on until the missing parts are obtained and installed correctly.

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

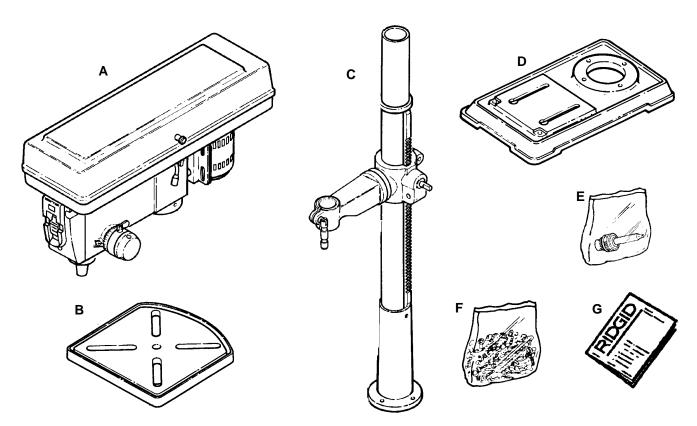
WARNING: To reduce the risk of fire or toxic reaction, never use gasoline, naptha or similar highly volatile solvents to remove protective oil

Apply a coat of paste wax to the table and column to prevent rust. Wipe all parts thoroughly with a clean dry cloth.

NOTE: Make certain all items are accounted for, before discarding any packing material.

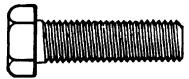
List of Loose Parts

ltem	Description	Qty.
Α	Head Asm	1
В	Table	1
С	Column Support Assembly	1
D	Base	1
Е	Bag Chuck/Arbor Assembly	1
F	Bag of Loose Parts	1
G	Owners Manual	1



Unpacking and Checking Contents (continued)

Loose Parts in Box and Bag



M10 x 1.5-40 Long Hex Head Bolt (4)



Key Drift (1)



M10 x 1.5-12 Long Hex Socket Set Screw (2)





M3 Hex "L" Wrench (1)



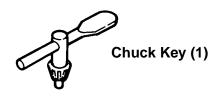
Crank (With Set Screw) (1)





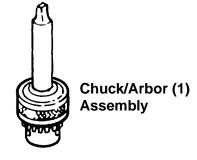


M24 Hex Box Wrench (1)

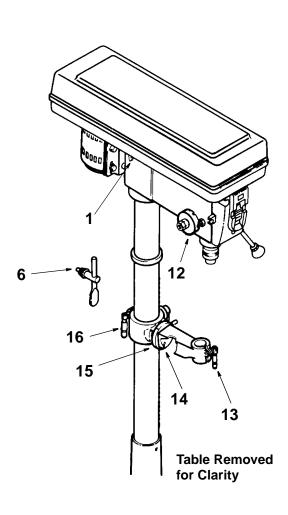


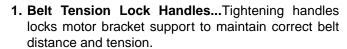


Key-Switch (1)

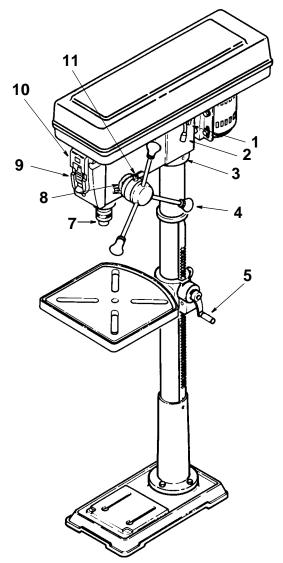


Location and Function of Controls





- **2. Belt Tension Handle...**Turn handle counterclockwise to apply tension to belt, turn handle clockwise to release belt tension.
- Head Lock Set Screws...Locks the head to the column. Always have them locked in place while operating the drill press.
- **4. Feed Handle...**For moving the chuck up or down. One or two of the handles may be removed if necessary whenever the workpiece is of such unusual shape that it interferes with the handles.
- **5. Table Crank...**Turn clockwise to elevate table. Support lock must be released before operating crank.
- **6. Chuck Key...**Used to tighten drill in the chuck and also to loosen the chuck for drill removal.
- Chuck...Holds drill bit or other recommended accessory to perform desired operations.
- **8. Depth Scale...**Allows operator to adjust drill press to drill to a desired depth.



- Drill "On-Off" Switch...Has locking feature to prevent unauthorized and possible hazardous use by children and others.
- 10. Light "On-Off" Switch... Turns the light on and off.
- **11. Depth Scale Lock...**Locks the depth scale at selected depth.
- **12. Spring Cap...**Provides means to adjust quill spring tension.
- **13. Table Lock...**Allows table to be rotated in various positions and locked.
- **14. Table Bevel Lock...**Locks the table in any position from 0°- 45°.
- **15. Bevel Scale...**Shows degree table is tilted for bevel operations. Scale is mounted on side of arm.
- **16. Support Lock Handle...**Tightening locks table support to column. Always have it locked in place while operating the drill press.

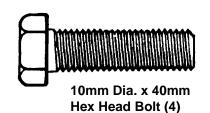
Note and follow the safety warnings and instructions that appear on the panel on the right side of the head.

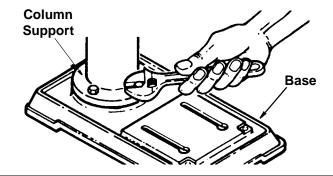
Assembly

WARNING: To reduce the risk of injury from unexpected starting or electrical shock, never connect plug to outlet until all assembly steps are completed and you read and understand all instructions.

Assembly of Base/Column

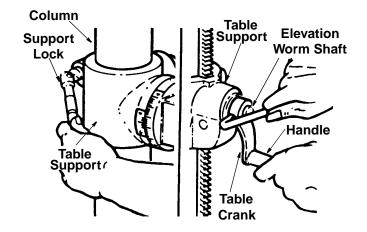
- 1. Locate four (4) 10mm dia. x 40mm long bolts among loose parts bag.
- 2. Position base on floor. Remove protective covering and discard.
- 3. Remove protective sleeve from column tube and discard. Place column assembly on base, and align holes in column support with holes in base.
- 4. Install a bolt in each hole through column support and base and tighten with adjustable wrench.





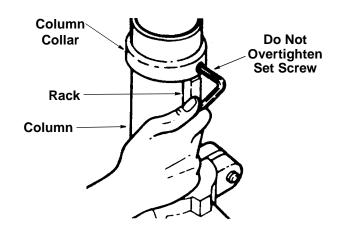
- 5. Locate table crank and support lock in loose parts box.
- 6. Install support lock from left side into table support and tighten by hand.
- 7. Install table crank assembly and tighten set screw with a 3mm hex "L" wrench. Do not overtighten. Set screw should be tightened against the flat section of the shaft.

NOTE: To minimize crank backlash, tighten support lock, rotate elevation worm shaft clockwise, then assemble crank tight against table support and tighten set screw.



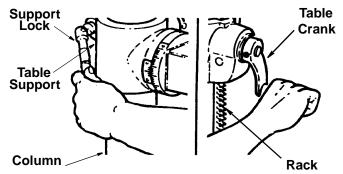
8. Check column collar for proper adjustment. Collar should not be angled on the column and it should be positioned so rack will slide freely in collar when table is rotated 360° around column tube. If readjusted, only tighten set screw enough to keep collar in place.

NOTE: To reduce the risk of column or collar damage, do not overtighten set screw.



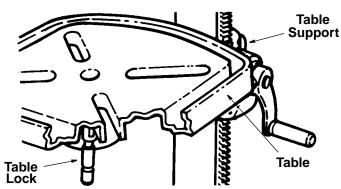
Installing The Table

 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. Loosen table lock, place table in table support and tighten table lock (located under table) by hand.

NOTE: If table won't fit into table support easily, pry open table support with a flat blade screwdriver.

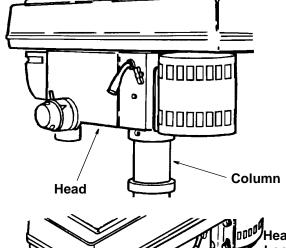


Installing the Head

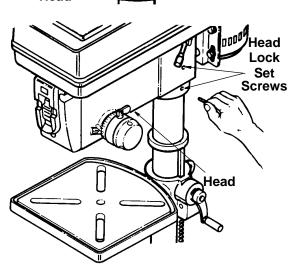
CAUTION: The head assembly weights about 61 pounds. To reduce the risk of back injury get help to lift the head.

- 1. Locate (2) two 10mm dia. x 12mm long set screws in loose parts bag.
- 2. 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.





3. Install a set screw in each hole (as indicated) on the right side of the head, and using a 5mm hex "L" wrench, tighten the two head lock set screws.



Assembly (continued)

Pulley Alignment and Speed Adjustment

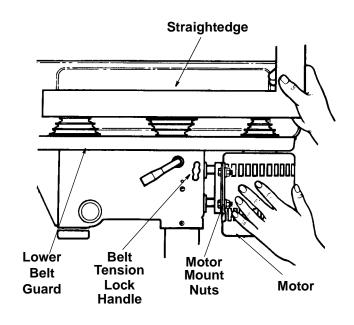
Checking Pulley(s) Alignment

WARNING: To reduce the risk of injury due to accidental starting always turn drill press off and remove switch key before making belt adjustments.

The pulleys and motor are assembled at the factory and should not require further adjustment. If the pulleys or motor are removed for service, follow the pulley alignment instructions below.

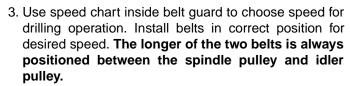
- 1. Place a straightedge such as a piece of wood, metal, or framing square across the top of pulleys.
- 2. The top of all three pulleys should touch the straightedge
- 3. If not:
 - · Loosen the motor mount nuts.
 - Move the motor until the pulleys are in line.
 - · Retighten the motor mount nuts.

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

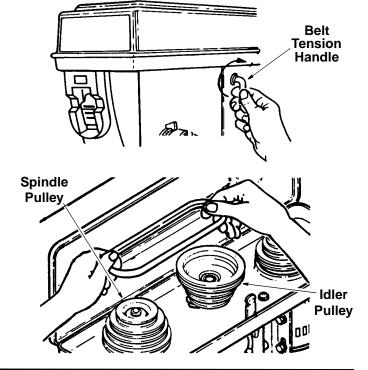


Speed Adjustment

- 1. Release belt tension lock handles located on each side of drill press head by turning them counterclockwise.
- Loosen belt tension by turning belt tension handle clockwise.



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

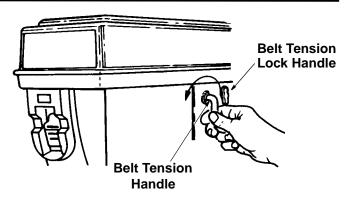


Tensioning Belt

- Apply tension to belt by turning belt tension handle counterclockwise until belt deflects approximately 1/2 inch by thumb pressure at its center.
- 2. Tighten belt tension lock handles.

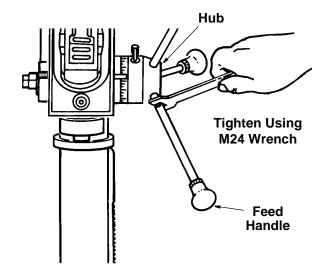
NOTE: Over tensioning belt may cause motor not to start or damage bearings.

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



Installing Feed Handles

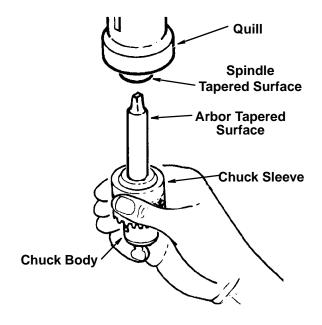
- 1. Locate three (3) feed handles among loose parts.
- 2. Screw the feed handles into the threaded holes in the hub and tighten.
- 3. Tighten feed handles using M24 wrench.



Installing the Chuck/Arbor Assembly

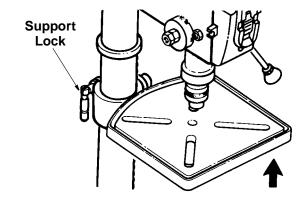
- Clean the tapered surfaces on the arbor and spindle with a clean cloth. Make sure there are no foreign particles sticking to these surfaces. The slightest piece of dirt on these surfaces will prevent the arbor from seating properly. This will cause the drill to "wobble".
- 2. Slide arbor into spindle 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 the step 4. Failure to follow this direction may allow the chuck to come loose during operation, fly out and hit the operator.

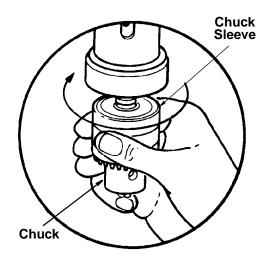


Assembly (continued)

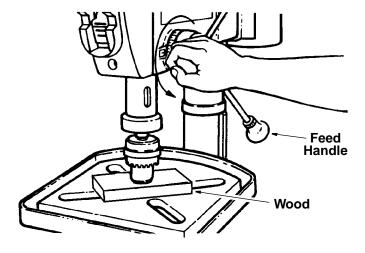
4. Unlock support lock and raise table so its about two (2) inches below tip of chuck.



5. Turn chuck sleeve clockwise and open jaws in chuck completely.

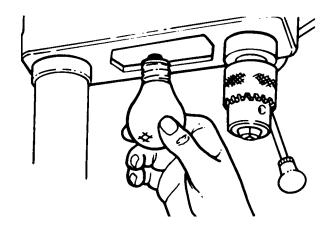


Place a piece of wood on table. Turn feed handles counterclockwise and force chuck against table until chuck is secure.



Installing Light Bulb

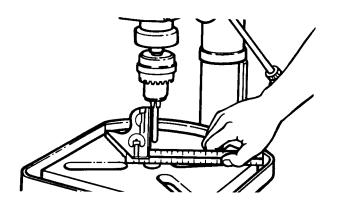
 Install a light bulb (not larger than 60 watt) into the socket inside the head.

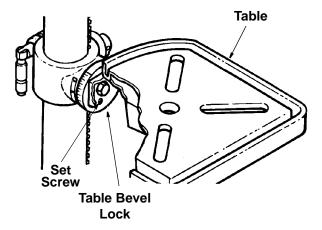


Adjusting the Table Square To Head

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

- 1. Insert precision round steel rod or straight drill bit 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 or bit.
- 3. If an adjustment is necessary, loosen the set screw under bevel lock with 3mm "L" wrench, then loosen the table bevel lock bolt with the 24mm flat wrench (included). (This adjustment is located under the table).
- 4. Align the table square to the rotor bit by rotating table until the square and rod or bit are in line.
- 5. Retighten table bevel lock.
- 6. Retighten set screw.

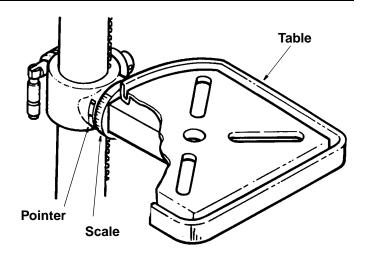




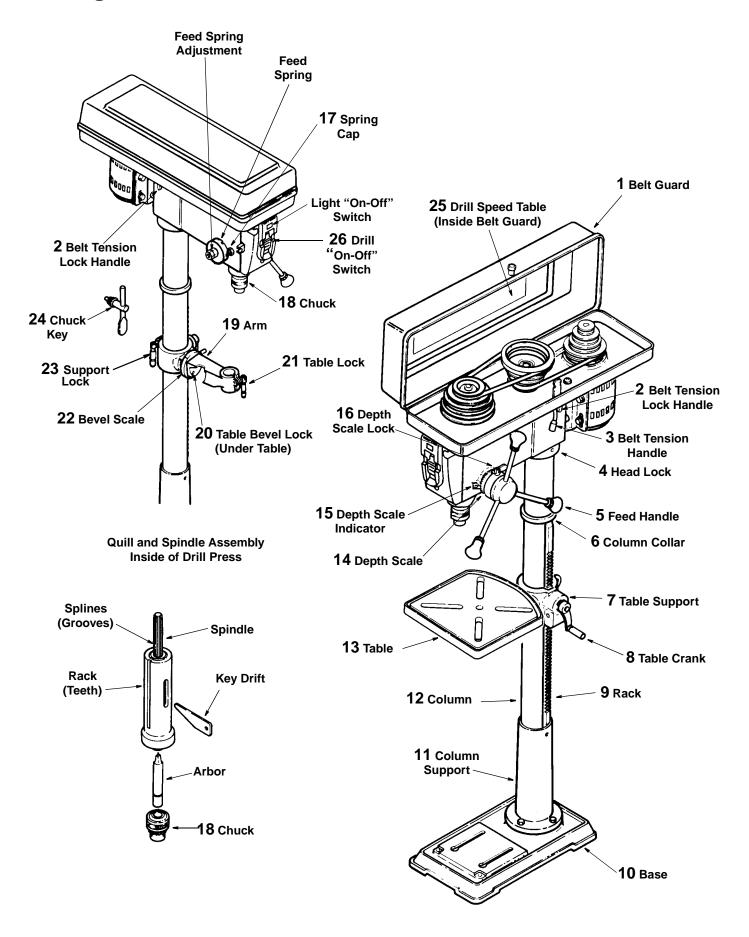
Bevel Scale

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.

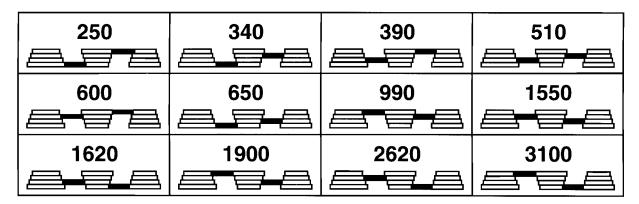
- 1. To use the bevel scale do the following.
 - a. Loosen set screw and table bevel lock (see step 3 above).
 - b. Move table so desired angle on bevel scale is straight across from zero line on table.
 - c. Retighten table bevel lock and set screw.



Getting To Know Your Drill Press



Spindle Speed in R.P.M.



- Belt Guard...Covers pulleys and belt during operation of drill press.
- **2. Belt Tension Lock Handle**...Tightening handle locks motor bracket support to maintain correct belt distance and tension.
- Belt Tension Handle...Turn handle counterclockwise to apply tension to belt, turn handle clockwise to release belt tension. Refer to section "Assembly-Installing and Tensioning Belt".
- 4. Head Lock Set Screws...Lock the head to the column. Always have them locked in place while operating the drill press.
- 5. Feed Handle...For moving the chuck up or down. One or two of the handles may be removed if necessary whenever the workpiece is of such unusual shape that it interferes with the handles.
- 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 crank.
- **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.

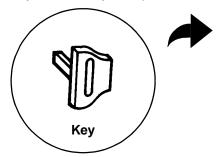
- **14. Depth Scale**...Shows depth of hole being drilled in inches and millimeters.
- **15. Depth Scale Indicator...**Indicates drilling depth selected on depth scale.
- **16. Depth Scale Lock**...Locks the depth scale to selected depth.
- Spring Cap...Provides means to adjust quill spring tension.
- **18. Chuck...**Holds drill bit or other recommended accessory to perform desired operations.
- **19. Arm**...Extends beyond table support for mounting 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 table support, if it is to be used for quick reference where accuracy is not critical.
- 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. Drill Speed**...Table...Drill Speed can be changed by placing the belt in any of the steps (grooves) in the pulleys. The spindle speed chart, as shown above, lists belt positions for the various spindle speeds.

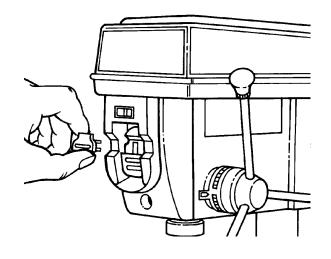
Getting To Know Your Drill Press (continued)

26. **On-Off Switch**...Has locking feature. This feature is intended to prevent unauthorized and possible hazardous use by children and others.

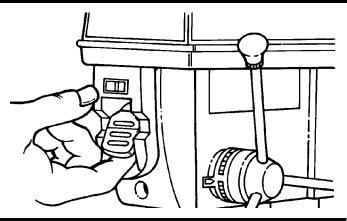
Insert key into switch.

NOTE: Key is made of yellow plastic.



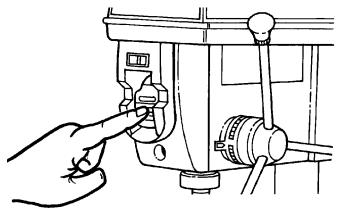


To turn drill ON, insert finger under switch lever and pull.



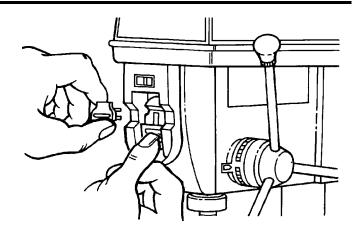
To turn drill OFF, push lever in.

NOTE: In an emergency: If 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 and remove key with other hand.

WARNING: For your own safety, always push 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.



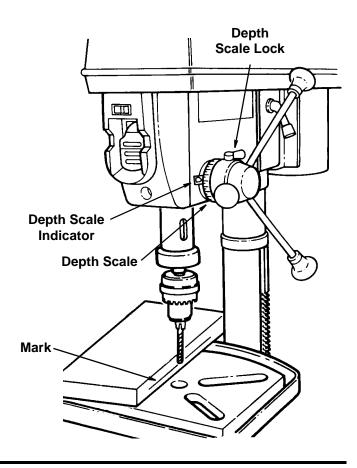
Drilling to a Specific Depth

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 workpiece.
- 2. Loosen the depth scale lock.
- 3. With the switch OFF, bring the drill bit down until the tip of lips of the bit are even with the mark.
- Turn the depth scale counterclockwise until it stops moving.
- 5. Tighten the depth scale lock.
- 6. The drill bit will stop at this depth until the depth scale is readjusted.

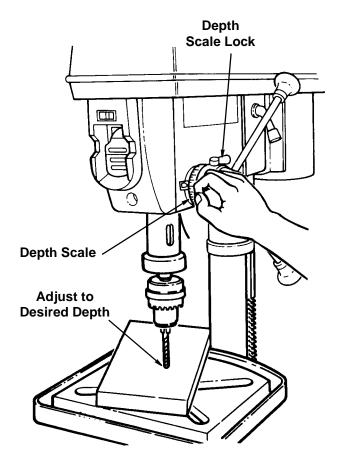
Another Way - Depth Scale

- 1. With the power off, loosen the depth scale lock.
- 2. Place workpiece on table. Adjust table until the tip of the drill bit is just a little above the top of the workpiece, turn the depth scale counterclockwise to zero.
- Turn the depth scale clockwise until the depth scale indicator points to the desired drilling depth on the depth scale.
- 4. Tighten the depth scale lock.
- 5. The chuck or drill will now be stopped after traveling downward the distance selected on the depth scale.



Locking Chuck at 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.

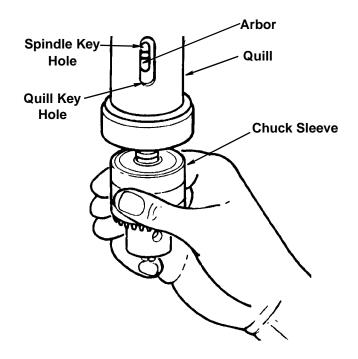


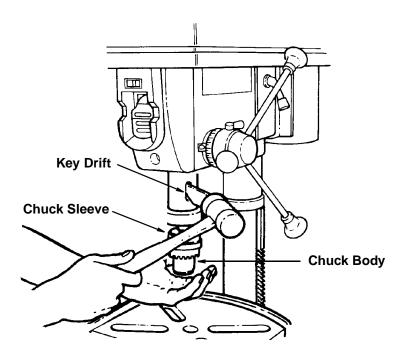
Getting To Know Your Drill Press (continued)

Removing Chuck and Arbor

- 1. With the 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 drift into key holes.
- 4. Tap key drift lightly until the chuck and arbor fall out of spindle.

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

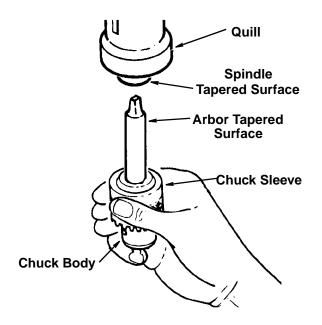




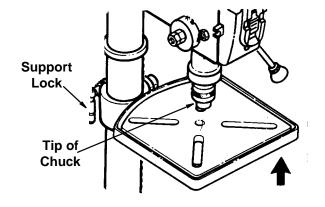
Re-installing the chuck and arbor

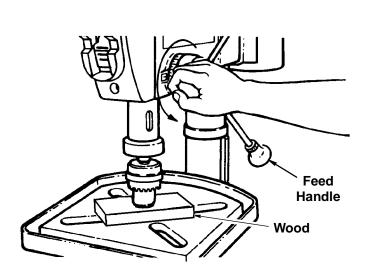
- Clean the tapered surfaces on the arbor and spindle with a clean cloth. Make sure there are no foreign particles sticking to these surfaces. The slightest piece of dirt on these surfaces will prevent the arbor from seating properly. This will cause the drill to "wobble".
- 2. Slide arbor into spindle 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.

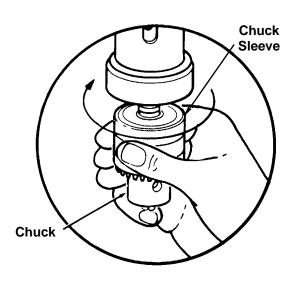
WARNING: Make sure the rectangular end of the arbor has slipped into the notch in the spindle before going on the step 4. Failure to follow this direction may allow the chuck to come loose during operation, fly out and hit the operator.



- 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.
- Place a piece of wood on table. Turn feed handles counterclockwise and force chuck against table until arbor is secure.







Safety Instructions for Basic Drill Press Operation

Read 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.

Plan Ahead To Protect Your Eyes, Hands, Face and Ears

Dress for safety

- Do not wear loose clothing, gloves, neckties or jewelry (rings, wrist watches). They can get caught and draw you into moving parts.
- · Wear nonslip footwear.
- Tie back long hair.
- Roll long sleeves above the elbow.
- Noise levels vary widely. To reduce the risk of possible hearing damage, wear ear plugs or muffs when using drill press for hours at a time.

Plan Your Work

- Don't force the tool. It will do the job better and safer at the rate for which it was designed.
- Use the right tool. Don't force tool or attachment to do a job it was not designed to do.
- 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, turn the drill press off and unplug it until the particular part is properly repaired or replaced.
- 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.
- To reduce the risk of injury from parts thrown by the spring, follow instructions exactly as given and shown in adjusting spring tension of quill.
- 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 vise, always fasten it to a table.
- Never do any work "Freehand" (hand holding workpiece rather than supporting it on the table), except when polishing.
- Securely lock head to column, table support to column and table to table support 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 inside of the belt guard for drilling information; for accessories, refer to the instructions provided with the accessories.
- Never climb on the drill press table, it could break or pull the entire drill press down on you.
- Turn the motor switch off and put away the switch key when leaving the drill press.
- To reduce the risk of injury from thrown work or tool contact, do not perform layout, assembly or setup work on the table while the cutting tool is rotating.
- Don't overreach. Keep proper footing and balance at all times.
- Maintain tools with care. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

Use Only Accessories Designed For This Drill Press To Reduce the Risk of Serious Injury From Thrown Broken Parts Or Work Pieces

- When cutting large diameter holes:
 - Clamp the workpiece firmly to the table. Otherwise the cutting may grab and spin it at high speed.
 - Use only one piece, cup-type, hole cutters.
 - Do not use fly cutters or multi-part hole cutters as they can come apart or become unbalanced in use.
 - Keep speed below 1500 R.P.M.

- Drum sanders must never be operated on this drill press at a speed greater than 1800 R.P.M.
- 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.
- Do not use wire wheels, router bits, shaper cutters, circle (fly) cutters or rotary planers on this drill press.

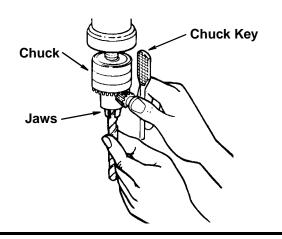
Basic Drill Press Operation

Installing Drills

Insert drill into chuck far enough to obtain maximum gripping of the chuck jaws. The jaws are approximately 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 is does not slip while drilling.

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

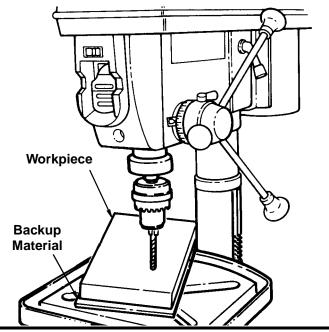


Positioning Table and Workpiece

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.

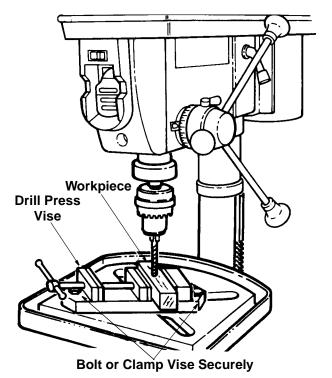
Always place a piece of backup material (wood, plywood, etc.) on the table underneath the workpiece. This will prevent "splintering" or making a heavy burr on the underside on the workpiece as the drill breaks through. To keep the backup material from spinning out of control, it must contact the left 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 reduce the risk of injury from spinning work and vise or tool breakage.



Basic Drill Press Operation (continued)

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 bolt with the 24mm flat wrench (included).

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

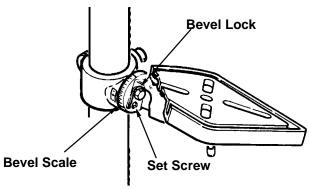
WARNING: To reduce the risk of injury from spinning work or tool breakage, always clamp workpiece and backup material securely to table before operating drill press with the table tilted.

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 your 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 cutting oil or motor oil to prevent burning of the drill tip.

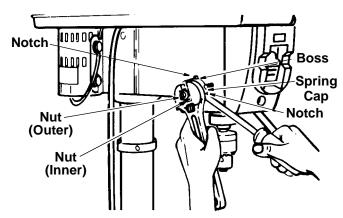
Adjustments

WARNING: For your own safety turn switch "OFF" and remove plug from power source outlet before making any adjustments. To reduce the risk of injury from thrown parts due to spring release, follow instructions carefully and wear eye goggles.

Quill Return Spring

NOTE: The return spring tension is set at the factory and should not require further adjustment.

- 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 (outer) nut only.
- 5. With screwdriver remaining in notch, loosen (inner) nut (approximately 1/8") until notch disengages from boss on head. Do not remove this nut.
- Carefully turn screwdriver counterclockwise 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. Move stop nuts and depth pointer to upper most position 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 outer nut and tighten to inner nut. But do not overtighten against inner nut.
- 12. Check quill while feeding to have smooth and unrestricted movement. If movement is too tight, loosen outer nut and slightly loosen inner nut until unrestricted. Retighten outer nut.

Maintenance

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 automotive type paste wax applied to the table and column will help to keep the surfaces clean.

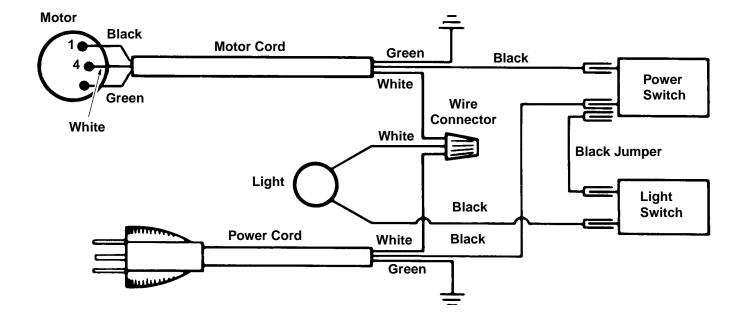
WARNING: To reduce the risk of shock or fire hazard, if the power cord is worn or cut, or damaged in any way, have it replaced immediately.

Lubrication

All of the ball bearings are packed with grease at the factory. They require no further lubrication.

Periodically lubricate the 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



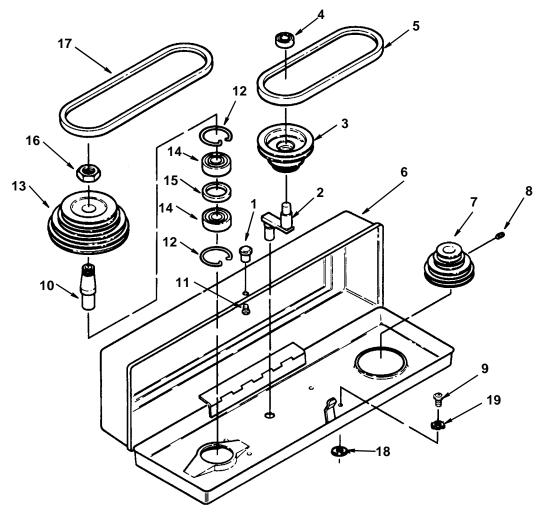
Troubleshooting

WARNING: For your own safety, turn switch "OFF" and always remove plug from power source outlet before troubleshooting.

Consult your Authorized Service Center if for any reason motor will not run.

Trouble Probable Cause		Remedy
Noisy Operation	 Incorrect belt tension. Dry spindle. Loose spindle pulley Loose motor pulley 	 Adjust tension. See "Installing and Tensioning Belt" section. Lubricate spindle. See "Lubrication" section. Checking tightness of retaining nut on pulley, and tighten if necessary. Tighten set screws in pulleys.
Drill bit burns	1. Incorrect speed 2. Chips not coming out of hole 3. Dull drill bit 4. Feeding too slow 5. Not lubricated	 Change speed. See "Getting to Know Your Drill Press" section. Retract drill bit frequency to clear chips Resharpen drill bit Feed fast enough, allow drill bit to cut Lubricate drill bit. See "Basic Drill Press Operation" section.
Drill bit leads off, hole not round	Hard grain in wood or lengths of cutting lips and/ or angles not equal. Bent drill bit	Resharpen drill bit correctly Replace drill bit
Wood splinters on under- side	No "backup material" under workpiece	Use "backup material". See "Basic Drill Press Operation" section.
Workpiece torn loose from hand	Not supported or clamped properly	Support or clamp workpiece. See "Basic Drill Press Operation" section.
Drill bit binds in work- piece	"Workpiece pinching drill bit or excessive feed pressure. Improper belt tension	Support or clamp workpiece. See "Basic Drill Press Operation" section. Adjust tension. See "Installing and Tensioning Belt" section.
Excessive drill bit runout or wobble.	Bend drill bit Worn spindle bearings Drill bit not properly installed in chuck Chuck not properly installed	 Use a straight drill bit. Replace bearings Install drill bit properly. See "Basic Drill Press Operation" section. Install chuck properly, refer to "Assembly- Installing the Chuck".
Quill returns too slow or too fast	Spring has improper tension	Adjust spring tension. See "Adjustments - Quill Return Spring" section.
Chuck will not stay attached to spindle, it falls off when trying to install.	Dirt, grease or oil on the tapered inside surface of chuck or on the spindles tapered surface.	Using a household detergent, clean the tapered surface of the chuck and spindle to remove all dirt, grease and oil.

Parts List for RIDGID 15" Drill Press Model No. DP15000 Figure 1



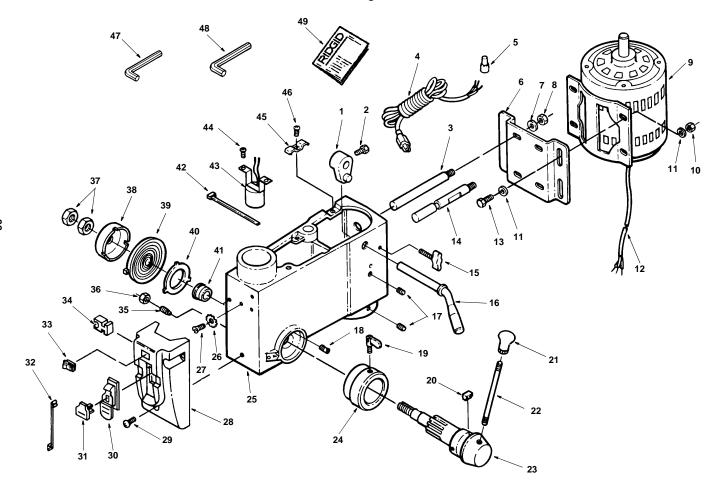
Always order by Part Number - Not by Key Number

Key No.	Part No.	Description
1	817325	Knob
2	508047	Pivot Idler
3	817544	Pulley Center
4	813271	Bearing Ball 15mm
5	817511-1	Belt "V" 3/8 x 24
6	822039-1	Guard
7	817543	Pulley Motor
8	*	Screw Hex Soc. Set M6 x 1.0-10
9	*	Screw Wash. Hd. M6 x 1.0-16
10	821734	Insert Pulley

^{*} Standard hardware item - may be purchased locally.

Key No.	Part No.	Description
11	*	Screw Pan. Hd. M5 x 0.8-12
12	817537	Ring Retaining
13	817545	Pulley Spindle
14	817530	Bearing Ball 20mm
15	817536	Spacer
16	821742	Nut Pulley M24 x 1.5 L.H.
17	817511-2	Belt "V" 3/8 x 26
18	820294	Washer Foam
19	*	Lockwasher M6 Ext.

Parts List for RIDGID 15" Drill Press Model No. DP15000 Figure 2



Parts List for RIDGID 15" Drill Press Model No. DP15000

Figure 2 Always order by Part Number -- Not by Key Number

Key No.	Part No.	Description
1	817317	Lever Adjusting
2	*	Screw Hex Hd. M8 x 1.25-16
3	817495	Support Motor Bracket
4	821739-1	Cord w/Plug
5	*	Connector Wire
6	817336-1	Mount Motor
7	*	Lockwasher 12mm
8	*	Nut Hex M12 x 1.75
9	826672	Motor
10	*	Nut Hex M8 x 1.25
11	*	Washer M8 x 16 x 1.6
12	821740-1	Cord Motor
13	*	Screw Hex Hd. M8 x 1.25-20
14	817516	Support Motor Bracket
15	817320	Knob Motor Adjusting
16	817494	Handle Belt Tension
17	*	Screw Hex Soc. Set M10 x 1.5-12
18	817303	Pin Stop
19	817343	Lock Depth Screw
20	817300	Guide Scale
21	826441	Knob
22	826445	Rod
23	826447-1	Hub Asm.
24	817774	Ring Depth Stop w/Scale
25	822216-6	Head

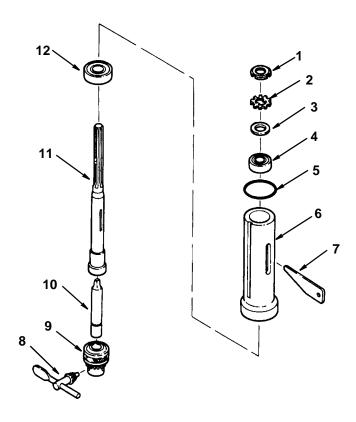
^{*} Standard hardware item - may be purchased locally.

Key No.		Description
26	*	Lockwasher Ext. M5
27	*	Screw Pan Hd. M5 x 0.8-8
28	826405	Box Switch
29	*	Screw Pan Hd M5 x 0.8-16
30	826347	Switch Locking
31	826122	Key Switch
32	821741	Lead 3"
33	817354	Switch Rocker
34	826435	Holder Key Chuck
35	817308	Screw SI. Special 10 x 1.5-27
36	*	Nut Hex M10 x 1.5
37	*	Nut Hex M12 x 1.5-8
38	817307	Cap Spring
39	817306	Spring Torsion
40	817305	Retainer Spring
41	817304	Seat Spring
42	60475	Tie Wire
43	817321	Socket Bulb Asm.
44	*	Screw Pan Hd. M6 x 1.0-12
45	63418	Clamp Cord
46	*	Screw Pan Hd. M5 x 0.8-12
47	813317-6	Wrench Hex "L" 3mm
48	813317-8	Wrench Hex "L" 5mm
49	SP6158	Owners Manual

Any attempt to repair this motor may create a hazard unless repair is done by a qualified service technician.

Repair service is available at your nearest Authorized Service Center.

Parts List for RIDGID 15" Drill Press Model No. DP15000 Figure 3

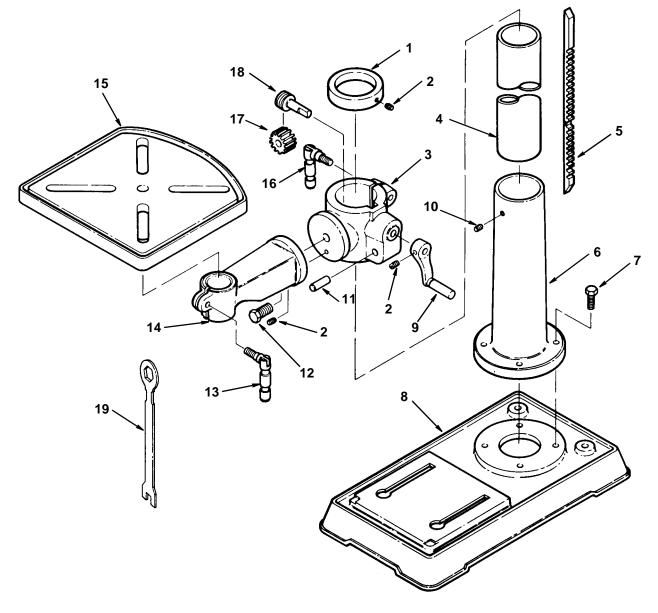


Always order by Part Number - Not by Key Number

Key No.	Part No.	Description
1	817309	Lock Nut M17 x 1.0
2	817310	Ring Locking
3	817311	Washer
4	813480	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		
12	817529	Bearing Ball		

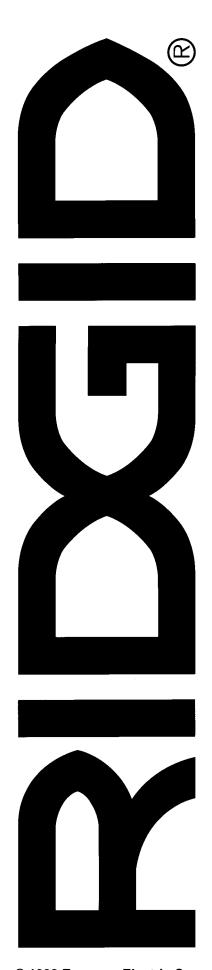
Parts List for RDIGID 15" Drill Press Model No. DP15000 Figure 4



Key No.	Part No.	Description
1	821883	Collar Rack
2	*	Screw Hex Soc. Set M6 x 1.0-10
3	821861-2	Support Table w/Indicator
4	821880	Tube Column
5	821882	Rack
6	821881-1	Support Column
7	*	Screw Hex Hd. M10 x 1.5-40
8	817577-1	Base
9	826439	Crank (Includes Set Screw)
10	*	Screw Hex Soc. Set M10 x 1.5-12

* Standard	hardware	item -	may l	be pı	urchased	locally.
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Key No.	Part No.	Description
11	817288	Pin Gear
12	*	Screw hex Hd. M16 x 2.0-35
13	817290-3	Clamp Table
14	817777-3	Arm Table w/Scale
15	817575-1	Table
16	817294-2	Clamp Column
17	817350	Gear Helical
18	817349	Worm Elevation
19	826438	Wrench Hex 24mm



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Part No. SP6158

Lifetime Warranty On RIDGID Tools

The RIDGID REPUTATION is the result of the consistent product quality and years of pride in workmanship. Rigorous checks and controls from raw materials to packaged products insure product confidence widely accepted as the mark of the professional trades. Therefore, RIDGID covers its products with a LIFETIME WARRANTY against defects in material or workmanship. To take advantage of this warranty, the complete product must be delivered prepaid to any RIDGID AUTHORIZED SER-VICE CENTER. Obviously, failures due to misuse, abuse or normal wear and tear are not covered by this warranty. NO OTHER WARRANTY, WRITTEN OR ORAL, APPLIES. No employee, agent, dealer or other person is authorized to give any warranty on behalf of RIDGID Power Tools, Emerson Electric Co. Warranted products will be repaired or replaced, at our option, at no charge to you and returned to you via prepaid transportation. Such replacement or repair is the exclusive remedy available from RIDGID Power Tools, Emerson Electric Co. Emerson Electric Co. is not liable for damage of any sort, including incidental and consequential damages. Some U.S.A. states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

Stock No. DP1500 Model No. DP15000

Model and serial numbers may be found at the left side of the head.

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

QUESTIONS OR COMMENTS? CALL 1-800-4-RIDGID



Form No. SP6158-2 Printed in U.S.A. 6/99