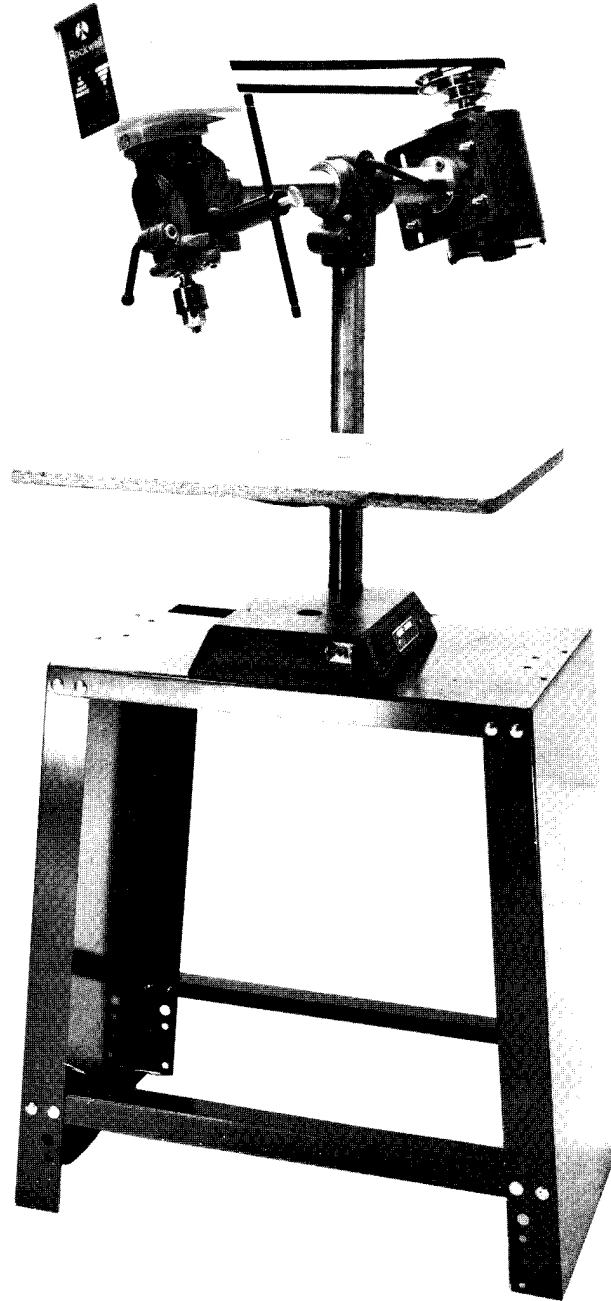




11-280 32" RADIAL DRILL PRESS



INTRODUCTION

Your new Radial Drill Press is ideal for many operations. It does jobs that are impossible on conventional type drill presses. The head swivels 360 degrees around the column and tilts more than 90 degrees right and left. The ram travels 11" back and forth. You can drill to the center of a 32" circle, do horizontal and angular drilling, multiple or series hole drilling and more.

11-280 includes basic machine, safety chuck key, spindle pulley, 5/8" bore motor pulley and V-belt. Motor and Stand optional.

SAFETY RULES FOR ALL TOOLS

As with all power tools there is a certain amount of hazard involved with the operator and his use of the tool. Using the tool with the respect and caution demanded as far as safety precautions are concerned will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or completely ignored, personal injury to the operator can develop.

There are also certain applications for which this tool was designed. Rockwell strongly recommends that this tool NOT be modified and/or used for any application other than for which it was designed. If you have any questions relative to its application DO NOT use the tool until you have written Rockwell and we have advised you.

Manager of Product Safety
Power Tool Division
Rockwell International
400 North Lexington Avenue
Pittsburgh, Pennsylvania 15208

- 1. KNOW YOUR POWER TOOL.** Read the owner's manual carefully. Learn the tools applications and limitations, as well as the specific potential hazards peculiar to it.
- 2. KEEP GUARDS IN PLACE** and in working order.
- 3. GROUND ALL TOOLS.** If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter wire must be attached to a known ground. Never remove the third prong.
- 4. REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- 5. KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
- 6. AVOID DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations. Keep your work area well illuminated.
- 7. KEEP VISITORS AWAY.** All visitors should be kept a safe distance from work area.
- 8. MAKE WORKSHOP KIDPROOF** - 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 it was not designed for.
- 11. WEAR PROPER APPAREL.** No loose clothing or jewelry to get caught in moving parts. Rubber-soled footwear is recommended for best footing. Long hair should be safely tied, pinned or netted to prevent entanglement in moving parts.
- 12. USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty.
- 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** before servicing and when changing accessories such as blades, bits, cutters.
- 17. USE RECOMMENDED ACCESSORIES.** Consult owner's manual. Use of improper accessories may be hazardous.
- 18. AVOID ACCIDENTAL STARTING.** Make sure switch is in "OFF" position before plugging in cord.
- 19. NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.
- 20. CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be checked to assure 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.

ADDITIONAL SAFETY RULES FOR DRILL PRESSES

- 1. BE SURE** drill bit or cutting tool is securely locked in the chuck.
- 2. BE SURE** chuck key is removed from the chuck before turning on power.
- 3. ADJUST** the table or depth stop to avoid drilling into the table.
- 4. SHUT OFF** the power, remove the drill bit or cutting tool, and clean the table before leaving the machine.
- 5. CAUTION:** Use clamps or a vise to secure workpiece to keep the workpiece from rotating with the drill bit or cutting tool.

UNPACKING AND CLEANING

Carefully remove the drill press and all loose items from the carton. Fig. 1, illustrates the machine unpacked. Remove the protective coating from the machined surfaces of the drill press. This coating may be removed with a soft cloth moistened with kerosene (do not use acetone, gasoline or lacquer thinner for this purpose).

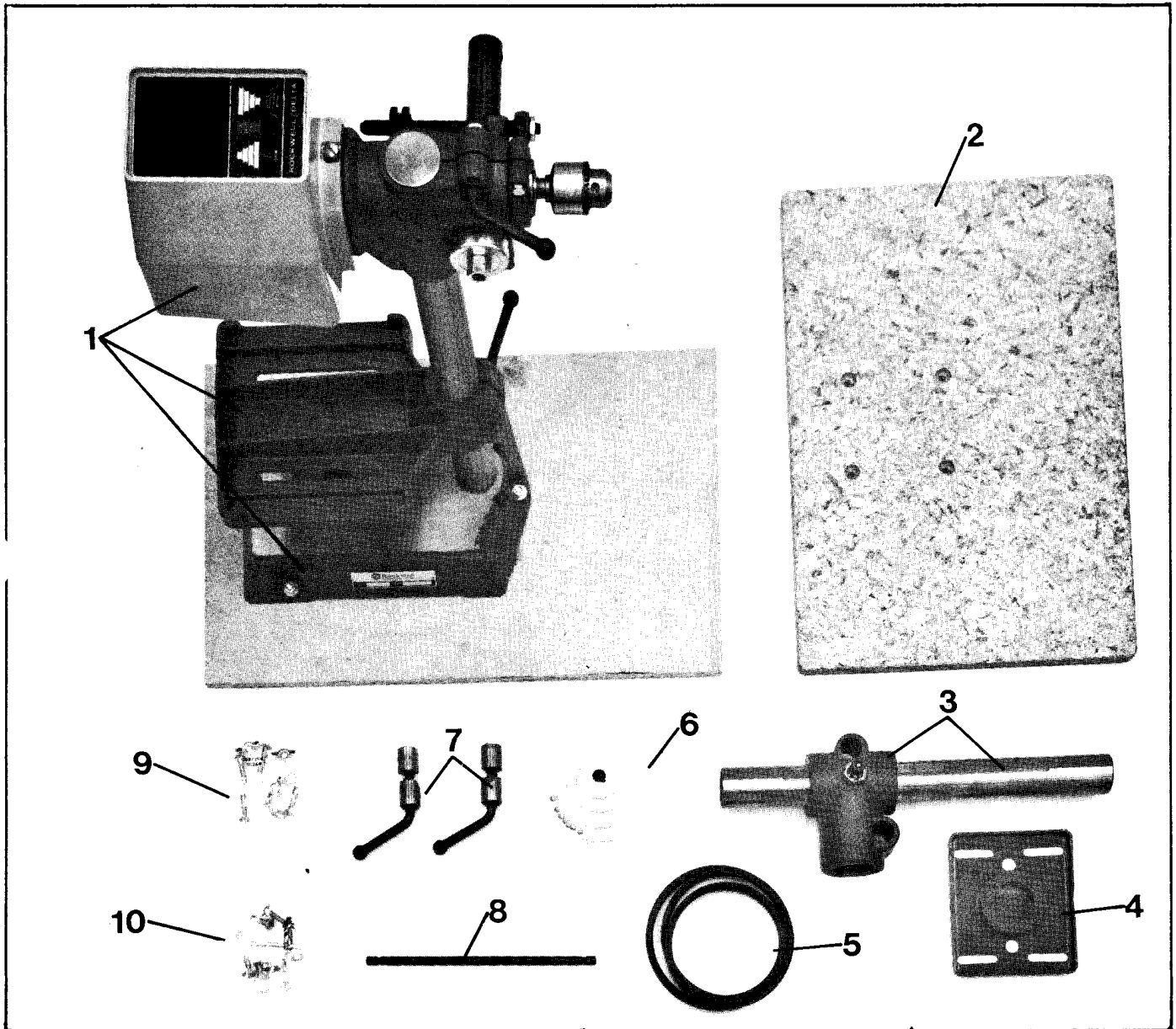


Fig. 1

- 1 Drill Press Head, Table, Base, Column and Mounting Board
- 2 Wood Table
- 3 "T" Bracket and Horizontal Column
- 4 Motor Mounting Plate
- 5 V-Belt
- 6 Motor Pulley
- 7 Horizontal and Vertical Column Clamps
- 8 Pinion Shaft Feed Handle
- 9 Hardware for Mounting Wood Table
- 10 Motor Mounting Hardware, Switch Plate, Chuck Key, Wing Screw for Pinion Shaft Feed Handle, Nylon Wire Clamp Screw and Nut

ASSEMBLING THE DRILL PRESS

1. Loosen two screws that fasten the drill press head (A) Fig. 2, to the column and remove the drill press head.
2. Loosen table clamp handle (B) Fig. 2, and remove the table (C). Turn the table (C) over and replace it on the column.

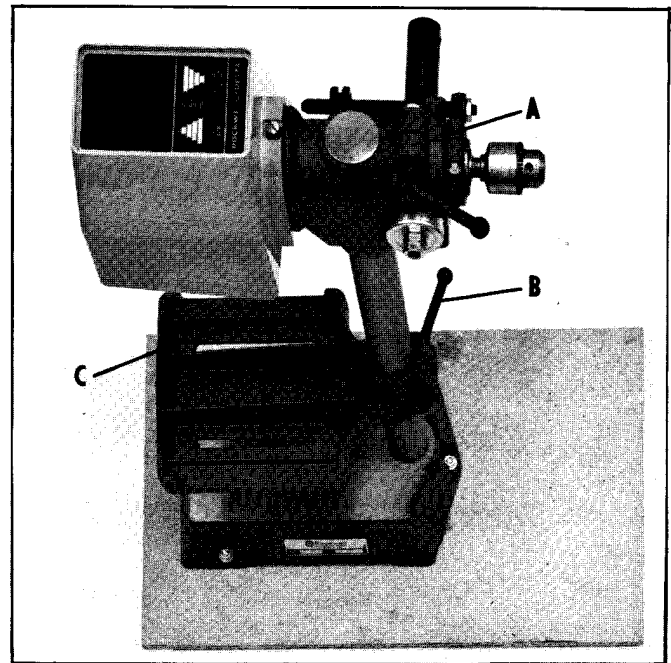


Fig. 2

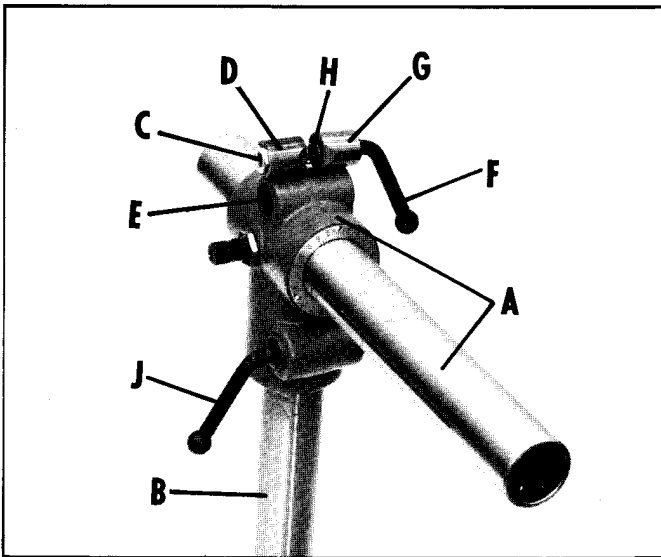


Fig. 3

3. Place "T" bracket and horizontal column (A) Fig. 3, on vertical column (B) as shown.
4. Remove nut (C) and clamp shoe (D) Fig. 3, from one column clamp. Place some grease in "T" bracket clamp bore (E) Fig. 3. Place the clamp handle (F), clamp shoe (G), and spring (H) through the "T" bracket clamp bore. Assemble the other clamp shoe (D) and nut to the clamp handle (F) on the other end of the bore. **IMPORTANT: MAKE SURE THE BEVEL END OF BOTH CLAMP SHOES (D) AND (G) FIG. 3, ARE AGAINST THE HORIZONTAL COLUMN.**
5. Assemble the vertical column clamp (J) Fig. 3, in the same manner as explained in STEP 4.

6. Place the drill press head (A) Fig. 4, on the front end of the horizontal column and fasten in place by tightening two screws, one of which is shown at (B) Fig. 4.
7. Assemble the pinion shaft feed handle (C) to the pinion shaft, as shown in Fig. 4, and fasten in place with wing screw (D).

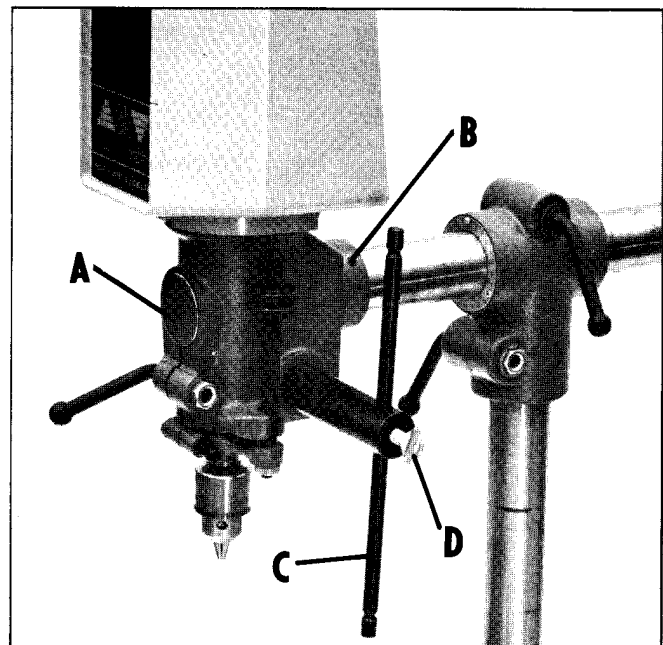


Fig. 4

MOTORS FOR YOUR DRILL PRESS

The motors available for use with your drill press are:

- 62-142, 1/2 H.P. heavy duty, (ball bearing), capacitor start, 1725 RPM, 115 Volt.
- 62-134, 1/3 H.P. heavy duty, (ball bearing), capacitor start, 1725 RPM, 115 Volt.
- 62-133, 1/3 H.P. standard duty, (sleeve bearing), split phase, 1725 RPM, 115 Volt.

These motors have been specially selected to best supply power to your machine and the relative safety of the machine is enhanced by their use. We therefore strongly suggest that only these motors be used as the use of other motors may be detrimental to the performance and safety of your drill press.

ASSEMBLING MOTOR PLATE, MOTOR, MOTOR PULLEY AND V-BELT

1. Assemble the motor plate (A) to the back end of the horizontal column, as shown in Fig. 5, and fasten in place with set screw (B).

2. Make sure the motor is DISCONNECTED from the power source and assemble the motor (C) to the motor plate (A), as shown in Fig. 5, using the four hex head screws, eight flat washers, eight shake proof lockwashers and four nuts supplied.

3. Fig. 6, illustrates the proper relationship of the motor mounting hardware. **CAUTION:** The proper grounding of the motor to prevent shock hazard, depends on the use of the shake proof lockwashers in the manner shown in Fig. 6.

4. Assemble the motor pulley (D) Fig. 5, to the motor shaft and assemble the V-belt (E) to the motor pulley and spindle pulley.

5. Using a straight edge, align the motor pulley to the arbor pulley. If necessary move motor pulley up or down on motor shaft. Tighten set screw in motor pulley against key in motor shaft.

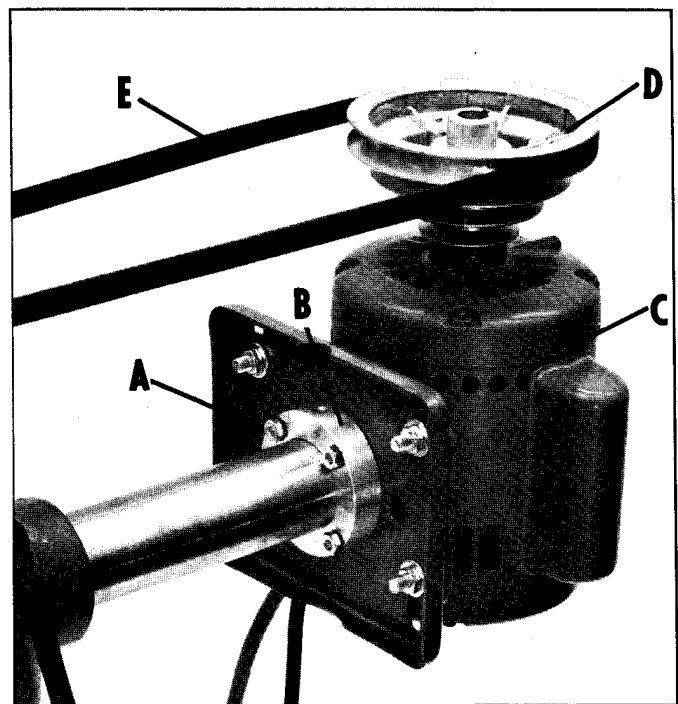


Fig. 5

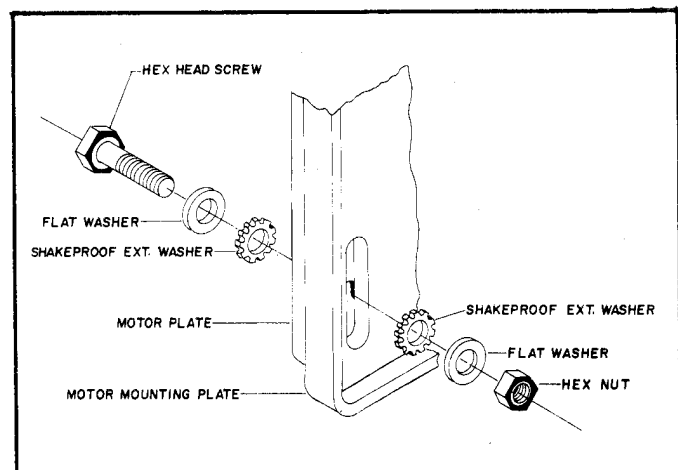


Fig. 6

ASSEMBLING SWITCH TO DRILL PRESS BASE

If you purchased one of the motors recommended for use with your drill press, you received a switch and cord set connected to the motor. Assemble the switch to the drill press base as follows:

1. **IMPORTANT:** When assembling the switch to the drill press base, make sure the motor power cord is NOT connected to the power source.

2. Remove outer hex nut (A) Fig. 7, from switch stem. Leave shakeproof lockwasher (B) and inside hex nut (C) on switch stem. NOTE: The proper grounding of the switch to prevent shock hazard, depends on the use of the shakeproof lockwasher in the manner shown.

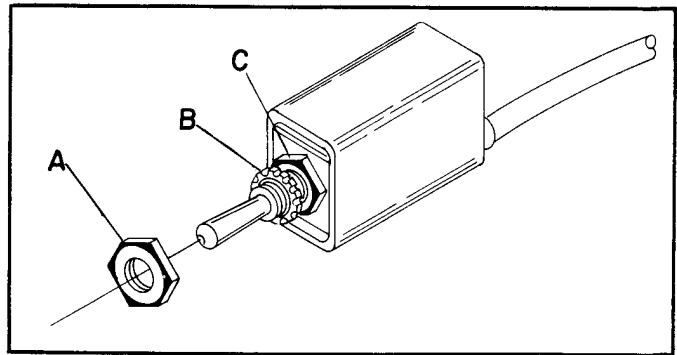


Fig. 7

3. Tilt the drill press on its side and place the cord (A) Fig. 8, in the slot (B). Insert switch stem through hole in front of drill press base making sure the keyway in the switch stem is in the down position.

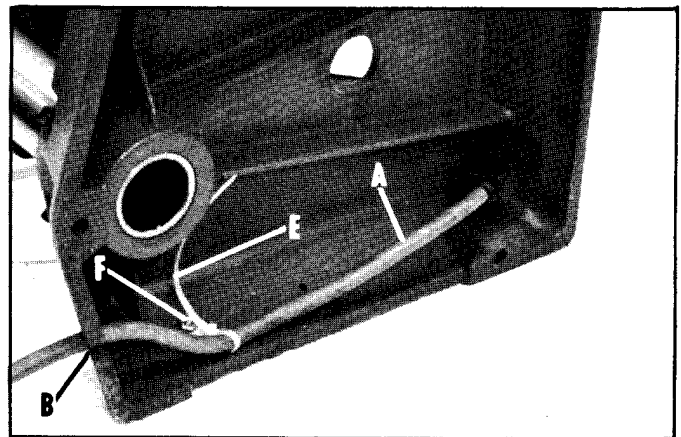


Fig. 8

4. Place the switch bracket (C) Fig. 9, on switch stem with key in switch bracket engaged with keyway in switch stem and fasten in place with hex nut (D) Fig. 9.

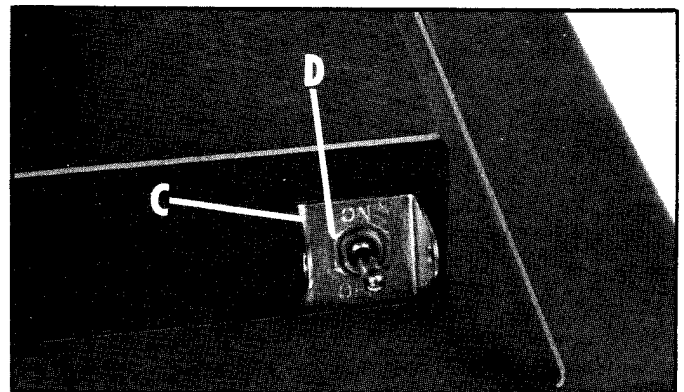


Fig. 9

5. **IMPORTANT:** Using the nylon wire clamp (E) and screw and nut (F) Fig. 8, tie the cord in such a manner, as shown in Fig. 8, that there is no danger of the cord being "pinched" when the drill press base is fastened to a stand or workbench.

6. We suggest that when the drill press is not in use, the switch be locked in the "OFF" position using a padlock, as shown in Fig. 10. Catalog No. 49-031 Padlock is available as an accessory.

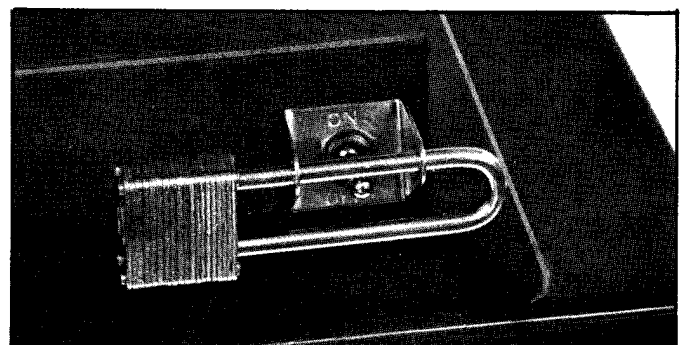


Fig. 10

ASSEMBLING DRILL PRESS TABLE

Assemble the drill press table (A) to the table bracket using the four screws (B), washers (C), and wing nuts (D), as shown in Fig. 11.

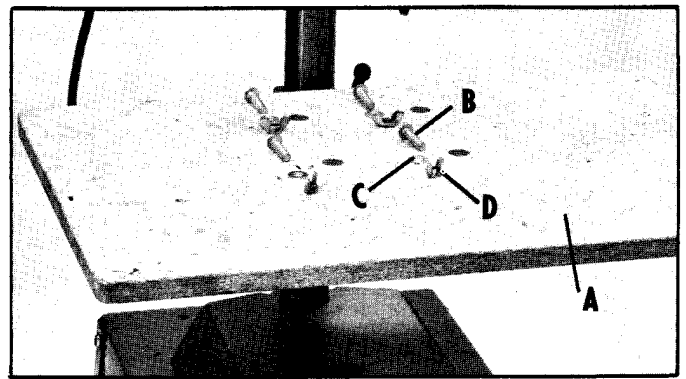


Fig. 11

ASSEMBLING STAND

If you purchased the 50-510 Steel Stand, assemble it as follows:

1. Assemble the top shelf and the two braces to the two panels of the stand, as shown in Fig. 12, using the 16 carriage bolts, flat washers, lockwashers and nuts supplied.
2. Fasten the top shelf to the panels using the 4 screws and tinnerman nuts supplied as shown in Fig. 12.
3. Fig. 13, illustrates the 50-510 Stand assembled.

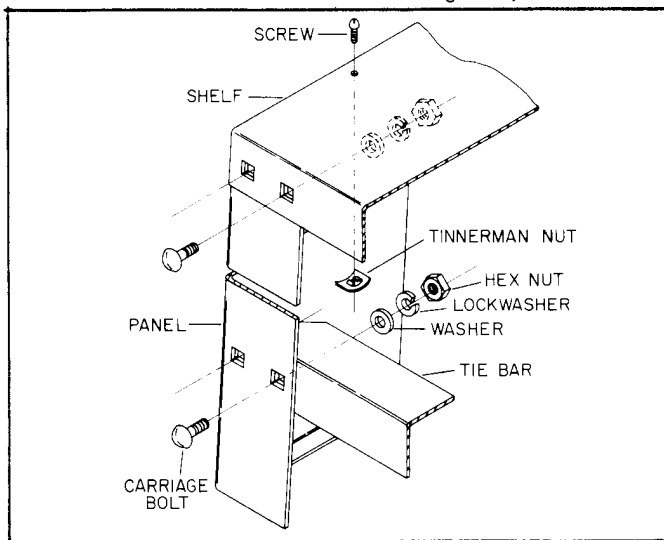


Fig. 12

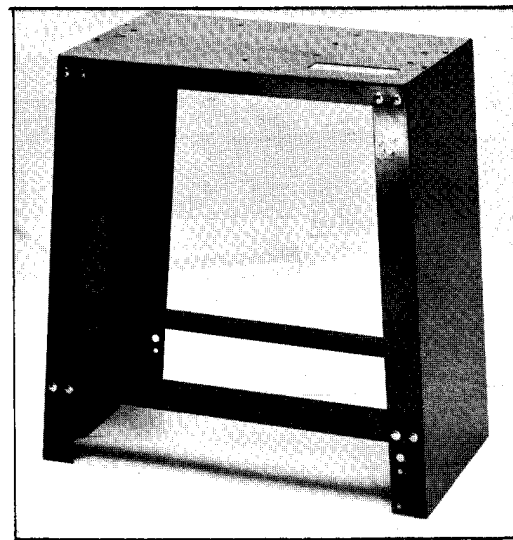


Fig. 13

ASSEMBLING DRILL PRESS TO STAND OR BENCH

Assemble the drill press to the 50-510 Steel Stand using the three holes (A) Fig. 14. **IMPORTANT:** If the drill is to be used without the 50-510 Steel Stand, we suggest that it is always fastened to a supporting surface using the holes on the bottom of the drill press base. Fig. 14-A, illustrates the size and center to center distance of the holes to be drilled in the bench.

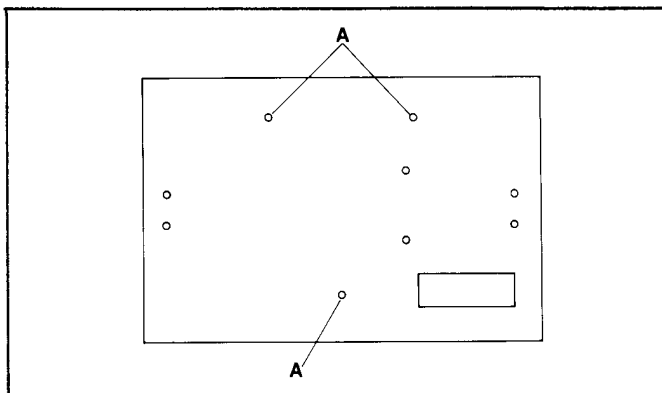


Fig. 14

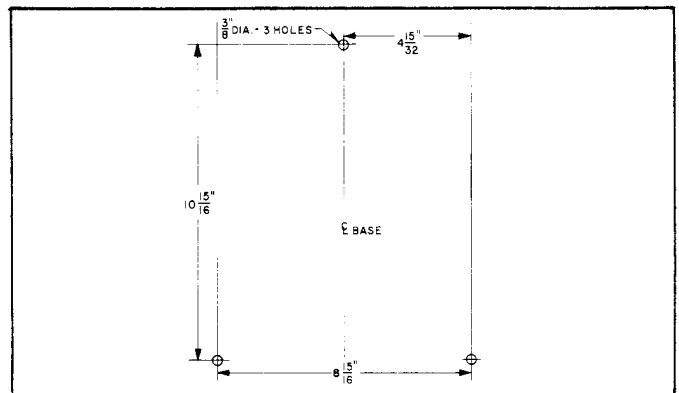


Fig. 14 A

FASTENING STAND OR BENCH TO FLOOR

IF DURING OPERATION THERE IS ANY TENDENCY FOR THE TOOL TO TIP OVER, SLIDE OR WALK ON SUPPORTING SURFACE, THE STAND OR BENCH MUST BE SECURED TO THE FLOOR.

CONNECTING DRILL PRESS TO POWER SOURCE

POWER CONNECTIONS

A separate electrical circuit should be used for your power tools. This circuit should not be less than #12 wire and should be protected with a 20 Amp time lag fuse. If an extension cord is used, use only 3-wire extension cords which have 3-prong grounding type plugs and 3-pole receptacles which accept the tools plug. For distances up to 100 feet use #12 wire. For distances up to 150 feet use #10 wire. Replace or repair damaged or worn cord immediately. Before connecting the motor to the power line, make sure the switch is in the "OFF" position and be sure that the electric current is of the same characteristics as stamped on motor nameplate. All line connections should make good contact. Running on low voltage will injure the motor.

GROUNDING INSTRUCTIONS

This tool must be grounded while in use to protect the operator from electric shock. The recommended motors are shipped wired for 115 Volt, Single Phase and are equipped with an approved 3-conductor cord and 3-prong grounding type receptacle, as shown in Fig. 15. The green conductor in the cord is the grounding wire. Never connect the green wire to a live terminal.

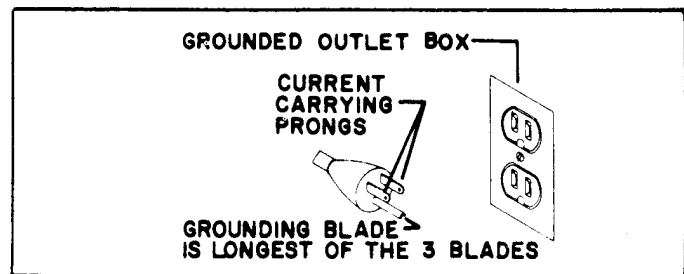


Fig. 15

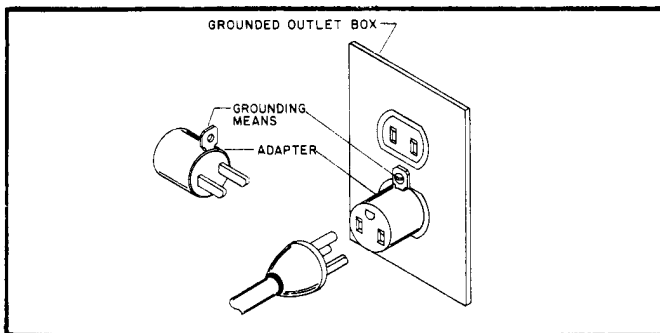


Fig. 16

An adapter, shown in Fig. 16, is available for connecting 3-prong grounding type plugs to 2-prong receptacles. THIS ADAPTER IS NOT APPLICABLE IN CANADA. The green-colored rigid ear, lug, etc., extending from the adapter is the grounding means and must be connected to a permanent ground such as to properly grounded outlet box, as shown in Fig. 16.

IMPORTANT: IN ALL CASES, MAKE SURE THE RECEPTACLE IN QUESTION IS PROPERLY GROUNDED. IF YOU ARE NOT SURE HAVE A CERTIFIED ELECTRICIAN CHECK THE RECEPTACLE.

SPINDLE SPEEDS

Spindle speeds of 700, 1250, 2400 and 4700 RPM are available when your machine is equipped with a 1725 RPM motor. The highest speed is obtained when the belt is on the largest step of the motor pulley and the smallest step of the spindle pulley, see Fig. 17.

CAUTION: ALWAYS DISCONNECT MACHINE FROM POWER SOURCE WHEN CHANGING SPEEDS.

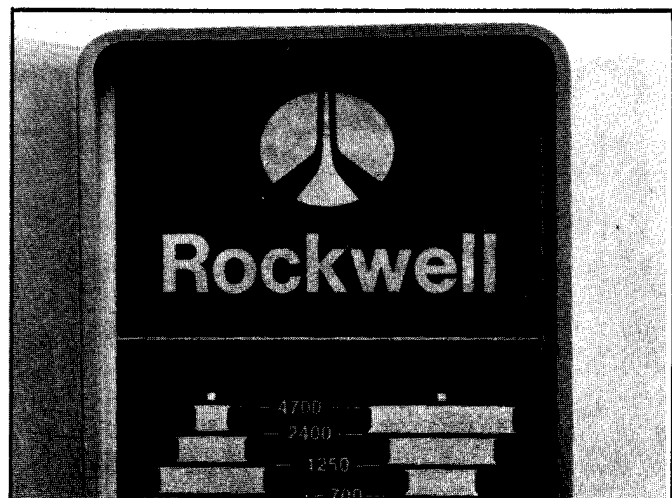


Fig. 17

TILTING THE HEAD

The head can be tilted right and left simply by loosening the horizontal column clamp (A) Fig. 18, and pulling out the plunger (B). Tilt the head to the desired angle and lock the horizontal column clamp (A). When returning the head perpendicular to the table, make sure the end of the plunger (B) is engaged in the milled slot (C) in the horizontal column and lock the horizontal column clamp (A).

SWIVELING THE HEAD

Head can be swiveled 360 degrees around the column simply by loosening the vertical column clamp (D) Fig. 18, and rotating the head and tee bracket to the desired position and tightening the vertical column clamp (D).

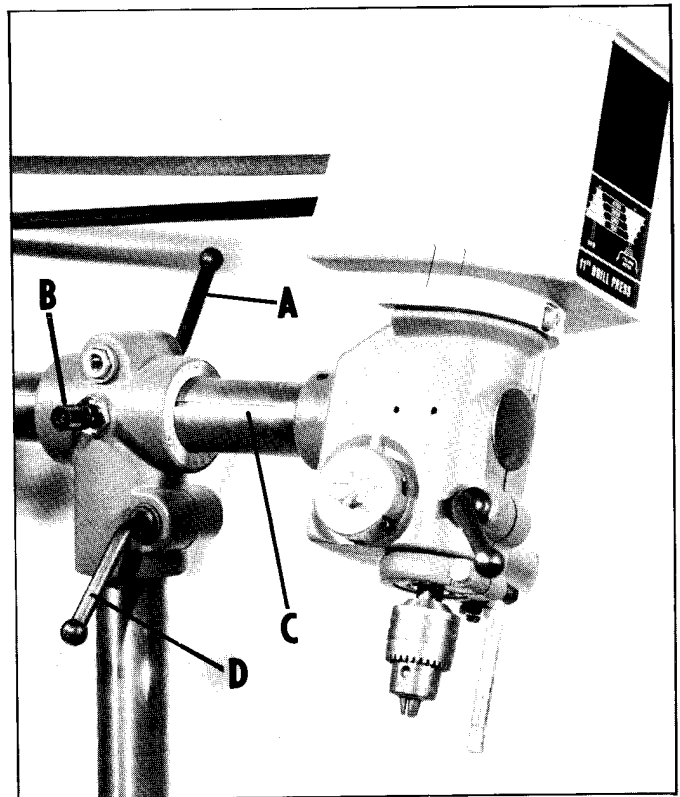


Fig. 18

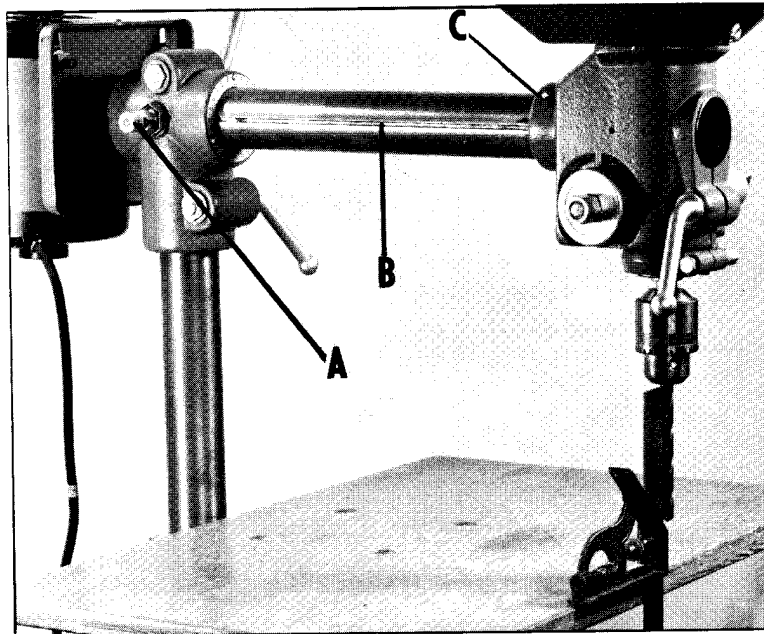


Fig. 19

ADJUSTING HEAD PERPENDICULAR TO TABLE

Check to see if the head is set perpendicular to the table by placing a drill bit in the chuck and a square on the table, as shown in Fig. 19. This adjustment should be performed with the plunger locator (A) Fig. 19, engaged in the milled slot (B) in the horizontal column.

If an adjustment is necessary, loosen the two screws, one of which is shown at (C) Fig. 19, that hold the head to the horizontal column, tilt the head until the drill bit is perpendicular to the table, and tighten the two screws. **CORRECT BELT TENSION SHOULD BE MAINTAINED WHILE THIS ADJUSTMENT IS BEING MADE.**

BELT TENSION

The belt should be just tight enough to prevent slipping. Excessive tension will reduce the life of the belt, pulleys and bearings. Correct tension is applied when the belt can be flexed about 1" out of line midway between the pulleys using light finger pressure.

To adjust belt tension, loosen the two set screws (one of which is shown at (C) Fig. 19) that hold the head to the horizontal column and move the head in or out until correct tension is obtained. Then tighten the two set screws. **NOTE:** At the same time tension is being applied to the belt, the head should be set perpendicular to the table surface as explained in the previous instructions.

DRILLING HOLES TO DEPTH

Where a number of holes are to be drilled to exactly the same depth, the stop nuts (A) Fig. 20, on the threaded stop rod (B) are used. After the first hole has been drilled to depth, the lower stop nut is set against the lug (C) on the head through which the stop rod passes. Return the quill to the up position and tighten the upper stop nut against the lower stop nut and all subsequent holes will be drilled to exactly the same depth.

QUILL ADJUSTMENTS

The quill travels in the ground seat of the head casting. These parts will remain accurate indefinitely if kept clean and lubricated according to instructions.

The spindle is raised or lowered by the hand lever. The quill can be locked at any desired point in its travel by tightening the quill clamping lever (D) Fig. 20. This is an especially desirable feature in operations such as drum - sanding.

The quill clamping lever (D) can be adjusted to lock in any convenient position when tight by shifting the hexagon nut (E) Fig. 20, in its socket. The quill clamping lever should hang downward when loose.

Any play which might develop between the head and quill after considerable use can be taken up by partially tightening the quill clamping lever (D) Fig. 20.

On operations such as sanding, where the quill is clamped in place, always keep the quill as high as the work will permit so that any side thrust will be transmitted directly to the head casting.

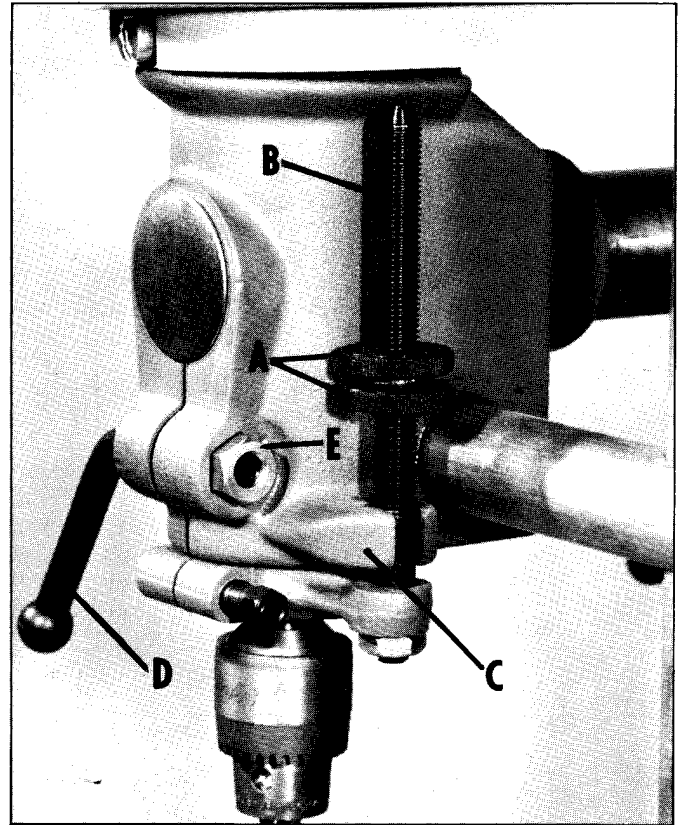


Fig. 20

ADJUSTING SPINDLE RETURN SPRING

For the purpose of automatically returning the spindle upward after the hole has been drilled, a clock spring is provided in the case (A) Fig. 21. This spring has been properly adjusted at the factory and the adjustment should not be disturbed unless absolutely necessary. NOTE: Before determining if this adjustment is necessary, make sure the stop rod runs freely up and down and is not twisted in the slot or guide of the head casting. To adjust the spindle return spring, proceed as follows:

1. Loosen the hexagon nuts (B) Fig. 21, and back them off about 1/8" from the spring case (A) for clearance.
2. Grip the case (A) Fig. 21, firmly, to hold the spring tension, and while pulling the case away from the lugs on the left side of the head casting, rotate the case 1/4 turn and slip the next pair of notches over the lugs. The spring case is turned counterclockwise to tighten and clockwise to loosen.
3. Keep the case against the head casting so that the lugs hold the spring tension while you test for proper tension.
4. If further adjustment is necessary, repeat Steps 2 and 3 until proper tension is obtained.
5. When proper tension is obtained, turn the inner hexagon nut (B) Fig. 21, lightly against the spring case (A), but not tight enough to cause binding. Lock it in position by means of the outer nut, using two wrenches to join them together.

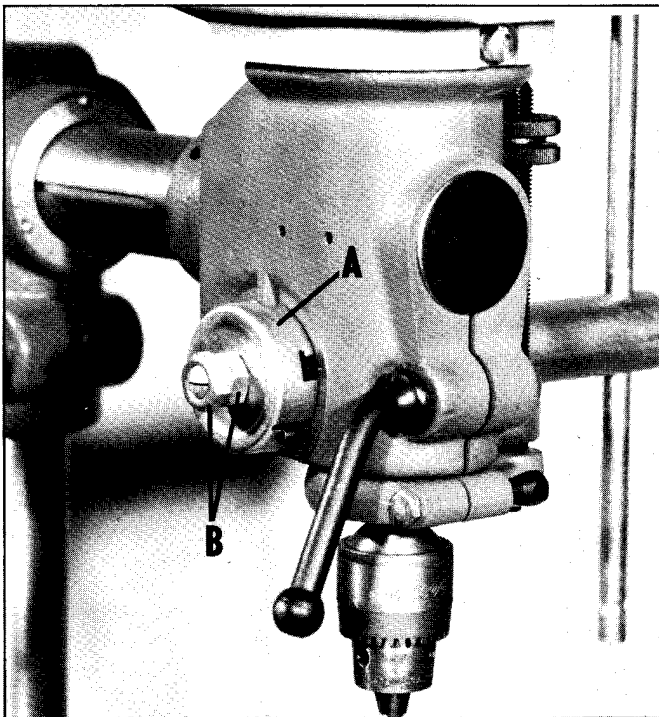


Fig. 21

CHANGING SPINDLES

When removing the spindle, proceed as follows:

1. Remove hole cover plate (A) Fig. 22.
2. Run the quill down until the set collar above the quill is accessible through the opening in the head where the hole cover plate (A) was removed.
3. Clamp the quill in this position and, while holding the spindle to avoid dropping it, release the set screw in the set collar.
4. Swing the table to one side and raise the quill to the top of its stroke. There will be sufficient clearance for lowering the spindle out of the bearings.

REMOVING END PLAY IN SPINDLE

To eliminate all end play in the spindle, clamp the table at a suitable height and lower the spindle against it with moderate pressure while, at the same time, clamping the quill with the quill locking lever (B) Fig. 22. Remove cover plate (A) and move the set collar down against the top of the quill, and tighten the set screw used to secure the collar in position. This method will remove slack between the thrust collar, thrust bearing and quill.

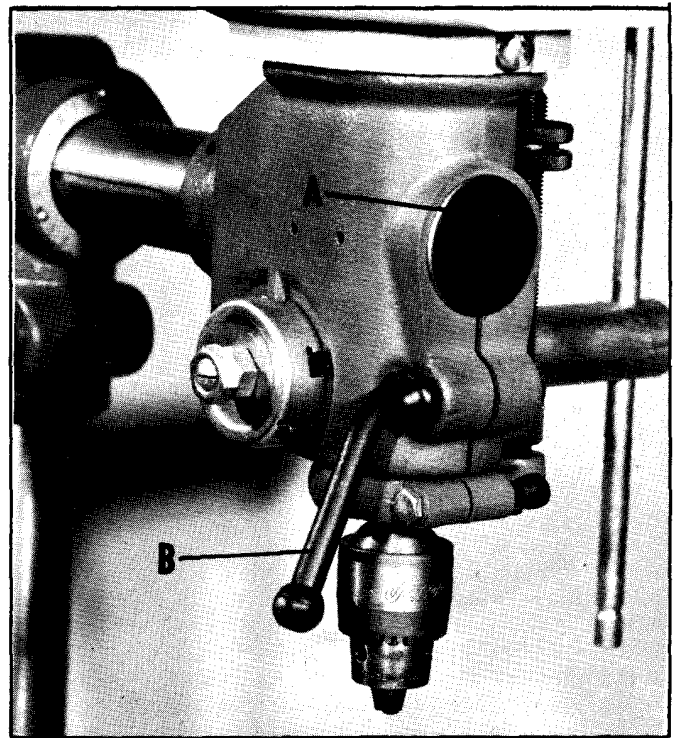


Fig. 22

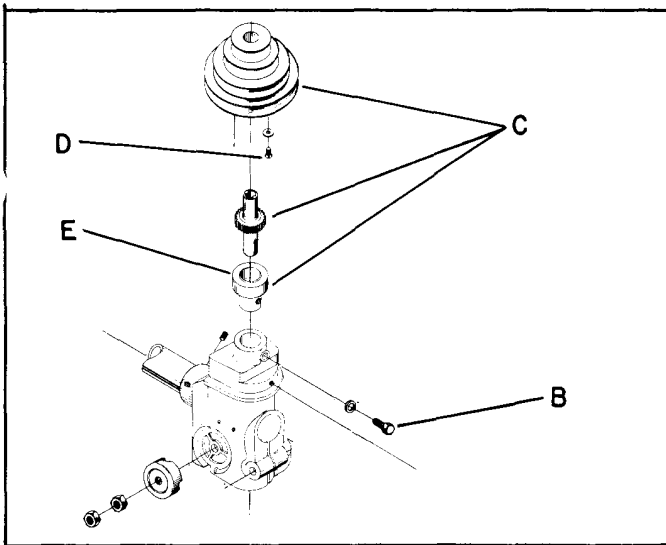


Fig. 23

REPLACING SPINDLE PULLEY BEARING

Replacement of the spindle pulley bearing will not be necessary until the machine has had a long period of heavy use. To check the bearing, remove the spindle so that the pulley will run idle. If it turns smoothly and runs with no noise beyond the whirling due to the belt, the bearing is still in good condition.

To replace the bearing, remove the spindle pulley guard. Remove the hexagon head cap screw (B) Fig. 23, from the front of the head and push the pulley assembly (C) upward, out of the head casting. Remove the three screws and washers (D) from the inside of the pulley and press the old bearing (E) out of the pulley. Install a new bearing and reassemble.

OPERATION

The following directions will give the inexperienced operator a start on the common drill press operations. Use scrap material for practice to get the feel of the machine before attempting regular work.

CORRECT DRILLING SPEEDS

Factors which determine the best speed to use in any drill press operation are: Kind of material being worked, size of hole, type of drill or other cutter, and quality of cut desired. The smaller the drill, the greater the required RPM. In soft materials, the speed should be higher than for hard metals. Refer to the spindle speed chart on page 14, for suggested spindle speeds.

DRILLING IN METAL

Use clamps to hold the work when drilling in metal. The work should never be held in the bare hand; the lips of the drill may seize the work at any time, especially when breaking through the stock. If the piece is whirled out of the operator's hand, he may be injured. In any case, the drill will be broken when the work strikes the column.

The work must be clamped firmly while drilling; any tilting, twisting or shifting results not only in a rough hole, but also increases drill breakage. For flat work, lay the piece on a wooden base and clamp it firmly down against the table to prevent it from turning. If the piece is of irregular shape and cannot be laid flat on the table, it should be securely blocked and clamped.

SANDING

One of the special uses of this drill press is in sanding the surfaces of wooden or metal parts, as illustrated in Fig. 24. Sanding drums of various sizes from 11/16" diameter by 2-1/2" long to 3 x 3" are available. These drums have a patented rubber cushioned core feature which permits use of interchangeable abrasive sleeves of various grades. We offer garnet sleeves for sanding wood and aluminum oxide for metals.

Use the No. 11-974 Spindle for these sanding drums. The smallest has a 1/2" shank to fit directly into the spindle; the larger drums have a 1/2" hole and set screws for attaching them by means of a short piece of 1/2" Steel Rod, Cat. No. 11-834.

Refer to the Spindle Speed Chart on page 14 for Sanding - Drum Speeds. To utilize the full face of the drum, mount a board on the drill press table and cut a hole, slightly larger than the drum, in the board. Run the drum down into the hole, as shown in the photograph, and clamp the quill. The abrasive sleeve will then extend below the work to cut equally across the entire face.

A fence may be used as a guide when sanding flat surfaces. Bolts, pivot pins or templates fastened to the table are useful for curved work. Such fixtures help to produce accurate results and protect the operator. Always feed the work against the rotation of the drum to prevent jamming.

Avoid the use of excessive pressure which increases side thrust on the spindle and bearings. Abrasive sleeves remove material by the cutting action of the grit. Effective operation depends upon the correct type and size of grit for the material and the proper drum speed. When the sleeve becomes worn or loaded, discard it and install a new one.

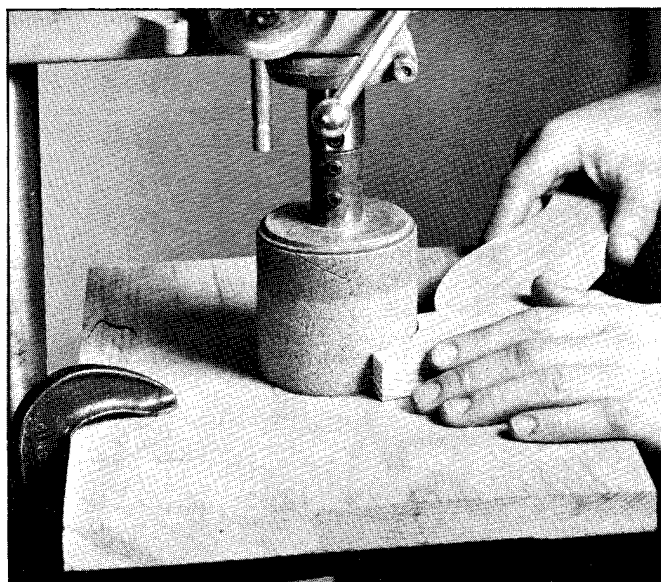


Fig. 24

BORING IN WOOD

Twist drills, although intended for metal drilling, may also be used for boring holes in wood. However, machine spur bits are generally preferred for working in wood; they cut a square bottom hole and are designed for removal of wood chips. Do not use hand bits which have a screw tip; at drill press speeds they turn into the wood so rapidly as to lift the work off the table and whirl it.

For through boring, line up the table so that the bit will enter the center hole to avoid damage. Scribe a vertical line on the front of the column and a matchmark on the table bracket, so that the table can be clamped in center position at any height.

Feed slowly when the bit is about to cut through the wood to prevent splintering the bottom face. Use a scrap piece of wood for a base block under the work; this helps to reduce splintering and protects the point of the bit.

MORTISING

The No. 11-976 Mortising Attachment shown in Fig. 25 is a handy accessory for accurately cutting mortises of various widths and lengths. It consists of a base which is arranged to mount on the drill press table, a fence holddown and chisel holder. The Spindle with 1/2" hole, No. 11-974, is used to hold the mortising bits. The attachment is adjustable for size of stock and location of cut. Hollow chisels and bits are available in four sizes, from 1/4" to 1/2". Any desired width and length of mortise can be made by overlapping cuts.

Conversion of the drill press for mortising is made by installing the No. 11-974 Spindle and attaching the chisel holder on the quill in place of the regular stop collar. Bushings are used to hold the mortising bits in the spindle.

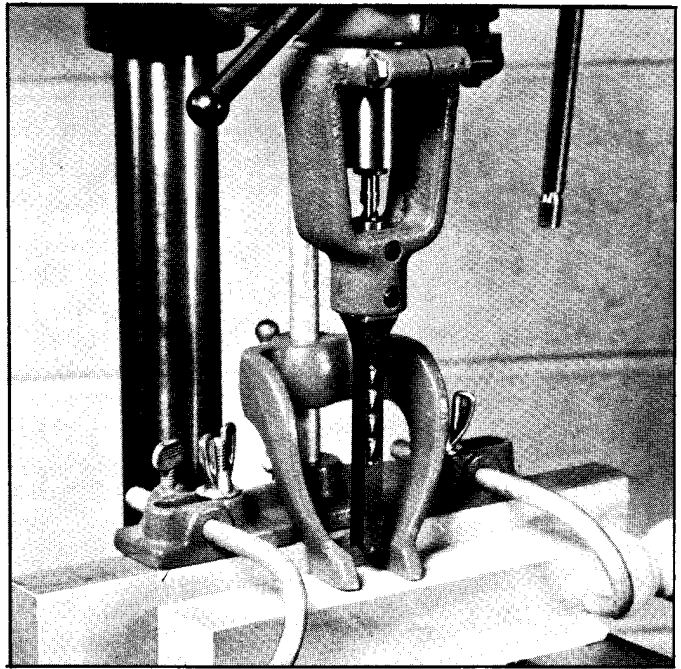


Fig. 25

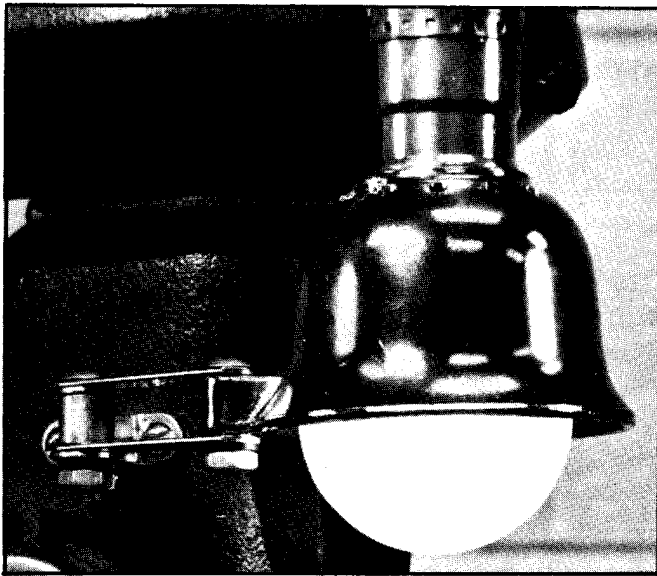


Fig. 26

INSTALLING LAMP ATTACHMENT

If you purchased the 40-882 Lamp Attachment it can be mounted to the two holes located in the left hand side of the head casting, as shown in Fig. 26.

LUBRICATION

Apply a few drops of light machine oil to the spindle bearings once or twice a month. The oil holes in the front of the quill near it's ends are accessible when it is run down and clamped and the front cover plate of the head casting is removed. The lower hole feeds the thrust bearing in addition to the lower spindle bearings. The spindle pulley bearing is sealed and needs no lubrication. Lubricate the surface of the quill occasionally by applying a drop or two of oil inside the head casting. Also oil the quill rack, clock spring, pinion, where it enters the head casting, upper end of the spindle above the pulley, flat surfaces of the stop rod and interior of the chuck.

To allow free movement of the horizontal column, apply a coating of white vaseline.

SUGGESTED SPINDLE SPEEDS—RPM

DRILLING SPEEDS

Hole Size -- Inch*	SUGGESTED SPINDLE SPEED—RPM						
	Softwoods	Hardwoods	Plastics	Aluminum	Brass	Cast Iron	Mild Steel
1/16	4700	4700	4700	4700	4700	4700	2400
1/8	4700	4700	4700	4700	4700	2400	1250
3/16	4700	2400	2400	4700	2400	2400	1250
1/4	2400	2400	2400	4700	2400	1250	700
5/16	2400	1250	1250	2400	1250	1250	700
3/8	2400	1250	1250	2400	1250	700	700
7/16	2400	1250	1250	1250	1250	700	
1/2	1250	1250	1250	1250	700	700	
5/8	1250	700	700	700			
3/4	1250	700	700	700			
7/8	1250	700					
1	700	700					
1-1/4	700	700					
1-1/2	700	700					
2	700	700					

* For intermediate sizes, use speed suggested for next larger hole.

Use slower speeds for deep holes or if drill bit burns or melts material.

MORTISING SPEEDS

Mortise Size -- Inch	SUGGESTED SPINDLE SPEED--RPM	
	Softwood	Hardwood
1/4	2400	1250
3/8	2400	1250
1/2	1250	1250

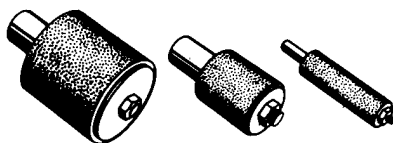
PLUG-CUTTING SPEEDS

Plug Size -- Inch	SUGGESTED SPINDLE SPEED--RPM	
	Softwoods	Hardwoods
3/8	2400	1250
1/2	1250	1250
5/8	1250	1250
3/4	1250	700
1	700	700

SANDING-DRUM SPEEDS

For long abrasive life, 1250 rpm is recommended for all sanding drum sizes up to 3-inch diameter, for sanding either wood or metal. Drums may be operated at 2400 rpm to produce a finer finish, but the higher speed will shorten abrasive life. Garnet abrasive is recommended for wood, aluminum oxide for metal.

Get dozens of uses out of your Drill Press with Rockwell quality accessories



Sanding Drums and Abrasive Sleeves

Sanding Drums Includes (1) abrasive sleeve.				Abrasive Sleeves Package of six. For use with sanding drums.	
No.	Size Diam.	Length	Mounting	No.	Type
46-038	3"	3"	1/2" Hole	46-138	Garnet 40 Grit, Coarse
46-538	1 3/4"	2"	1/2" Hole	46-832	Garnet 50 Grit, Medium
46-048	1 1/16"	2 1/2"	1/2" Shank	46-338	Al. Oxide 50 Grit, Coarse
46-679	1 1/2"	1"	5/16" Shank	46-638	Garnet 40 Grit, Medium
				46-837	Garnet 60 Grit, Fine
				46-838	Al. Oxide 50 Grit, Coarse
				46-841	Garnet 50 Grit, Medium
				46-248	Garnet 80 Grit, Fine
				46-847	Al. Oxide 50 Grit, Coarse
				46-682	Al. Oxide 40 Grit, Coarse
				46-683	Al. Oxide 80 Grit, Fine

RECOMMENDED MOTORS FOR DRILL PRESSES

1/2 HP heavy duty (ball bearings), capacitor start, 1725 RPM, 115 V. With integral, manual reset and thermal overload protection.

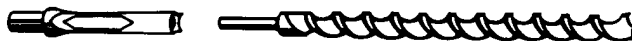
Model 62-142

1/3 HP heavy duty (ball bearings), capacitor start, 1725 RPM, 115 V. With integral, manual reset and thermal overload protection.

Model 62-134

1/3 HP standard duty (sleeve bearings), split phase, 1725 RPM, 115 V.

Model 62-133



Mortising Chisels, Bits and Bushings

For use with 15-840 and 11-976 Mortising Attachments.

Mortising Chisels with 3/8" x 1 1/4" shank			Mortising Bits		Bushings Furnished with 11-976 attachment. Used to mount bits to 11-974 spindle on 11" & radial drill presses.	
Size	No.	Depth Capacity	No.	Shank Size	No.	Size
1/4" sq.	11-634	1 7/8"	15-514	3/16"	11-524	3/16"
3/8" sq.	11-636	3"	15-516	19/64"	11-526	19/64"
1/2" sq.	11-638	3"	15-517	19/64"	11-526	19/64"



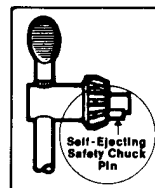
Mortising Attachments

Offer full 4 3/4" capacity under hold-down; 2 3/4" from ends of hooked rods to fence. Includes fence with mounting bolts hold-down, brackets and rod; chisel holder and curved arms. No. 11-524 and 11-526 Bushings for use with No. 11-974 Spindle on 11" and radial drill presses also included with 11-976 Attachment.
No. 11-976. For use with 1 1/2" and radial drill presses. Requires mortising chisels, bits and spindle.



Auxiliary Shaft

No. 11-834. For mounting sanding drums or any set screw mounted accessory with 1/2" hole



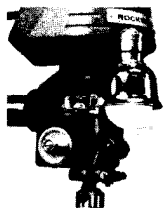
Self-Ejecting Safety Chuck Keys

For added operator safety. Included with all drill presses.
No. 65-107. For 11" and Radial Drill Presses.
No. 65-112. For 15" Drill Presses.



Spindle

No. 11-974. With 1/2" hole. For use with mortising attachment (and 1/2" shank sanding drums) on 11" and radial drill presses.



Lamp Attachment

No. 40-882. For use with 11" and radial drill presses. Furnishes tool with its own illumination, independent of shop lighting system. Uses 15 or 25 watt bulbs. Includes shade, socket, cord and mounting parts

Plug Cutters

Made of selected steel. All approximately 4 1/4" long, 1/2" diameter x 2" shanks.

- No. 15-534. 3/8"
- No. 15-535. 1/2"
- No. 15-536. 3/4"
- No. 15-537. 3/4"



NO. 50-510 DRILL PRESS STAND

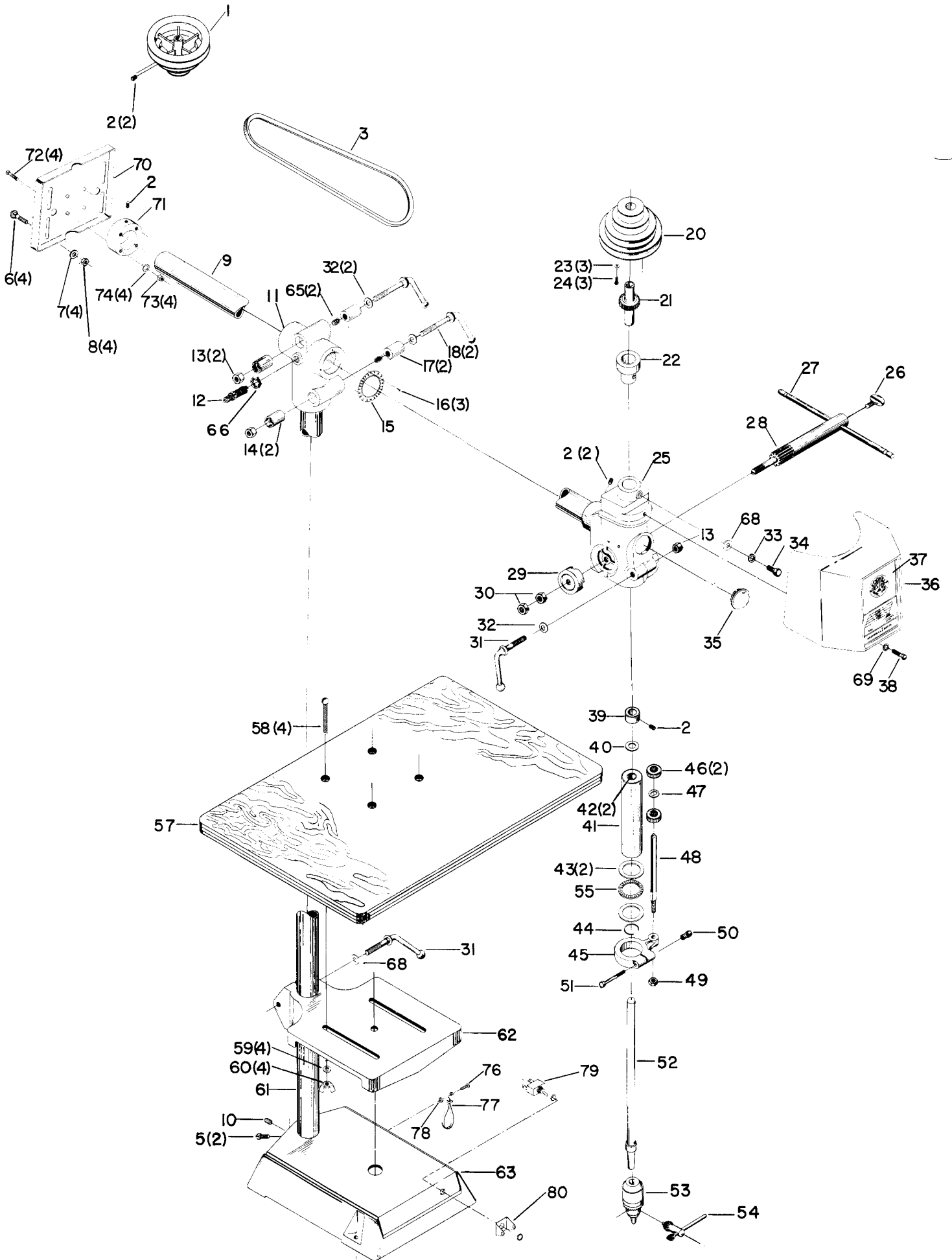
NO. 50-118 RETRACTABLE CASTER ATTACHMENT FOR 50-510 STAND



Machine Spur Bits

Production type. Made of selected steel. Approximately 6" long with 1/2" shank.

- No. 15-524. 1/4"
- No. 15-525. 3/16"
- No. 15-526. 3/8"
- No. 15-527. 7/16"
- No. 15-528. 1/2"
- No. 15-529. 9/16"
- No. 15-530. 5/8"
- No. 15-532. 3/4"
- No. 15-538. Set of 8 bits



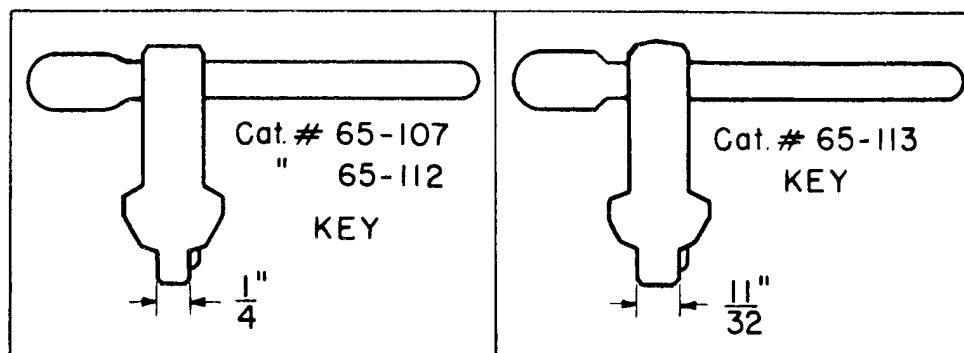
Replacement Parts

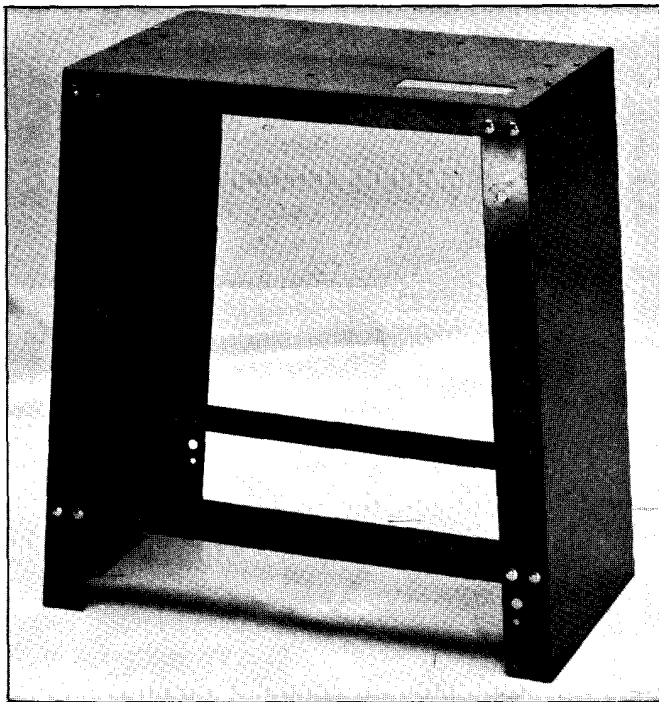
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	Cat. #41-703	Motor Pulley, including:	40	DSS-77	Washer
2	SP-201	5/16-18 X 5/16" Soc. Set Screw	41	HDP-102-S	Quill, including:
3	Cat. #49-172	Belt	42	HDP-130	Bushing
	SP-808	5/16-18 X 1" Carriage Bolt	43	0906222	Needle Thrust Bearing
7	SP-1604	5/16 X 3/4 X .065 Washer	55	0906221	Bearing Race
8	SP-1300	5/16-18 Hex Nut	44	HDP-105	Retainer
9	448-01-030-0001	Horizontal Column	45	DP-270	Stop Collar
11	448-01-314-0002	Bracket Assembly, including:	46	DP-274	Knurled Nut
15	951-02-011-4338	Scale	47	DP-318	Washer
16	SP-2250	#4 X 3/16" Drive Screw	48	HDP-113	Stop Rod
12	448-01-312-0001	Plunger, including:	49	SP-1005	3/8"-16 Hex Jam Nut
66	SP-2957	Palnut	50	DP-221	Hex Clamp Nut
13	DP-223	7/16"-14 Hex Nut	51	SP-622	1/4-20 X 2" Hex Hd. Screw
14	448-01-027-0001	Clamp Shoe	52	DP-255-SA	Spindle
17	448-01-027-0002	Clamp Shoe	53	**	Key Chuck
18	931-04-051-6351	Handle	54	**	Key
*	DP-265-U	Spindle Pulley, Consisting of:	57	448-01-091-0001	Particle Board Table
20	DP-265	Pulley	58	SP-515	5/16-18 X 1-1/4" Rd. Hd. Screw
21	DP-264	Gear	59	SP-1620	11/32 X 11/16 X 1/16" Stl. Washer
22	SP-5373	Bearing	60	SP-1403	5/16"-18 Wing Nut
23	240-14	Washer	61	448-01-030-0002	Verticle Column
24	SP-3801	#8-32 X 3/8" Rd. Hd. Screw	62	HDP-803	Table
25	448-01-057-0002	Head Casting	63	Cat. #49-194	Base, including:
26	DP-282	3/8"-24 Thumb Screw	5	SP-309	5/16-18 X 5/16" Sq. Hd. Screw
27	DP-233	Feed Handle	10	SP-207	5/16-18 X 1/2" Soc. Set Screw
28	HDP-807-S	Pinion Shaft	65	NCS-33	Spring
29	DP-232-S	Return Spring	68	NCS-251	Shim Washer
30	SP-1227	1/2"-20 Hex Jam Nut	69	SP-1750	5/16" Internal Tooth Lockwasher
1	DP-11	Lock Bolt	*	1087436	Motor Plate Ass'y, Consisting of:
2	BM-45	Spring Washer	70	1087433	Plate
33	SP-1709	3/8" Lockwasher	71	1087434	Hub
34	SP-653	Screw	72	901-11-020-0878	1/4-20 X 1-1/8" Carriage Bolt
35	448-01-031-0002	Cover	73	SP-1034	1/4"-20 Nut
36	1086356	Pulley Guard	74	904-03-030-1757	1/4" External Tooth Lockwasher
37	1088235	Nameplate	76	SP-587	#10-32 X 5/8 Truss Hd. Screw
38	SP-724	5/16-18 X 7/8" Fil. Hd. Screw	77	438-01-004-0054	Nylon Cord Clamp
39	HDP-107-S	Spacer, including:	78	SP-1203	#10-32 Hex Nut
2	SP-201	5/16-18 X 5/16" Soc. Set Screw	79	438-01-017-0079	Switch (Supplied with Motor)
			80	MG-169	Switch Guard

* Not shown assembled

** Please refer to the following list when replacing chucks or keys

IDENTIFICATION NUMBER FOUND ON CHUCK	ORDER ROCKWELL CHUCK NUMBER	ORDER ROCKWELL SELF-EJECTING SAFETY CHUCK KEY
#MC-33 Jacobs	402-01-025-0002	65-107
#H5T33 Supreme	402-01-025-0002	65-107
#MC33R33 Jacobs	402-01-025-0003	65-113
#U-8K-33 Jacobs	402-01-025-0004	65-112

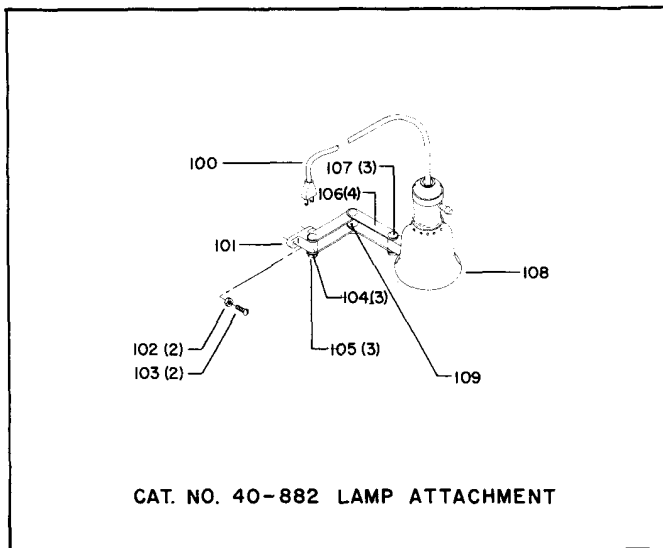




Replacement Parts

50-510 STAND

Qty.	Part No.	Description
2	1087934	Panels
2	1087936	Tie Bars
1	1087935	Top Shelf
16	SP-834	5/16-18 X 3/4" Carriage Bolt
16	SP-1704	3/8" Lockwasher
16	SP-1030	5/16-18 Hex Nut
16	SP-1604	5/16 X 3/4 X 1/16 Flat Washer
4	1087576	#8 Self Threading Screw
4	SP-2954	Tinnerman Nut



Replacement Parts

Ref. No.	Part No.	Description
	Cat. #40-882	Lamp Attachment, incl:
100	SP-2447	Cord
101	S-6	Mounting Bracket
102	SP-1203	#10-32 Hex, Nut
103	SP-559	#10-32 x 1/2" Rd. Hd. Mach. Screw
104	SP-1702	1/4" Lockwasher
105	SP-1029	1/4-20 Hex, Nut
106	S-3	Steel Link
107	S-5	Spec. 1/4-20 x 15/16" Carr. Bolt
108	S-1-S	Cover
109	S-4	Spacing Sleeve

Authorized Stationary Parts Distributors

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Rockwell International
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Phone: (213) 749-0386

OAKLAND, 94604
Rockwell International
4621 Malat Street - P.O. Box 2053
Phone: (415) 535-2424

COLORADO

DENVER, 80207
Rockwell International
4900 East 39th Avenue
Phone: (303) 388-5803

GEORGIA

ATLANTA (Doraville), 30340
Rockwell International
3500 McCall Place
Phone: (404) 458-2263

HAWAII

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DETROIT, (Southfield), 48075
Rockwell International
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Phone: (313) 358-1000

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Rockwell International
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Phone: (816) 221-2070

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NEW YORK, 10013
Rudolf Bass, Incorporated
175 Lafayette Street
Phone: (212) 226-4000

BUFFALO, 14204
Karle Saw Company
138-150 Chicago Street
Phone: (716) 853-8053 or 853-8054

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YOUR ROCKWELL WARRANTY

Rockwell is proud of the quality of the power tools which it sells. The component parts of our tools are inspected at various stages of production, and each finished tool is subjected to a final inspection before placed in its specially designed carton to await shipment. Because of our confidence in our engineered quality, Rockwell agrees to repair or replace any part or parts of Rockwell Power Tools or Rockwell Power Tool Accessories which examination proves to be defective in workmanship or material. In order to take advantage of this guarantee, the complete portable power tool or accessory, or in the case of machinery, the part must be returned prepaid to the appropriate factory, Rockwell Service Center, or authorized service station for examination. This guarantee, of course, does not include repair or replacement required because of misuse, abuse, or normal wear and tear. Repairs made by other than our factory, service center, or authorized service station, relieves Rockwell of further liability under this guarantee. THIS GUARANTEE IS MADE EXPRESSLY IN PLACE OF ALL OTHER GUARANTEES OR WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO QUALITY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE.



50-118 RETRACTABLE CASTER ATTACHMENT

INTRODUCTION

The 50-118 Retractable Caster Attachment is designed for use with the 50-507, 50-508, 50-509, 50-510, 50-513, 50-515, 50-516 and 50-802 Stands. To assemble the 50-118 Retractable Caster Attachment to your stand, proceed as follows:

1. Carefully unpack the caster attachment from the carton.

2. Assemble the four cams (A) to the two shafts, using the four 7/8" long roll pins (B), as shown in Fig. 1. The roll pins must be started straight when assembling the cams to the shafts. Refer to Fig. 2, to determine the correct holes to use in the shafts.

3. Cams on each shaft must match when assembled.

4. Assemble the spring washer (A) and fiber washer (B) to the two shafts as shown in Fig. 3.

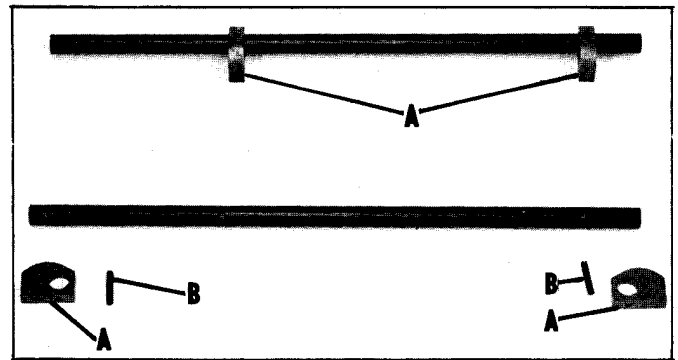


Fig. 1

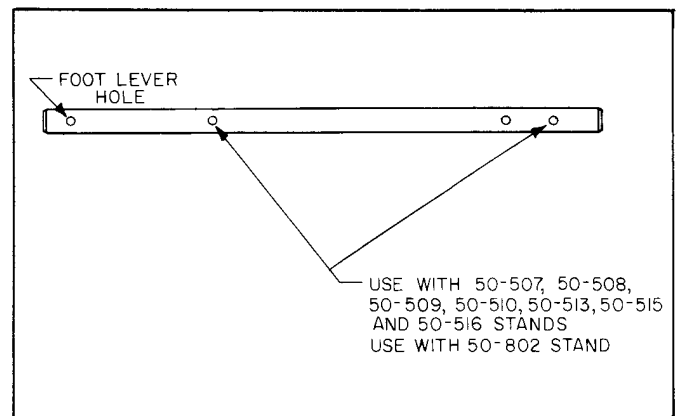


Fig. 2

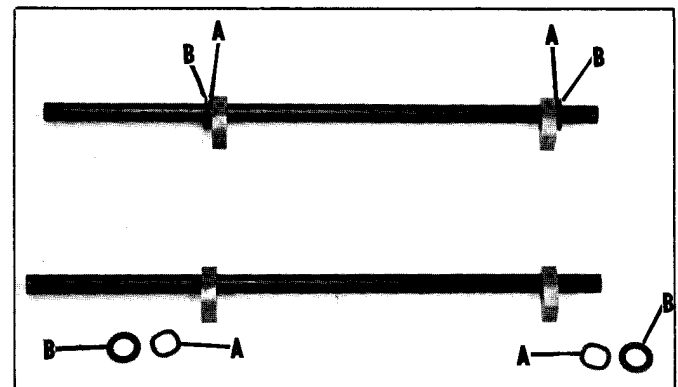


Fig. 3

5. Assemble the four casters (A) and the four leveling screws and locknuts (B) to the caster brackets, as shown in Fig. 4.

6. Assemble the four caster bracket (C) to the two shafts, as shown in Fig. 4.

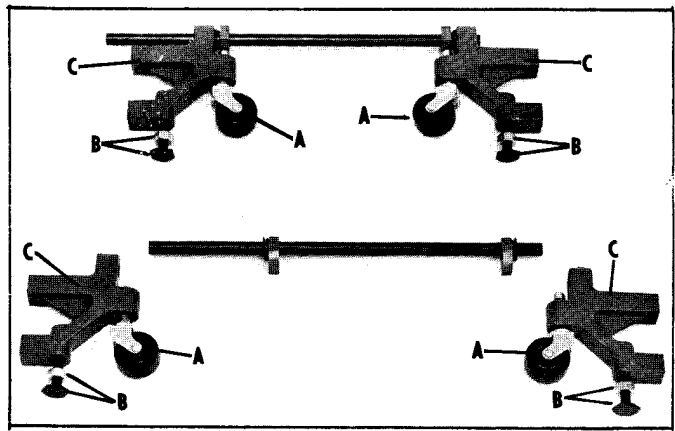


Fig. 4

7. Insert the foot lever end of the shaft (A) up and through the inside of the large hole in the cabinet, as shown in Fig. 5.

8. Fasten the four caster brackets (C) to the stand using the eight flat washers and hex head cap screws (B), as shown in Fig. 5.

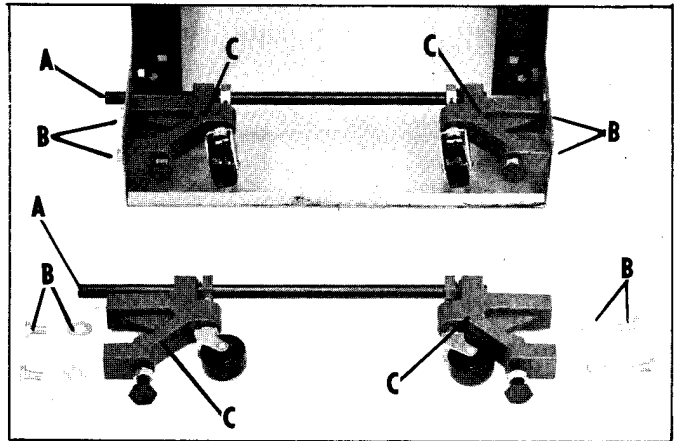


Fig. 5

9. Assemble the foot levers (A) to the two shafts using the 1" long roll pins, as shown in Fig. 6.

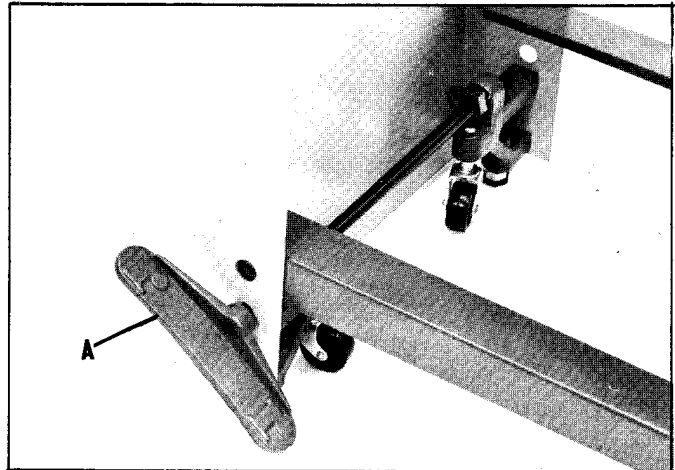
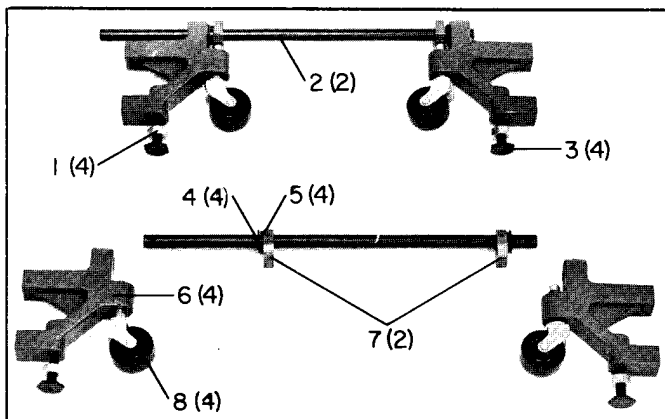


Fig. 6

Replacement Parts

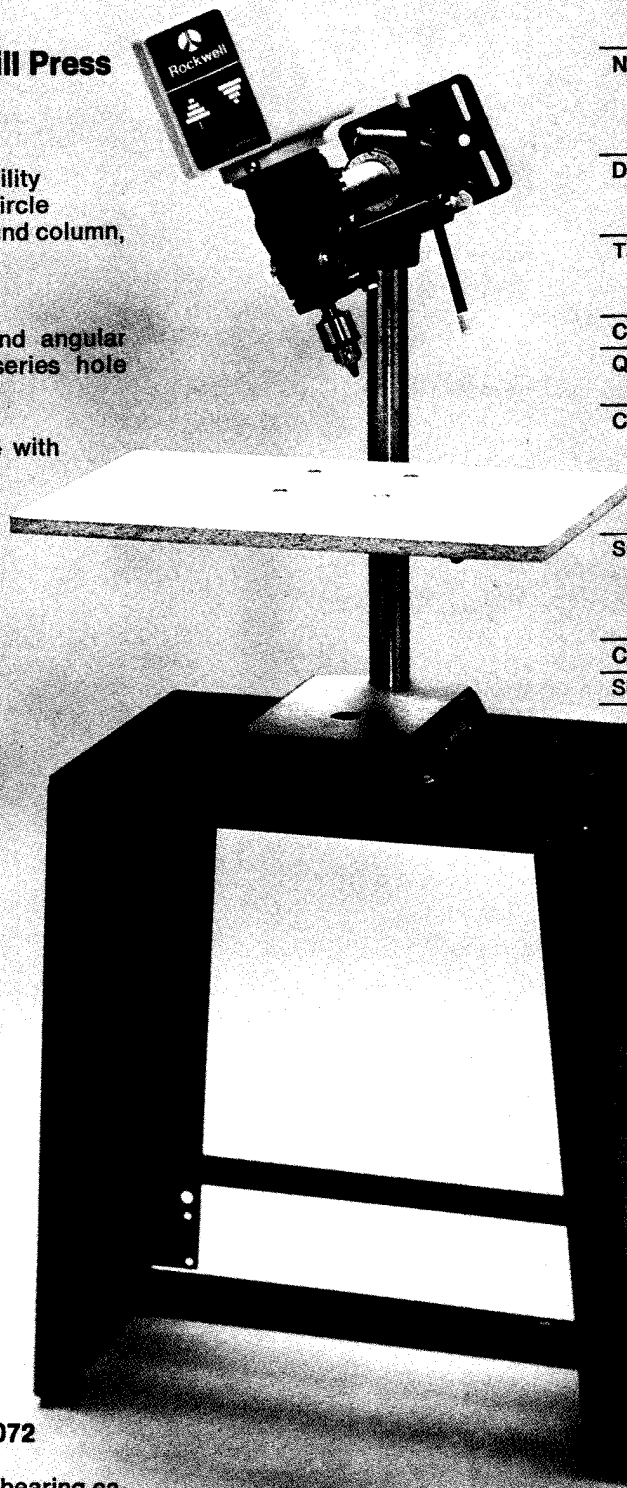


Ref. No.	Part No.	Description
1	SP-5433	3/8-16 Hex Jam Nut
2	436-02-106-0010	Shaft
3	901-09-131-5295	3/8-16 X 1-1/2" Leveling Screw
4	DSS-36	Fiber Washer
5	MS-109	Wave Washer
6	436-01-089-0006	Bracket
7	MS-103	Cam
8	MS-108	Caster
*	MS-102	Foot Lever
*	SP-2732	5/32 X 1" Roll Pin
*	SP-2733	5/32 X 7/8" Roll Pin
*	SP-1605	3/8 X 7/8 X 1/16" Flat Washer
*	SP-606	5/16-18 X 5/8" Hex. Hd. Cap Screw
*		Not Shown

Radial Drill Presses

Model 32 Radial Drill Press with Stand No. 11-072

- Maximum drilling flexibility
- Drills to center of 32" circle
- Head swivels 360° around column, tilts 90° left and right
- Ram travels 11"
- Four spindle speeds
- Performs horizontal and angular drilling, multiple and series hole drilling
- Adjustable depth scale
- Calibrated angle scale with positive stop at 90°
- Extra large table
- Self-ejecting safety chuck key



No. 11-072:	Includes 11-280 Drill Press, 50-520 Stand, Key Chuck, V-Belt, Motor Pulley, Chuck Key
Dimensions:	Width 24", Front to Rear 30", Height on Stand 63 1/4"
Table Size:	8 1/2" x 9", 23 3/4" x 16 1/2" —Auxiliary Chipboard Table
Column Diameter:	1 3/4"
Quill:	Travel 3 5/8", Diameter 1 3/4"
Capacities:	Diameter Hole in Cast Iron 1/2", Steel 3/8" Chuck to Base 1 1/4" max. Chuck to Table 11" max.
Spindle Speeds:	700, 1250, 2400 and 4700 RPM with 1725 RPM Motor and standard pulley
Carton Size:	20" x 16 1/2" x 31 1/2"
Shipping Weight:	120 Lbs.

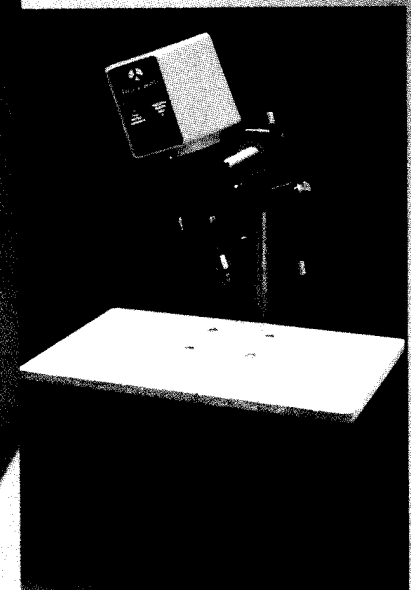
Optional Motors for No. 11-280 and No. 11-072

No. 62-142 1/2 H.P. ball bearing capacitor start, 1725 RPM, 115V.

No. 62-134 1/3 H.P. ball bearing capacitor start, 1725 RPM, 115V.

No. 62-133 1/3 H.P. sleeve bearing split phase, 1725 RPM 115V.

All Rockwell motors are made with U.L. recognized components and are specifically designed for optimum performance on the specified Rockwell tool. The use of other motors is not recommended as a safety hazard may result.



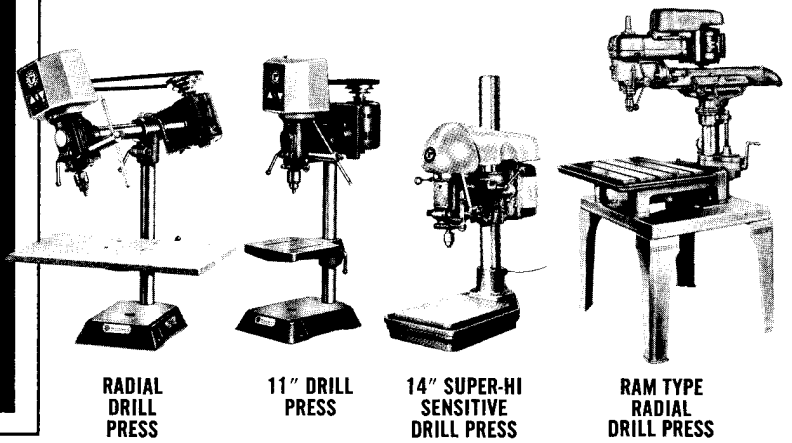
Model 32 Radial Drill Press No. 11-280

Same features as 11-072 but without stand.

Carton Size: 20" x 16 1/2" x 31 1/2"
Shipping Weight: 88 Lbs.

Stand
No. 50-520. For Model 11-280 Drill Press

SAFETY SUGGESTIONS FOR ROCKWELL DELTA DRILL PRESSES

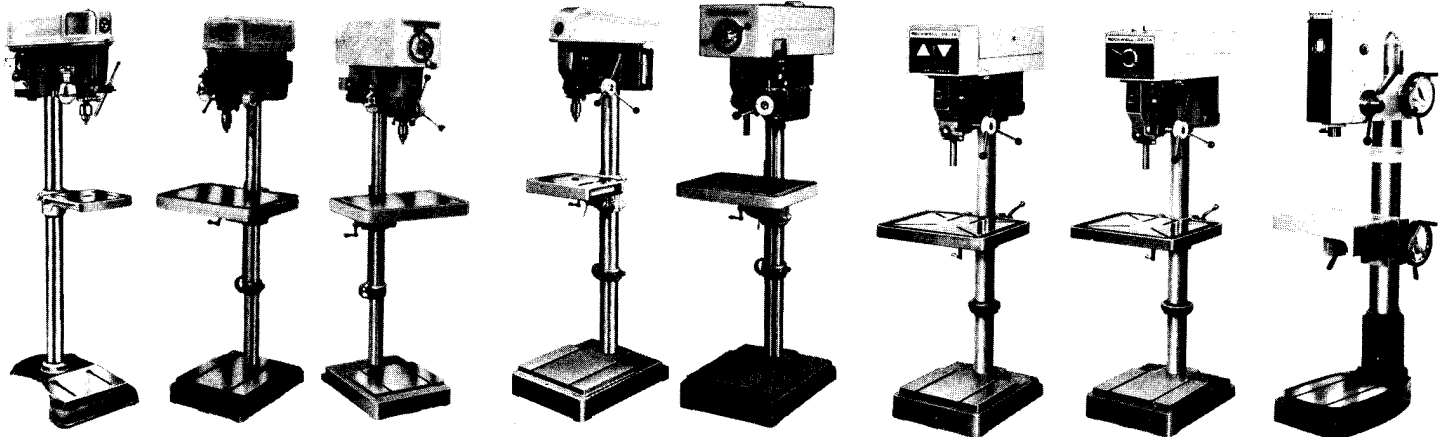


RADIAL
DRILL
PRESS

11" DRILL
PRESS

14" SUPER-HI
SENSITIVE
DRILL PRESS

RAM TYPE
RADIAL
DRILL PRESS



15" UTILITY
DRILL PRESS

6-STEP PULLEY
6" STROKE
15" DRILL PRESS

VARIABLE SPEED
6" STROKE
15" DRILL PRESS

17" DRILL
PRESS

17"
VARIABLE SPEED
DRILL PRESS

SERIES 2000
8-STEP PULLEY
DRILLING MACHINE

SERIES 2000
VARIABLE SPEED
DRILLING MACHINE

1 3/8" CAPACITY
GEARED HEAD
DRILLING MACHINE

1. IF YOU ARE NOT thoroughly familiar with the operation of Drill Presses, obtain advice from your Supervisor or Instructor.

2. MAKE SURE wiring codes and recommended electrical connections are followed and that machine is properly grounded.

3. REMOVE tie, rings, watch and other jewelry, and roll up sleeves.

4. ALWAYS wear safety glasses or a face shield.

5. GUARDS should be in place and used at all times.

6. CHANGE VARIABLE SPEEDS with the motor running.

7. MAKE all adjustments with the power off.

8. BE SURE drill bit or cutting tool is securely locked in the chuck.

9. BE SURE chuck key is removed from the chuck before turning on power.

10. ADJUST the table or depth stop to avoid drilling into the table.

11. HOLD the material securely with a vise or clamps.

12. DISCONNECT drill from the power source when making repairs.

13. SHUT OFF the power, remove the drill bit or cutting tool, and clean the table before leaving the machine.