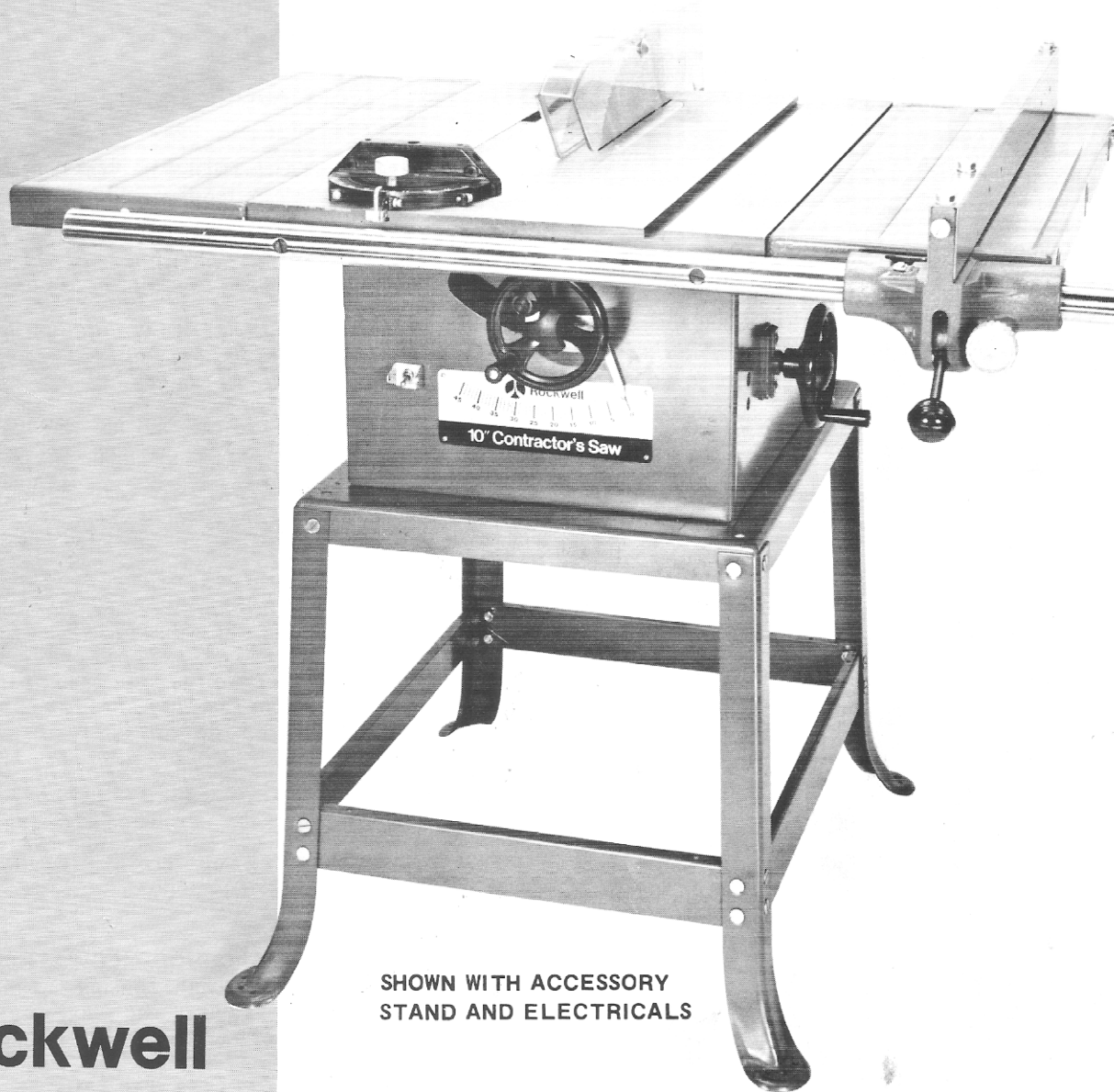


Instruction manual

10'' (254 mm) Contractors' Saw



SHOWN WITH ACCESSORY
STAND AND ELECTRICALS



The Serial No. and Model No. plate is attached to the rear brace of the saw cabinet. Locate this plate and record the Serial No. and Model No. in your manual for future reference.

SERIAL NO. 80L00280
MODEL NO. 34-440

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.

ROCKWELL INTERNATIONAL
MANAGER OF PRODUCT SAFETY
POWER TOOL DIVISION
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 lug 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, or expose them to rain. Keep work area well lighted.

7. KEEP CHILDREN AND VISITORS AWAY. All children and 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, gloves, neckties, or jewelry to get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.

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 the owner's manual for recommended accessories. The use of improper accessories may cause hazards.

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 carefully checked to ensure that it will operate properly and perform its intended function — check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

21. DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

22. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.

23. DRUGS, ALCOHOL, MEDICATION. Do not operate tool while under the influence of drugs, alcohol or any medication.

ADDITIONAL SAFETY RULES FOR CIRCULAR SAWS

1. ALWAYS use guard, splitter and anti-kickback fingers on all "thru-sawing" operations. Thru-sawing operations are those when the blade cuts completely through the work piece as in ripping or cross cutting.

2. ALWAYS hold the work firmly against the miter gage or fence.

3. ALWAYS use a push stick for ripping narrow stock. Refer to ripping applications in instruction manual where push stick is covered in detail.

4. NEVER perform any operation "free-hand" which means using your hands to support or guide the work piece. Always use either the fence or the miter gage to position and guide the work.

5. NEVER stand or have any part of your body in line with the path of the saw blade.

6. NEVER reach behind or over the cutting tool with either hand for any reason.

7. MOVE the rip fence out of the way when cross cutting.

8. **WHEN** cutting mouldings, **NEVER** run the stock between the fence and the moulding cutterhead. Refer to moulding applications in Instruction Manual for details.

9. **DIRECTION OF FEED.** Feed work into a blade or cutter against the direction or rotation of the blade or cutter only.

10. **NEVER** use the fence as a cut-off gage when cross cutting.

11. **NEVER** attempt to free a stalled saw blade without first turning the saw OFF.

12. **PROVIDE** adequate support to the rear and sides of the saw table for wide or long workpieces.

13. **AVOID KICKBACKS** (work thrown back toward you) by keeping blade sharp, keeping rip fence parallel to the saw blade, keeping splitter and antikickback fingers and guard in place and operating, by not releasing work before it is pushed all the way past the saw blade, and by not ripping work that is twisted or warped or does not have a straight edge to guide along the fence.

14. **AVOID** awkward operations and hand positions where a sudden slip could cause your hand to move into the cutting tool.

UNPACKING

Carefully unpack the saw and all loose items from the carton. Fig. 2, illustrates all the loose items packed with your saw.

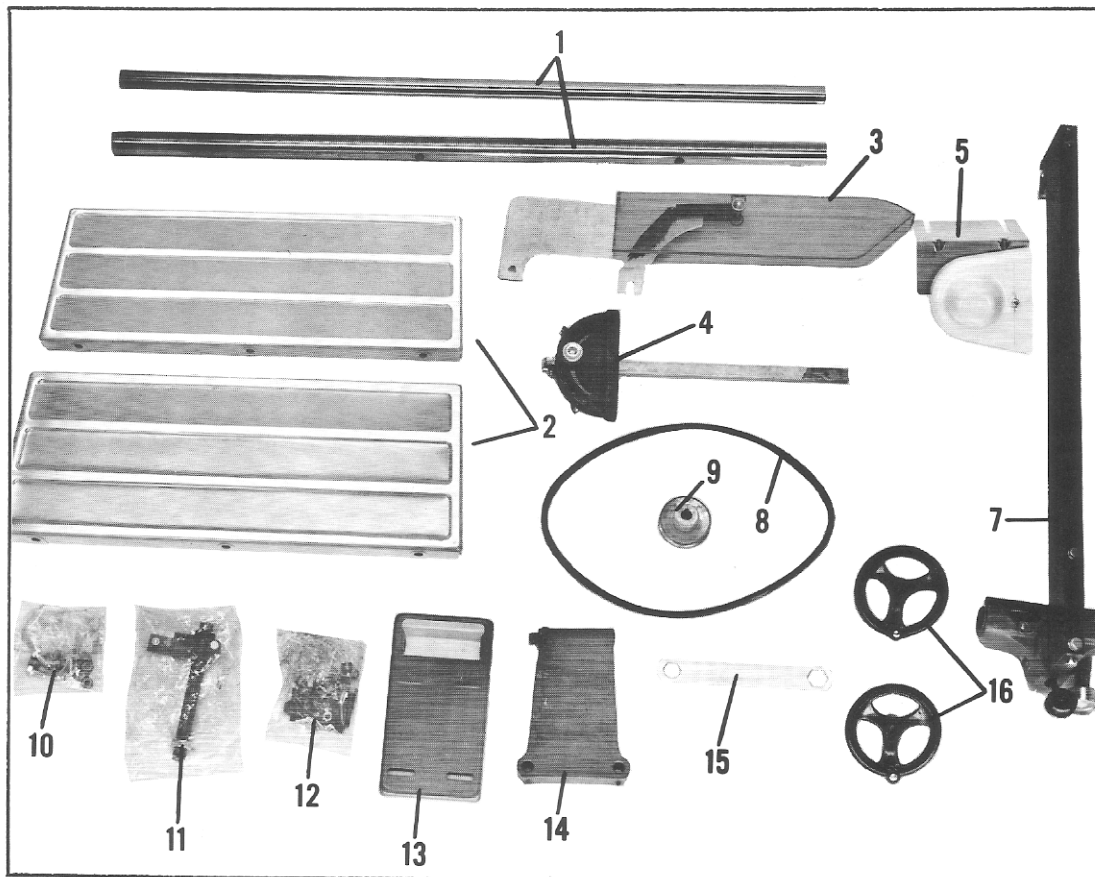


Fig. 2

- 1 Guide Rails
- 2 Extension Wings
- 3 See-Thru Blade Guard and Splitter
- 4 Miter Gage
- 5 Belt and Pulley Guard
- 6 Rip Fence
- 7 V-Belt
- 8 Motor Pulley
- 9 Hardware for Extension Wings
- 10 Blade Guard and Splitter Mounting Hardware
- 11 Tilting and Raising Lock Knobs, Switch Bracket, Motor Mounting Hardware, Guide Rail Hardware
- 12 Motor Mounting Plate
- 13 Motor Mounting Plate Bracket
- 14 Arbor Wrench
- 15 Raising and Tilting Handwheels

ASSEMBLING STAND

If you purchased the 50-315 Stand, assemble the stand as shown in Fig. 3, using the 24 screws and nuts supplied. Only tighten the screws and nuts finger tight at this time. NOTE: Fig. 4, illustrates the proper relationship of the screws and nuts to the stand. Place the stand on a level surface and tighten the screws and nuts in the following order. First the eight lower tie bar screws and nuts (A), second the eight upper tie bar screws and nuts (B), and third the eight top shelf screws and nuts (C) Fig. 4.

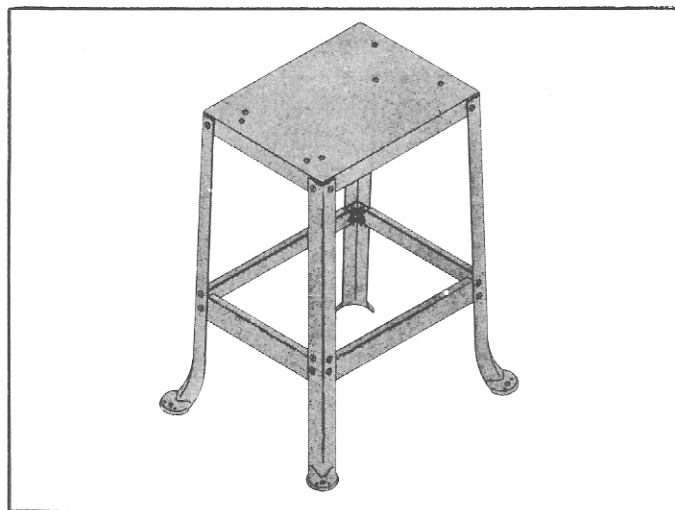


Fig. 3

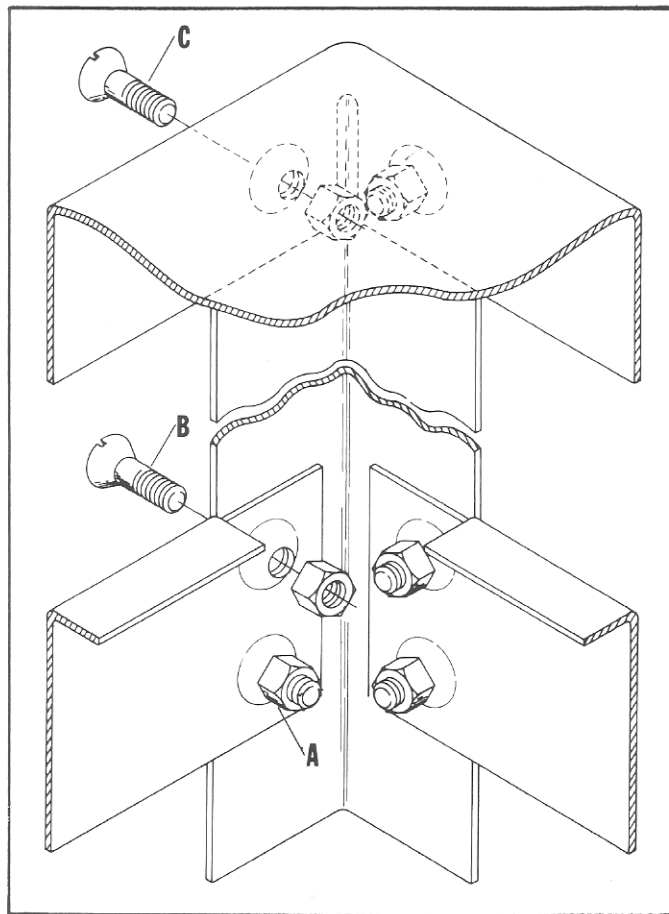


Fig. 4

ASSEMBLING SAW TO STAND OR BENCH

Assemble the saw to the 50-315 Steel Stand. **IMPORTANT:** If the saw is to be used without the 50-315 Steel Stand, we suggest that it always be fastened to a supporting surface using the holes on the bottom ledge of the saw cabinet. Fig. 5, illustrates the size and center to center distance of the holes to be drilled in the bench. Care must be taken that a hole is provided in the supporting surface to facilitate the removal of saw dust.

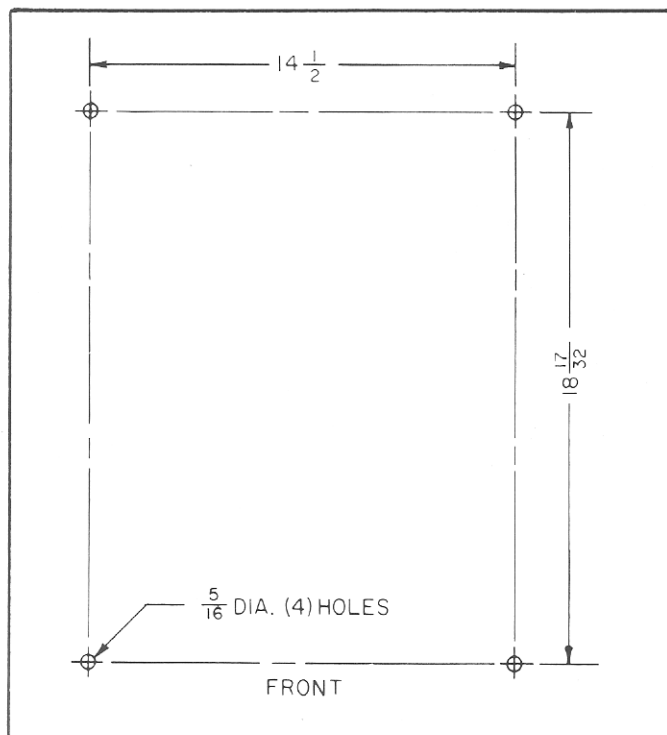


Fig. 5

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.

ASSEMBLING MOTOR MOUNTING BRACKET AND PLATE

1. Assemble the motor mounting bracket (A) to the two posts (B) and tighten set screws (C), as shown in Fig. 6.
2. Loosen screw that holds rod (D) in place and remove rod (D) from motor mounting bracket (A) Fig. 6.
3. Assemble motor mounting plate (E) Fig. 6, to the motor mounting bracket (A) and reassemble rod (D) to the plate and bracket. Make sure screw that holds the rod (D) in place is tightened into the V-groove in the rod.

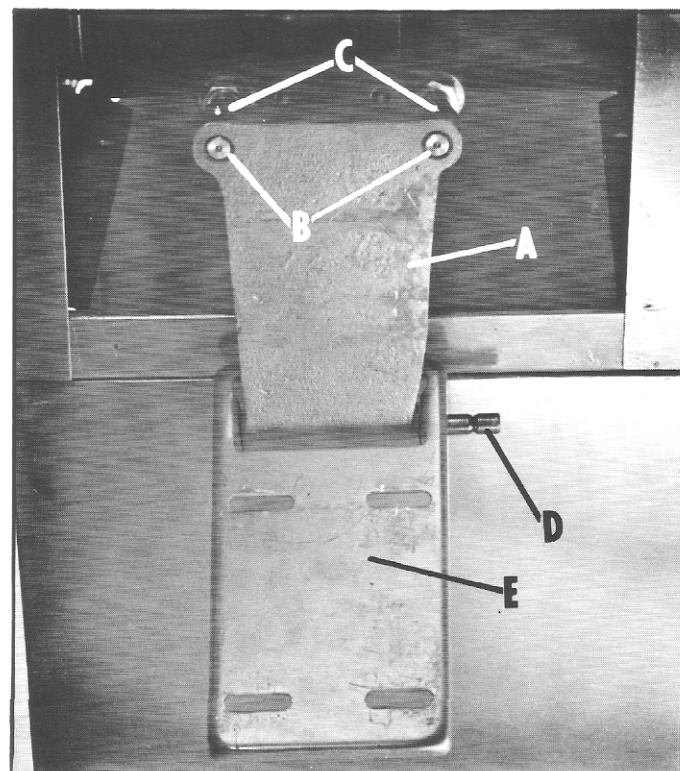


Fig. 6

RECOMMENDED MOTOR FOR YOUR SAW

The motor recommended for use with your saw is the 62-042 1½" H.P. Ball Bearing, Capacitor Start, 115 Volt motor.

This motor has been specially selected to best supply power to your machine and the relative safety of the machine is enhanced by its use. We therefore strongly suggest that only this motor be used as the use of other motors may be detrimental to the performance and safety of the saw.

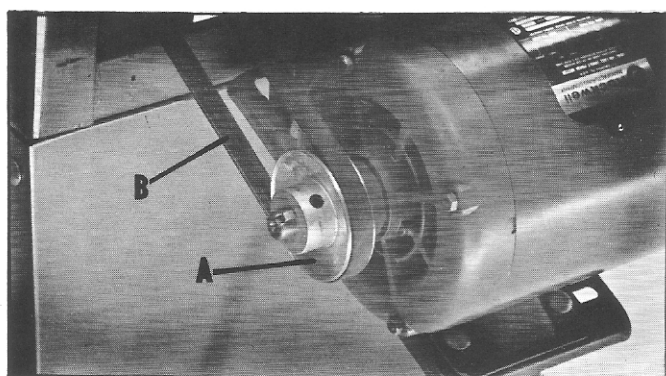


Fig. 7

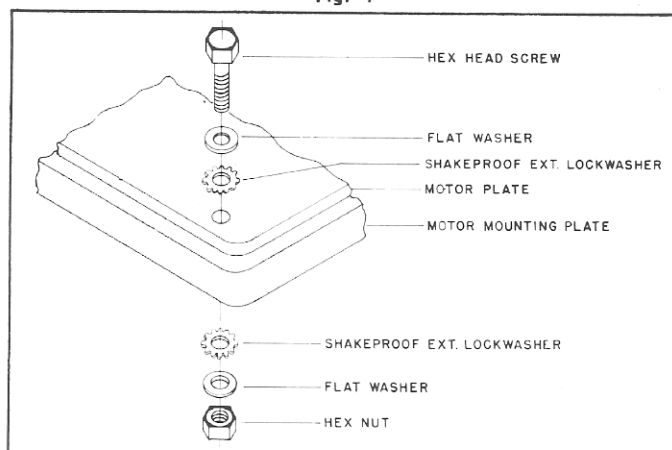


Fig. 7A

ASSEMBLING MOTOR, MOTOR PULLEY, BELT & PULLEY GUARD, AND V-BELT

If you purchased the motor recommended for use with your saw, make sure the motor is **DISCONNECTED** from the power source and assemble it to your saw as follows:

1. Assemble motor pulley (A) Fig. 7, to the motor shaft with hub of pulley out. Tighten set screw in motor pulley against key in motor shaft, as shown in Fig. 7.
2. Assemble motor to motor mounting plate, as shown in Fig. 7, using the four hex head screws, eight flat washers, eight shakeproof lockwashers and four nuts supplied. Do not tighten at this time.
3. Fig. 7A 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 shakeproof lockwashers in the manner shown in Fig. 7A.

4. Assemble the carriage bolt (A) to the belt and pulley guard bracket, using the 11/32" flat washer (B) and Tinnerman nut (C), as shown in Fig. 8.

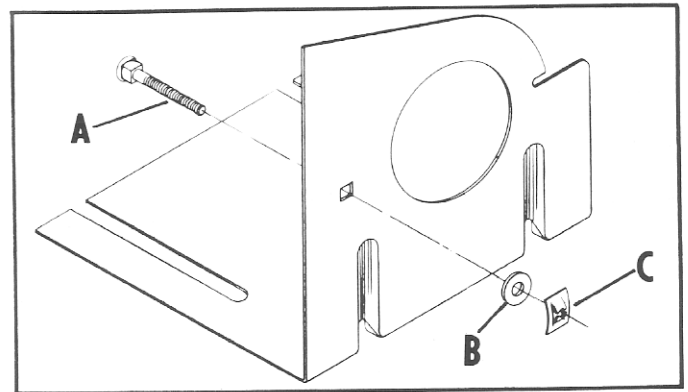


Fig. 8

5. Slide the belt and pulley guard bracket (A) between the motor plate and motor mounting plate, as shown in Fig. 9.

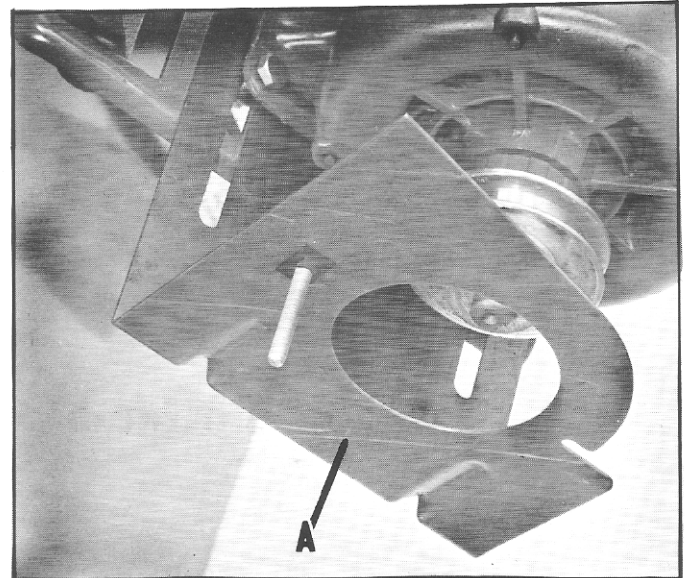


Fig. 9

6. Position the belt and pulley guard bracket (A) so that the motor pulley (B) is centered and through the hole in the belt and pulley guard bracket, as shown in Fig. 10. Tighten motor mounting screws, washers, lockwashers and nuts.

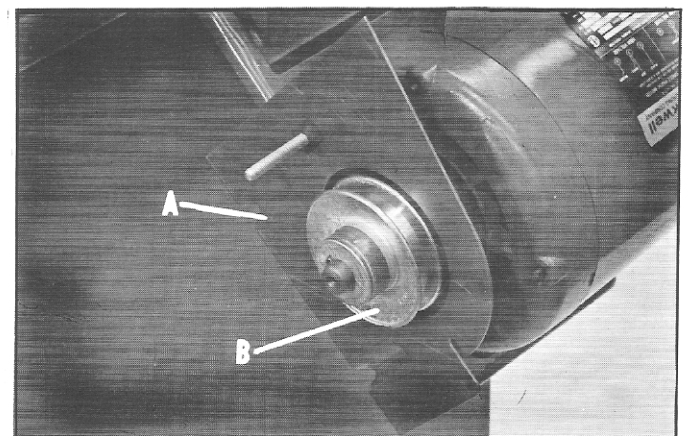


Fig. 10

7. Using a straight edge, align the motor pulley to the arbor pulley. If necessary move motor pulley in or out on motor shaft. NOTE: Be sure guard bracket is still centered and aligned with pulley as shown in Fig. 10.

8. Assemble V-belt to the motor pulley and arbor pulley and adjust for correct belt tension.

9. Place washer (C), spacer (D) and washer (E) on carriage bolt, as shown in Fig. 11.

10. Assemble the belt and pulley cover (A) to the bracket and fasten in place using the wing nut (B), as shown in Fig. 11 and 12.

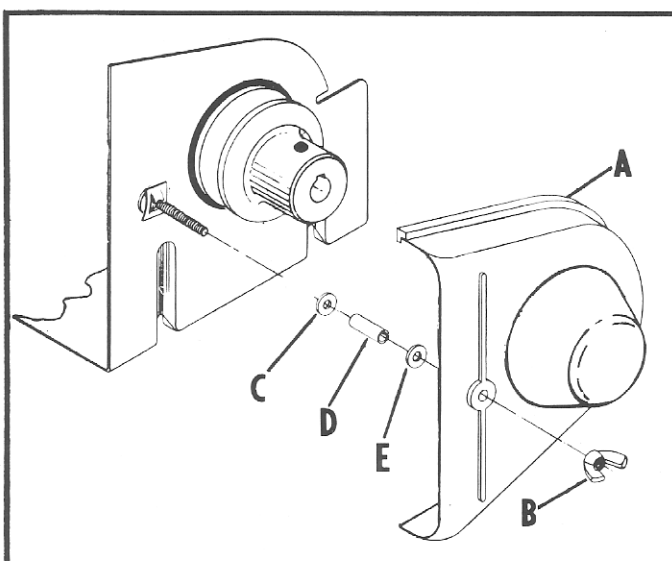


Fig. 11

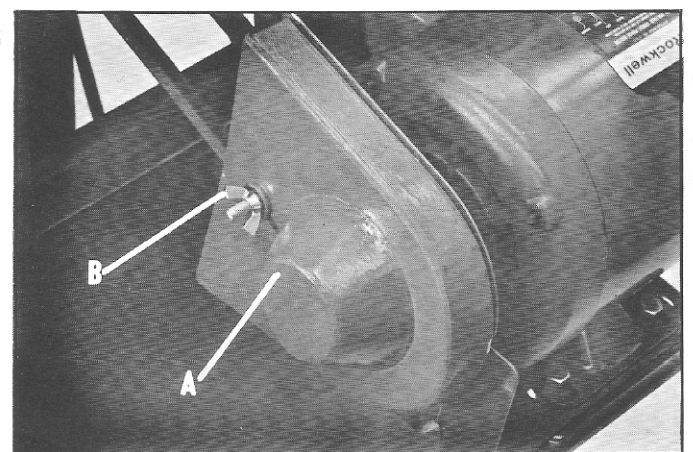


Fig. 12

ASSEMBLING SWITCH TO SAW CABINET

IMPORTANT: When assembling the switch to the saw cabinet, make sure the motor power cord is NOT connected to the power source.

1. Remove outer hex nut from switch stem. Leave shakeproof lockwasher (A) Fig. 13, and inside hex nut on switch. **NOTE:** The proper grounding of the switch to prevent shock hazard, depends on the use of the shakeproof lockwasher in the manner shown.

2. Insert switch stem through hole in front of saw cabinet making sure the keyway in the switch stem is in the down position.

3. Place switch bracket (B) Fig. 14, on switch stem with key in switch bracket engaged with keyway in switch stem and fasten in place with hex nut (C) that was removed in STEP 1.

4. **IMPORTANT:** After attaching switch to cabinet use the two tie straps provided and tie the power cord and motor cord to front hole located on the ledge of the saw cabinet and the motor cord to the back hole, as shown in Fig. 14A. Leave all excess motor cord hang out of the back of cabinet.

5. **IMPORTANT:** We suggest that when the saw is not in use, the switch be locked in the "OFF" position using a padlock, as shown in Fig. 15. Catalog No. 49-031 Padlock is available as an accessory.

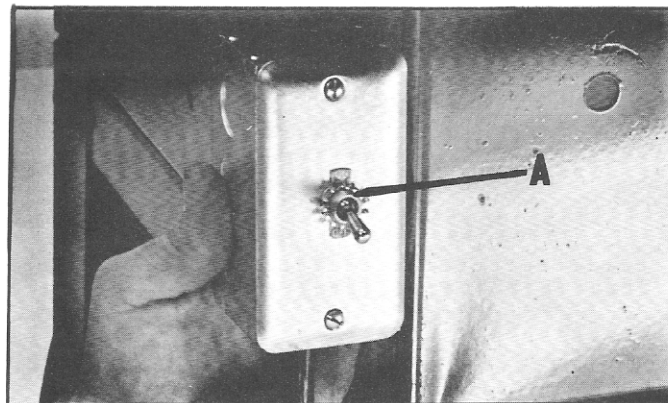


Fig. 13

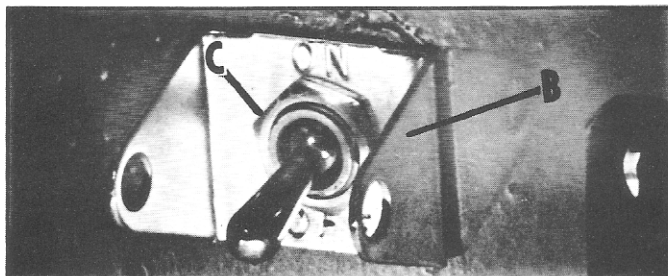


Fig. 14

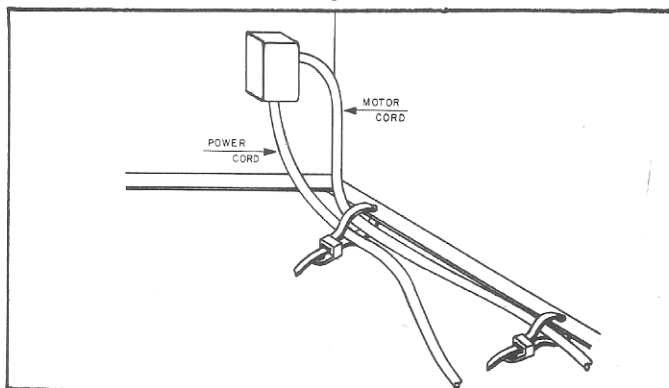


Fig. 14 A

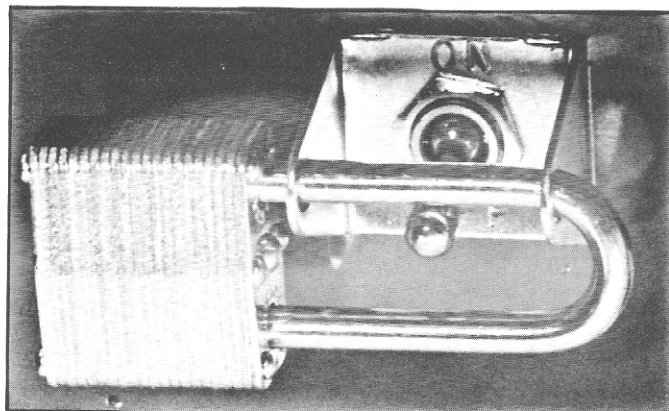


Fig. 15

ASSEMBLING RAISING AND TILTING HANDWHEELS AND LOCK KNOBS

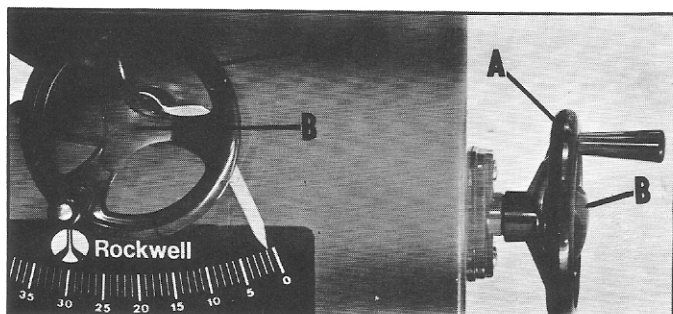


Fig. 16

Assemble the raising and tilting handwheels (A) and lock knobs (B) to the raising and tilting screws, as shown in Fig. 16. Make sure the slot in the handwheels engage with the roll pins in the raising and tilting screws.

ASSEMBLING EXTENSION WINGS

The extension wings are to be fastened to each end of the table. A straight edge should be used to level the extension wings to the table. To assemble the extension wings to the saw table, proceed as follows:

1. If your saw table has through holes on the side of the table, attach the extension wing to the table, as shown in Fig. 17, using the 7/16-20 x 1-1/2" long screws, washers and nuts.

2. If your saw table has threaded holes on the side of the table, attach the extension wing to the table, as shown in Fig. 17, using the 7/16-20 x 1-1/2" long screws and washers. The nuts are discarded as they are not needed when the table is equipped with threaded holes.

NOTE: The saw must be bolted to the supporting surface or a sturdy ontrigger support must be used if a table extension over 24 inches long is attached to the saw.

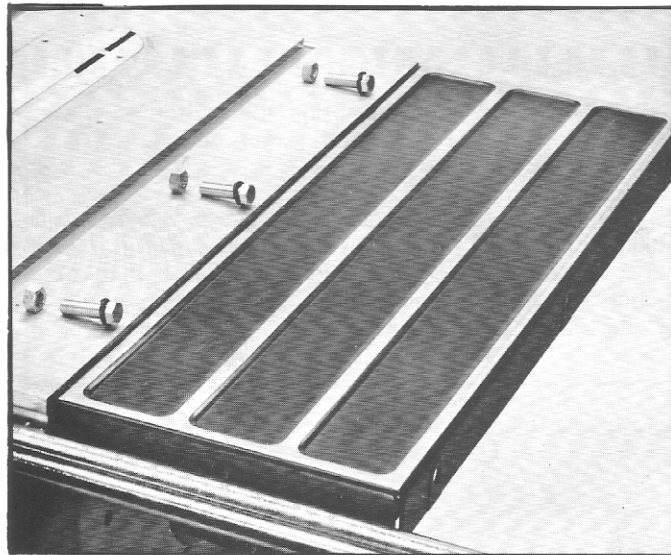


Fig. 17

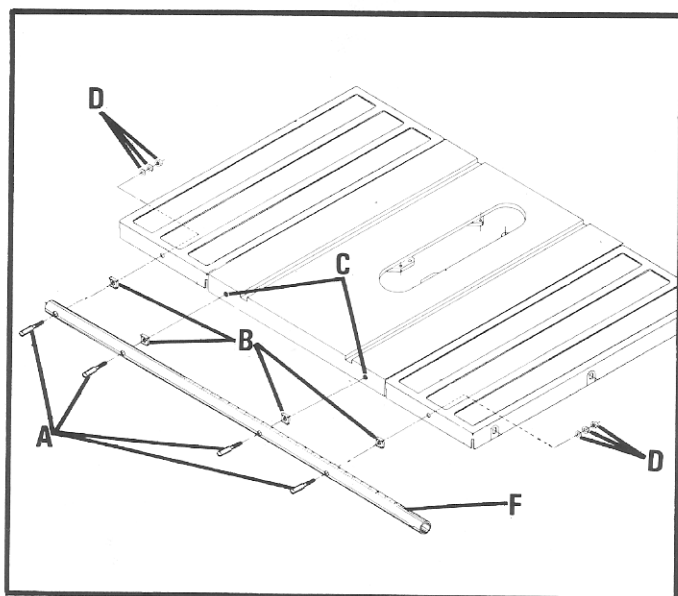


Fig. 18

ASSEMBLING GUIDE RAILS

1. The guide rail with the calibrations goes on the front of the saw table and should be positioned as shown in Fig. 18. Assemble the front guide rail (F) Fig. 18 to the saw table using two spacers (B) and special screws (A) threaded into tapped holes (C).

2. Use the remaining two spacers (B) and special screws (A) Fig. 18, to attach the front guide rail to the extension wings and fasten using the flat washers, lockwashers and hex nuts (D) provided.

3. Assemble the plain guide rail to the rear of the saw table and extension wings in the same manner as the front guide rail. Be sure both guide rails extend out to the same side of the saw.

ASSEMBLING BLADE GUARD AND SPLITTER ASSEMBLY

1. Remove cap screw, washer and outer splitter bracket holder (A) Fig. 19. Also remove blade, blade arbor nut and flange (B).

2. Hold a straight edge against the saw arbor flange (C) and splitter bracket (D) Fig. 19, and check for alignment on the top and bottom of the splitter bracket (D). If an adjustment is necessary loosen two screws that hold splitter bracket (D) to the trunnion and shift the bracket (D) to bring it into alignment with saw arbor flange. Then tighten the two screws that hold splitter bracket. NOTE: Snap out the nut retainer in the splitter bracket to make this adjustment easier to perform.

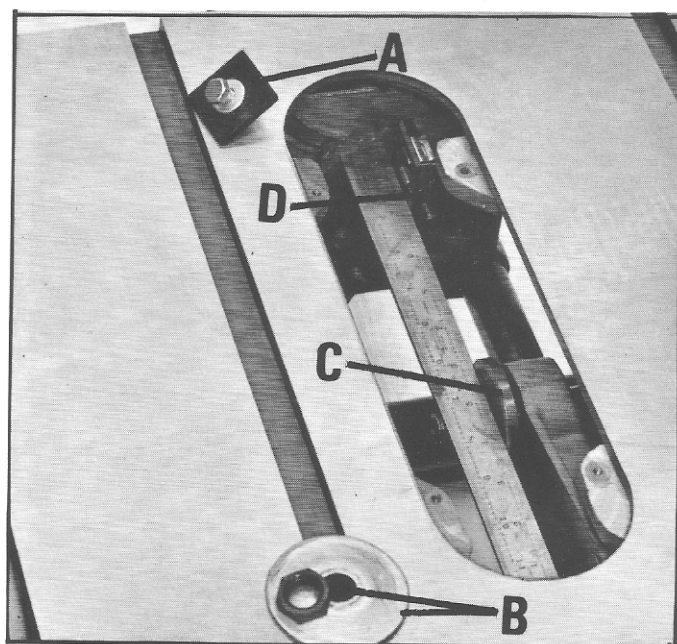


Fig. 19

3. Thread nut (A) Fig. 20, onto threaded end of rod (B) and thread rod (B) into the hole provided in the trunnion bracket (C) as shown. If necessary a rod or pin can be placed into hole (D) to assist in providing leverage when threading the rod (B) into the trunnion bracket. Then tighten nut (A) against trunnion bracket (C), as shown.

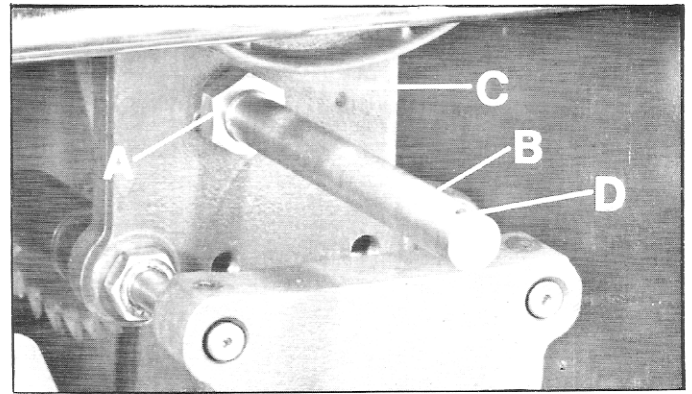


Fig. 20

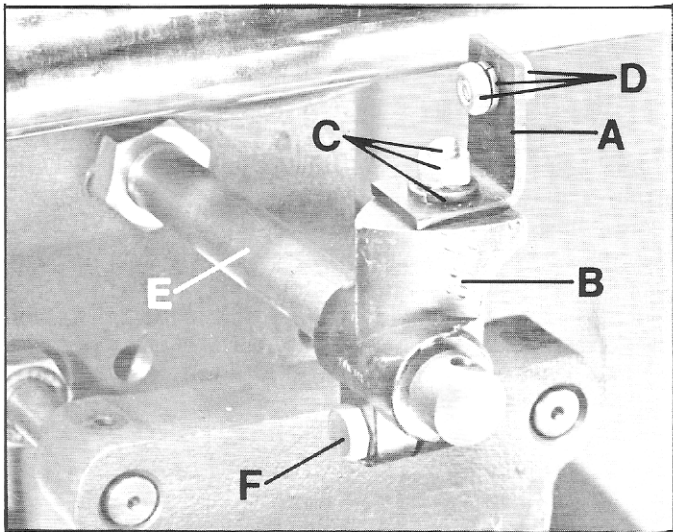


Fig. 21

4. Assemble bracket (A) Fig. 21, to bracket (B) using the screw, nut and lockwasher (C). Assemble the screw, nut and lockwasher (D) to bracket (A) as shown.

5. Place bracket (B) Fig. 21, on rod (E) as shown, and fasten using the screw and nut (F).

6. Assemble the center portion of the splitter to the splitter bracket (D) Fig. 19, and replace splitter bracket holder (A) Fig. 19.

7. Remove nut, screw and lockwasher (B) Fig. 22, from the rear splitter bracket and assemble the splitter (A) to the bracket using the screw, nut and lockwasher (A).

8. Replace saw blade and using a straight edge make sure the splitter (A) Fig. 22, is in alignment with the saw blade, as shown. If necessary, the rear mounting bracket assembly (C) can be adjusted to bring the splitter into alignment with the saw blade.

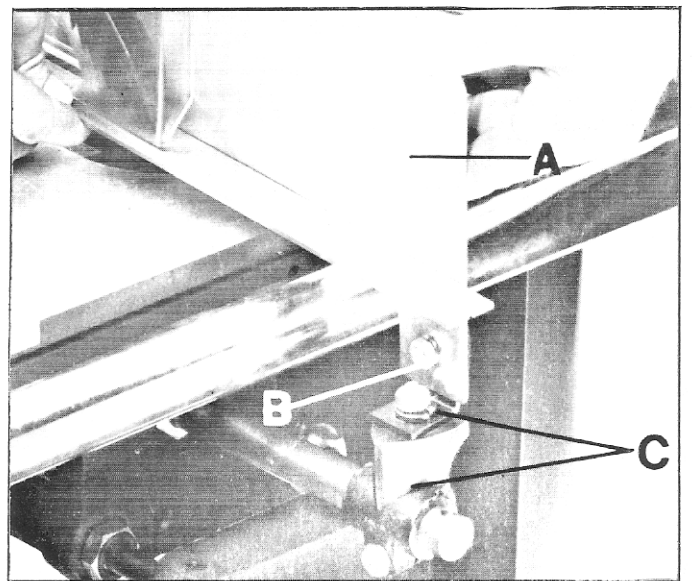


Fig. 22

TABLE INSERT

The table insert (A) is placed in the opening in the saw table, as shown in Fig. 23, and should be level with the surface of the saw table. To adjust the table insert use a straight edge and screwdriver and turn the four adjusting screws in or out until the insert is flush with the table, as shown in Fig. 23.

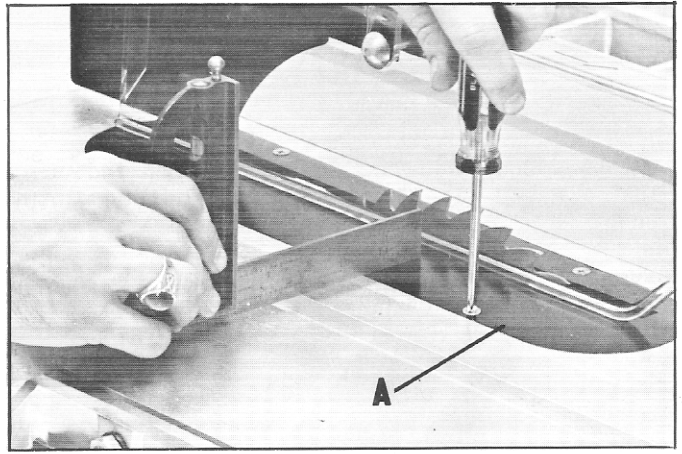


Fig. 23

CONNECTING SAW TO POWER SOURCE

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. 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.

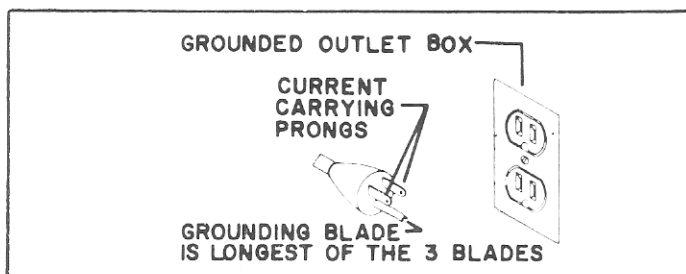


Fig. 24

115 VOLT, SINGLE PHASE OPERATION

This tool must be grounded while in use to protect the operator from electric shock. The motors recommended for use with your saw are shipped wired for 115 Volt, Single Phase, and are equipped with an approved 3-conductor cord and 3-prong grounding type plug to fit the proper grounding type receptacle, as shown in Fig. 24. The green conductor in the cord is the grounding wire. Never connect the green wire to a live terminal.

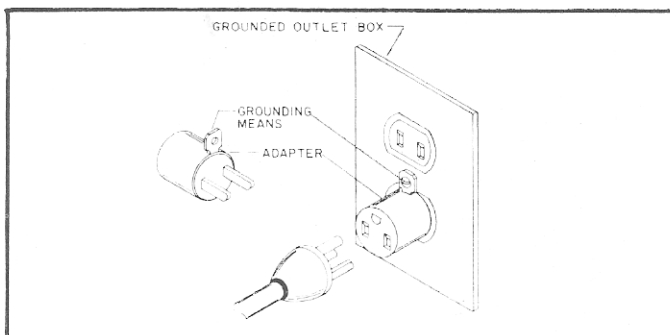


Fig. 25

An adapter, shown in Fig. 25, 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. 25.

230 VOLT, SINGLE PHASE OPERATION

The motors recommended for use with your saw are dual voltage, 115/230 Volt motors. If it is desired to operate your saw at 230 Volt, Single Phase, it is necessary to reconnect the motor leads in the motor junction box, by following the instructions given on the motor nameplate.

IMPORTANT: Make sure motor is disconnected from power source before reconnecting motor leads.

It is also necessary to replace the 115 Volt plug, supplied with the motor, with a 230 Volt plug that has two flat, current-carrying prongs in tandem, and one round or "U"-shaped longer ground prong, as shown in Fig. 26. This is used only with the proper mating 3-conductor grounding receptacle, as shown in Fig. 26.

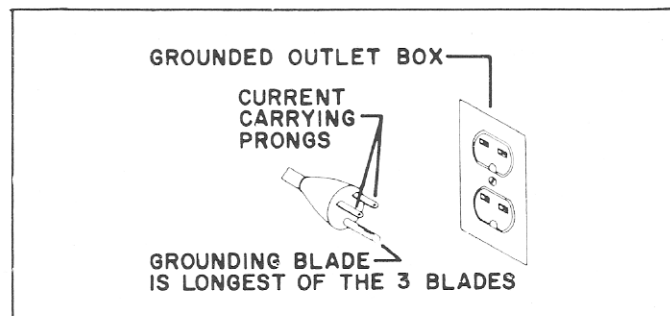


Fig. 26

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.

OVERLOAD PROTECTION

The motor on your saw is equipped with a reset overload relay button. If the motor shuts off or fails to start due to overloading (cutting stock too fast, using a dull blade, using the saw beyond its capacity, etc.) or low voltage turn the switch to the "off" position, let the motor cool three to five minutes and push the reset button which will reset the overload device. The motor can then be turned on again in the usual manner.

BLADE RAISING AND TILTING MECHANISM

To raise or lower the saw blade, loosen lock knob (A) Fig. 27, and turn raising handwheel (B). With the exception of hollow ground blades, the blade should be raised 1/8" to 1/4" above the top surface of the material being cut. With hollow ground blades the blade should be raised to the maximum to provide chip clearance.

To tilt the saw blade, loosen lock knob (C) Fig. 27, and turn tilting handwheel (D). When desired angle is obtained, tighten lock knob (C).

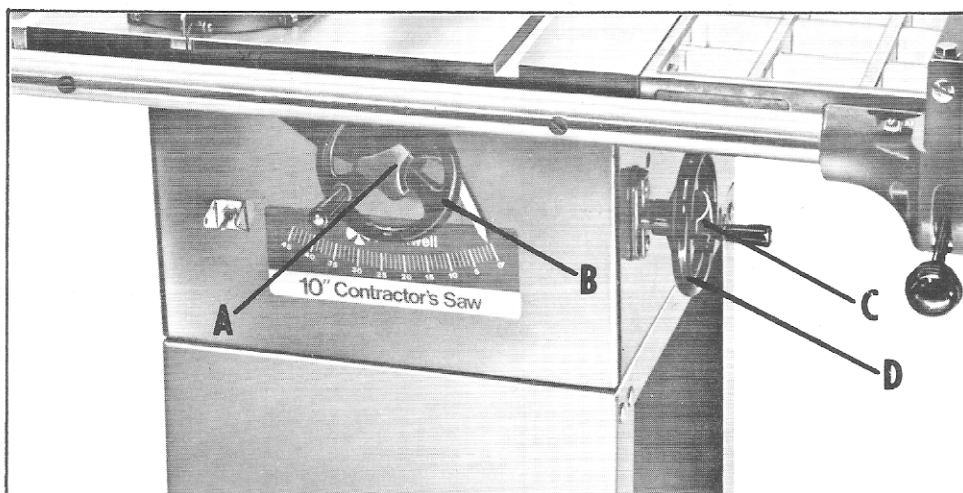


Fig. 27

ADJUSTMENT FOR "WEAR" IN RAISING MECHANISM

After a long period of time, it is possible that the raising worm and the teeth on the arbor bracket will wear slightly resulting in play in the raising mechanism. To compensate for this wear the raising worm and the arbor bracket can be brought closer together. This can be done as follows:

1. Remove lock knob and raising handwheel but do not remove pointer.
2. Loosen lock nut (A) Fig. 28, and using the pointer (B) as a lever turn to the right or left until all the perceptible play between the worm and arbor bracket is removed.
3. When this adjustment is completed, reset the pointer.

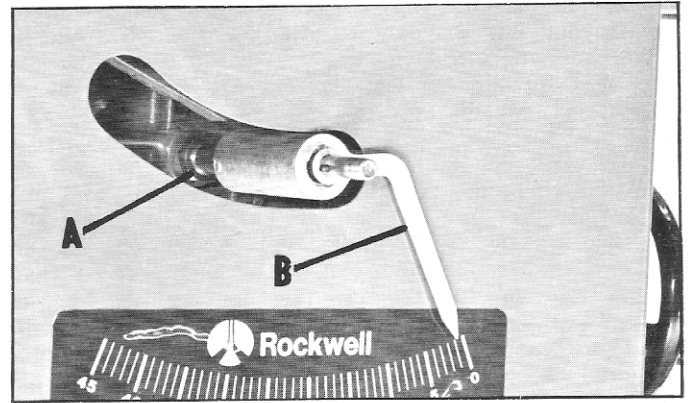


Fig. 28

ADJUSTING 90° POSITIVE STOP

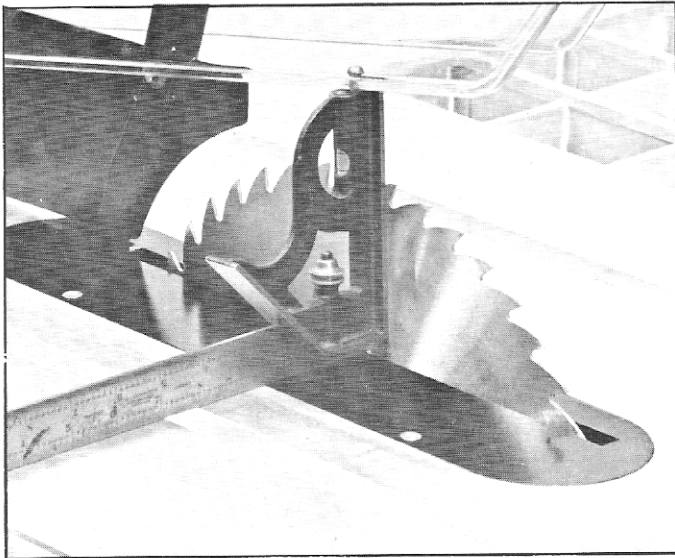


Fig. 29

Your saw is equipped with a positive stop at 90 degrees. To check and adjust the positive stop, proceed as follows:

1. Raise the saw blade to its maximum.
2. Set the blade at 90 degrees to the table by turning the blade tilting handwheel counterclockwise as far as it will go.
3. Place a square on the table as shown in Fig. 29, and check to see if the blade is at a perfect 90 degree angle to the table.

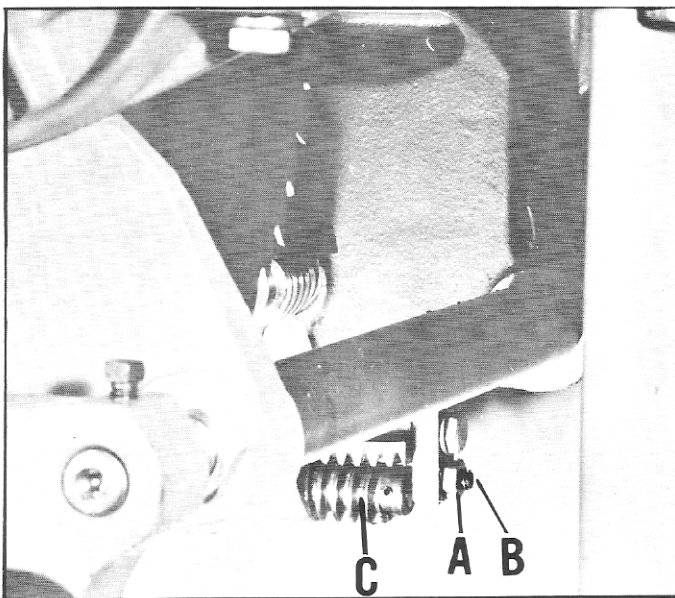


Fig. 30

4. If the blade is not at 90 degrees to the table, loosen locknut (A) Fig. 30, and back out adjusting stop screw (B). Then turn the blade tilting handwheel until you are certain the blade is at 90 degrees to the table. The adjusting stop screw (B) should then be turned until it bottoms against the end of the tilting screw (C) Fig. 30, and locked in this position with locknut (A). Recheck and adjust further if necessary.

RIP FENCE OPERATION AND ADJUSTMENTS

The rip fence can be used on either side of the saw blade. The most common location is on the right hand side. The rip fence is guided by means of guide rails fastened to the front and rear of the table. The front guide rail is calibrated to show the distance the fence is set from the saw blade.

To move the rip fence, raise the clamp lever (A) Fig. 31, as far as it will go and move the fence to the desired position on the table. For fine movement of the rip fence, raise the clamp lever (A) Fig. 31, as far as it will go and push in and turn the "micro-set" knob (B).

When the clamp lever (A) Fig. 31, is all the way down, clamping action on the front and rear guide rails should be equal. If clamping action on the rear guide rail is more or less than clamping action of front guide rail, an adjustment of the rear clamp hook is made by turning screw (C) Fig. 31. Turning the screw (C) clockwise will increase tension and turning it counter-clockwise will decrease tension. When lowering clamp lever (A) slowly, you will notice clamp action on front guide rail first and as lever is moved downward to its lowest position, clamp action will take place on rear guide rail.

Your machine is shipped from the factory with the table adjusted so the miter gage slots are parallel to the saw blade. The fence, therefore, should be adjusted so it is parallel to the miter gage slots. To check the rip fence, set it at one of the miter gage slots and tighten the clamp lever (A) Fig. 31. If an adjustment is necessary, loosen the two front cap screws (D) Fig. 31 and raise the clamp lever (A). Move the rear end of the fence body to one side or the other until it is parallel with the miter gage slot. Then lock the clamp lever (A), by pushing it down, and tighten the two clamp screws (D).

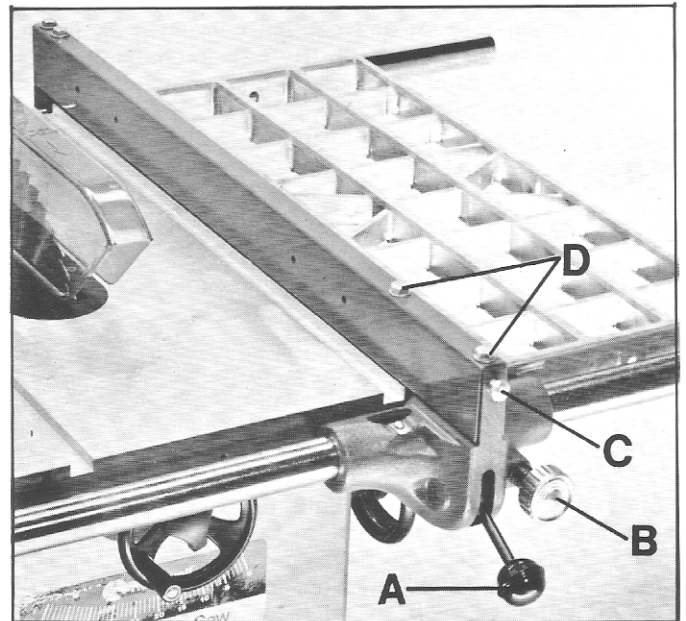


Fig. 31

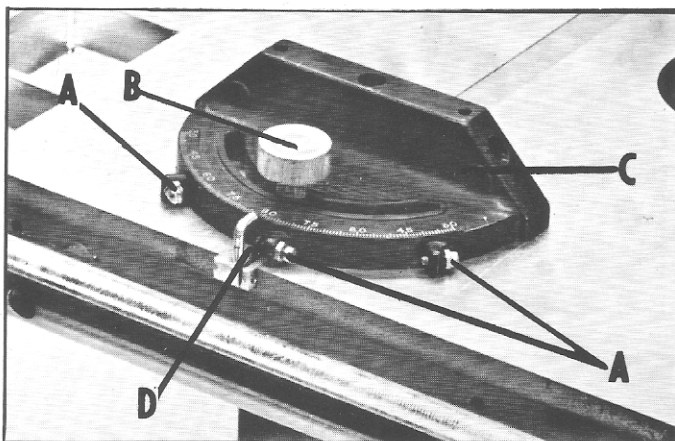


Fig. 32

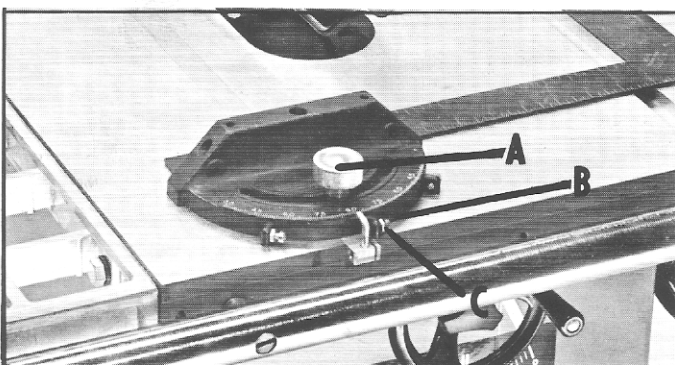


Fig. 33

MITER GAGE OPERATION AND ADJUSTMENTS

Your Rockwell Miter Gage is accurately constructed and equipped with individually adjustable index stops at 90 degrees and 45 degrees right and left. Adjustment to the index stops can be made by tightening or loosening the three adjusting screws (A) Fig. 32.

To operate the miter gage, simply loosen the lock knob (B) Fig. 32, and move the body of the miter gage (C) to the desired angle. The miter gage body will stop at 0 degrees and 45 degrees both right and left. To rotate the miter gage body past these points, the stop link (D) Fig. 32, must be flipped out of the way.

To check and adjust the 90 degree setting of the miter gage, set the gage at 90 degrees, as shown in Fig. 33. Place a square against the face of the miter gage and along one of the miter gage slots, as shown. If the gage is not at 90 degrees, loosen the locking knob (A) and move the miter gage body until you are certain the gage is set at 90 degrees. Then adjust the stop screw (B) so it strikes the stop link when the gage is at 90 degrees, and tighten nut (C).

REMOVING SAW BLADE

When removing saw blades from your saw, make sure the saw is disconnected from the power source. Remove the table insert, place a block of wood against the front of the saw blade and using the arbor nut wrench, turn the arbor nut toward you.

OPERATION

Plain sawing includes ripping and cross cutting, plus a few other standard operations of a fundamental nature. The following methods feature safety. 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. It is good practice to make trial cuts using scrap material when setting up your saw for operation.

CROSS CUTTING

Cross cutting requires the use of the miter gage to position and guide the work. Place the work against the miter gage and advance both the gage and work toward the saw blade, as shown in Fig. 34. The miter gage may be used in either table slot, however, most operators prefer the left groove for average work. When bevel cutting (blade tilted), use the table groove that does not cause interference of your hand or miter gage with the saw blade guard.

Start the cut slowly and hold the work firmly against the miter gage and the table. One of the rules in running a saw is that you never hang onto or touch a free piece of work. Hold the supported piece, not the free piece that is cut off. The feed in cross cutting continues until the work is cut in two, then the miter gage and work are pulled back to the starting point. Before pulling the work back, it is good practice to give the work a little sideways shift to move the work slightly away from the saw blade. Never pick up any short length of free work from the table while the saw is running. A smart operator never touches a cut-off piece unless it is at least a foot long. Never use the fence as a cut-off gage when cross cutting.

For added safety and convenience the miter gage can be fitted with an auxiliary wood-facing that should be at least 1 inch higher than the maximum depth of cut, and should extend 12 inches or more on either side of the blade. This auxiliary wood-facing can be fastened to the front of the miter gage by using two wood screws through the holes provided in the miter gage body and into the wood-facing.

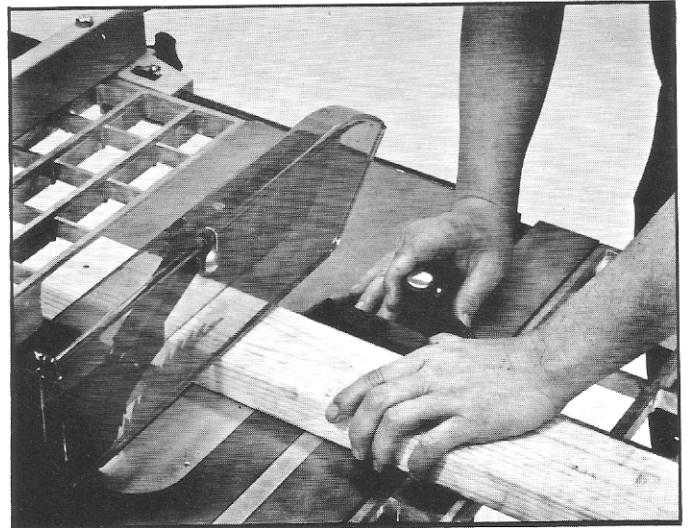


Fig. 34

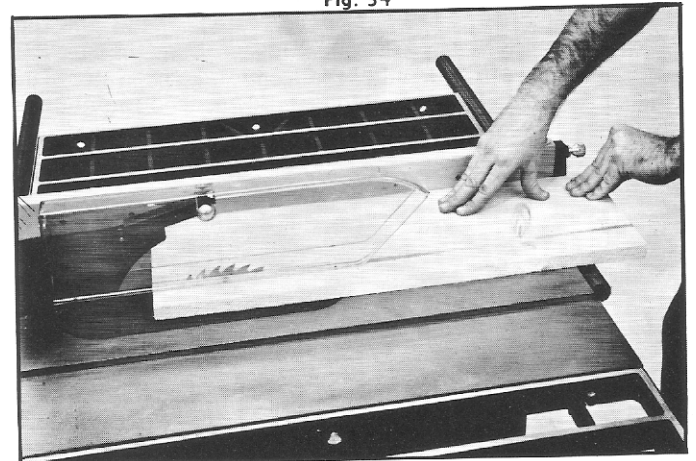


Fig. 35

RIPPING

Ripping is the operation of making a lengthwise cut through a board, as shown in Fig. 35, and the rip fence is used to position and guide the work. One edge of the work rides against the rip fence while the flat side of the board rests on the table. Since the work is pushed along the fence, it must have a straight edge and make solid contact with the table. The saw guard must be used. The guard has anti-kickback fingers and a splitter to prevent the saw kerf from closing and binding the blade.

Start the motor and advance the work holding it down and against the fence. Never stand in the line of the saw cut when ripping. Hold the work with both hands and push it along the fence and into the saw blade as shown in Fig. 35. The work can then be fed through the saw blade with one or two hands. After the work is beyond the saw blade and anti-kickback fingers the hand is removed from the work. When this is done

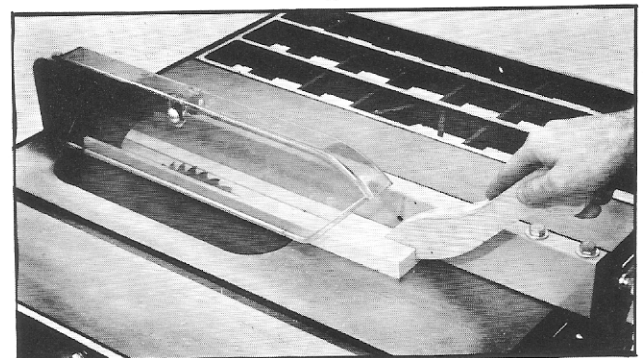


Fig. 36

the work will either stay on the table, tilt up slightly and be caught by the rear end of the guard or slide off the table to the floor. Alternately, the feed can continue to the end of the table, after which the work is lifted and brought back along the outside edge of

the fence. The waste stock remains on the table and is not touched with the hands until the saw is stopped unless it is a large piece allowing safe removal.

If the ripped work is less than 3 inches wide, a push stick should be used to complete the feed, as shown in Fig. 36. The push stick can easily be made from scrap material. When ripping 2 inches or narrower, make an auxiliary guide and fasten it to the rip fence, and use a push stick.

When cutting thin material (such as veneer), the material may slide or catch between the bottom of the rip fence and the table surface, causing loss of control of the work piece.

To prevent this from happening, a wood facing should be attached to the fence as follows:

1. Cut a piece of wood approximately $\frac{3}{4}$ " thick to the length and height of the rip fence.
2. Attach wood facing (A) Fig. 37 to the rip fence (B) using four wood screws (C) inserted through the holes provided as shown in Fig. 37.
3. Care should be taken that the wood facing fits flush to the table surface along edge (D) Fig. 37, so that thin work material cannot slide under.

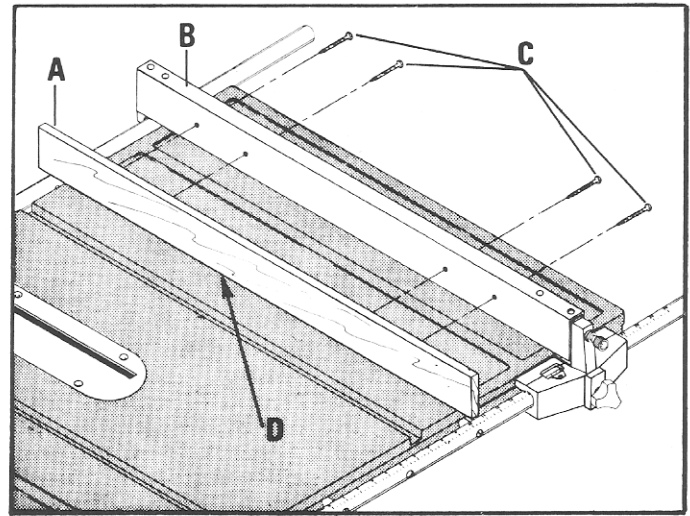


Fig. 37

USING ACCESSORY MOULDING CUTTERHEAD

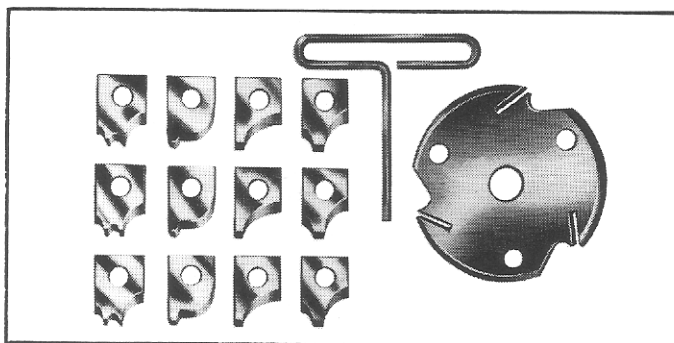


Fig. 38

Moulding is cutting a shape on the edge or face of the work. Cutting mouldings with a moulding cutterhead in the circular saw is a fast, safe and clean operation. The many different knife shapes available make it possible for the operator to produce almost any kind of mouldings, such as various styles of corner moulds, picture frames, table edges, etc.

The moulding head consists of a cutterhead in which can be mounted various shapes of steel knives, as shown in Fig. 38. Each of the three knives in a set is fitted into a groove in the cutterhead and securely clamped with a screw. The knife grooves should be kept free of sawdust which would prevent the cutter from seating properly.

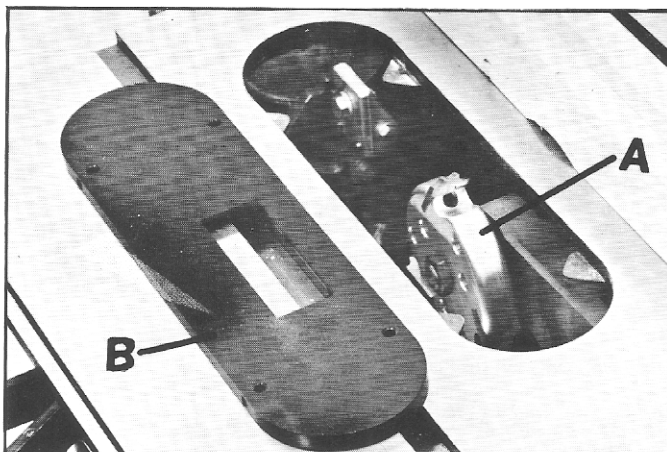


Fig. 39

The moulding cutterhead (A) Fig. 39, is assembled to the saw arbor in the same manner as the saw blade. The guard, splitter and anti-kickback finger assembly can not be used when moulding and must be removed from the saw as shown. Also, the accessory moulding cutterhead table insert (B) Fig. 39, must be used in place of the standard table insert.

It is necessary when using the moulding cutterhead to add wood-facing to one or both sides of the rip fence as shown in Fig. 40. The wood-facing is attached to the fence with wood screws through the holes provided in the fence. 3/4 inch stock is suitable for most work although an occasional job may require 1 inch facing.

Position the wood-facing over the cutterhead with the cutterhead below the surface of the table. Turn the saw on and raise the cutterhead. The cutterhead will cut its own groove in the wood-facing. Fig. 40 shows a typical moulding operation. NEVER USE MOULDING CUTTERHEAD IN A BEVEL POSITION.

IMPORTANT: NEVER RUN THE STOCK BETWEEN THE FENCE AND THE MOULDING CUTTERHEAD AS IRREGULAR SHAPED WOOD WILL CAUSE KICK-BACK.

When moulding end grain, the miter gage is used. The feed should be slowed up at the end of the cut to prevent splintering.

In all cuts, attention should be given the grain, making the cut in the same direction as the grain whenever possible.

ALWAYS INSTALL BLADE GUARD AFTER OPERATION IS COMPLETE.

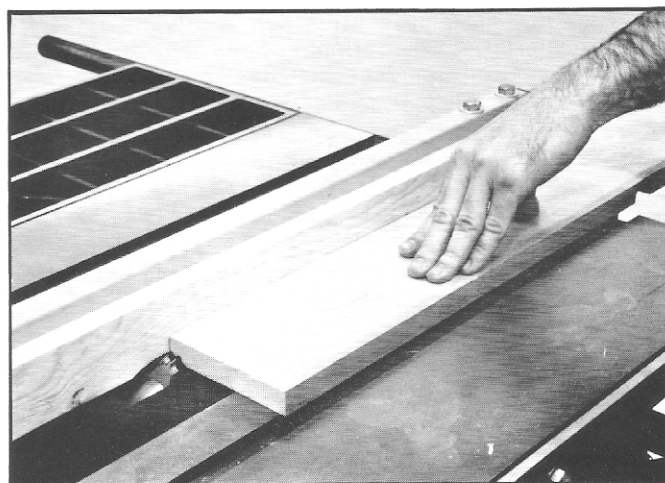


Fig. 40

USING ACCESSORY DADO HEAD

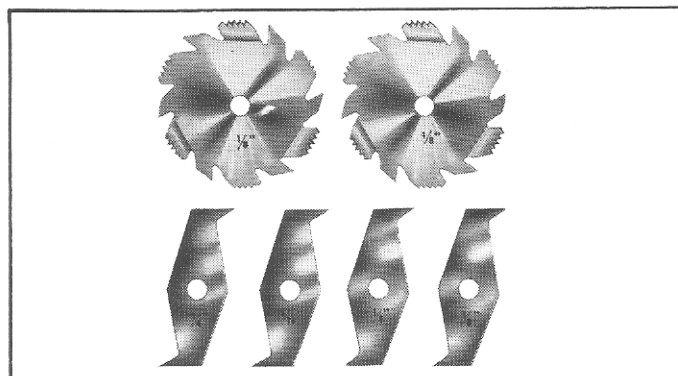


Fig. 41

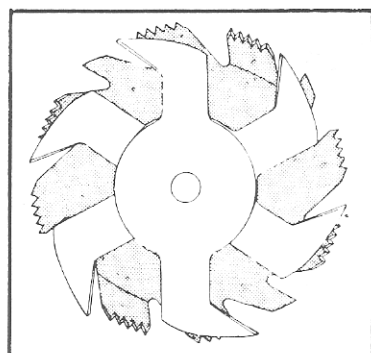


Fig. 42

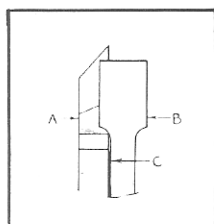


Fig. 43

Dadoing is cutting a rabbet or a wide groove into the work. Most dado head sets are made up of two outside saws and four or five inside cutters, as shown in Fig. 41. Various combinations of saws and cutters are used to cut grooves from 1/8" to 13/16" for use in shelving, making joints, tenoning, grooving, etc. The cutters are heavily swaged and must be arranged so that this heavy portion falls in the gullets of the outside saws, as shown in Fig. 42. The saw and cutter overlap is shown in Fig. 43, (A) being the outside saw, (B) and inside cutter, and (C) a paper washer or washers which can be used as needed to control the exact width of groove. A 1/4" groove is cut by using the two outside saws. The teeth of the saws should be positioned so that the raker on one saw is beside the cutting teeth on the other saw.

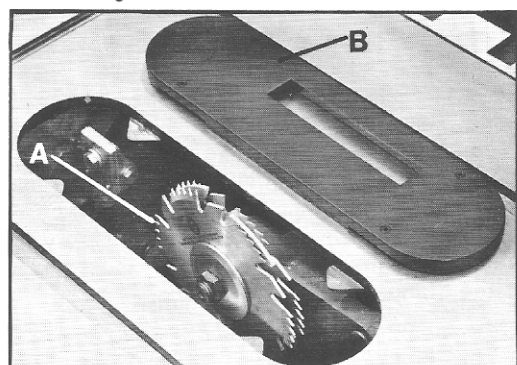


Fig. 44

The dado head set (A) Fig. 44, is assembled to the saw arbor in the same manner as the saw blade. The guard, splitter and anti-kickback finger assembly can not be used when dadoing and must be removed from the saw, as shown. Also, the accessory dado head table insert (B) Fig. 44, must be used in place of the standard table insert.

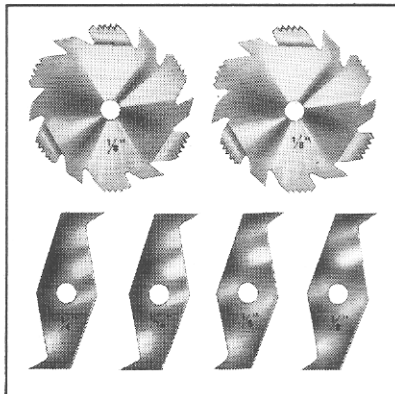
NEVER USE THE DADO HEAD IN A BEVEL POSITION.

ALWAYS INSTALL BLADE GUARD AFTER OPERATION IS COMPLETE.

ROCKWELL CIRCULAR SAW ACCESSORIES

DADO HEAD SETS

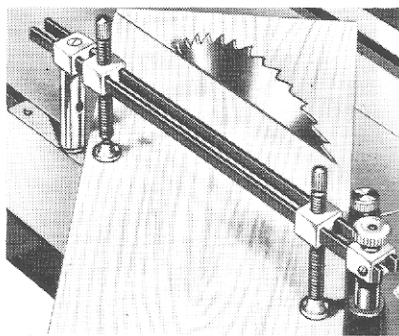
Sets are made of high quality steel, carefully hardened and tempered. Blades and chippers are matched to assure clean, even cuts with or across the grain.



No. 34-333 Production Type Dado Head Set. Consisting of two hollow-ground outer blades (6" dia. x $\frac{1}{8}$ " thick) and four inside cutters (one $\frac{1}{4}$ " thick; two $\frac{1}{8}$ " thick; one $\frac{1}{16}$ " thick). With $\frac{5}{8}$ " arbor hole. Cuts grooves from $\frac{1}{8}$ " to $\frac{13}{16}$ " wide. $3\frac{1}{2}$ lbs.

No. 33-212 Production Type Dado Head Set. Consisting of two hollow-ground outer blades (8" diameter by $\frac{1}{8}$ " thick) and four inside cutters (one $\frac{1}{4}$ " thick; two $\frac{1}{8}$ " thick; one $\frac{1}{16}$ " thick). With $\frac{5}{8}$ " arbor hole. Cuts grooves from $\frac{1}{8}$ " to $\frac{13}{16}$ " wide. 8 lbs.

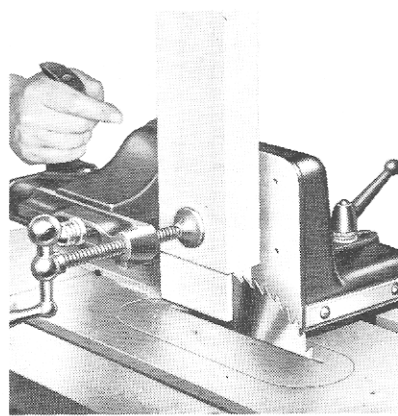
No. 34-334 Economy Dado Head Set. Consisting of two flat-ground outer blades (6" dia. x $\frac{1}{8}$ " thick) and five inside cutters (four $\frac{1}{8}$ " thick; one $\frac{1}{16}$ " thick). With $\frac{5}{8}$ " arbor hole. Cuts grooves from $\frac{1}{8}$ " to $\frac{13}{16}$ " wide. 4 lbs.



No. 34-568 (old 865) Clamp Attachment for Miter Gage. Holds work securely for accurate miter and cut-off operations. Complete with clamp bar, front and rear posts and two sliding clamp screws and blocks. For use with No. 34-895 Miter Gage. $1\frac{1}{2}$ lbs.

No. 34-873 (old 873) Extra Clamp Screw and Block Only. For use with No. 34-568 clamp attachment. $\frac{1}{2}$ lb.

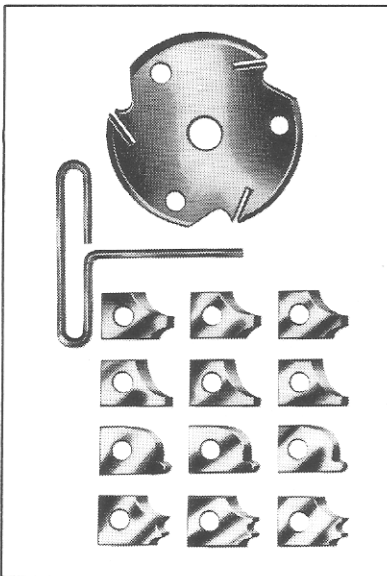
No. 43-170 (old 1170) Tenoner for use with No. 43-186 (old 1186) Sliding Jig. Can also be used on wood shaper. 21 lbs.



No. 34-172 (old 1172) Tenoning Attachment. Simplifies operation of cutting tenons for mortise and tenon joints. Stock can be fed with one hand—far removed from saw blade(s). Handles stock up to $2\frac{3}{4}$ " thick. Base plate included. 30 lbs.

No. 34-171 (old 1171) Spacer Collars. Set of two: $\frac{1}{4}$ " and $\frac{3}{8}$ " widths with $\frac{5}{8}$ " arbor hole. For spacing saw blades to cut tenons in one pass. 1 lb.

MOULDING CUTTERHEAD SETS



No. 34-813 Heavy Duty Moulding Cutterhead & Knife Set. Includes No. 34-562 (old 265) cutterhead, No. 34-521 (old 1521) wrench and Nos. 35-102, 35-103, 35-221 and 35-222 cutterhead knives. For use on $\frac{1}{2}$ " and $\frac{3}{4}$ " dia. arbors. 4 lbs.

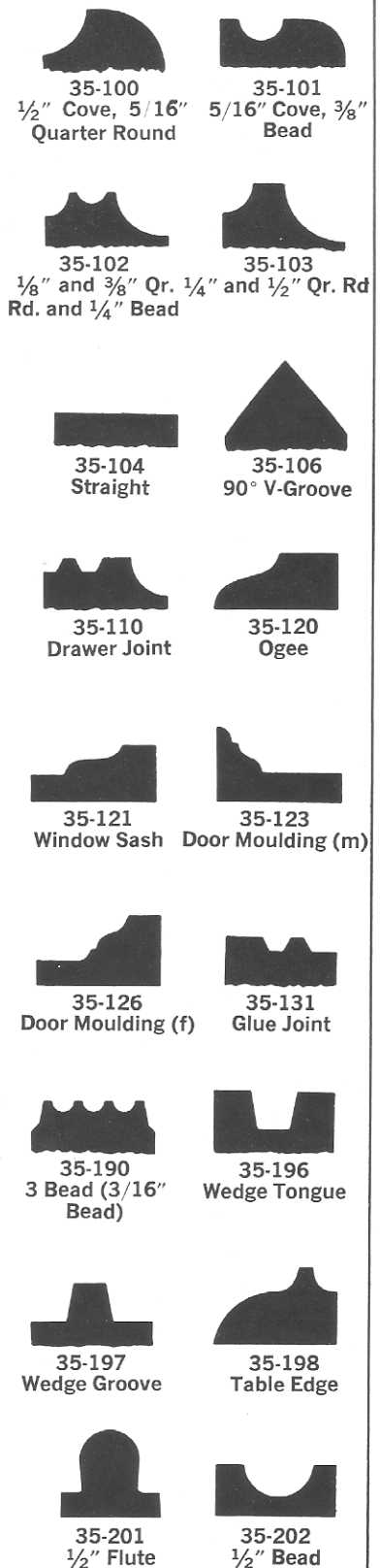
No. 34-821 Basic Moulding Cutterhead & Knife Set. Includes No. 34-562 (old 265) cutterhead, No. 34-521 (old 1521) wrench and No. 35-102 set of knives. For use on $\frac{1}{2}$ " and $\frac{3}{8}$ " dia. arbors. 3 lbs.

No. 34-562 (old 265) Moulding Cutterhead. Heavy Duty, Solid-Steel Type. For use on $\frac{1}{2}$ " and $\frac{3}{4}$ " arbors. Less wrench and knives. 3 lbs.

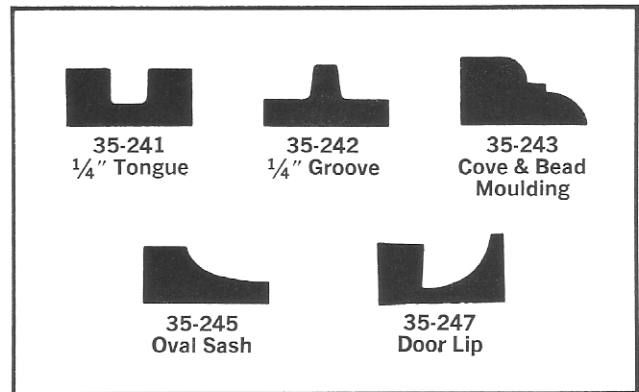
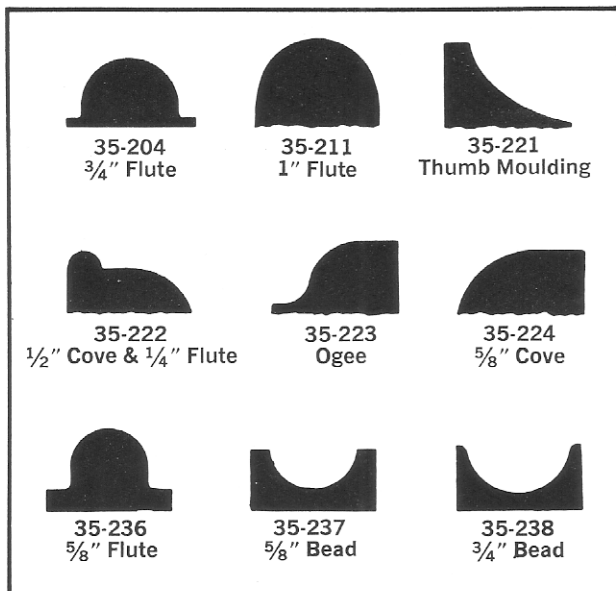
No. 34-521 (old 1521) Wrench. For moulding cutterhead. $\frac{1}{8}$ lb.

With a Moulding Cutterhead and these 32 Sets of Knives You Can Cut Thousands of Different Mouldings On Your Circular Saw.

Each set consists of three knives. $\frac{1}{4}$ lb. Knives are shown $\frac{1}{2}$ size.

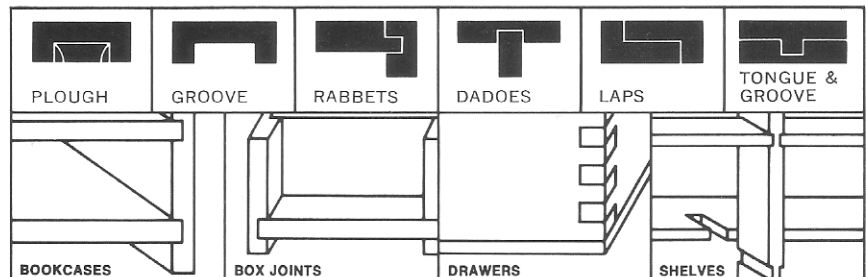
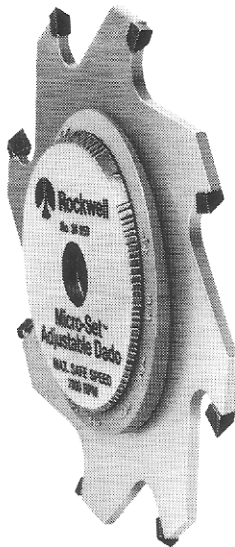


ROCKWELL CIRCULAR SAW ACCESSORIES

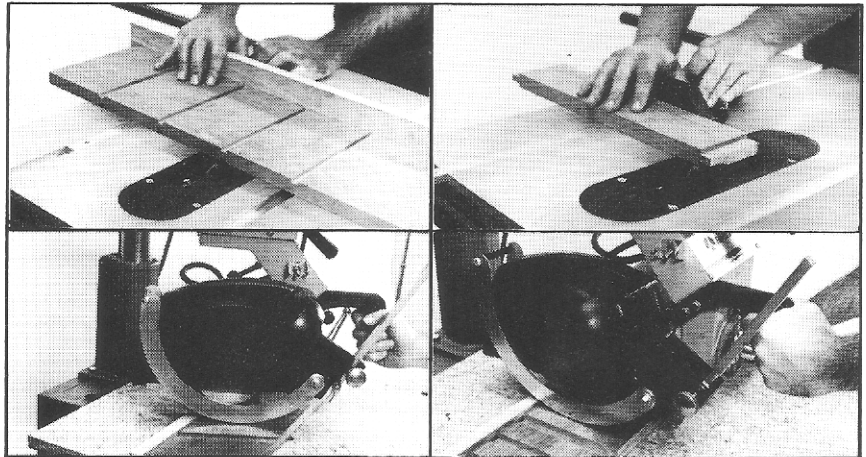


ROCKWELL MICRO-SET™ ADJUSTABLE DADO

... Carbide-Tipped
for Longer Life



Make These Cuts and Joints and Many More
With Your Rockwell Micro-Set™ Adjustable Dado



Easy to use!

**Just dial the width of cut you want
and get perfect results every time!**

Here's the dado that stays on the saw! No need to remove it from the saw arbor to change settings. Just turn the calibrated dial to the width of cut you want from 1/4" to 1 3/16"

wide, up to 3/4" deep. The Micro-Set dado also ploughs, rabbets, grooves and makes decorative cuts. The 6 3/8" blade is carbide tipped to cut wood or plastic laminates smoothly and truly, more times. Sturdy plastic carrying case is included.

NOTE: Do not use on machines exceeding 7000 rpm.

SPECIFICATIONS

Catalog No. 34-959
Width of Cut 1/4" to 1 3/16"
(6.35 to 20.64 mm)
Maximum Depth of Cut 3/4" (19.05 mm)
No. of Teeth 8
Fits Arbor 5/8" (15.87 mm)
Speed Not to Exceed 7000 RPM
Weight 2 lbs. (.907 kg)

BASIC ACCESSORIES

No. 62-042 Motor, 1½ HP, Single Phase, Ball Bearing, Capacitor Start, 3450 RPM, 115/230 V, TEFC, with 8-foot Cord with 115V Grounding Type Plug, Remote Control On-Off Toggle Switch with Locking Feature and Cord Connected to Motor. 42 lbs.

No. 34-965 Belt and Pulley Guard. Use with 62-042 Motor. 3 lbs.

No. 50-315 Stand for 10" Contractors' Saw. 28 lbs.

ADDITIONAL ROCKWELL ACCESSORIES

For Saw Blades, See Section G2, Page 4.

No. 34-154 Standard Table Insert. 1¾ lbs.

No. 34-254 Dado Head Table Insert (for 6" diameter dado heads only). 1½ lbs.

No. 34-453 Moulding Cutterhead Table Insert. 1½ lbs.

No. 34-472 Extra Long Guide Bars that permit ripping to the center of a 100" panel. 22 lbs.

No. 34-550 Metric Extra Long Guide Bars. same length as 34-472 but with metric calibrations in centimeters and millimeters. 22 lbs.

No. 34-551 Metric Extra Long Front Guide Bar only. Calibrated in centimeters and millimeters. 11 lbs.

No. 34-552 Metric Front Guide Bar. Same length as Standard Equipment but with calibrations in centimeters and millimeters. 7 lbs.

No. 34-658 "See-Thru" Splitter-Mounted Blade Guard complete with spring-loaded anti-kickback fingers. 6 lbs.

No. 34-895 Auto-Set® Miter Gage. For straight and angle operations. Has 3/8" x 3/4" x 18" guide bar and pivoting work support body with pointer and calibrations reading through 120° swing. Adjustable, positive stops at 90° and 45° positions. Accommodates No. 34-568 (old 865) Clamp Attachment. 3½ lbs.

No. 34-568 Clamp Attachment for Miter Gage. 1½ lbs.

No. 41-043 Motor Pulley, 5/8" bore, 3" diameter, for 3450-RPM motors. 2 lbs.

No. 49-034 V-belt, 44" O.C. ½ lb.

No. 49-364 Retractable Caster Set. Fits 50-315 Stand. 13 lbs.

ACCESSORIES

Saw Blades (with 5/8" arbor hole. Each 1½ lbs.)

NUMBER	TYPE	DIAMETER
34-105 (old 1015)	Combination	10"
34-016 (old 1016)	Hollow Ground	10"
34-017 (old 1017)	Rip	10"
34-018 (old 1018)	Cross Cut	10"
34-707	Plywood (200 teeth) For fine finish work.	7"

Carbide-Tipped Combination. Recommended for general purpose use on hard or soft woods, certain plastics, laminates. Each tooth has an alternate top bevel grind (ATB). Entire blade is hard chrome finished.

NUMBER	ARBOR	TEETH	DIAMETER
34-840	5/8"	24	9"
34-841	5/8"	24	10"

HOW TO ORDER REPLACEMENT PARTS

Even quality built tools such as the Rockwell power tool you have purchased, might need occasional replacement parts to maintain it in good working condition over the years. To order replacement parts, contact or write your nearest Rockwell Service Center listed on the back page of this manual.

Please give the following information:

1. Model No. and Serial No. and all specifications shown on the Model No./Serial No. plate.
2. Part number or numbers as shown in the Replacement Parts list supplied with your power tool.
3. A brief description of the trouble with the power tool.



ALABAMA

Birmingham 35209
Suite 105
131 West Oxmoor Road
Phone: (205) 942-6325

ARIZONA

Phoenix 85017
3004 West Thomas Road
Phone: (602) 269-5617

CALIFORNIA

Los Angeles 90007
2400 South Grand Avenue
Phone: (213) 749-0386

Orange 92668
385 North Anaheim Blvd.
Phone: (714) 634-4111

Sacramento 95818
2828 Q Street
Phone: (916) 452-0228

San Leandro 94577
3039 Teagarden Street
Phone: (415) 357-9762

Santa Clara 95050
2305 De La Cruz Blvd.
Phone: (408) 241-9790

San Diego 92111
7465 Raytheon Road
Phone: (714) 279-2520

Van Nuys 91406
16249 Stagg Street
Phone: (213) 989-1242

COLORADO

Denver 80207
4900 East 39th Avenue
Phone: (303) 388-5803

CONNECTICUT

Manchester (Hartford) 06040
57 Tolland Turnpike
Phone: (203) 646-1078

DISTRICT OF COLUMBIA

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4811 Kenilworth Avenue
Phone: (301) 779-8080

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661 N.W. 122nd Street
Phone: (305) 688-9686

Jacksonville 32205
517 Cassat Avenue
Phone: (904) 387-4455

Tampa 33609
4536 W. Kennedy Blvd.
Phone: (813) 877-9585

Orlando 32803
1807 1/2 Winter Park Road
Phone: (305) 644-8100

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Atlanta 30340
3500 McCall Place
Phone: (404) 458-2263

Forest Park (Atlanta) 30050
4017 Jonesboro Road
Phone: (404) 363-8000

HAWAII

Honolulu 96819
3209 Koapaka Street
Phone: (808) 847-2048

ILLINOIS

Melrose Park (Chicago) 60160
4533 North Avenue
Phone: (312) 345-8900

Posen (Chicago) 60469
2514 W 147th Place
Phone: (312) 371-5053

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Indianapolis 46268
Park 100 Bldg. No. 6
5327 W 86th Street
Phone: (317) 299-9078

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Louisville 40218
Buechel Plaza
4160 Bardstown Rd.
Phone: (502) 459-5300

LOUISIANA

Kenner (New Orleans) 70062
2440-O Veterans Mem. Blvd.
Phone: (504) 729-7363

MARYLAND

Baltimore 21205
4714 Erdman Avenue
Phone: (301) 483-3100

MASSACHUSETTS

Boston 02134
414 Cambridge St. (Allston)
Phone: (617) 782-1700

MICHIGAN

Southfield (Detroit) 48075
18650 W. Eight Mile Road
Phone: (313) 569-4333

Grand Rapids 49506
2750 Birchcrest S.E.
Phone: (616) 949-9040

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Minneapolis 55429
4315 68th Avenue North
Phone: (612) 561-9080

MISSOURI

North Kansas City 64116
1141 Swift Avenue
Phone: (816) 221-2070

St. Louis 63139
2348 Hampton Avenue
Phone: (314) 644-3166

NEW JERSEY

Union 07083
945 Ball Avenue
Phone: (201) 964-1730

NEW YORK

New York 10013 (Manhattan)
132 Lafayette Street
Phone: (212) 966-2726

Flushing 11365
175-25 Horace Harding Expwy.
Phone: (212) 225-2040

Syracuse 13201
700 Marcellus Street
Phone: (315) 425-4782

Tonawanda 14150
3191 Eggert Road
Phone: (716) 837-1222

NORTH CAROLINA

Charlotte 28209
4612 South Boulevard
Phone: (704) 525-4410

Greensboro 27406
3005 South Elm
Phone: (919) 274-4604

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1431-35 Glendale-Milford Rd.
Phone: (513) 772-1490

Cleveland 44114
1234 East 26th Street
Phone: (216) 621-6329

Columbus 43214
4560 Indianola Avenue
Phone: (614) 263-0929

Dayton 45439
3050 S. Kettering Blvd.
Phone: (513) 298-5281

Toledo 43606
2938 Douglas Road
Phone: (419) 473-0962

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Oklahoma City 73107
3631 N.W. 23rd Street
Phone: (405) 946-5437

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5131 Jonestown Road
Phone: (717) 657-0545

Philadelphia 19120
4433-37 Whitaker Avenue
Phone: (215) 455-7907

Pittsburgh 15208
400 North Lexington Avenue
Phone: (412) 247-3600

RHODE ISLAND

East Providence 02914
1009 Waterman Avenue
Phone: (401) 434-3620

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Memphis 38116
1004 East Brooks Road
Phone: (901) 332-1353

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Dallas 75247
2934 Iron Ridge Street
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10606 Hempstead Road
Phone: (713) 682-0334

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Phone: (801) 487-4953

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Richmond 23230
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Seattle 98101
1918 Minor Avenue
Phone: (206) 622-4576

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10700 W. Burleigh Street
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SAN JUAN, PUERTO RICO

Rio Piedras, Puerto Rico 00929
Mail: Box 29268, 65th Infantry Station
Package: Calla Almeria 321
Urban Valencia
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Calgary, Alberta T2G 489
4411 Manitoba Road, S.E.
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45 West 7th Avenue
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MANITOBA

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Guelph, Ontario N1H 6M7
40 Wellington Street
Phone: (519) 836-2840

London, Ontario N6E 1P7
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Phone: (519) 681-0890

Mississauga, Ontario L4V 1J2
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Ottawa, Ontario K2P 0N9
207 Gilmour Street
Phone: (613) 236-7459

QUEBEC

St. Laurent (Montreal), P.O.
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523 Rue Desjardins Street
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Quebec, P.O. G1L 2W7
793 - 3rd Avenue
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