

Sears

Sears

CRAFTSMAN®

OWNERS  
MANUAL

MODEL NO.  
901.23181

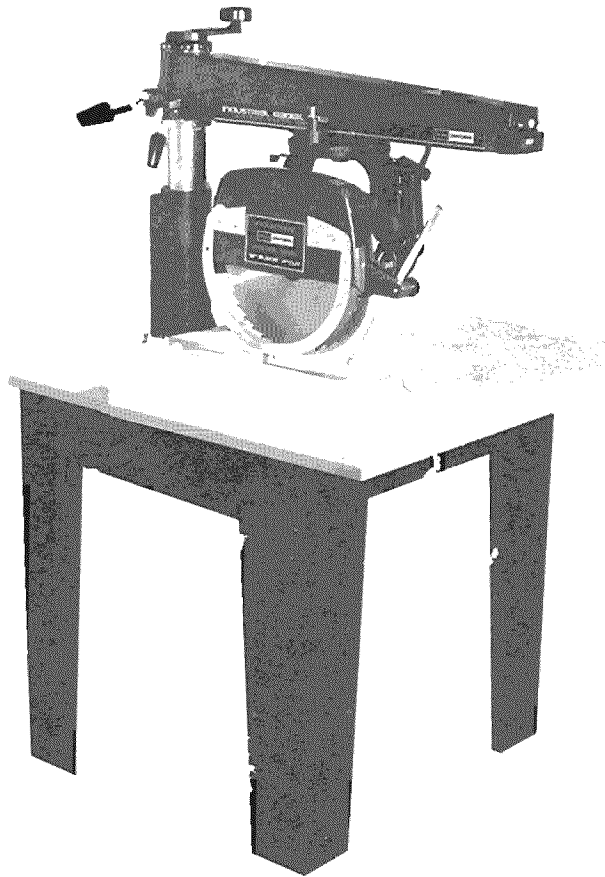
Serial  
Number \_\_\_\_\_

Serial Number  
may be found on the  
machine nameplate  
located at the front  
of the table frame.

Please record it  
above for your records.

**CAUTION :**  
Read Rules for  
Safe Operation  
and Instructions  
Carefully

# instruction maintenance and parts



**WARNING:** FOR YOUR OWN SAFETY, READ THIS MANUAL BEFORE OPERATING TOOL.  
REVIEW SAFETY RULES AND OPERATING INSTRUCTIONS FREQUENTLY.

## 12" RADIAL ARM SAW

**KEEP THIS BOOKLET  
WITH THE SAW**

This booklet is provided for your convenience in the use and care of your new Craftsman Saw. These instructions include operation, usage, precautions, preventive maintenance, maintenance and other pertinent data to assist you in assuring long life and dependable service from your saw.

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# CAUTION

For purposes of clarity, the lower guard is omitted from the photographs inside this manual. However, ALL cuts must be made with both the upper and lower guards in place.

MODEL NO.	PHASE	VOLTAGE
901.23181	1 ph	120—208/240 VOLT 60 CY.

## SINGLE PHASE POWER CONNECTIONS AND GROUNDING

This tool should be grounded while in use to protect the operator from electric shock.

**We recommend that you NEVER disassemble the tool or try to do any rewiring in the electrical system. Any such repairs should be performed only by Sears Service Centers or other qualified service organizations. Should you be determined to make a repair yourself, remember that the green colored wire is the "grounding" wire. Never connect this green wire to a "live" terminal.**

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances. Do not modify the plug provided — if it will not fit the outlet, have the proper outlet installed by a qualified electrician. Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal. Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded. Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug. Repair or replace damaged or worn cord immediately.

**208-240 Volt Operation**—the saw is supplied with a plug like Figure A. It should be used in the proper standard, matching 3-wire grounding receptacle. A 15 amp line is satisfactory for 208-240 Volt use.

**120 Volt Operation**—See page 19 for 120 Volt Connection. The plug supplied, must be replaced with the plug shown in Figure B. It should be used in the proper standard, matching 3-wire grounding receptacle.

The use of a separate 20 amp circuit is recommended. Protect line with a 20 amp time delay fuse or breaker. Replace or repair damaged or worn cord immediately.

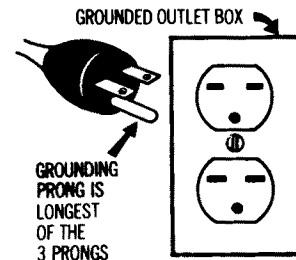


Fig. A

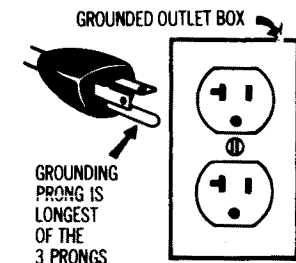


Fig. B

# UNPACKING AND SET-UP INSTRUCTIONS

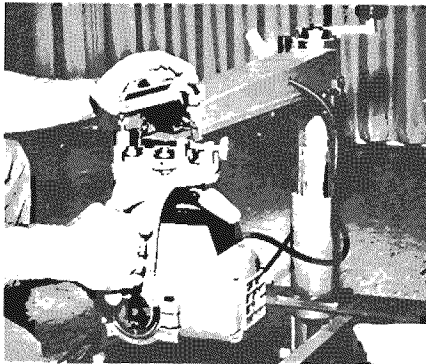
Your Craftsman Saw has been completely assembled, tested and table top kerfed at the factory and then partially disassembled for packaging and shipment.

We suggest the following procedure:

1. Turn the Elevating Handle at top of column counter-clockwise a few turns to release the motor box and remove it from under the arm. (Do not discard the metal plate or guard found under motor box.)
2. Remove the Arm End Cap but do not disconnect the leads to the switch. Insert rollerhead yoke and motor assembly into the arm, being careful not to damage the rip pointer on right side, and roll to extreme back of arm against column. Lock the entire assembly with the rip lock. Replace arm end cap.

3. Swing arm and position at right angle to guide fence at 0° on miter scale. Locate miter latch in column slot. Securely lock arm with arm clamp handle.
4. Place machine on its back (column on floor) and attach legs with four (4) bolts to each leg. Now place machine in an upright position on its legs. To prevent forward creeping of the saw carriage, tilt the saw backward by shimming under the front of table frame or front legs if so equipped. Use sturdy outrigger supports if any table extensions are attached to the saw.

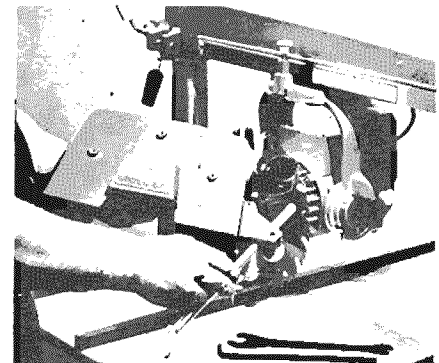
All electrical connections have been made for you to operate your machine on 208 to 240 volts power supply. For change to 120 volt on single phase models refer to connection diagram on the motor name plate, and page 19 of this manual.



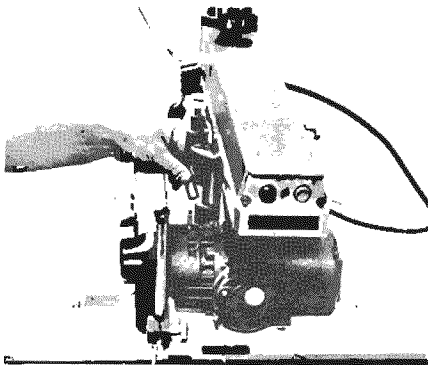
1. Wipe tracks with clean dry cloth. Insert motor assembly in arm. Be careful not to damage rip pointer on right side of assembly.



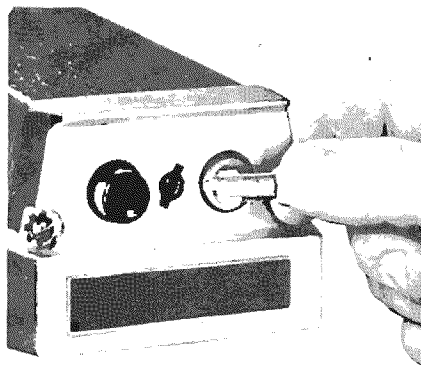
2. Clean saw blade with clean dry cloth. Place saw blade between collars (recessed portion against blade). Tighten arbor nut using both wrenches.



3. Assemble guard kick-back and elbow. See page 17 for details of assembly of upper and lower guards.



4. Enclose blade with guard and lock in place with wing nut.



5. Insert key, unlock push button switch and you are ready for a lifetime of woodworking pleasure.

## SPECIFICATIONS

Motor Rating Develops	3-1/2 HP	Ripping Capacity—Width	685.8 mm (27")
Continuous Duty	1-1/2" HP	Miter Locating latch	(0° and 45° R or L)
Full Load Speed—60 cy. AC	3450 RPM	Scales	Miter, Rip, Bevel
Blade Guards (Upper and lower)	304.8 mm (12")	Bevel Locating Pin	0°, 45°, 90°
Standard Blade	304.8 mm (12")	Column Diameter	69.9 mm (2-3/4")
Arbor Size	15.9 x 38.1 mm (5/8" x 1-1/2") long	Steel Table Size	660.4 x 812.8 mm (26" x 32")
Maximum Depth of Cut	101.6 mm (4")	Work Table Overall Size	746.1 x 977.9 mm (29-3/8" x 38-1/2")
Maximum Depth of Cut at 45° Bevel	69.9 mm (2-3/4")	Height Work Table on Legs	838.2 mm (33")
Cross Cut Capacity—1" stock	406.4 mm (16")	Net Weight	94.3 kg (208 lbs.)
Spindle Dado Cap.—Width	20.6 mm (13/16")	Gross Shipping Weight	109.8 kg (242 lbs.)

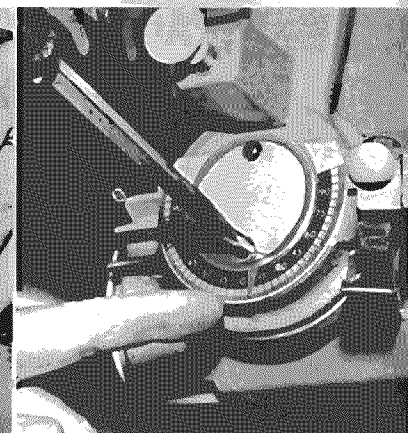
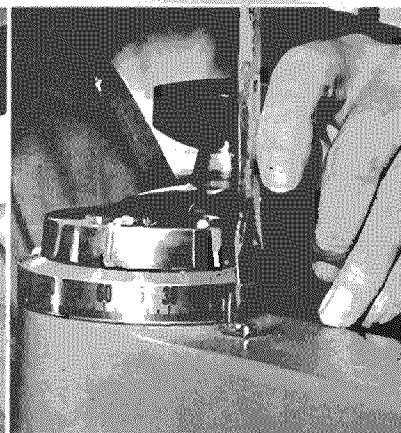
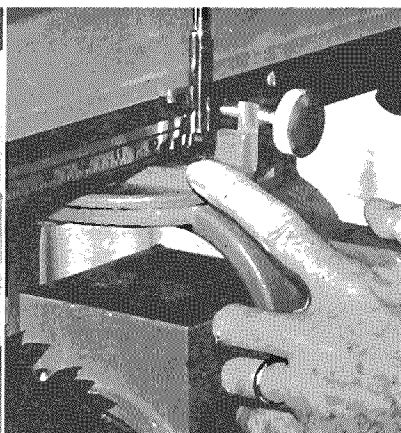
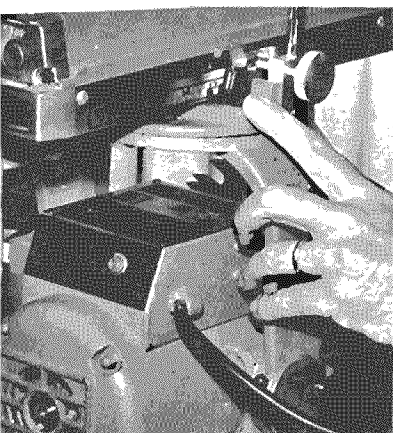


Figure 1

Figure 2

Figure 3

Figure 4

## ADJUSTMENTS AND ALIGNMENTS

### Adjustment of Scales

#### Rip Scale

The Rip Scale is located on the right side of the Radial Arm. When the motor is positioned with motor arbor toward the column it is called "in rip" position, and material should be fed from right to left. When the motor arbor is positioned toward the operator it is called "out rip" and material is fed from left to right. When "in ripping" width dimensions are located on the top of the scale and when "out ripping" on the bottom of the scale by use of the reference pointers. The pointers are adjustable and must be readjusted only when gauge (thickness) of blade is changed.

To adjust:

"In rip" (figure 1)

- (a) Place the motor in "in rip" and move the motor on the arm until the saw blade just touches the guide fence.
- (b) Loosen two screws on pointer base and move pointer until edge aligns with 0 on the top scale. Tighten back screw.

"Out rip" (figure 2)

- (a) Place a board of known width against the guide strip, position motor in "out rip" position and move the motor until the blade just touches the material.
- (b) Loosen front screw only and move bottom pointer until the edge aligns with dimension on the lower scale of the known width of board. Tighten screw.

#### Miter Scale (figure 3)

The miter scale is located at the top rear of the arm. When the arm is positioned for straight cross-cut the pointer should be at 0 on the scale. To adjust loosen the screw holding the pointer, adjust, and tighten.

#### Bevel Scale (figure 4)

The bevel scale is located at the front of the motor. When the motor is positioned for vertical cutting pointer should be at 0 on the scale. To adjust loosen the two screws, move the pointer to 0 and tighten.

## ALIGNMENT PROCEDURE

All Craftsman machines are thoroughly tested, inspected, and accurately adjusted before leaving the factory. Rough handling in shipment can, at times, affect adjustments. Because of this we recommend alignment check before operation. You will also find that because of overload and various excessive stresses and strains realignment and minor adjustments may periodically become necessary to maintain complete accuracy.

Provisions are made for complete adjustment of all positions so that your Craftsman Machine can be kept accurate for its entire life. A description of each of these adjustments follows and should be performed in the sequence listed.

### 1. CHECK TABLE TOP AND GUIDE FENCE

The table top assembly and guide strip are checked for straightness with a master straight edge before leaving the factory. As all wood products must "breathe" and are affected by various humidity conditions, a slight change from factory conditions may sometimes be found. Straightness of top and Guide Strip, with Clamp Screws (at rear of table) tight, should be checked with a square or straight edge. Correction can be made only by sanding. A slight variation from perfect straightness of table top will not normally affect the average woodworking requirements. Do not use a level except as a straight edge. (This check is for straightness, not levelness with floor.)

NOTE: You may desire to place a hardboard or plywood protective top on the section of table top in front of the guide fence until you are more familiar with the operation of your machine. This procedure will eliminate excessive cutting into permanent top and, like the guide fence, is easily replaced when necessary. Be sure you countersink finishing nails and place them so as not to be in line with cutting tools.

### 2. ADJUSTMENT OF YOKE CLAMP HANDLE (figure 5)

The purpose of this handle is to provide a friction lock between the upper face of the yoke and the bottom face of the rollerhead. It should also eliminate any play between these two parts. In operating position the yoke clamp handle is pushed back from

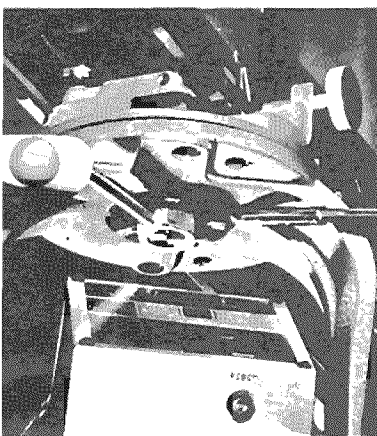


Figure 5

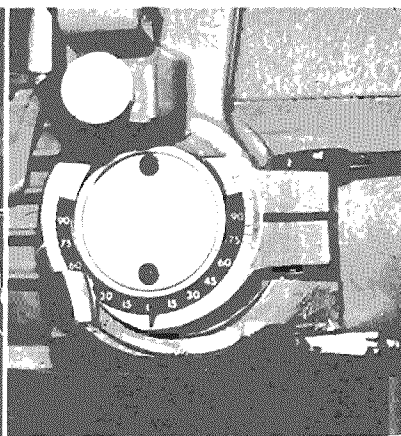


Figure 6



Figure 7

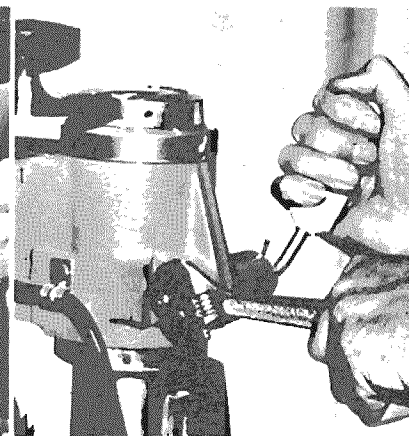


Figure 8

the hand grip of the yoke. If, at any time, it is possible to move this handle so that it strikes the rear leg of the yoke, it is not in proper adjustment. Its proper position for machine operation is approximately 90° or less to the hand grip of the yoke.

To readjust:

- (a) Pull yoke clamp handle forward to release friction locking action.
- (b) Insert screw driver between the yoke and the notched clamp adjustor. Flex the adjustor downward just enough to pass over the lug stop on the yoke.
- (c) Rotate clamp adjustor as necessary (to tighten, counter-clockwise; to loosen, clockwise). Be sure the notch in the adjustor is positioned properly over the yoke lug stop at final setting.

If difficulty is encountered in making the above adjustments, we suggest you use the 1/4" hex wrench in the hex hole in the king bolt. By turning this with the use of the hex wrench, it will assist in the above adjustment procedure.

### 3. ADJUSTING BEVEL CLAMP HANDLE

(figure 6)

The purpose of the Bevel Clamp Handle is to hold the motor rigidly at any angle. This is accomplished by the cam action of the top of the clamp tightening the split portion of the yoke around dial plate hub. In locked position it should be flush with and under bevel scale and hold motor rigidly at the angle desired.

To adjust:

- (a) Loosen Bevel Clamp Handle by pulling left side away from motor.
- (b) While holding bottom head of Cap Screw with a wrench tighten or loosen the top jam nut as necessary.

### 4. ADJUSTING ROLLERHEAD BEARINGS TO ARM TRACKS (figure 7)

The rollerhead is suspended by four special tolerance, grease-packed, double shield ball bearings. These bearings are mounted on two straight bearing shafts and two eccentric bearing shafts. In proper adjustment the top and bottom radii of all four bearings should be in contact with the arm tracks for their entire length and head should roll freely but with some resistance. Excessive bearing pressure will cause difficult operation and rapid wear. Too little pressure will cause loss of accuracy and the saw will try to feed itself into the material being crosscut. Proper adjustment will require a force of 4 to 6 pounds to move the rollerhead along the arm at a constant speed. The front and rear bearings should be adjusted to contribute equally to this force. NOTE: the end cap was removed for clarity and it need not be removed for this adjustment.

- (a) Wipe tracks with a clean dry lint-free cloth.
- (b) Bring motor, yoke, and rollerhead assemblies to the end of arm.
- (c) Set in "out rip" position.
- (d) Loosen hex nuts on left side, front and rear.
- (e) Insert 1/8" Allen wrench in recess at bottom of shafts and turn bearing shaft until the bearing is snugly against the track. Repeat for the second bearing. Check the force required to move the rollerhead. Readjust as required.
- (f) Tighten the hex lock nuts while holding each bearing shaft in its adjusted position.

### 5. ADJUSTING ARM CLAMP HANDLE

(figure 8)

The Arm Clamp Handle holds the arm in desired position for cross-cut or miter work. When tightened it should be in upright (vertical) position. If, when tightened, this handle goes beyond this position, it should be adjusted as follows:

- (a) Remove Cotter Pin by tapping from bottom to top.
- (b) Tighten left-hand nut as necessary.
- (c) Replace cotter pin.

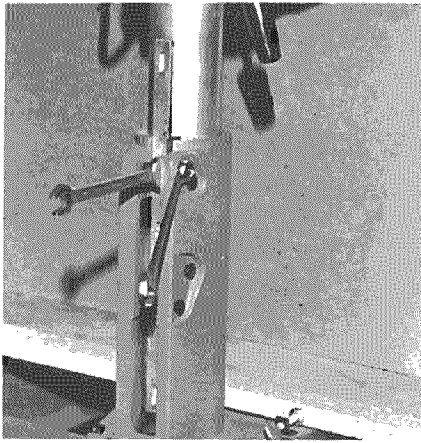


Figure 9

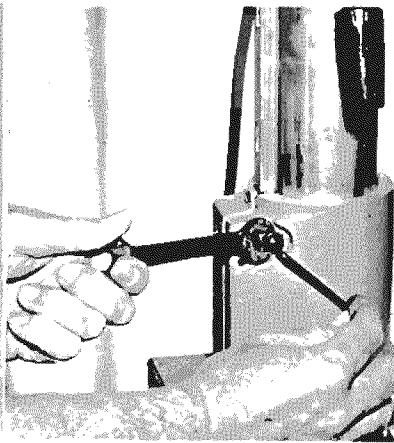


Figure 10

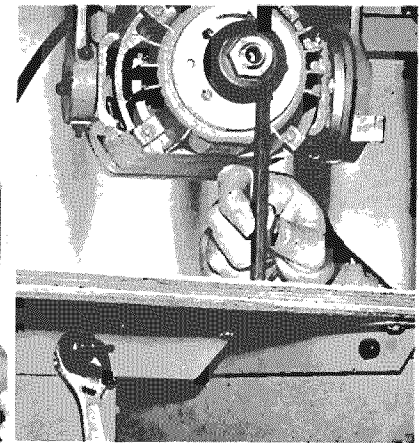


Figure 11

## 6. ADJUSTING BASE TO COLUMN

(figures 9 and 10)

If, after the Arm Clamp Handle is tightened, you have side motion at the end of the arm and this is caused by the Column rotating in the base it indicates adjustment of the base or column key gib is necessary.

To adjust: (Face rear of machine)

- (a) Loosen all base hardware above table frame level (4 pieces). There are: two pinch bolts with lock nuts (top and bottom), two set screws with lock nuts (top and bottom).
- (b) Elevate and depress column. If base is too tight around the column causing binding, loosen pinch bolt and tighten lock nut to the right to spread base.
- (c) Tighten the base pinch bolts (top and bottom) by turning bolt heads on right side until the base fits snugly around the column diameter but column elevates and depresses freely. Lock with nuts inside slot.
- (d) To prevent side motion of the arm (rotation of column) tighten the top and bottom set screws so that the column key gib (brass plate) is forced against the column key. Be careful you do not tighten to the point of binding with resulting hinderance to the elevating. Lock by tightening jam nuts.

## 7. ADJUSTING TABLE TOP PARALLEL WITH ARM (figure 11)

The table top surface must be parallel with the horizontal plane of the arm tracks.

To check this alignment:

- (a) Insert the arbor nut wrench or a piece of steel about 10" long between the saw arbor collars.
- (b) Elevate or depress saw that when swinging arbor wrench on the motor arbor the bottom of it just touches the table top.
- (c) Locate the highest spot on the table over adjusting cleats by moving the arm on the column and the rollerhead along the arm tracks.

- (d) If the bottom of the arbor wrench in vertical position does not "just touch" the table top at all positions over the cleats adjustment is necessary.

To readjust Main Table:

- (a) Loosen locking nuts holding center cleat to table frame.
- (b) Loosen all locking nuts at both sides of the main table frame except the one holding the highest point of the table top as determined above.
- (c) Elevate the low sections to the same elevation as the highest and (1) tighten all locking nuts at both sides of the table frame, (2) tighten locking nuts at center cleat.

## 8. ADJUSTING BLADE PERPENDICULAR TO WORK TOP (figures 12 and 13)

With the arm in cross-cut position, all latches engaged and all clamp handles locked place a steel square with one angle on the table top parallel to guide strip and the other angle against the flat of the saw blade (place in saw blade gullets and not against teeth because of tooth set). If blade is not flat against square, adjust as follows:

- (a) Remove name plate by removing two screws.
- (b) Loosen two outside socket head screws.
- (c) Loosen bevel clamp handle.
- (d) Tilt motor until blade is flat against the square and again lock (very firmly) socket head screws. Replace name plate.

NOTE: In some cases it will be found necessary to also loosen center cap screw in order to adjust motor.

## 9. ADJUSTING CROSS CUT TRAVEL WITH GUIDE FENCE (figures 14 and 15)

With the miter latch engaged and arm clamp handle locked, place a wide board (1" x 12" if available) against the guide strip. Cross-cut this board with a set tooth blade. Check cut with a steel square. If cut is not square, the arm is out of alignment with the guide fence.

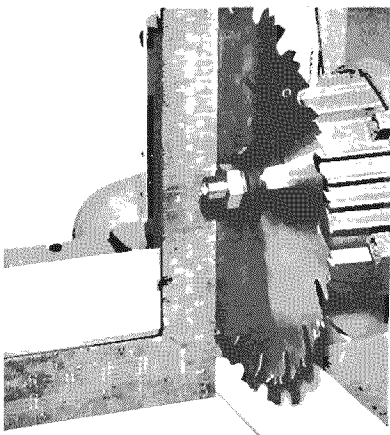


Figure 12

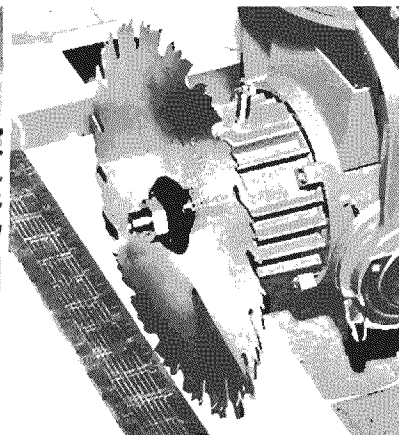


Figure 14

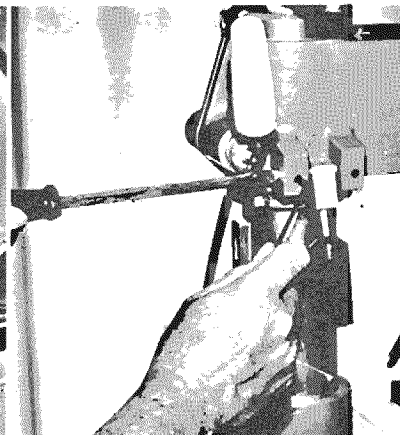


Figure 15

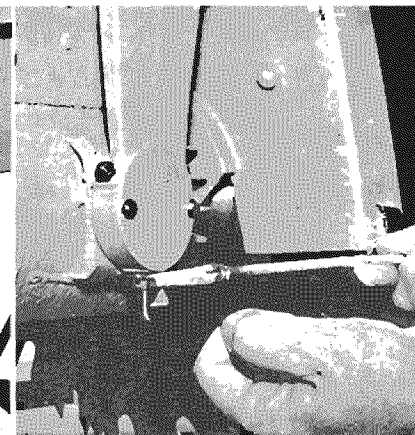


Figure 16



Figure 13

To readjust:

- (a) Loosen arm clamp handle.
- (b) Loosen two set screws.
- (c) Lay steel square on table top with one angle against guide fence and the other at angle of 0° crosscut.
- (d) Move saw carriage and blade forward along steel square to determine which way arm must be adjusted.
- (e) If saw blade moves toward square as it

comes forward, disengage miter latch. With screw driver loosen rear adjusting screw, re-engage miter latch. Check and repeat if necessary.

- (f) If saw blade moves away from square as it comes forward, disengage miter latch. Loosen front adjusting screw and tighten rear adjusting screw, re-engage miter latch. Check and repeat if necessary.
- (g) When saw travel is parallel to square for entire length, lock adjusting screws in place by retightening set screws.

## 10. ADJUSTING CROSS-CUT TRAVEL PARALLEL TO ARM TRACKS (figure 16)

Both the leading and trailing teeth of the saw blade should travel in the same plane parallel to the arm tracks. To check, place a board 4" x 1" or larger against the right side of the guide fence. With the machine in 0° cross-cut position and all locks and latches engaged, end trim this stock by allowing only the front teeth of the blade to clear the stock and the rear teeth remaining in the cut. Now remove the stock by sliding to the right before returning the cutting head to the back of the arm. Examine the cut edge of the stock. If blade marks of the rear teeth are prominent on the cut stock the rear teeth are not exactly following the front teeth and adjustment is necessary. (The arcs of the rear teeth start at the bottom front of the stock and travel up and back.) Repeat this same operation with the stock against the left side of the guide fence. To adjust when marks are on stock cut on right side:

- (a) Disengage bevel clamp handle.
- (b) Loosen right and left lock nuts at rear of yoke.
- (c) Loosen left set screw about 1/6 turn and tighten right set screw.
- (d) Retighten lock nuts and bevel clamp handle.
- (e) Recheck as above by cutting.

To adjust when marks are on stock cut on left side:

- (a) Disengage bevel clamp handle.
- (b) Loosen right and left lock nuts.
- (c) Loosen right set screw about 1/6 turn and tighten left set screw.
- (d) Retighten lock nuts and bevel clamp handle.
- (e) Recheck as above by cutting.

After left and right adjustments have been made, tilt the motor to 45° bevel cross-cut position and again make cuts on 2" x 4" stock as was done in cross-cut position. If tooth marks again appear the motor is too high or low in the rear of the yoke.

To adjust when marks appear on bottom side of cut (left-hand piece of stock):

- (a) Disengage bevel clamp handle.
- (b) Loosen all lock nuts.
- (c) Loosen right set screws about 1/6 turn and tighten bottom set screw.
- (d) Retighten lock nuts and bevel clamp handle and recheck as above by cutting.

To adjust when marks appear on upper side of cut:

- (a) Disengage bevel clamp handle.
- (b) Loosen all lock nuts.
- (c) Loosen bottom set screw about 1/6 turn and tighten right set screws.
- (d) Retighten lock nuts and bevel clamp handle and recheck as above by cutting.

# RULES FOR SAFER OPERATION OF STATIONARY POWER TOOLS

1. **KEEP GUARDS IN PLACE** and in working order.
2. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
3. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
4. **DON'T USE IN DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
5. **KEEP CHILDREN AWAY.** All visitors should be kept a safe distance from work area.
6. **MAKE WORKSHOP KID PROOF** with padlocks, master switches, or by removing starter keys.
7. **DON'T FORCE TOOL.** It will do the job better and be safer at the rate for which it was designed.
8. **USE RIGHT TOOL.** Don't force tool or attachment to do a job for which it was not designed.
9. **WEAR PROPER APPAREL.** No loose clothing, gloves, neckties, rings, bracelets, or other jewelry to get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
10. **ALWAYS USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
11. **SECURE WORK.** Use clamps or vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
12. **DON'T OVERREACH.** Keep proper footing and balance at all times.
13. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
14. **DISCONNECT TOOLS** before servicing; when changing accessories such as blades, bits, cutters, etc.
15. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure switch is in off position before plugging in.
16. **USE RECOMMENDED ACCESSORIES.** Consult your Sears store for recommended accessories. The use of improper accessories may cause risk of injury to persons.
17. **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
18. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine 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.
19. **DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
20. **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.
21. **ONE OPERATOR ONLY.** The same person who pulls saw should position the work.

## DIRECTIONS FOR REMOVING ARBOR NUT

(Figure 2, Page 3)

1. Fit 5/16" Allen Wrench into front end of motor shaft. (This is a holding wrench only.)
2. Fit large wrench on arbor nut as nearly parallel to first wrench as possible.
3. While holding first wrench stationary with right hand, use downward pressure of left hand on second wrench and nut will loosen.

## MAINTENANCE AND OPERATION

1. DO—Be sure blade rotates clockwise when facing arbor.
2. DO—Be sure all clamp handles are tight before starting any operation. Push back to tighten. Pull to loosen.
3. DO—Be sure blade and arbor collars are clean and recessed side of collars are against blade. Tighten arbor nut securely, using both wrenches provided.
4. DO—Keep saw blade sharp and properly set.
5. DO—Use anti-kickback attachment on guard.

6. DO—Keep arm tracks and bearing surfaces clean and dry. Periodic cleaning with dry cleaner is recommended.
7. DO—Periodically recheck alignment.
8. DO—Remove blade but not arbor collars and nut when using rear shaft.
9. DO—Keep motor air slots clean and free of chips.
10. DO—Return roller head to full rear after each cross or angle cut. Return reel is available.
1. DON'T—Attempt to operate on anything but designated voltage.
2. DON'T—Operate unless all clamp handles are tight.
3. DON'T—Use blades of larger diameter than recommended.
4. DON'T—Remove anti-kickback from guard. Adjust it to just clear the workpiece when crosscutting.
5. DON'T—Rip from wrong direction—observe caution tag on guard.
6. DON'T—Oil or grease arm tracks or motor.
7. DON'T—Wedge anything against fan to hold motor shaft.
8. DON'T—Subject table top to variable humidity conditions (keep away from damp place.)
9. DON'T—Force cutting action. Stalling or partial stalling of motor can cause major damage to motor winding.
10. DON'T—Remove saw blade guard when boring.
11. DON'T—Remove arbor collars and nut when using rear shaft.
12. DON'T—Remove ground prong from plug. Never operate saw unless it is properly grounded.
13. DON'T—Remove small scraps from table with fingers.

The lower blade guard covers the side of the teeth when the blade is behind the fence. READ THE FOLLOWING PRECAUTIONS.

## CAUTIONS TO FOLLOW WHEN USING LOWER GUARD:

1. The lower blade guard will provide additional protection from contact with the side of the blade—BUT NOT FROM CONTACT WITH THE FRONT OR REAR OF THE BLADE. When the lower guard touches the fence or material being cut, it will rise up over the material—thus exposing the blade teeth. Be careful, keep your hands out of the line of cut!
2. Lower blade guards may become caught in prior kerfs in the fence or table. Replace guide fence frequently.
3. Short cut-off pieces of wood may become caught between the lower guard and the blade. If this happens, shut off power; wait until blade stops before removal of piece.
4. The lower blade guards effectiveness is limited in bevel operations. It may have to be raised out of the way when setting bevel angle to prevent bending. BE SURE THAT POWER IS OFF AND BLADE IS COMPLETELY STOPPED BEFORE MAKING ANY ADJUSTMENT.
5. Catching the lower guard in saw kerfs when changing the saw set-up can be avoided by elevating the saw until the bottom of the guard clears the fence.
6. When ripping narrow strips, the lower guard may have to be raised to rest on top of the fence. Be sure to use a pusher stick to feed the work.
7. Do not use the lower guard with any accessory other than the correct size saw blade.
8. To summarize, when in doubt about whether to use the lower guard, and when practical, make a "dry run" with power off to determine if it is a help or hindrance.

## MOTOR OVERLOAD PROTECTION

Your single-phase Saw Motor is equipped with a manual-reset type overload protector. If the protector "trips" and stops the motor, take the following steps:

1. Press the saw "OFF" switch button and allow the motor to cool.
2. After motor has cooled, the overload protector may be reset by firmly pressing the red reset button located on the rear of the motor connection box. If you do *not* hear an audible "click", the motor must be allowed to cool further before attempting the reset.
3. After the reset is accomplished, the saw may be started by pushing the "ON" button.



# • OPERATING INSTRUCTIONS •

Observe and comply with the warning labels on the saw.

## WARNING

FOR YOUR OWN SAFETY READ INSTRUCTION  
MANUAL BEFORE OPERATING SAW

1. Wear eye protection.
2. Keep hands out of path of saw blade.
3. Return carriage to full rear position after each crosscut type of operation.
4. Know how to reduce risk of kickback.
5. Use pusher board for narrow work.
6. Do not perform any operation freehand.
7. Never reach around moving saw blade.
8. Shut off power before clearing a stall or jam.
9. Make no adjustments until tool has stopped.

## DANGER

TO AVOID INJURY DO  
NOT FEED MATERIAL  
INTO CUTTING TOOL  
FROM THIS END

Use common sense, think all operations through before starting, and be alert.

Review the "Rules For Safer Operation of Stationary Power Tools" and "Maintenance and Operation" sections. (See index)

Keep saw in good adjustment and alignment; use only sharp, free-cutting tools and accessories that were designed for your machine. These precautions will help reduce the possibility of jam-ups or kickbacks.

Never perform any operation "free hand" (i.e. supporting the workpiece by hand alone). The workpiece must always be solidly supported or guided by the fence or supporting jig or fixture to prevent any unexpected movement.

If the sawblade or cutter becomes stalled or lower guard becomes jammed - Turn off power immediately. Never attempt to free a jam up without first turning power off. Remove workpiece and re-check machine alignment. Adjust as necessary.

**DANGER** Coasting cutting tools can be dangerous - apply the brake immediately on manual braking units to stop the tool as soon as the switch is turned off.

The torque developed during manual or automatic braking may loosen the blade retaining nut, therefore the arbor nut should be checked periodically and tightened if necessary.

Never cycle the tool "on" and "off" rapidly, as forces can be produced which will loosen the arbor nut.

If the arbor nut should ever loosen, allow the blade to come to a complete stop and re-tighten the arbor nut securely, but not excessively, using both wrenches provided.

Read through and study the pictorial operating instructions which follow for further instructions before using your new Craftsman Radial Arm Saw.

Kickbacks can occur when the workpiece binds between the saw blade and the fence during a ripping type operation. Such action could cause the workpiece to be ejected from the machine and thrown violently back towards the operator.

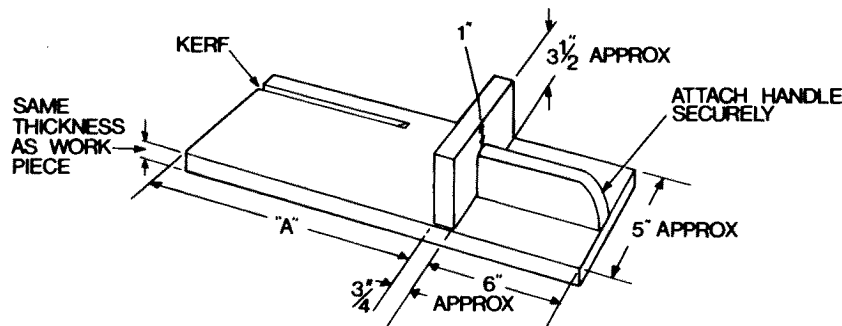
Never stand, or permit someone else to stand in line with the work being ripped due to possible kickbacks.

The anti-kickback fingers must be kept sharp, free moving and correctly adjusted to insure proper operation.

Use extra care when ripping material that is twisted or bowed which can rock on the saw table and cause pinching or binding. Place the wood on the table in such a manner as to minimize rocking.

A pusher board should be used when ripping narrow work (i.e. less than 3 inches or so between the blade and fence). The pusher board should be made from clear, straight grained lumber as shown below.

It is easier to change the saw set-up and will prevent lower guard catching if work table is higher than rear table. 1/4" plywood and brady may be used.



Dimension "A" must be such that the workpiece is fed completely past the blade but short enough to prevent the pusher board from passing under the anti-kickback device.

The pusher board should be pre-kerfed prior to use, for every new width of rip a new or re-worked pusher board must be used.

Do not rip workpieces shorter than 12" in length.

# OPERATING INSTRUCTIONS

## CAUTION

For purposes of clarity, the lower guard is omitted from the photographs inside this manual. However, ALL cuts must be made with both the upper and lower guards in place.

## ARM ROTATES RIGHT OR LEFT FOR MITER CUTS

Release clamp (B) and lift latch (C) ... then easily swing the arm (A) into any right or left angle. The calibrated miter scale (D) is at eye-level and shows precisely the miter angle you want. The "built-in" stops at 0 and 45° automatically locate these popular common angles. You get life-time mechanical accuracy without human error. Also, you never shift the lumber for miters ... Craftsman puts the saw at the exact angle and you pull across for perfect miter cuts everytime!

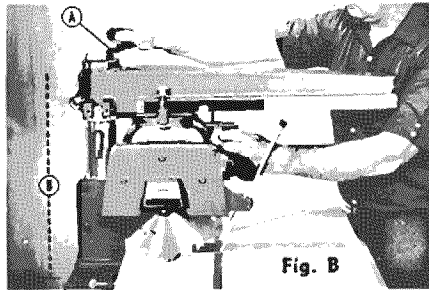
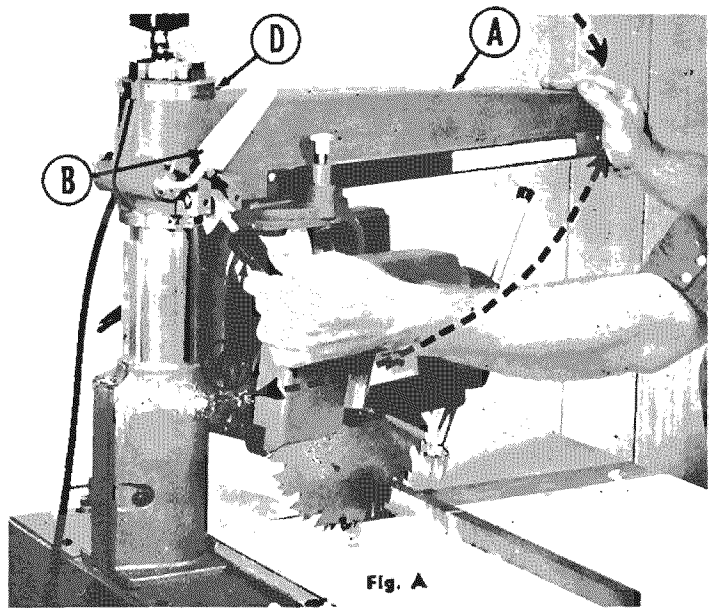


Fig. B

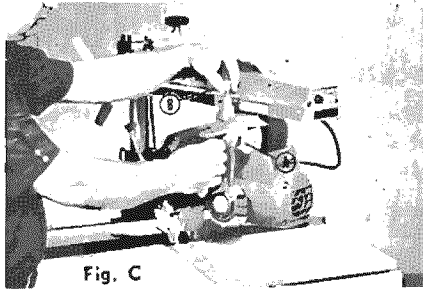


Fig. C

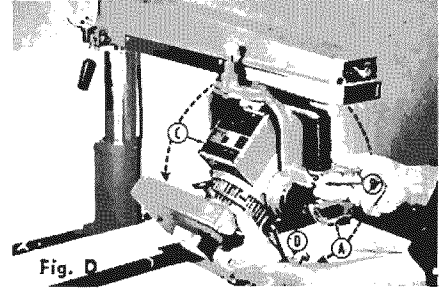


Fig. D

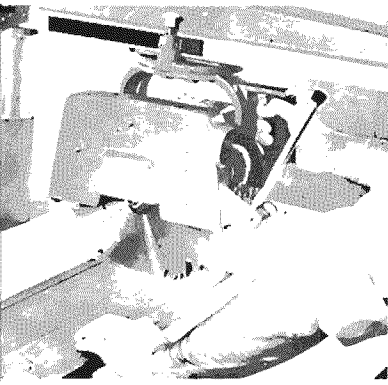
## Saw Swivels for Rip Cuts

It's easy. Release yoke clamp (A) and lift locating pin (B) ... then swing yoke right or left. Automatically stops at three 90° positions. Changes from cross cut to rip in less than five seconds!

## Saw Tilts for Bevel Cuts

First, raise arm about 18 turns. Pull out clamp (A) and locating pin (B). Tilt motor (C) for angle desired on bevel scale (D) ... Relock (A). Automatically locates popular 0°, 45° and 90° bevel positions. There's no limit on bevel cuts.

Craftsman measures for you ... each full turn of the elevating knob (A) lifts or lowers (B) the arm exactly 1/8 inch ... one half turn gives you 1/16 inch ... actually pre-determines depth of cut. This is precision depth control at its finest.



CROSS CUT

## CROSS CUT

Read Fig. A. Set arm at right angle to the guide fence, at 0° on the miter scale. With the miter latch in column slot at 0° position, securely lock arm with arm clamp handle. Place material on work table, against guide fence, draw saw blade across for the cut just far enough to sever wood. After completing cut, return saw blade behind guide fence.

The model 35010 "Roller Head Stop" accessory is available for use as an adjustable cross cut stop to prevent motion of the blade beyond the position necessary to complete the cut when performing repetitive cutting operations.

NOTE: Adjust the anti-kickback assembly to just clear the workpiece in all crosscutting operations.

## MITER

Read Fig. A. Release arm clamp handle, lift miter latch. Swing arm to desired angle shown on miter scale. For 45° miter cuts, right or left, locate the miter latch in the proper 45° column slot. Securely lock arm with clamp handle. Intermediate angles: lock arm in position with arm clamp handle only. Cutting action same as cross cut.

## IN-RIP/OUT-RIP

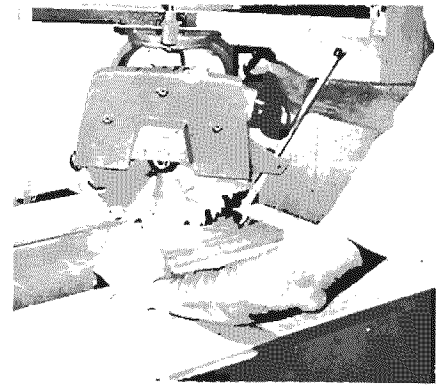
Read Fig. C. Start with arm locked in cross cut position. Pull out motor to end of arm. Pull yoke clamp handle against pin lifter. Revolve motor 90°, right or left, for out-rip or in-rip position, and lock yoke clamp handle. Locate saw for desired width of rip, using rip scale, and lock saw carriage by tightening rip lock against side of arm. Adjust guard so that it just touches material. Lower anti-kickback assembly so that fingers are approximately 1/8 inch lower than material. Slide the piece of material to be cut under anti-kickback fingers. Try pulling material in opposite direction. The anti-kickback fingers should grab it, if they do not readjust anti-kickback assembly. With material against guide strip, feed evenly into saw blade; give it a chance to cut. DO NOT FORCE. DO NOT FEED FROM ANTI-KICKBACK SIDE OF GUARD. FOLLOW INSTRUCTIONS ON CAUTION TAG.

## ANTI-KICKBACK WITH SPREADER.

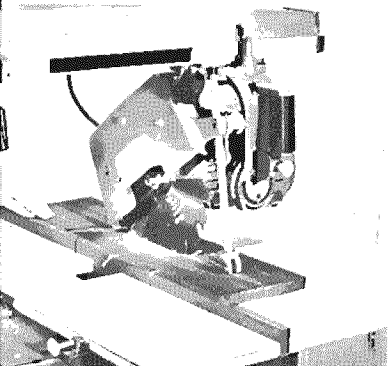
See your Sears Service Center for Accessories.

## ANTI-KICKBACK SPREADER OPERATING INSTRUCTIONS FOR RIPPING

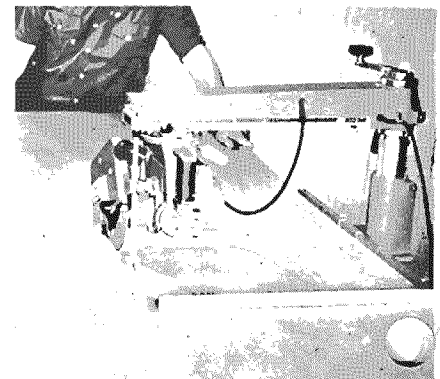
1. Disconnect the electrical power.
2. Rotate the adjusting screw to center the splitter blade in the kerf made by the blade.
3. Adjust the upper guard to drag lightly on the top surface of the workpiece. Lock it securely in this position.
4. Lower the splitter and anti-kickback until the anti-kickback fingers are about 1/8" below the top surface of the workpiece. Lock it securely in this position.
5. Slide the workpiece under the anti-kickback fingers in the normal rip direction. Try to pull the workpiece backwards. If the fingers do not prevent backwards movement repeat step 3.



MITER



IN-RIP



OUT-RIP

## CROSS-CUTTING

Adjust the splitter and anti-kickback so that the splitter blade just clears the fence and workpiece. Clamp it in this position. This provides blade guarding from the front direction.

## REPETITIVE CROSSCUTTING

Clamp a "C" clamp (minimum 6") using a wood block on each side of the arm. This will limit the carriage travel beyond the position necessary to complete the crosscut operation.

## CAUTION

For purposes of clarity, the lower guard is omitted from the photographs inside this manual. However, ALL cuts must be made with both the upper and lower guards in place.

### BEVEL CUT-OFF

Read Figs. B and D. Start in cross cut position. Elevate the saw by rotating crank on top of column. Pull out locating pin and release bevel clamp handle. Tilt motor in yoke to angle desired on bevel scale. Locating pin quickly locates 0°, 45° or 90° positions. If any other angle is desired, bevel clamp will hold motor rigidly in position.

CAUTION: POSITION BEVEL STOP VERTICALLY BEFORE MAKING BEVEL CUT. (See Page 16, item 4)

### PLOUGH

This operation is done with dado head in RIP position. Lower dado head for depth of cut desired, then lock carriage securely against machine arm. Be sure to adjust guard on in-feed side, lower anti-kickback assembly to hold material. When starting cut, hold material firmly down on table and back against guide. Feed evenly.

### COMPOUND MITER

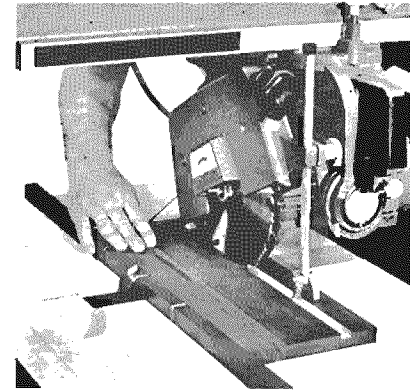
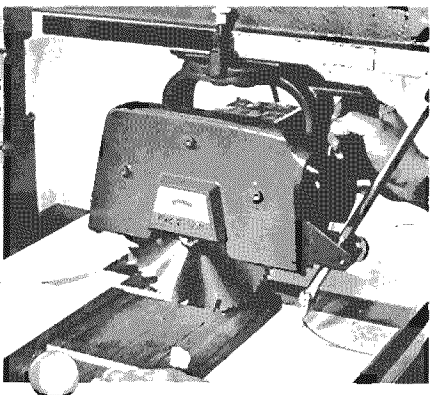
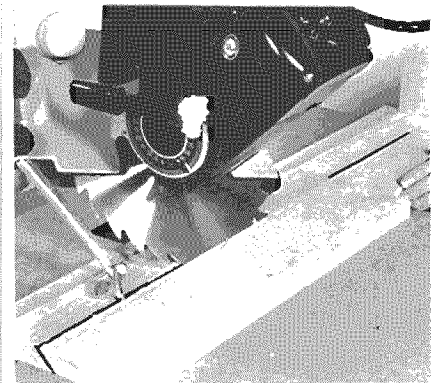
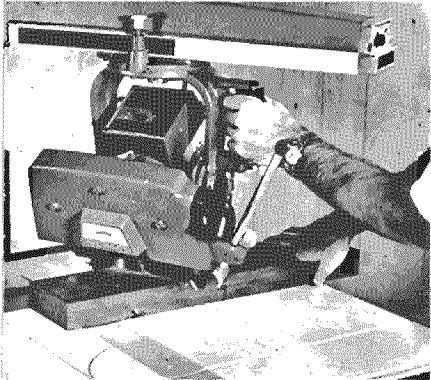
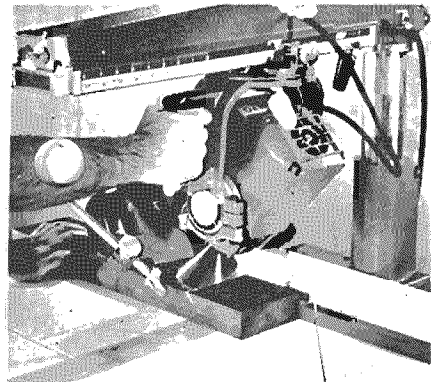
Read Figs. A, B and D. Start in bevel cut-off position. Lift miter latch, release arm clamp handle. Swing the arm into desired miter position, usually 45° or in-between angles, then relock arm clamp handle. Pull saw across for miter cuts. The compound miter cut is simply a combination bevel and miter cut.

### BEVEL RIP

Read Figs. B, C, and D. Start in bevel cross-cut position as described above. Now, place the saw into rip position and (using rip lock) lock securely against arm at desired point. Be sure to lower guard at in-feed position, adjust the anti-kickback device and then use a wood "pusher" board to further prevent kickback.

### DADO

Replace saw blade with dado head. Use far across or angle dado cuts same as saw blade. When determining depth of cut, simply lower dado until it just touches top of material. Then lower dado head as desired. Each full turn equals  $\frac{1}{8}$ ", one-half turn  $\frac{1}{16}$ ", etc. Wide dado cuts can be made by making successive passes across the material.



## CAUTION

For purposes of clarity, the lower guard is omitted from the photographs inside this manual. However, ALL cuts must be made with both the upper and lower guards in place.

## CUTTING KERF MARKS

After all your adjustments are made you should now cut into the table top the most common kerf marks. This will allow you to move the saw into different positions without changing the elevation. To do so proceed as follows:

- (a) Locate and lock the arm 90° to the fence. Locate the blade 90° to the table.
- (b) Draw the saw out to about the middle of the track and lower the blade until it just grazes the ply top.
- (c) Turn the saw on and push the roller head all the way back. This will cut the fence and lightly score the ply top.
- (d) Lower the arm (saw still running) 1/4 turn. Pull the saw forward to the end of the arm with your *left hand*. This will cut a groove in the table top 1/32" deep. Tighten Rip Lock. (Refer to figure 1)
- (e) With the saw still running, release yoke clamp handle and locator pin. You can now rotate the yoke in a clockwise direction. Continue rotating the yoke until the spring mounted yoke locator pin falls into the next hole. You have now cut in the table top a 1/4 turn groove known as the swing line. The saw is now in the "in-rip" position. (Refer to figure 2) Loosen Rip Lock.
- (f) Once the 1/4 turn out is complete lock the yoke lock with your right hand and with the blade still revolving push the yoke back on the track until the blade reaches the fence. This will cut the rip trough in the center of the table. Stop Motor. (Refer to fig. 3)
- (g) Return saw to position shown in figure 1. Lock Rip Lock and start motor. Release yoke clamp handle and locator pin and rotate yoke counterclockwise to the outtrip position. This cuts the swing line for outtripping. Loosen rip lock.
- (h) Lock the yoke lock (clamp handle), and with your right hand and blade still revolving, push the saw back until the new trough matches the trough cut in (f). Stop Motor.
- (i) Return saw to position shown in figure 1 and move to the rear position behind the fence.
- (k) Lock Rip Lock and start motor. With motor running release the arm clamp handle and miter latch and move arm to the 45° right hand miter position. This will cut a trough for mitering. (Optional step) Repeat above for 45° left hand miter. Stop Motor.

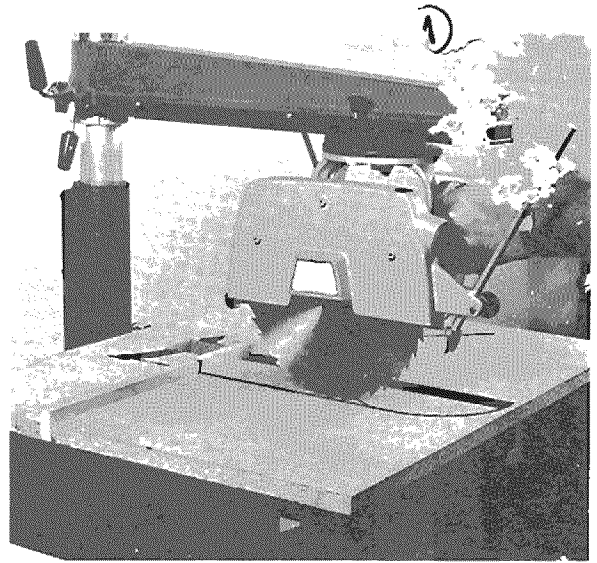


FIGURE 1

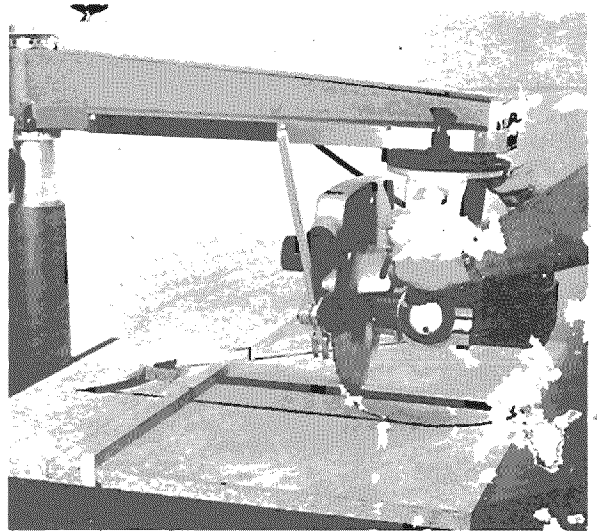


FIGURE 2

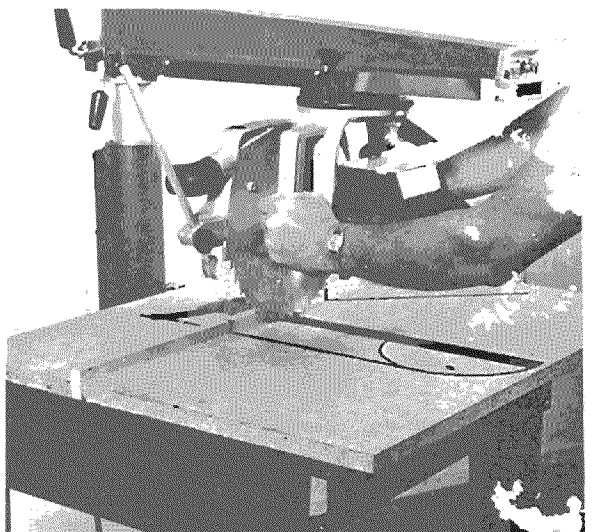
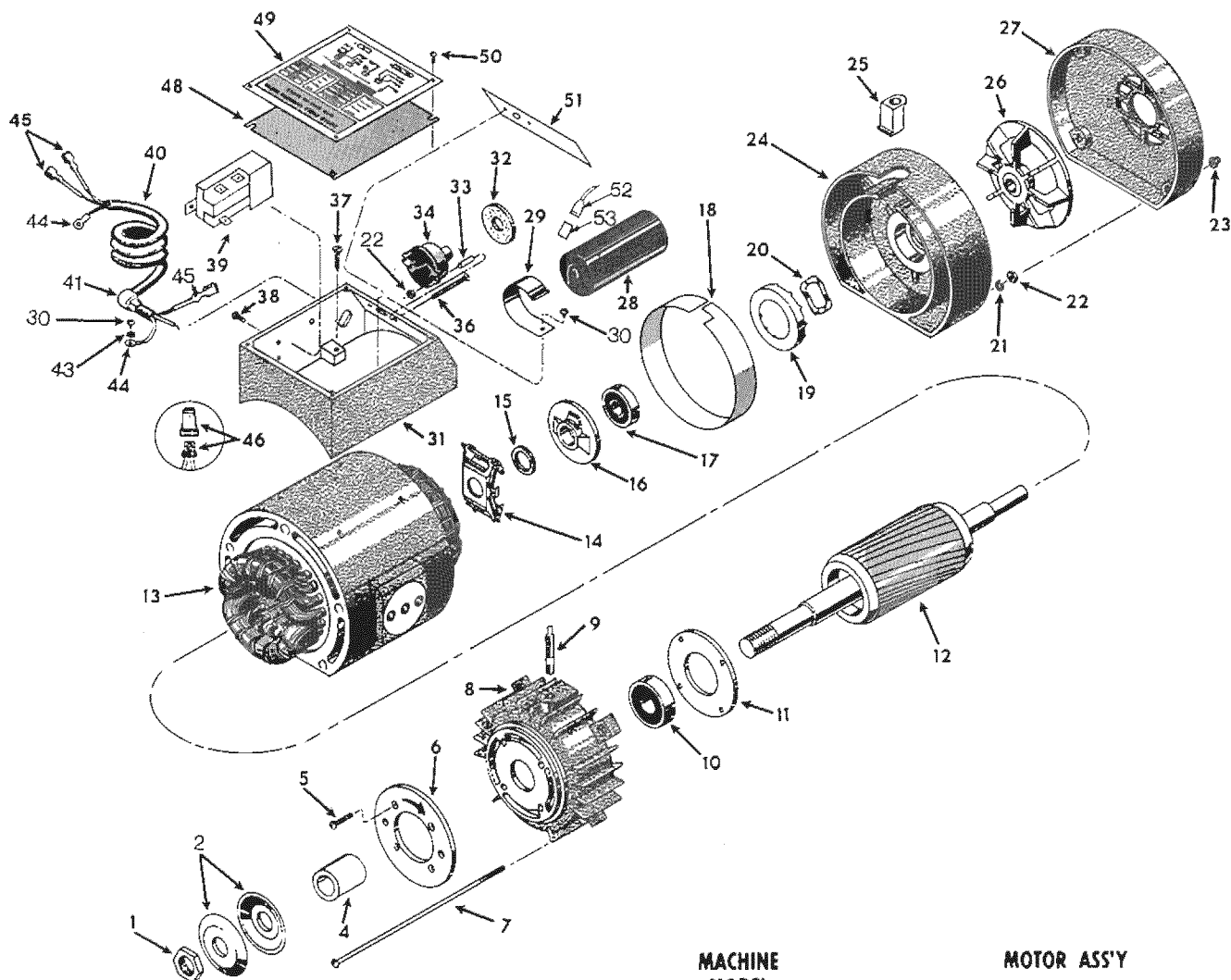


FIGURE 3

# TROUBLE SHOOTING CHART—MOTOR

TROUBLE	PROBABLE CAUSE	REMEDY
Motor will not run.	<ol style="list-style-type: none"> <li>1. Protector open; circuit broken.</li> <li>2. Low voltage</li> <li>3. Bad capacitor or starting relay.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reset protector by pushing on red button (indicated by audible click).</li> <li>2. Check power line for proper voltage.</li> <li>3. Replace capacitor or starting relay.</li> </ol>
Motor will not run and fuses "BLOW."	<ol style="list-style-type: none"> <li>1. Short circuit in line cord or plug.</li> <li>2. Short circuit in junction box, or loose connections.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inspect line cord and plug for damaged insulation and shorted wires</li> <li>2. Inspect all terminals in motor junction box for loose or shorted connections.</li> </ol>
Motor fails to develop full power. (Power output of motor decreases rapidly with decrease in voltage at motor terminals.)	<ol style="list-style-type: none"> <li>1. Power line: overloaded with lights, appliances and other motors.</li> <li>2. Undersize wires or circuit too long.</li> <li>3. General overloading of power company's facilities. (In many sections of the country, demand for electrical power exceeds the capacity of existing generating and distribution systems.)</li> <li>4. Incorrect fuses in power line.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce line load.</li> <li>2. Increase wire sizes, or reduce length of wiring.</li> <li>3. Request a voltage check from the power company.</li> <li>4. Install correct fuses.</li> </ol>
Motor starts slowly or fails to come up to full speed.	<ol style="list-style-type: none"> <li>1. Low Voltage — will not trip starting relay.</li> <li>2. Starting relay not operating.</li> <li>3. Bad capacitor.</li> </ol>	<ol style="list-style-type: none"> <li>1. Correct low voltage condition.</li> <li>2. Replace relay.</li> <li>3. Replace capacitor.</li> </ol>
Motor overheats.	<ol style="list-style-type: none"> <li>1. Motor overloaded.</li> <li>2. Improper cooling. (Air circulation restricted through motor due to sawdust, etc.)</li> </ol>	<ol style="list-style-type: none"> <li>1. Correct overload condition.</li> <li>2. Clean out sawdust to provide normal air circulation through motor.</li> </ol>
Starting relay in motor will not operate.	<ol style="list-style-type: none"> <li>1. Burned relay contacts (due to extended hold-in periods caused by low line voltage, etc.)</li> <li>2. Open relay coil.</li> <li>3. Loose or broken connections in motor terminal box.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace relay and check line voltage.</li> <li>2. Replace relay.</li> <li>3. Check and repair wiring.</li> </ol>
Motor stalls (resulting in blown fuses or tripped circuit breakers).	<ol style="list-style-type: none"> <li>1. Starting relay not operating.</li> <li>2. Voltage too low to permit motor to reach operating speed.</li> <li>3. Fuses or circuit breakers do not have sufficient capacity.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace relay.</li> <li>2. Correct the low line voltage condition.</li> <li>3. Replace fuses or circuit breakers with proper capacity units.</li> </ol>
Frequent opening of fuses or circuit breakers.	<ol style="list-style-type: none"> <li>1. Motor overloaded.</li> <li>2. Fuses or circuit breakers do not have sufficient capacity.</li> <li>3. Starting relay not operating (motor does not reach normal speed.)</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce motor load.</li> <li>2. Replace fuses or circuit breakers.</li> <li>3. Replace relay.</li> </ol>



**MACHINE  
MODEL**

901.23181

**MOTOR ASS'Y**

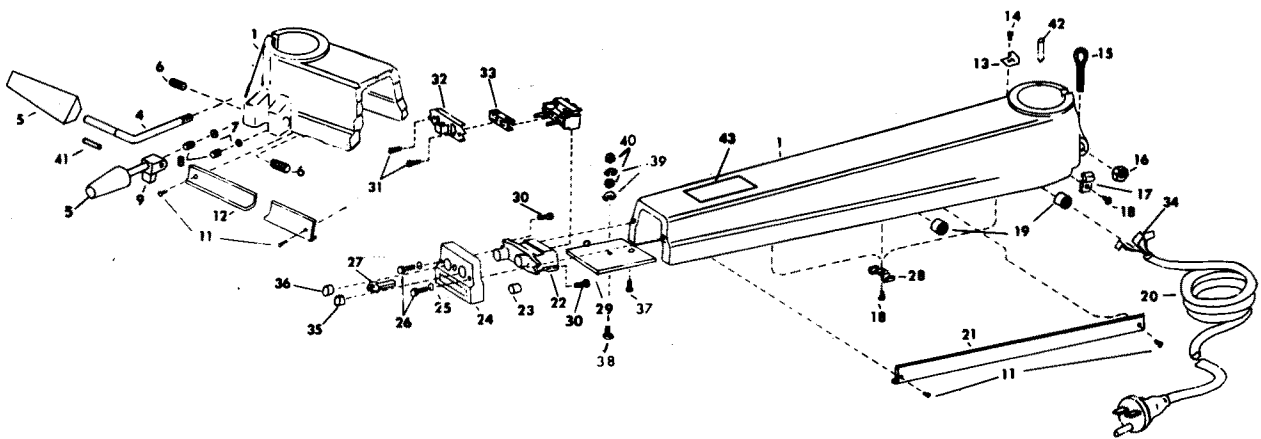
120/208-240 1 ph. 60 cy. 121635-04

Identification	Description	Quantity	Part No.
1	Arbor Nut	1	80109-00
2	Arbor Collar	2	122166-00
4	Arbor Spacer	1	80105-01
5	8-32 x 1-1/2 Mach. Scr.	4	99276-18
6	Cover Plate	1	80104-03
7	Tie Rod	4	545611-00
8	Arbor End Bell	1	545404-01
9	Guard Stud	1	539007-00
10	Ball Bearing	1	80510-00
11	Bearing Cover	1	545405-00
12	Rotor & Shaft	1	545706-00
13	Stator 120/208-240 (1 ph 60 cy)	1	121964-59
14	Brake Mechanism	1	545407-00
15	Felt Washer	1	500314-00
16	Brake Sleeve & Facing	1	545414-00
17	Ball Bearing	1	81472-00
18	Fan Bell Insulation	1	500171-00
19	Brake Clip	1	203356-00
20	Load Spring	1	82495-00
21	#8 Lock Washer	4	418-00
22	#8-32 Hex Nut	6	81967-00
23	#8-32 Hex Cap Nut	4	81934-00
24	Fan End Bell	1	545281-01
25	Lead Bushing	1	121921-00
26	Fan	1	96630-00
27	Fan Housing	1	96631-02
28	Capacitor	1	121631-00

Identification	Description	Quantity	Part No.
29	Capacitor Clamp	1	500139-00
30	#8-32 x 3/8 S.T. Mach. Scr.	2	80598-00
31	Relay Box	1	96609-02
32	Felt Washer	1	545012-00
33	Standoff Bushing	2	545274-00
34	Overload Protector	1	65927-00
36	#8-32 x 1-1/8 Flt. HD. Scr.	2	82321-00
37	#8-32 x 5/8 Flt. HD. Scr.	4	80595-00
38	#10-24 x 3/8 S.T. Pan HD. Scr.	2	84638-00
39	Relay	1	71732-08 (60CY)
40	Motor Cable (incl. M44 & M45)	1	121630-00
41	Cord Bushing	1	48822-00
43	#8 Washer	1	33985-00
44	Lead Terminals	2	81750-00
45	Lead Terminals	3	81771-00
46	Wire Nut	2	32114-01
48	Paper Gasket	1	545273-00
49	Specification Plate	1	121790-00
50	#4 x 5/16 Self Tap Screw	4	71029-00
51	Decal	1	122312-00
52	Spade Connector	2	81771-01
53	Insulating Cover	1	72268-00

**PARTS NOT SHOWN**

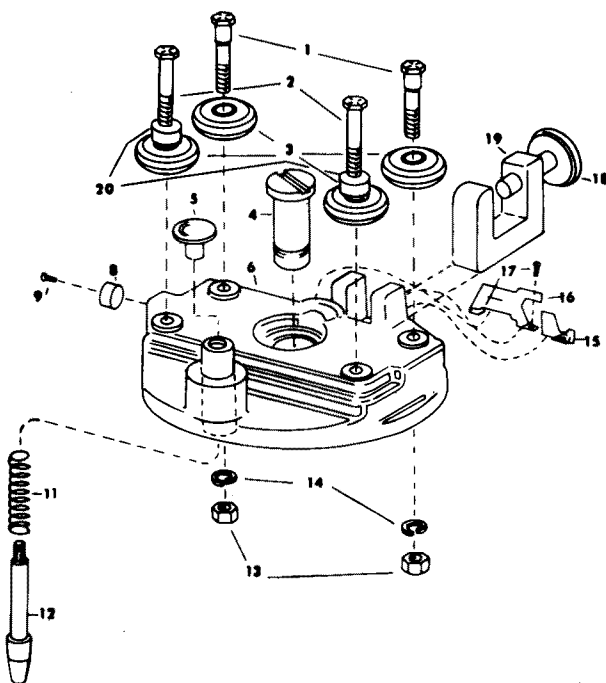
Sleeve	1	545588-00 (Blue Lead)
Arbor Nut Wrench—80137-01		
Arbor Hex Wrench—80138-00		
Connection Diagram		121627-00 (Page 19)



## ARM ASSEMBLY

Identifi- cation	Description	Quan- tity	Part No.
1	Arm (Incl. Item 42, 43)	1	121352-07
4	Clamp Rod	1	203571-00
5	Handle Grip	2	80066-00
6	Miter Adjusting Screw	2	83122-01
7	Set Screw Slug	2	103522-00
8	Soc. Hd. Cup Pt. Set Screw (1/4-20-1/4)	2	82387-00
9	Miter Latch	1	96716-00
11	Self Tap Screw (6-32 x 1/4)	1	80488-00
12	Arm Name Plate	1	122308-00
13	Miter Pointer	1	203597-00
14	Self Tap Screw (8-82 x 1/4)	1	52512-00
15	Cotter Pin	1	82023-00
16	L.H. Hex Nut (3/8-16)	1	81965-00
17	Cable Strap	3	80564-00
18	Self Tap Screw (8-32 x 3/8)	4	82240-00
19	Bushing	2	542705-00
20	Line Cable	1	85282-01
21	Rip Scale	1	121798-00
22	Switch	1	203194-02

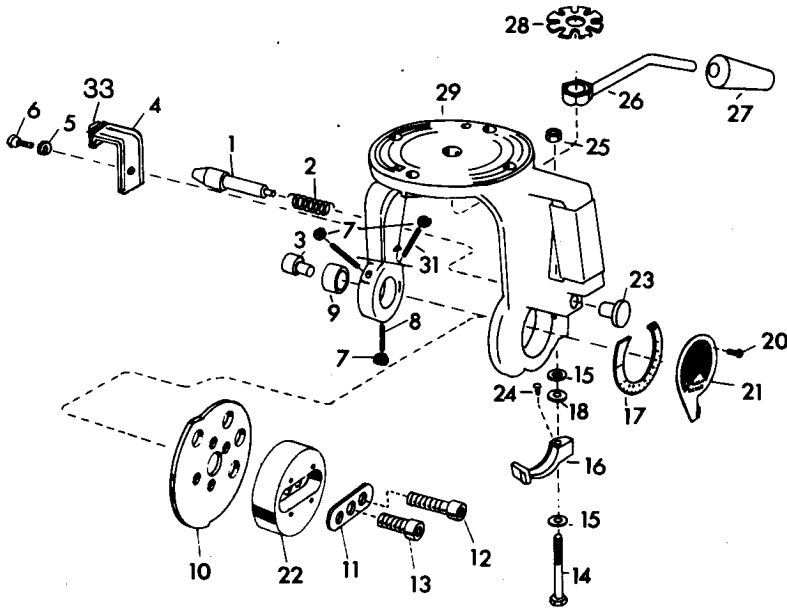
Identifi- cation	Description	Quan- tity	Part No.
23	Bumper	2	121341-00
24	Arm End Cap (Incl. 23)	1	203207-06
25	Lock Washer (#10)	2	82526-00
26	Fill. Md. Mach. Screw (10-24 x 3/4)	2	96994-00
27	Switch Key	1	85283-00
28	Cable Clip	2	81713-00
29	Switch Cover	1	203166-01
30	6-32 x 5/16 Self Tap Scr.	2	82261-00
31	#6 x 3/8 Ph. Hd. Tap Scr.	2	83054-00
32	Switch Support	1	203358-00
33	Switch Slide Lock	1	207061-00
34	Terminal Lug	2	81771-00
35	Black Button	1	207070-00
36	Red Button	1	207070-01
37	Self Tap Screw 8-32 x 1/4	1	82236-00
38	#8-32 x 1/2 Pan. Hd. Scr.	1	99262-08
39	#8 Lock Washer	2	36524-00
40	#8-32 Hex. Nut	2	407-00
41	Dowel Pin	1	83121-03
42	Groove Pin	1	82083-00
43	Instruction Label	1	122307-00
NOT SHOWN:			
	Decal (Use with item 24)	1	122306-00



## ROLLERHEAD ASSEMBLY

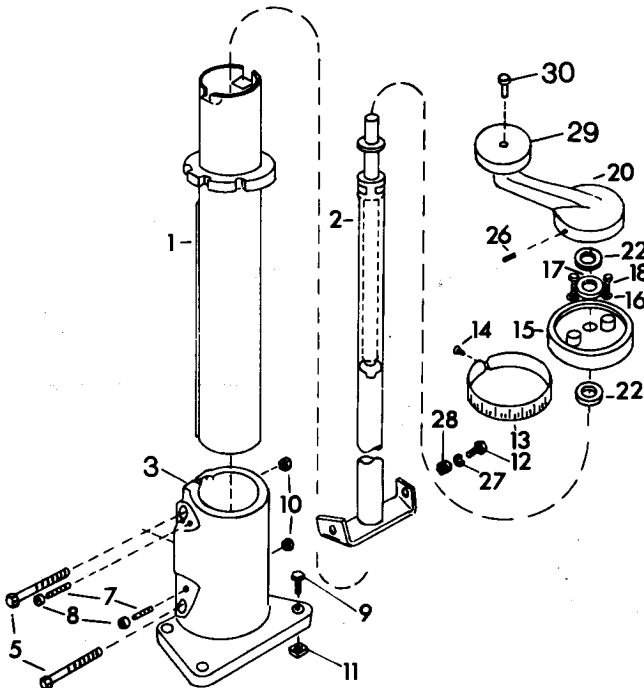
Identifi- cation	Description	Quan- tity	Part No.
1	Bearing Shaft (Eccentric)	2	203682-00
2	Bearing Shaft (Concentric)	2	82102-00
3	Ball Bearing	4	80970-00
4	King Bolt	1	70475-00
5	Plastic Knob	1	69532-00
6	Rollerhead	1	122256-00
8	Bumper	1	121637-00
9	#6-32 x 3/4 Ph. Fill. Hd. Screw	1	121622-00
11	Latch Spring	1	122254-00
12	Locating Pin	1	122258-00
13	5/16-24 Hex Nut	2	80470-00
14	5/16 Lock Washer	2	84319-00
15	Pointer, Out-rip	1	203765-00
16	Pointer, In-rip	1	122260-00
17	#6-32 x 1/4 Self Tapping Pan Hd. Screw	2	99247-04
18	Clamp Screw	1	81368-00
19	Rip Lock	1	83130-01
20	Spacer	2	122257-00

## YOKE ASSEMBLY



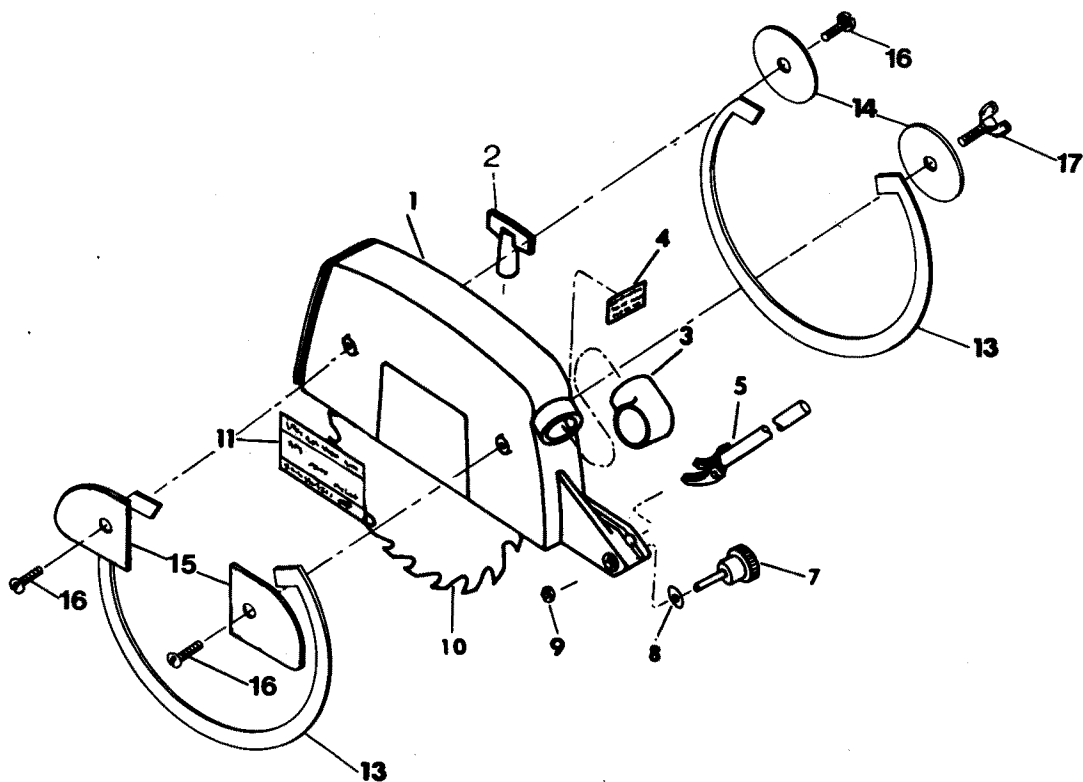
Identifi- cation	Description	Quan- tity	Part No.
1	Locating Pin	1	121615-00
2	Latch Spring	1	96723-00
3	Support Screw	1	203111-00
4	Bevel Stop (Incl. 33)	1	88157-00
5	Spring Washer	1	56510-01
6	#10-24 x 3/4 Self Tapping Pan Hd. Screw	1	83394-00
7	#10-24 Hex Nut	3	81953-00
8	#10-24 x 1 Socket Hd. Cup Point Set Screw	1	80652-00
9	Trunnion Bushing	1	122193-00
10	Dial Plate	1	121280-00
11	Hub Washer	1	80969-00
12	5/16-18 x 1-1/4 Socket Hd. Cap Screw	2	82172-00
13	Spec. Screw	1	81014-00
14	3/8-16 x 2-1/2 Hex Hd. Cap Screw	1	82124-00
15	Washer	1	203802-00
16	Bevel Handle	1	84353-02
17	Bevel Protractor	1	121787-00
18	Washer	2	203663-01
20	#8-32 x 1/4 Pan Hd. Screw	2	80487-00
21	Bevel Pointer	1	122311-00
22	Dial Plate Hub	1	81361-00
23	Plastic Knob	1	69532-00
24	Drive Screw	1	12122-00
25	3/8-16 Hex Jam Nut	1	99364-05
26	Clamp Assembly	1	203751-00
27	Handle Grip	1	80066-00
28	Yoke Clamp Adjuster	1	80464-00
29	Yoke	1	203665-08
31	#10-24 x 1-1/4 Set Screw	2	82413-00
33	Bumper	1	121341-00

## BASE AND COLUMN



Identifi- cation	Description	Quan- tity	Part No.
1	Column	1	203139-01
2	Support Tube, Bridge and Screw Assembly	1	121289-00
3	Base	1	121291-01
5	5/16-18 x 2-1/2 Hex Hd. Cap Screw	2	72382-00
7	1/4-20 x 1-3/8 Flat Point Set Screw	2	122147-00
8	1/4-20 Hex Jam Nut	2	99374-05
9	3/8-16 x 1-3/8 Hex Hd. Cap Screw	4	99172-22
10	5/16-18 Hex Jam Nut	2	81956-00
11	3/8-16 Square Nut	4	80468-00
12	3/8-16 x 3/4 Hex Hd. Cap Screw	2	82098-00
13	Miter Scale	1	203602-01
14	#7 x 5/16 Type "U" Drive Screw	1	82280-00
15	Thrust Cap (Incl. 13, 14)	1	86518-02
16	1/4 Lock Washer	2	99389-06
17	Shim Washer	3	100245-00
18	1/4-20 x 1 Round Hd. Mach. Screw	2	82286-00
20	Elevating Arm (Incl. Item 26, 29, 30)	1	71917-02
22	Shim Washer	1	103564-00
26	1/4-20 x 1" Set Screw	1	82398-00
27	3/8 Lock Washer	2	415-00
28	3/8-16 Hex Nut	2	81986-00
29	Elevating Grip	1	71914-00
30	Shoulder Rivet	1	73421-00





## GUARD ASSEMBLY

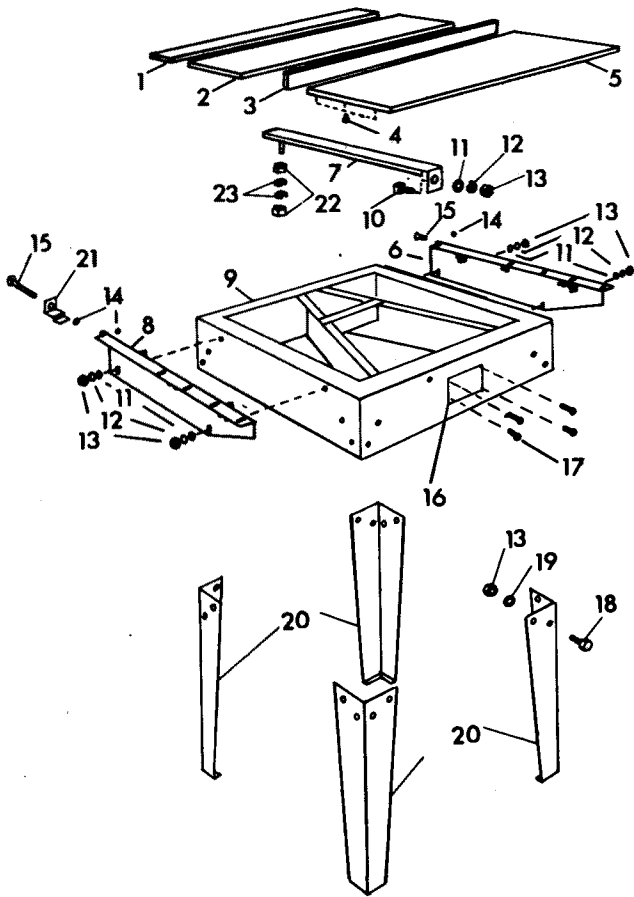
Identification	Description	Quantity	Part No.
1	Guard (Includes 4, 11)	1	96665-07
2	Wing Nut	1	70474-00
3	Dust Spout	1	80466-00
4	Caution Plate	1	80126-00
5	Anti-Kickback Assembly	1	70477-01
7	Anti-Kickback Clamp Knob	1	80085-01
8	Shim Washer	1	80457-00
9	5/16-18 Hex Jam Nut	1	80467-00
10	Saw Blade (12")	1	
11	Nameplate	1	122305-00
13	Lower Guard	2	96645-03
14	Retainer-Inner	2	122341-00
15	Retainer-Outer	2	96807-03
16	#10-24 x 3/8 Self Tapping Round Hd. Screw	3	84638-00
17	#10-24 x 3/8 Thumb Screw	1	96692-00

## ASSEMBLY OF LOWER GUARD TO UPPER GUARD

1. Hang outer lower guard (13) on bosses located on upper guard and mount two retainers (15) using two self-tapping screws (16) into pre-drilled holes on outer side of guard. Tighten screws to seat retainers.
2. Hang inner lower guard (13) on bosses located on guard and mount two retainers (14) using one self-tapping screw (16) and one thumb screw (17) on inner side of guard. Thumb screw to be used in boss nearest to kickback assembly. Tighten screw and thumb screw to seat support washers.

**NOTE:** To remove guard and blade from motor, it is not necessary to remove or re-install the outer lower guard. To change blades remove thumb screw and inner retainer by hand and the inner lower guard is easily removed. The upper guard with outer lower guard can be removed allowing blade to be changed.

## TABLE AND FRAME



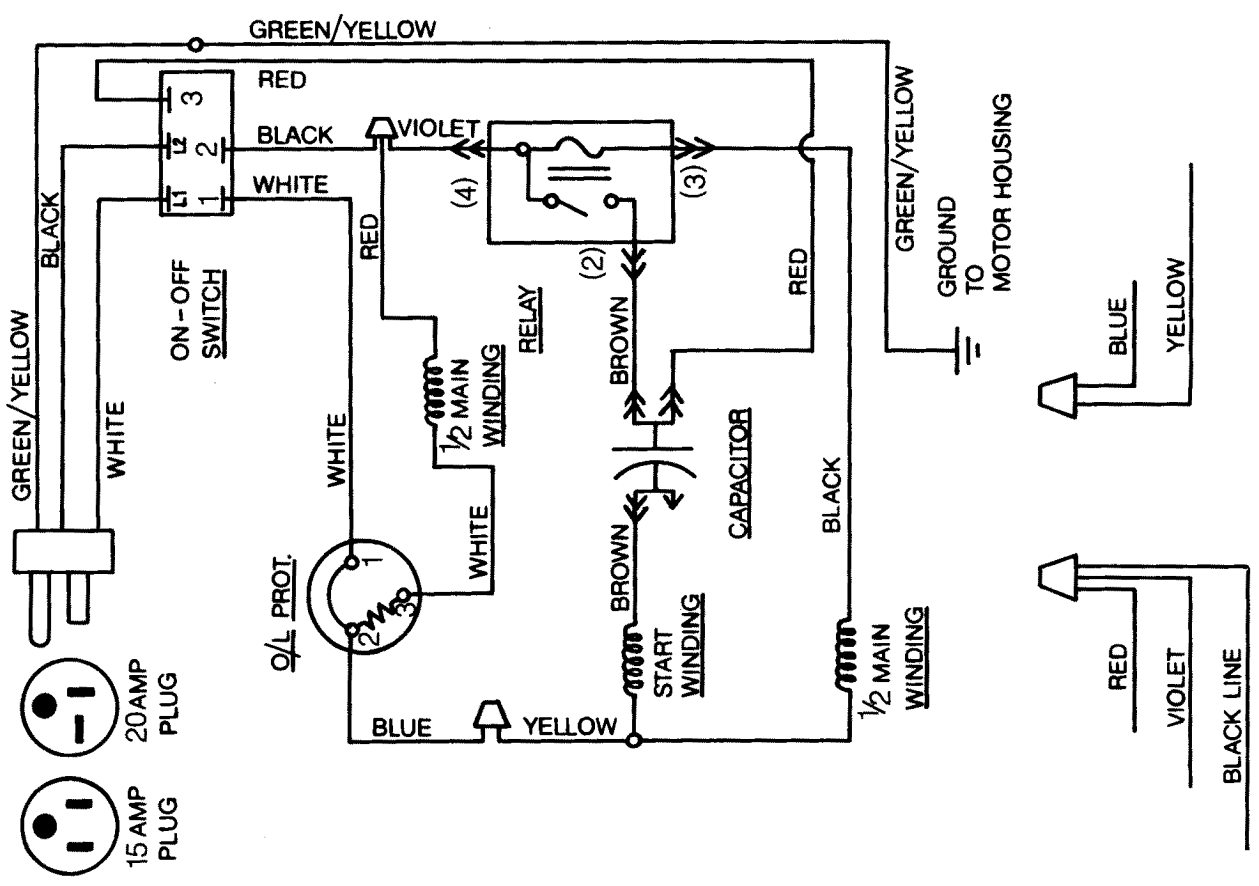
Identifi- cation	Description	Quan- tity	Part No.
1	Spacer Board	1	96615-10
2	Back Board	1	96615-09
3	Guide Strip	1	96615-10
4	Table Screw	8	201287-00
5	Fixed Board	1	121286-01
6	R.H. Cleat Assem.	1	86508-04
7	Center Cleat Assem.	1	96967-00
8	L.H. Cleat Assem.	1	86508-05
9	Table Frame	1	96959-01
10	3/8-16 x 3/4 Square Hd. Mach. Screw	5	81911-00
11	3/8 Flat Washer	5	80674-00
12	3/8 Lock Washer	5	415-00
13	3/8-16 Hex Nut	21	84180-00
14	Eyelet	3	80050-00
15	Thumb Screw	3	80455-00
16	Nameplate	1	122310-00
17	Drive Screws	4	12122-00
18	3/8-16 x 1/2 Hex Hd. Cap Screw	16	82098-00
19	3/8 Flat Washer	16	82504-00
20	Table Leg	4	96960-01
21	Bracket	3	72086-00
22	5/16-18 Hex Nut	2	81956-00
23	5/16 Lock Washer	2	99384-07

### PARTS NOT SHOWN:

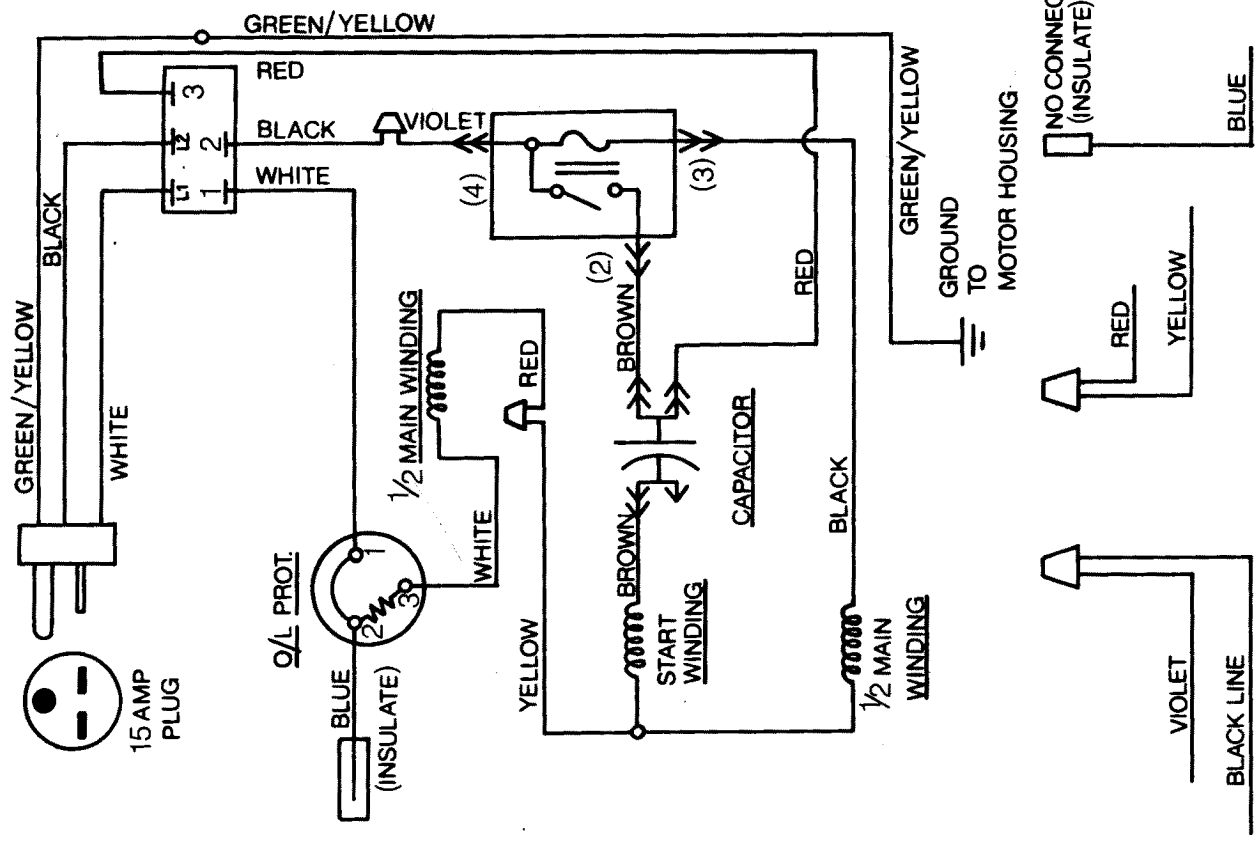
99056-03	Hex Wrench 3/32
99056-04	Hex Wrench 1/8
99056-11	Hex Wrench 1/4
99056-14	Hex Wrench 3/8

# WIRING DIAGRAM 121627-00

## 120 VOLT CONNECTION



## 240 VOLT CONNECTION



## FULL ONE YEAR WARRANTY ON CRAFTSMAN RADIAL SAW

If within one year from the date of purchase, this Craftsman Radial Saw fails due to a defect in material or workmanship, Sears will repair it, free of charge.

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

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

SEARS, ROEBUCK AND CO., DEPT. 698/731 A, SEARS TOWER, CHICAGO, IL 60684

## RECOMMENDED ACCESSORIES

<u>CATALOG NUMBER</u>	<u>DESCRIPTION</u>
9-32499	12" Master Combination Blade
9-32702	12" Rip Combination Blade
9-32427	12" Hollow Ground Planer Blade
9-32469	12" General-Purpose Blade
9-32477	12" Bevel-Ground Combination Blade
9-32014	12" Rip Blade 30 Tungsten Carbide Tips
9-32555	12" Cut-Off Blade/Alternately Bevel-Ground Tips
9-22723	10" Sanding Wheel
9-3217	7" Dia. Molding Set (Four 3-pc. Sets)
9-3219	7" Dia. Molding Set (Eight 3-pc. Sets)
9-3253	8" Dado Set
9-32475	8" Flat-Ground Dado Set
9-3257	7" Dado Set
9-4952	Circular Saw Blade Stabilizer
9-16997	Dust Collector
9-23189	Shaper Guard
F9-RY-35026	Auto. Carriage Return

**Sears**

**Sears**

**OWNERS  
MANUAL**

## **12" RADIAL ARM SAW**

**SERVICE**

**Now that you have purchased your Radial Arm Saw, should a need ever exist for repair parts or service, simply contact any Sears Service Center and most Sears, Roebuck and Co. stores.**

**Be sure to provide all pertinent facts when you call or visit.**

**MODEL NO.  
901.23181**

**The model number of your Radial Arm Saw will be found on the Machine Nameplate, attached to the table frame.**

**IMPORTANT!—To assure product SAFETY and RELIABILITY repairs, maintenance and adjustment should be performed by Sears Service Centers or other qualified service organizations, always using Sears replacement parts.**

**HOW TO ORDER  
REPAIR PARTS**

**WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:**

- **PART NUMBER**
- **PART DESCRIPTION**
- **MODEL NUMBER**
- **NAME OF ITEM**

**901.23181**

**12" Radial Arm Saw**

**All parts listed may be ordered from any Sears Service Center and most Sears stores.**

**If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for handling.**

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