

# Sears

*owners  
manual*

**MODEL NO.  
113.197801**

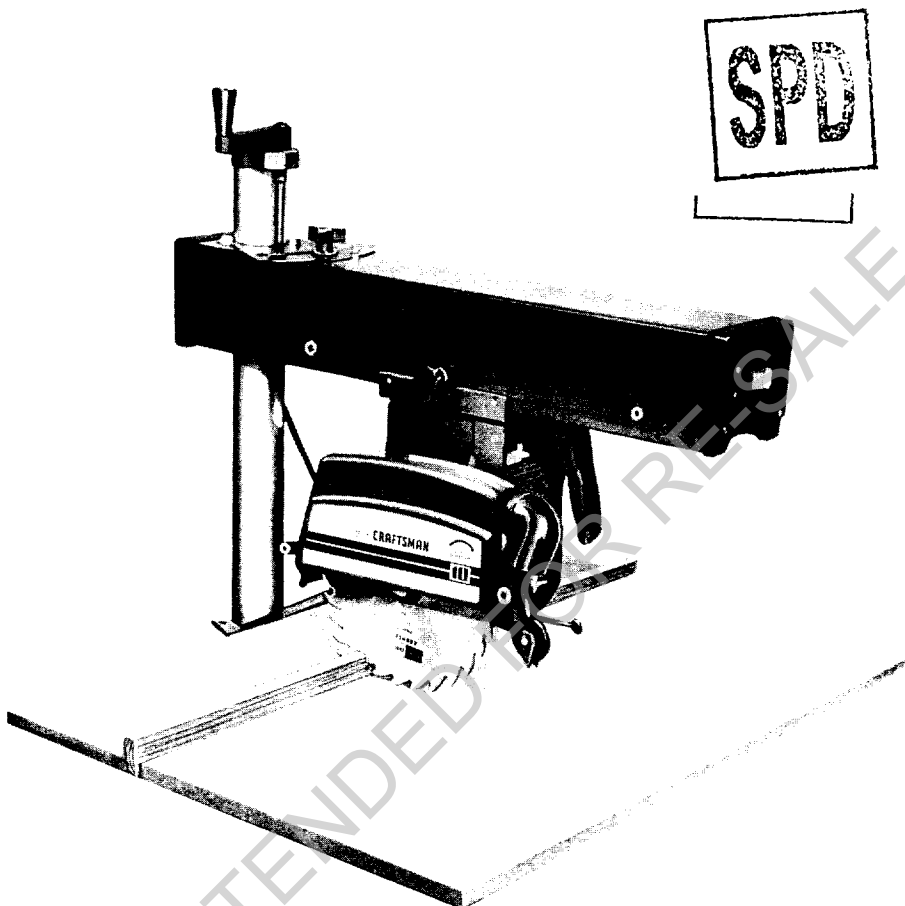
Serial  
Number \_\_\_\_\_

Model and serial  
number may be found  
at the right rear side  
of the arm.

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

## CAUTION:

Read **GENERAL**  
and **ADDITIONAL**  
**SAFETY**  
**INSTRUCTIONS**  
carefully



# Sears

# CRAFTSMAN®

## **10-INCH RADIAL SAW**

- *assembly*
- *operating*
- *repair parts*

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

## FULL ONE YEAR WARRANTY ON CRAFTSMAN RADIAL SAW

If within one year from 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., Sears Tower, BSC 41-3, Chicago, IL 60684

## general safety instructions for power tools

### 1. KNOW YOUR POWER TOOL

Read and understand the owner's manual and the labels affixed to the tool. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.

### 2. GROUND ALL TOOLS

This tool is equipped with an approved 3-conductor cord and a 3-prong grounding type plug to fit the proper grounding type receptacle. The green conductor in the cord is the grounding wire. Never connect the green wire to a live terminal.

### 3. KEEP GUARDS IN PLACE

in working order, and in proper adjustment and alignment.

### 4. REMOVE ADJUSTING KEYS AND WRENCHES

Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.

### 5. KEEP WORK AREA CLEAN

Cluttered areas and benches invite accidents. Floor must not be slippery due to wax or sawdust.

### 6. AVOID DANGEROUS ENVIRONMENT

Don't use power tools in damp or wet locations or expose them to rain. Keep work area well lighted. Provide adequate surrounding work space.

### 7. KEEP CHILDREN AWAY

All visitors should be kept a safe distance from work area.

### 8. MAKE WORKSHOP KID-PROOF

— with padlocks, master switches, or by removing starter keys.

### 9. DON'T FORCE TOOL

It will do the job better and 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

Do not wear loose clothing, gloves, neckties or jewelry (rings, wrist watches) to get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair. Roll long sleeves above the elbow.

### 12. USE SAFETY GOGGLES (Head Protection)

Wear Safety goggles (must comply with ANSI Z87.1) at all times. Everyday eyeglasses only

have impact resistant lenses, they are NOT safety glasses. Also, use face or dust mask if cutting operation is dusty, and ear protectors (plugs or muffs) during extended periods of operation.

### 13. SECURE WORK

use clamps or a vise to hold work when practical. It's safer than using your hand, frees both hands to operate tool.

### 14. DON'T OVERREACH

Keep proper footing and balance at all times.

### 15. MAINTAIN TOOLS WITH CARE

Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

### 16. DISCONNECT TOOLS

before servicing, when changing accessories such as blades, bits, cutters, etc.

### 17. AVOID ACCIDENTAL STARTING

Make sure switch is in "OFF" position before plugging in.

### 18. USE RECOMMENDED ACCESSORIES

Consult the owner's manual for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards.

### 19. NEVER STAND ON TOOL

Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.

Do not store materials above or near the tool such that it is necessary to stand on the tool to reach them.

### 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.

# additional safety instructions for radial saws

**CAUTION:** Always disconnect the power cord before removing the guard, changing the cutting tool, changing the set-up or making adjustments. Shut off motor before performing layout work on the saw table.

**WARNING: DO NOT CONNECT POWER CORD UNTIL THE FOLLOWING STEPS HAVE BEEN SATISFACTORILY COMPLETED:**

- I. Assembly and alignment.
- II. Examination and operating familiarity with ON-OFF switch, elevation control, yoke index and lock bevel index and lock, carriage lock, guard clamp screw, spreader and antikickback device, and miter index and lock.
- III. Review and understanding of all Safety Instructions and Operating Procedures thru-out manual.

## INSTALLATION

1. Set carriage lock before moving the saw.
2. Bolt the saw to the floor if it tends to slip, walk, or slide during normal operation.
3. Mount the saw so the table is approximately 39" above the floor.
4. Mount the saw so the arm slopes slightly downward to the rear so the carriage will not move forward due to gravity.
5. If you attach any kind of table extensions over 24" wide to either end of the saw, make sure you either bolt the saw to the bench or floor as appropriate, or support the outer end of the extension from the bench or floor, as appropriate.

## MINIMIZE ACCIDENT POTENTIAL

This saw is intended to be used to cut and shape wood and plastics. It may be used to cut non-ferrous metals if a non-ferrous metal cutting saw blade is used. DO NOT use the chisel tooth combination saw blade shipped with this saw to cut plastics or non-ferrous metals. DO NOT cut ferrous metals with this saw.

Most accidents are caused by FAILURE TO FOLLOW setup and operating instructions:

### (A) GENERAL

- Avoid awkward hand positions, where a sudden slip could cause a hand to move into a sawblade or other cutting tool. Never reach in back of or around the cutting tool with either hand to hold down the workpiece, or for any other reason; DO NOT place fingers or hands in the path of the sawblade.
- Never saw, dado, mold, or rabbet unless the proper guard is installed and set up as instructed.
- NOTE THE FOLLOWING DANGER LABELS WHICH APPEAR ON THE FRONT OF THE YOKE AND GUARD:

**DANGER: FOR YOUR OWN SAFETY**  
READ AND UNDERSTAND OWNER'S MANUAL BEFORE OPERATING MACHINE

- |                                       |  |
|---------------------------------------|--|
| 1. WEAR SAFETY GOGGLES                | 5. NEVER REACH AROUND THE SAWBLADE       |
| 2. KEEP HANDS OUT OF PATH OF SAWBLADE | 6. ALLOW TOOL TO STOP BEFORE ADJUSTING   |
| 3. KNOW HOW TO AVOID "KICKBACKS"      | 7. DO NOT PERFORM ANY OPERATION FREEHAND |
| 4. USE "PUSH STICK" FOR NARROW WORK   |  |

**WARNING:** TO AVOID INJURY RETURN CARRIAGE TO THE FULL REAR POSITION AFTER EACH CROSSCUT TYPE OF OPERATION

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

stop before removing workpiece or scrap or taking any other action.

- If any part of this radial saw is missing or should break, bend or fail in any way, or any electrical component fail to perform properly, shut off power switch, remove cord from power supply and replace damaged, missing and/or failed parts before resuming operation.
- IF YOUR SAW MAKES AN UNFAMILIAR NOISE OR IF IT VIBRATES EXCESSIVELY, STOP OPERATING IMMEDIATELY UNTIL THE SOURCE HAS BEEN LOCATED AND THE PROBLEM CORRECTED.
- **WARNING: DO NOT ALLOW FAMILIARITY (GAINED FROM FREQUENT USE OF YOUR SAW) TO BECOME COMMONPLACE. ALWAYS REMEMBER THAT A CARELESS FRACTION OF A SECOND IS SUFFICIENT TO INFLICT SEVERE INJURY.**
- Before starting work, verify that no play exists between the column and arm or in the carriage, and that arm, yoke, and bevel locks/clamps are tight.
- A large proportion of saw accidents is caused by use of the wrong type blade, dull, badly set, improperly sharpened cutting tools, by gum or resin adhering to cutting tools, and by sawblade misalignment out-of-parallel with the fence. Such conditions can cause the material to stick, jam (stall the saw) or "KICKBACK" at the operator. NEVER ATTEMPT TO FREE A STALLED SAW BLADE WITHOUT FIRST TURNING THE SAW "OFF". If the sawblade is stalled or jammed, shut saw "OFF", remove workpiece, and check sawblade squareness to table surface and to the fence, and check for heel. Adjust as indicated.
- **CAUTION: DO NOT cycle the motor switch "ON" and "OFF" rapidly, as this might cause the sawblade to loosen. In the event this should ever occur, allow the saw blade to come to a complete stop and re-tighten the arbor nut normally, not excessively.**
- Do not leave a long board unsupported so the spring of the board causes it to shift on the table. Provide proper support for the workpiece, based on its size and the type of operation to be performed. Hold the work firmly against the fence and table.
- Never use a length stop on the free end or edge of the workpiece whether crosscutting or ripping. Never hang onto or touch the free end of workpiece when crosscutting, or a free piece that is cut off while power is "ON" and/or the saw blade is rotating. In short, the cut-off piece in any "thru-sawing" operation must never be confined — it must be allowed to move away from the side of the blade.
- Make sure your fingers do not contact the terminals when installing or removing the plug to or from a live power source.
- Never climb on the saw, or climb near the saw when power is "ON". Never leave the saw with power "ON", or before the cutting tool has come to a complete stop. Lock the motor switch and put away the key when leaving the saw.

- DEPRESS MOTOR BRAKE until sawblade or other cutting tool has come to a complete

# additional safety instructions for radial saws

- Do not use any blade or other cutting tool marked for an operating speed lower than 3450 RPM. Never use a cutting tool larger in diameter than the diameter for which the saw was designed. For greatest safety and efficiency when ripping, use the maximum diameter blade for which the saw is designed, since under these conditions the spreader is nearest the blade.
- Never turn your saw "ON" before clearing the table or work surface of all objects (tools, scraps of wood, etc.) except the workpiece and related feed or support devices for the operation planned.
- DO NOT perform layout, assembly, or setup work on the table while the cutting tool is rotating.
- Never perform any operation "FREE HAND". This term means feeding the sawblade into the workpiece or feeding the workpiece into the sawblade or other cutting tool without using the fence or some other device which prevents rotation or twisting of the workpiece during the operation. **Never "RIP" in the crosscut position. Never make a miter cut with the arm in the 90° crosscut position and the workpiece angled to the fence.**
- Never lower a revolving cutting tool into the table or a workpiece without first locking the Carriage Lock Knob. Release the knob only after grasping the Yoke Handle. Otherwise the cutting tool may grab the workpiece or table and be propelled toward you.

## (B) RIPPING

Ripping is cutting with the grain or the long way of the board — it is performed by pushing the workpiece along the fence and thru the sawblade (sawblade parallel to the fence).

1. Never apply the feed force to the section of the workpiece that will become the cut-off (free) piece. Feed force when ripping must always be applied between the saw blade and the fence . . . use a "PUSH STICK" (see pg. 23) for narrow (under 6 inches wide) or short (under 12 inches long) work.
2. Whenever possible, use the in-rip position — this provides minimum obstruction for feeding by hand or push stick as appropriate.
3. Do not release the workpiece before operation is complete — push the workpiece all the way past the rear (outfeed or exit) of the sawblade.
4. Make sure by trial before starting the cut that the antikickback pawls will stop a kickback once it has started. Keep points of pawls SHARP!
5. DO NOT attempt to shorten a workpiece by pushing it along the fence and through the sawblade in a rip position. Perform this operation in the crosscut position.
6. **CAUTION: Never reposition the Guard or antikickback with power "ON".**
7. A "KICKBACK" occurs during a rip-type operation when a part or all of the workpiece is thrown back violently toward the operator.

It can occur when the workpiece closes in on the rear (outfeed side) of the sawblade (heel), or is grabbed by the sawblade teeth (wrong-way feed) at the outfeed side. "PINCHING" is generally avoided by using the spreader, and a sharp sawblade of the correct type for the workpiece being cut. "HEEL" can be avoided by maintaining the sawblade exactly parallel to the fence. Grabbing by the sawblade teeth can be caused by heel or by feeding from the wrong direction (see "DANGER" warning on guard) — it can be avoided by maintaining the sawblade parallel to the fence, feeding into the sawblade from the nose of the guard only, by positioning the spreader/antikickback assembly properly, and keeping the workpiece down on the table and against the fence.

8. Position the nose of the guard to just clear the workpiece, and position/adjust the antikickback and spreader devices as instructed under "Basic Saw Operations".
9. NEVER cut more than one piece at a time by stacking workpieces vertically.
10. NEVER feed a workpiece thru the saw with another piece (butting second piece against trailing edge of piece being cut), even if of the same thickness. Feed each workpiece individually thru the sawblade, and completely beyond the sawblade, before ripping the next workpiece. Use push stick if the rip cut is less than 3" wide.
11. DO NOT pull the workpiece thru the sawblade — position your body at the nose (in-feed) side of the guard: start and complete the cut from that same side. This will require added table support for long pieces.
12. Plastic and composition (like hardboard) materials may be cut on your saw. However, since these are usually quite hard and slippery, the antikickback pawls may not stop a kickback.  
Therefore, rip with the finished side down (next to the table) and be especially attentive to following proper set-up and cutting procedures. Do not stand, or permit anyone else to stand, in line with a potential kickback.
13. When sawing 1/4" or thinner materials, follow all normal ripping procedures except set sawblade into table top at least 1/8". DO NOT let go of or stop feeding the workpiece between the blade and fence until you have pushed it completely past the antikickback pawls. Otherwise the workpiece could get into the back of the sawblade and be thrown violently from the saw in the direction opposite to the feed direction. This is the same action that would occur if the instructions of the DANGER warning on the guard is aborted. Do not stand, or permit anyone else to stand, in line with the path of a workpiece that may be thrown from the saw in this manner.
14. Position the saw so neither you, a helper, or a

casual observer is forced to stand in line with the sawblade.

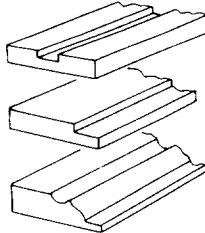
15. Use extra care when ripping wood that has a twisted grain or is twisted or bowed — it may rock on the table and/or pinch the sawblade.
16. Shaping of wood with a dado head or a molding head can be performed "top-side" (cutting tool basically vertical and employing sawblade guard), or "edge" (saw arbor vertical — cutting tool horizontal — and employing the Accessory molding head guard).

#### Ploughing

(Grooving with the grain)

#### Top side rabbeting

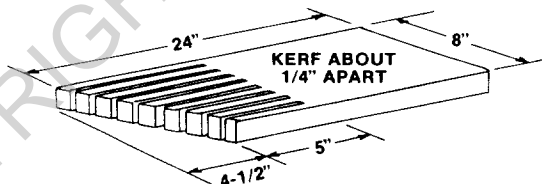
#### Top side molding (shaping) . . .



Resawing, gaining, coving, with the grain, are examples of rip-type cuts. The same basic setup procedures, including rotation of the guard and adjusting and positioning of the AKB/Spreader device as for in-rip or out-rip cutting, apply. However, since none of these operations involve thru-sawing (sawing through the workpiece), there is no kerf. Therefore the spreader and AKB pawls can only be lowered to a position where the spreader just clears the workpiece.

**CAUTION:** The AKB/Spreader device will not stop a kickback in this position, but will act as a holddown and as a guard of the out-feed side of the sawblade.

17. For rip or rip-type cuts, the end of a workpiece to which a push stick or push board is applied must be square (perpendicular to the fence) in order that feed pressure applied to the workpiece by the push stick or block does not cause the workpiece to come away from the fence, and possibly cause a kickback.
18. During rip and rip type cuts, the workpiece must be held down on the table and against the fence with a push stick, push block, or featherboards. A featherboard is made of solid lumber per sketch.



### (C) CROSSCUTTING

Crosscutting is cutting across the grain or the short way of the board. It is performed by placing the workpiece against the fence and then pulling the sawblade from behind the fence outward with the arm. The arm can be positioned for a 90° crosscut (sawblade perpendicular to fence) or a miter cut (arm and sawblade at some angle to fence other than 90°).

1. ALWAYS RETURN THE CARRIAGE TO THE FULL REARWARD POSITION AT CONCLUSION OF EACH CROSSCUT TYPE OPERATION. Never remove your hand from the Yoke Handle unless the carriage is in this position. Otherwise the cutting tool may climb up on the workpiece and be propelled toward you.
2. Place guard in horizontal position and adjust antikickback pawls to just clear the top of the fence or workpiece, whichever is higher. This provides additional guarding.
3. NEVER gang crosscut — lining up more than one workpiece in front of the fence — stacked vertically, or horizontally outward on the table — and then pulling saw thru: the blade could pick up one or more pieces and cause a binding or loss of control and possible injury.
4. Do not position the arm so the operation you are performing permits the cutting tool to extend beyond the edges of the Table.
5. Top-side dadoing, rabbeting or molding across the grain are examples of crosscut-type cuts. The same basic procedures including positioning of the AKB/Spreader device as for crosscutting apply.

### (D) ACCESSORIES

1. Use only recommended accessories as listed on page 31.
2. Never operate this saw when equipped with a dado head or molding head unless the molding head guard is installed — see listing of recommended accessories. The only exception is when "top-side" dadoing or molding, when the sawblade guard must be used. See detailed instructions that accompany the dado head, molding head, and molding head guard.
3. The use of grinding wheels, abrasive or cut-off wheels, or wire wheels, can be dangerous and is not recommended. (Abrasive or cut-off wheels are used to saw many different materials including metals, stone, and glass.)



The operation of any power tool can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear safety goggles complying with ANSI Z87.1 (shown on Package) before commencing power tool operation. Safety Goggles are available at Sears retail or catalog stores.

# electrical connections

## POWER SUPPLY

### 1. Motor Specifications

The A-C motor used in this saw is a non-reversible type having the following specifications:

Voltage ..... 120  
Amperes ..... 11.5  
Hertz (cycles) ..... 60  
Phase ..... Single  
RPM ..... 3450  
Rotation as viewed from saw blade end .....  
Clockwise

**CAUTION:** Your saw is wired for 120V operation. Connect to a 120V, 15-Amp. branch circuit and use a 15-Amp. time-delay fuse or circuit breaker.

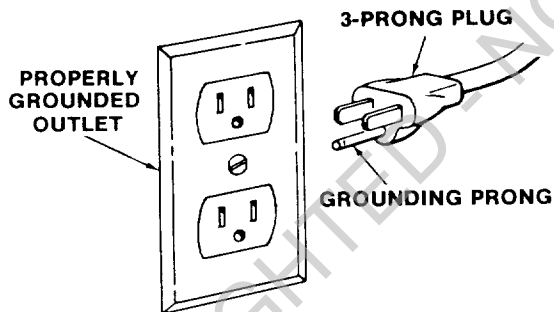
This machine must be grounded while in use to protect the operator from electrical shock.

IF YOU ARE NOT SURE THAT YOUR OUTLET IS PROPERLY GROUNDED, HAVE IT CHECKED BY A QUALIFIED ELECTRICIAN.

**WARNING:** DO NOT PERMIT FINGERS TO TOUCH THE TERMINALS OF PLUGS WHEN INSTALLING OR REMOVING THE PLUG TO OR FROM THE OUTLET.

**WARNING:** IF NOT PROPERLY GROUNDED THIS POWER TOOL CAN HAVE THE POTENTIAL HAZARD OF ELECTRICAL SHOCK, PARTICULARLY WHEN USED IN DAMP LOCATIONS OR IN PROXIMITY TO PLUMBING. IF AN ELECTRICAL SHOCK OCCURS THERE IS THE POTENTIAL OF A SECONDARY HAZARD SUCH AS YOUR HANDS CONTACTING THE SAWBLADE.

IF POWER CORD IS WORN OR CUT, OR DAMAGED IN ANY WAY, HAVE IT REPLACED IMMEDIATELY.



This power tool is equipped with a 3-conductor cord and grounding type plug which has a grounding prong, listed by Underwriters' Laboratories. The ground conductor has a green jacket and is attached to the tool housing at one end and to the grounding prong in the plug at the other end.

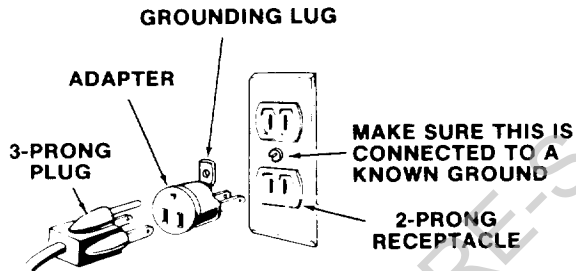
This plug requires a mating 3-conductor grounding type outlet as shown.

If the outlet you are planning to use for this power tool is of the two prong type DO NOT REMOVE OR ALTER THE GROUNDING PRONG IN ANY MANNER. Use an adapter as shown and always connect the grounding lug to a known ground.

It is recommended that you have a qualified electrician replace the TWO prong outlet with a

properly grounded THREE prong outlet.

An adapter as shown below is available for connecting plugs to 2-prong receptacles. The green grounding lug extending from the adapter must be connected to a permanent ground such as to a properly grounded outlet box.



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

### MOTOR SAFETY PROTECTION

**NOTE:** This motor should be blown out, or "vacuumed", frequently to prevent sawdust interference with normal motor ventilation.

**CAUTION:** Let motor come up to full speed prior to starting cut.

1. This tool should be connected to a 120 volt, 15 amp branch circuit with a 15 amp time delay fuse or circuit breaker. Failure to use the proper size fuse can result in damage to the motor.
2. If the motor fails to start, turn the power switch to the off position immediately. **UNPLUG THE TOOL.** Check the saw blade to insure that it turns freely and that its teeth are not wedged into the table top. After the blade has been freed, try to start the motor again. If, at this point, the motor still fails to start, refer to the "Motor Trouble-Shooting Chart."
3. If the motor should suddenly stall while cutting, the power switch should be turned off, the tool unplugged and the blade freed. The motor may now be restarted and the cut finished.
4. Frequent opening of fuses or circuit breakers may result if motor is overloaded, or if the motor circuit is fused differently from recommendations. Overloading can occur if you feed too rapidly or if your saw is misaligned so that the blade heels. Do **not** use a fuse of greater capacity without consulting a qualified electrician.
5. Although the motor is designed for operation on the voltage and frequency specified on the motor nameplate, normal loads will be handled safely on voltages not more than 10% above or below the nameplate voltage. Heavy loads, however, require that voltage at motor terminals equals the voltage specified on motor nameplate.
6. Most motor troubles may be traced to loose or incorrect connections, overloading, reduced input voltage (such as small size wires in the supply circuit) or to an overly-long supply circuit. Always check the connections, the load and the supply circuit whenever the motor fails to perform satisfactorily. Check wire sizes and lengths with the table following.

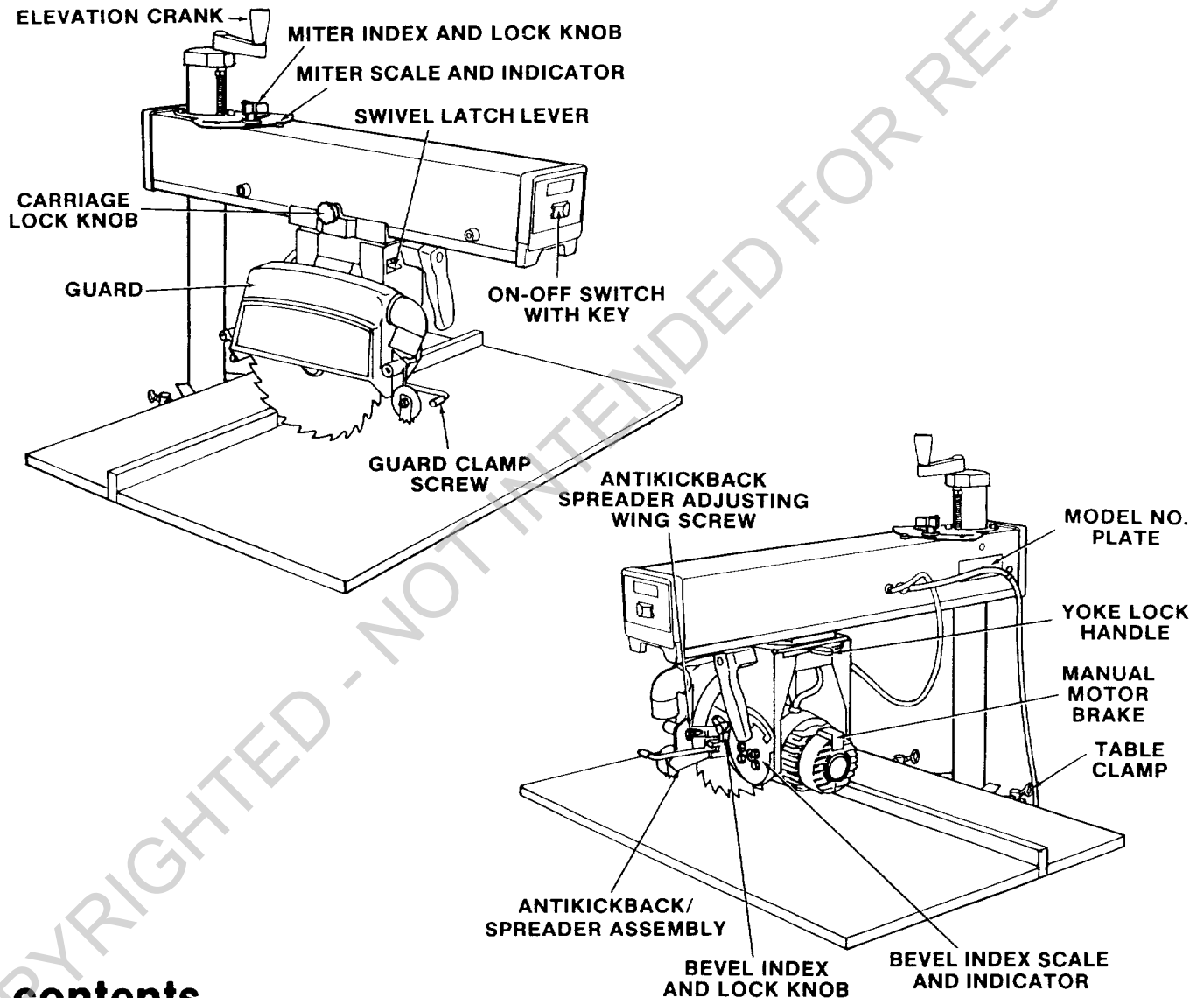
## WIRE SIZES

The use of any extension cord will cause some loss of power. To keep this to a minimum and to prevent over-heating and motor burn-out, use the table below to determine the minimum wire size (A.W.G.) extension cord. Use only 3 wire extension cords which have 3 prong grounding type plugs and 3-pole receptacles which accept the tools plug.

**NOTE:** For circuits of greater length, the wire size must be increased proportionately in order to deliver ample voltage to the saw motor.

Length of the Conductor	Wire Size Required (American Wire Gauge Number) 120 Volt Lines
Up to 100 feet	No. 12
100 feet to 200 feet	No. 8
200 feet to 400 feet	No. 6

## locations and functions of controls

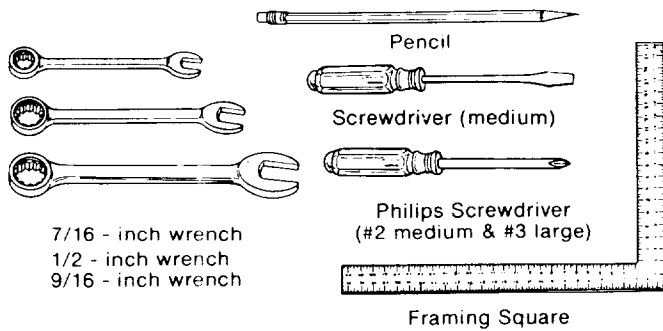


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# assembly and alignment

## TOOLS NEEDED



## UNPACKING AND PREASSEMBLY

**WARNING: DO NOT CONNECT THE POWER CORD TO A SOURCE OF POWER. THIS CORD MUST REMAIN UNPLUGGED WHENEVER YOU ARE WORKING ON THE SAW.**

Model 113.197801 Radial Saw is shipped complete in one carton. Legs or stand are not included.

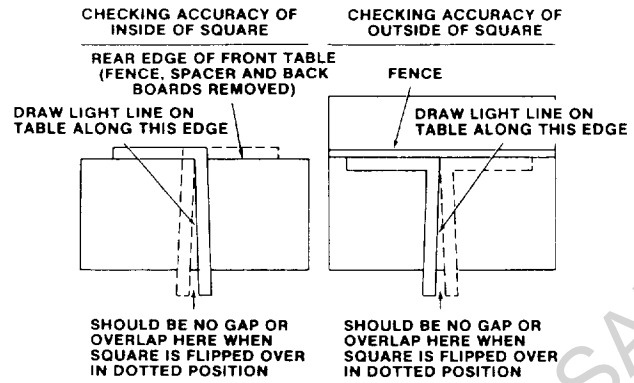
### 1. Unpacking and Checking Contents

Separate all "loose" parts from packaging materials and check each item with "Table of Loose Parts" to make sure all items are accounted for, before discarding any packing material.

If any parts are missing, do not attempt to assemble radial saw, plug in the cord, or turn the switch on until the missing parts are obtained and are installed correctly.

KEY NO.	TABLE OF LOOSE PARTS	QTY.
A	Column, Arm, and Carriage Assy. ....	1
B	Channel Bracket .....	1
C	Table Mounting Channel .....	2
D	Front Channel .....	1
E	Rear Table .....	1
F	Fence .....	1
G	Front Table .....	1
H	Blade Guard .....	1
J	Bracket Clamp .....	2
K	Blade .....	1
L	Owners Manual .....	1

## FRAMING SQUARE MUST BE TRUE



### Loose Parts Bag # 63868

(containing the following items)

Nut, Shaft .....	1
Spacer, Motor .....	1
Key, Switch .....	1
Wrench, Hex L 1/8 .....	1
Wrench, Hex L 5/32 .....	1
Wrench, Hex L 3/16 .....	1
Knob .....	1
Clamp, Table .....	2
Nut, Lock 5/16-18 .....	2
Spacer, Column .....	6
Washer, 21/64 x 1 x 1/16 .....	2

### Loose Parts Bag # 63866

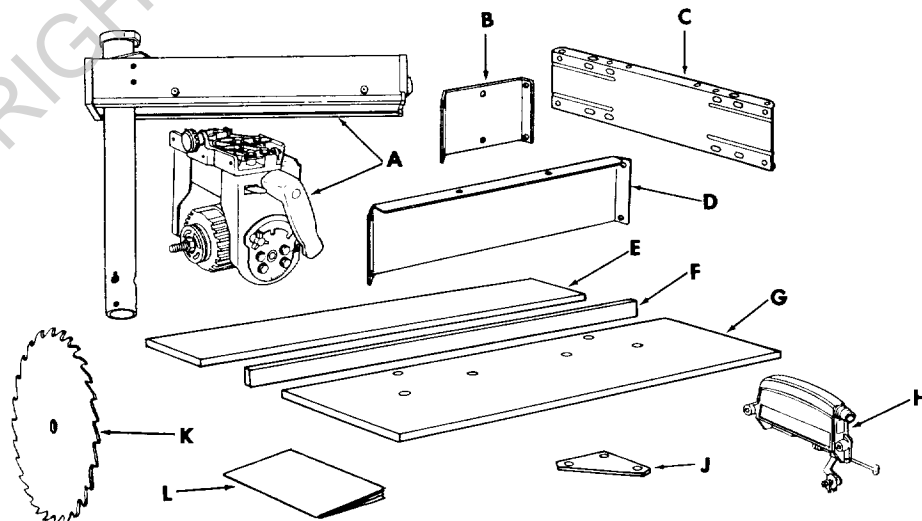
(containing the following items)

Wrench, Arbor .....	1
Wrench, Shaft .....	1
Elbow, Dust .....	1
Collar, Blade .....	2

### Loose Parts Bag # 63867

(containing the following items)

Screw, Pan Hd. 1/4-20 x 1 .....	10
Washer, 17/64 x 5/8 x 1/32 .....	6
Nut, Hex 1/4-20 .....	10
Lockwasher, 1/4 .....	10
Lockwasher, 5/16 .....	14
Washer, 21/64 x 5/8 x 1/16 .....	14
Bolt, High Strength, 5/16-18 x 1 .....	6
Bolt, High Strength 5/16-18 x 3/4 .....	8
Nut, Hex 5/16-18 .....	14
Washer, Neoprene .....	6

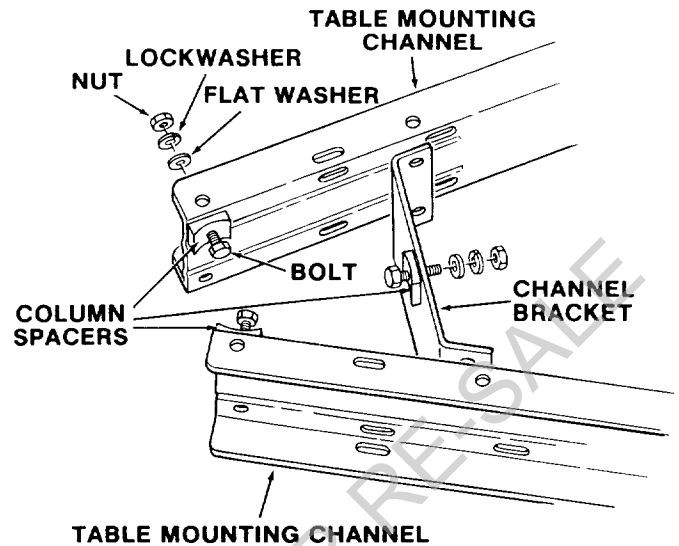




## ATTACHING TABLE SUPPORT CHANNELS

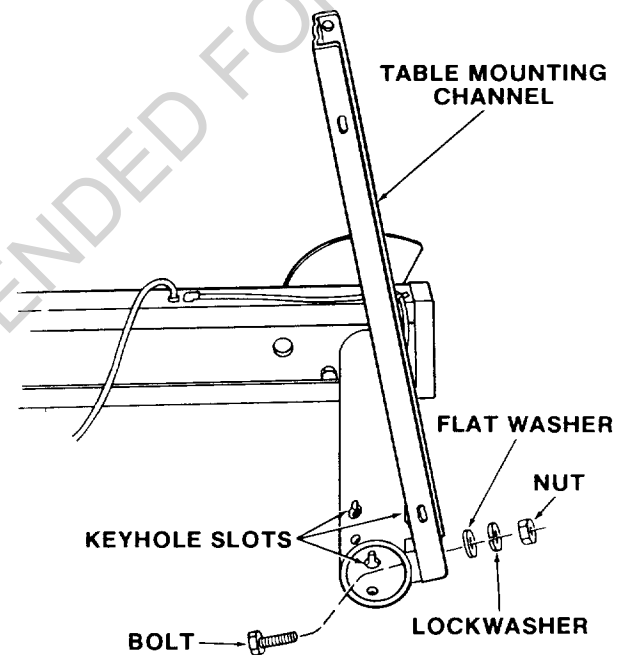
1. From the loose parts, find (6) 5/16-18 x 1 hex head bolts, column spacers, 21/64 x 5/8 x 1/16 flat washers, 5/16 lockwashers, and 5/16-18 nuts.
2. Assemble 3 bolts, column spacers, flat washers, lockwashers, and nuts on table mounting channels and channel bracket as shown. Just start nuts on bolt threads.

**NOTE:** Be sure table mounting channels are assembled top side up as shown.

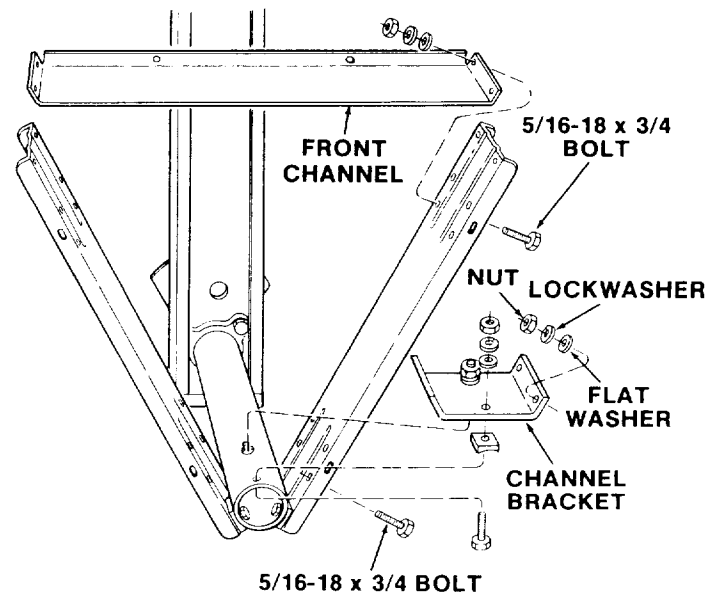


3. Position column and arm assembly as shown and attach table mounting channel to column tube thru keyhole slot. Assemble lower bolt, spacer, flat washer, lockwasher and nut as shown finger tight. Reposition assembly and attach other mounting channel on left side of column.

**NOTE:** Loosen miter lock knob on top of the arm 1/2 turn (see illustration on page 7) and rotate the arm on the column to the 0° position.



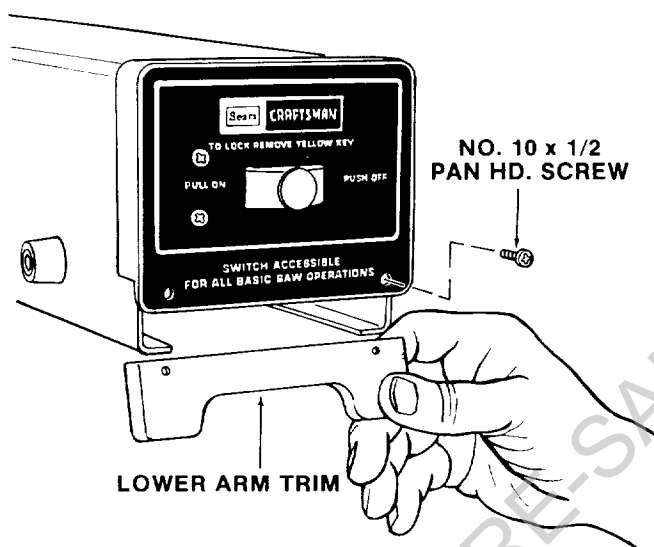
4. Reposition arm and column assembly and attach channel bracket to keyhole slot in column tube. Assemble the lower bolt, spacer, flat washer, lockwasher and nut as shown. Use (4) hex hd. 5/16-18 x 3/4 bolts, flat washers, lockwashers, and nuts on side of table mounting channel and channel bracket. Do not tighten.
5. Attach front channel with flange up and towards front with (4) hex hd. 5/16-18 x 3/4 screws, flat washers, lockwashers and nuts.
6. Reposition saw on its base, index and lock arm in 0° position.



# assembly and alignment

## REMOVE LOWER ARM TRIM

Remove the (2), 10 x 1/2 Pan Hd screws as shown.

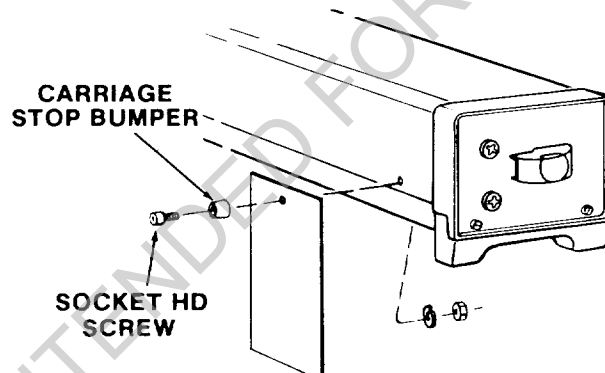


## REMOVE CARRIAGE STOP BUMPER

Remove 1/4-20 x 3/4 socket Hd screw, lockwasher, and nut with 3/16" Hex "L" wrench supplied.

Remove WARNING TAG

Read and understand warning tag. Discard tag after installing carriage assembly and re-installing stop bumper.



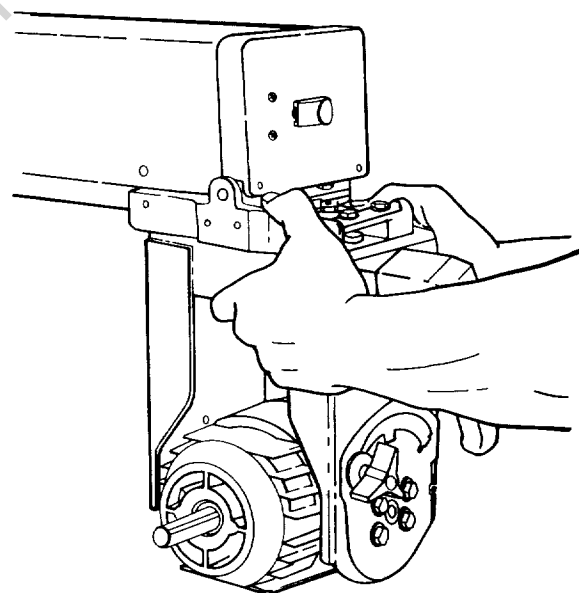
## INSTALL CARRIAGE ASSEMBLY

Holding carriage assembly with both hands, carefully start and slide the carriage onto the track. The assembly must be held parallel with the arm so that all glides slide smoothly onto the arm, preventing any excessive strain on glides and track.

Check for looseness of carriage glides. Refer to "Adjusting Carriage Glides" in "Adjustments to Compensate for Wear" Section.

Reinstall lower arm trim.

**WARNING: REINSTALL CARRIAGE STOP BUMPER TO PREVENT CARRIAGE FROM COMING OFF ARM.**



## MOUNT SAW TO CRAFTSMAN STAND, STEEL LEGS, OR FLAT BENCH

The saw must be bolted down. Position your saw to slope slightly rearward, so when the carriage is installed it will not move forward due to gravity.

## ALIGNMENT PROCEDURE IMPORTANT:

IN ORDER TO OBTAIN MAXIMUM CUTTING ACCURACY, THE FOLLOWING FIVE STEPS MUST BE CAREFULLY FOLLOWED. BECOME THOROUGHLY FAMILIAR WITH THESE STEPS SO THAT YOU CAN ALWAYS MAINTAIN YOUR SAW IN PROPER ALIGNMENT. THE ACCURACY OF EACH ADJUSTMENT IS ALWAYS DEPENDENT UPON THE ACCURACY OF THE PRECEDING ADJUSTMENT.

After following the 6 step assembly and alignment procedure and the Basic Saw operation section refer to Trouble Shooting section if any difficulty is experienced when performing any sawing operation.

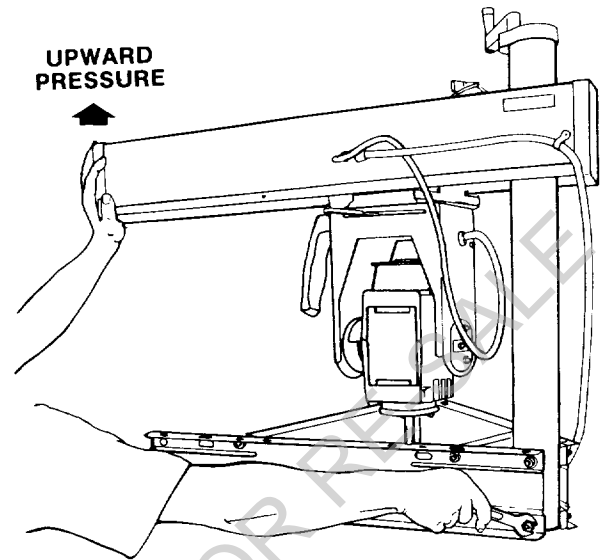
### STEP ONE

**NOTE:** The following adjustments, performed properly, will result in the work table being parallel to the arm.

1. Elevate arm to its maximum elevation by rotating crank clockwise.

Loosen Bevel Index Lock Knob 1/2 turn. Move Knob upward to release index nut and then rotate the motor to position the end of motor shaft down. Slide knob downward into index notch and tighten Bevel Index Lock Knob.

2. Loosen Miter Index Lock Knob at rear of Arm 1/2 to 1 turn and slide rearward to release index. (It may be necessary to tap the knob down before it will slide.) Rotate Arm to the 30° right miter position.



3. While applying upward pressure to front of Arm tighten with a 1/2" wrench the (2) 5/16" nuts which hold the right Table Mounting Channel to the Column.
4. Repeat the above procedure with Arm in the 30° Left Miter position and tighten the nuts holding the Left Table Mounting Channel to the column.
5. Tighten the two bolts in the front, center of the Channel Bracket. **NOTE:** The four (4) bolts holding the Channel Bracket to the Table Mounting Brackets should be finger tight only.

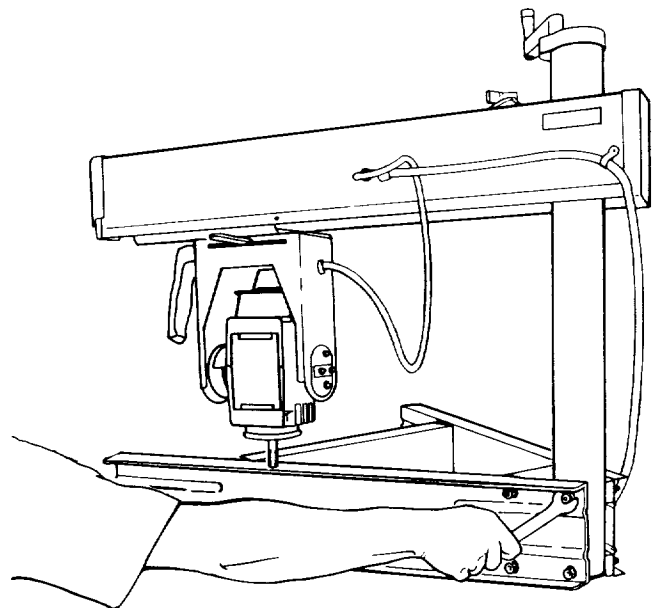
6. Push Motor to its most rearward position. Rotate Arm to position end of motor shaft directly above the right Table Mounting Channel.

7. Lower the Arm by turning the Elevation Crank counterclockwise until the end of the motor shaft just touches the Channel.

8. Pull motor out to the forward stop on the Arm and position motor shaft above right Channel. The end of the motor shaft should now be higher than the Channel. If it is not, repeat steps 3 and 4 above. Next, slowly loosen the top rear nut on the right Table Mounting Channel until the motor shaft just touches the Table Mounting Channel. Tighten the nut. Return the motor to the rear of the Arm and recheck alignment. If the motor shaft does not sit flush with the top of the Table Mounting Channel then adjust with the elevation crank until it does. Now repeat the above procedure until the motor shafts travels evenly along the top of the Channel.

9. Pull motor out to the forward stop on the Arm and position the motor shaft above the Left Table Mounting Channel. Slowly loosen the top, rear nut on the Left Table Mounting Channel until the motor shaft just touches the Channel. Tighten the nut. Recheck alignment with the motor at the rear stop. If it is not in line with the top of the Channel repeat steps 8 and 9 starting on the Left side this time.

10. The end of the Motor Shaft should now just clear the tops of both Table Mounting Channels and



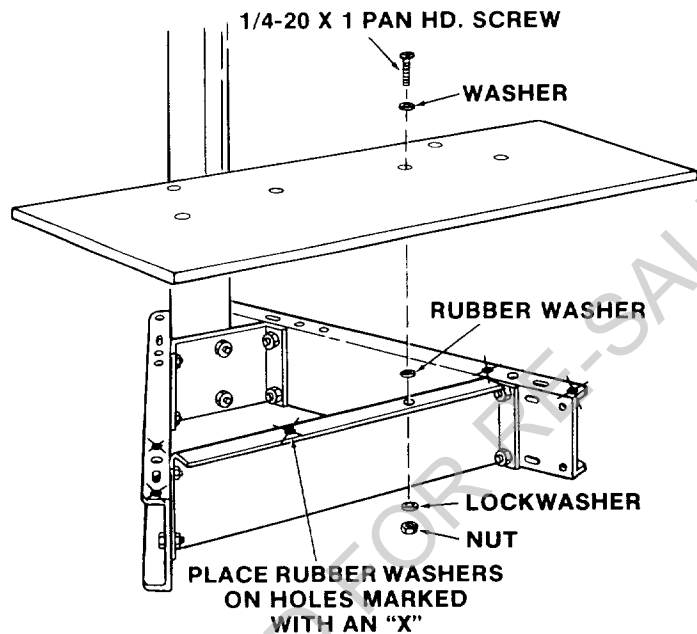
the Front Channel in all locations. Now tighten the four (4) remaining screws that hold the Channel Bracket to the Table Mounting Brackets. Check all other bolts and nuts on the Base to be certain that they are tight.

# assembly and alignment

## 11. INSTALLING FRONT (WORK) TABLE

- Next you will install the Front Table. First move the Motor to the rear stop on the Arm.
  - Now place one of the six (6) flat rubber washers over each of the Table mounting holes in the base as shown.
  - Carefully position the Front Table over the washers, lining up the holes with the Rubber Washers as you set it in place.
  - Install the six (6) 17/64" flat washers and the six (6) 1/4-20 x 1 inch pan-head machine screws through the Table, Rubber washer, and Channel.
  - Install one 1/4 inch Lockwasher and 1/4 inch Hex Nut on each of the six (6) screws. Tighten 1/2 turn beyond finger tight to begin compressing the Rubber Washers. These Washers will serve in the final alignment of the Arm to the Table.
12. Elevate Arm, by rotating the Crank clockwise, until the end of the Motor Shaft clears the Table. Using the handle of the Arbor Wrench as a "feeler-gage" adjust the screws at the six Table mounting locations until the entire Table is an even distance from the end of the Motor Shaft.

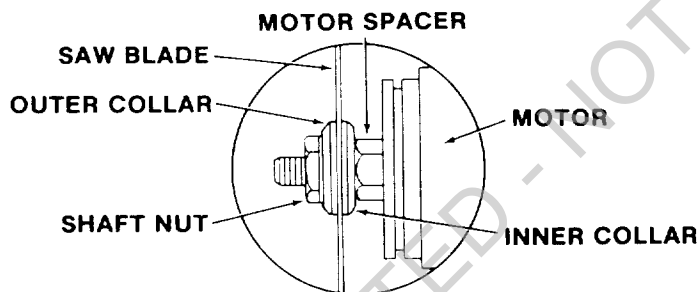
**NOTE:** Be certain that all six (6) screws are at least 1/2 turn tightened beyond hand tight. If



necessary adjust all screws down an equal amount and recheck alignment.

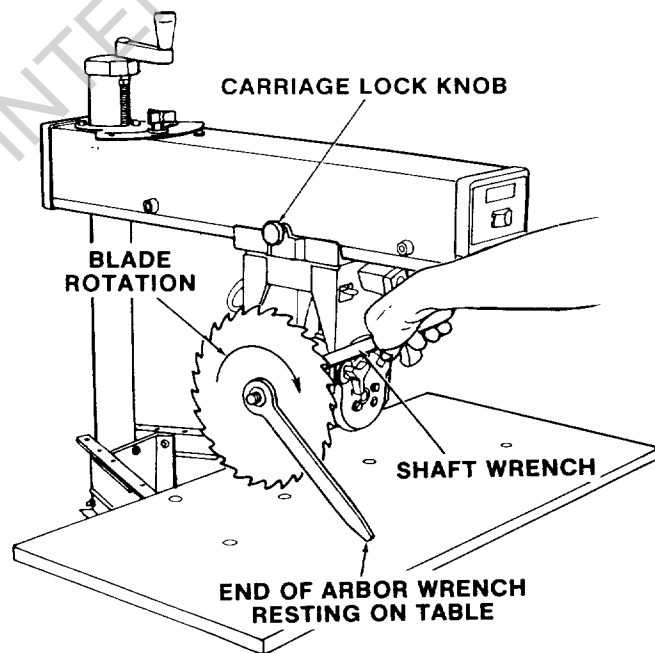
## INSTALL SAW BLADE

Reposition motor and install saw blade as shown. MOTOR SHAFT HAS LEFT HAND THREADS.



## INSTALL CARRIAGE LOCK KNOB

Find carriage lock knob in loose parts bag and install in left side of carriage. This knob locks the carriage in position on the arm when making adjustments or when ripping.



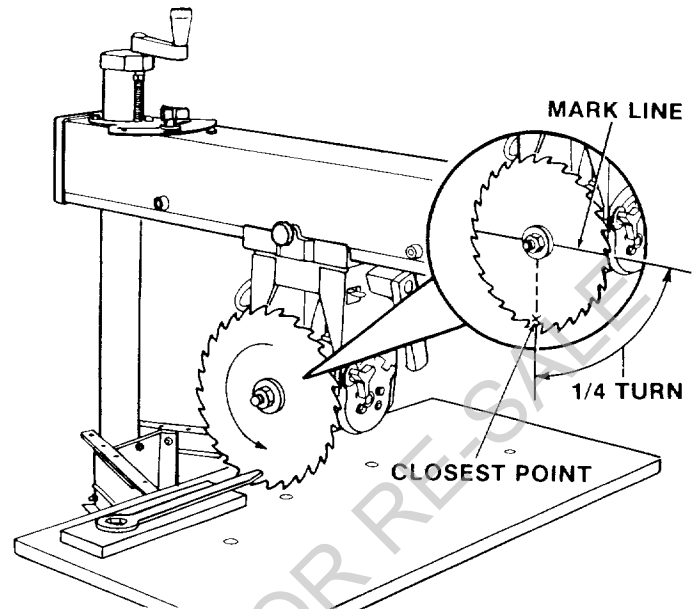
## BEFORE STARTING STEP TWO

Please observe the following suggestions to achieve the greatest possible accuracy from your saw.

- Always index your saw to the same side of the index positions for both the arm and the motor. For instance, once the miter lock knob is engaged fully into the 0° miter position, push arm to the left

while locking the knob. Similarly, once the bevel lock knob is indexed into the 0° bevel position, push down on the rear of the motor while locking the knob. If the indexing is done in this way for all alignment adjustments, you will be able to index repeatedly. The same procedure should be followed for all index positions.

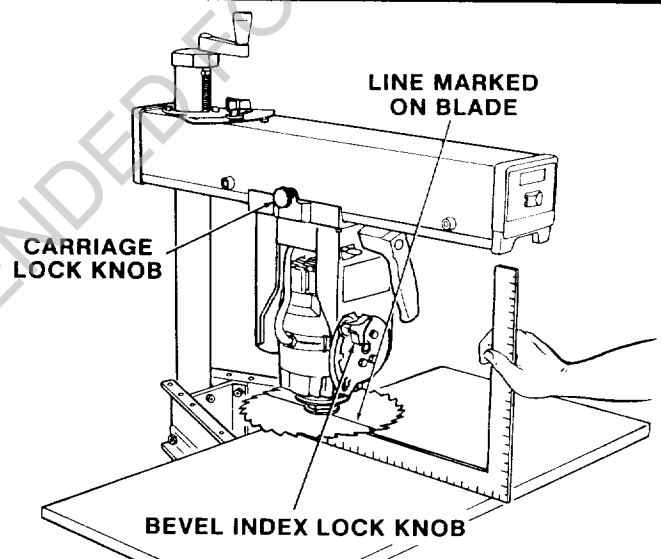
2. All sawblades have a small amount of "run-out" which can affect the squaring of the blade to the fence and table. To eliminate the effect of this it will be necessary to first find the point of most run-out. This is done by laying the arbor wrench close to the side of the blade, slowly spin blade until you find the point that is closest to the end of the wrench. Mark this spot. Now draw a line from a point 1/4 turn from the marked spot through the arbor of the motor. When doing any alignment of the blade to the fence and table, position the blade so that the line that you marked is parallel to the edge of the square.



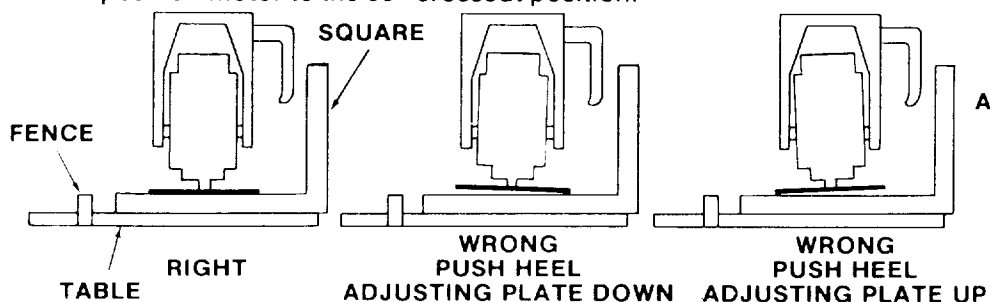
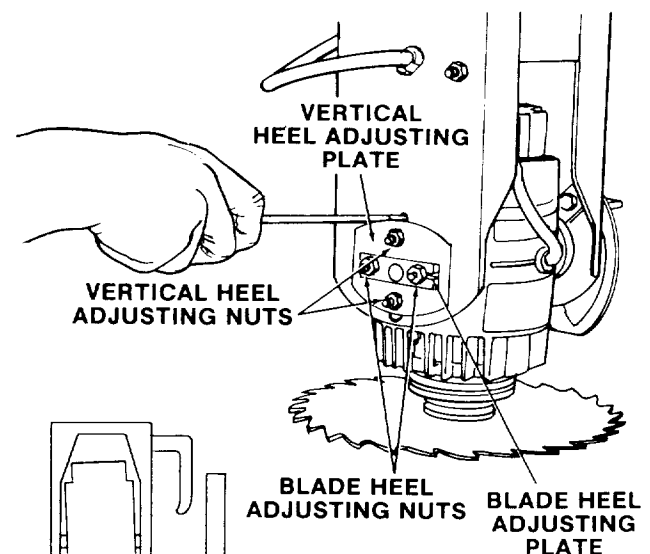
## STEP TWO

### VERTICAL HEEL ADJUSTMENT

1. With sawblade in 90° cutoff position, elevate saw and rotate motor to vertical position (Blade Horizontal) and check for heel. Make sure bevel index-lock knob is locked.
2. Position square between blade and table as shown, lower arm. Do not allow the square to rest against a "set-out" tooth, it must rest flat against the blade side.
3. If the saw blade is parallel with the table top (no visible gap appears between the saw blade and square), no adjustment is required.



4. If there is a visible gap between sawblade and square, a bevel heel condition exists and adjustment is required.
  - a. To correct, loosen the two vertical heel adjusting nuts and the two blade heel adjusting nuts until you can move the vertical heel adjusting plate to remove the gap between sawblade and square.
  - b. Tighten the two blade heel adjusting nuts and recheck.
  - c. Push the Vertical Heel Adjusting Plate up against the bottom of the Blade Heel Adjusting Plate and then tighten the two vertical heel adjusting nuts.
  - d. Reposition motor to the 90° crosscut position.



# assembly and alignment

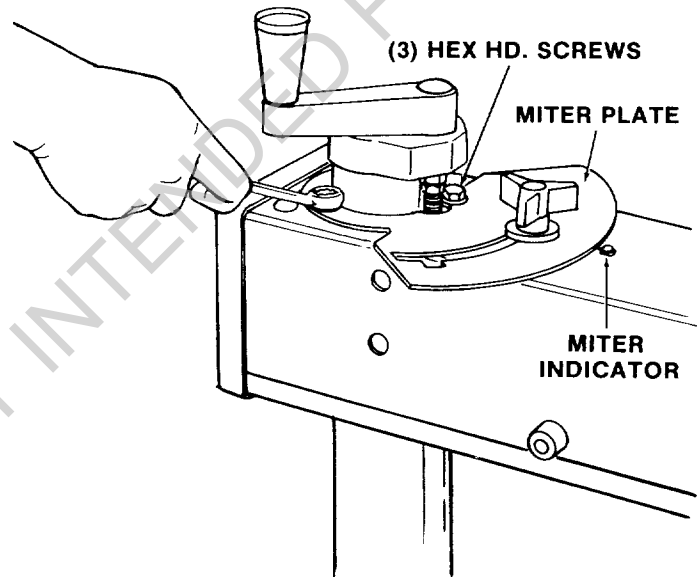
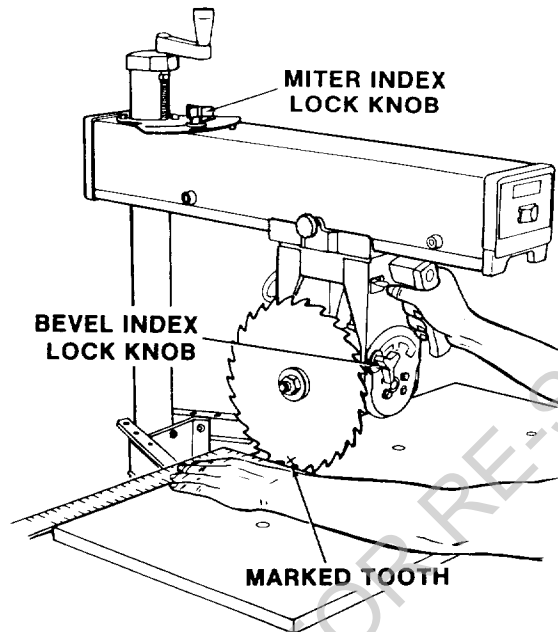
## STEP THREE

### SQUARING CROSSCUT TRAVEL (CARRIAGE TRAVELS IN STRAIGHT LINE)

1. Check that arm is indexed and locked at 0°.
2. Lower arm until saw blade just clears the front table. Lock the yoke clamp handle and bevel index-lock knob. Place a framing square on the table as shown and position the blade and square until the leg of the square just contacts a tooth of the blade. Mark this tooth.

**NOTE:** The framing (or combination) square must be "true" — see start of "Assembly and Alignment" section for checking method.

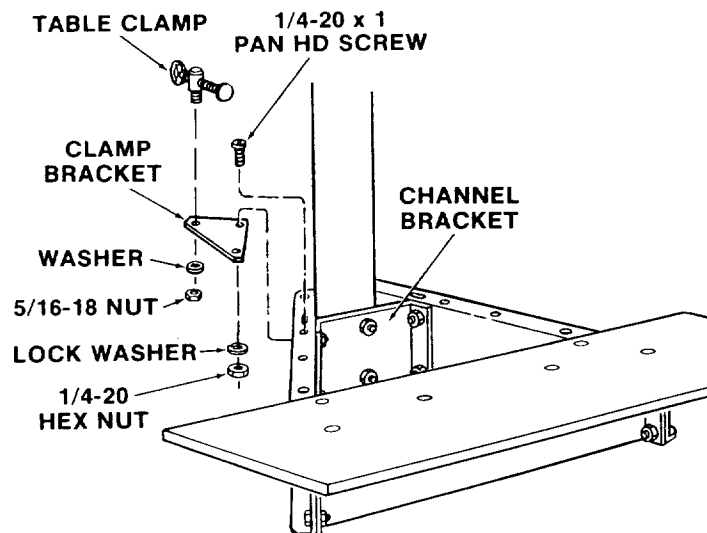
3. When the carriage is moved back and forth on the arm, the marked tooth should just touch the square at all points. If marked tooth moves into square or away from square the following adjustments are required:
    - a. Loosen (3) 5/16-18 Hex Head Screws on top of miter plate. Leave Miter Lock Knob tightened.
    - b. Move the arm in proper direction to make marked tooth follow edge of square when the saw blade is moved along arm in a "crosscut" manner.
    - c. **RETIGHTEN** (3) Hex Head Screws and recheck "crosscut" travel.
- NOTE:** This squaring of the crosscut travel will simultaneously set BOTH of the 45° miter index positions.
- d. Set miter indicator on 0°.



## INSTALLING TABLE CLAMPS

1. Install the Clamp Bracket under the top edge of the Table Channel using two 1/4-20 x 1 Pan Head Screws, Lockwashers and 1/4-20 hex nuts. Use the two holes in the Table Channel that are in front of the Channel Bracket. Repeat on other side.
2. Install the Table Clamp through the larger hole in the Clamp Bracket using the 1" washer and 5/16-18 locknut. Repeat on other side.
3. Place the fence and rear table in place behind the front table board and clamp in place using Table Clamps.

**NOTE:** The life of the saw table will be lengthened considerably if you will cover the front table with a fitted piece of 1/8 inch plywood. This should be tacked in place for easy replacement. Use of such a cover will allow you to do all cutting into the cover, rather than your table top.

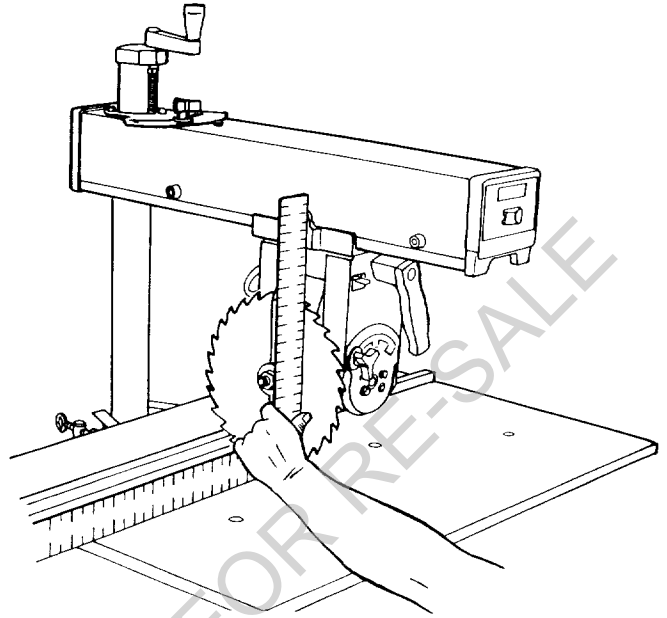


## STEP FOUR

### SQUARING SAW BLADE TO (WORK) TABLE

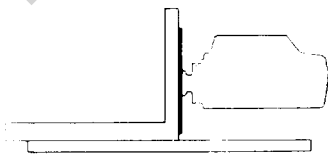
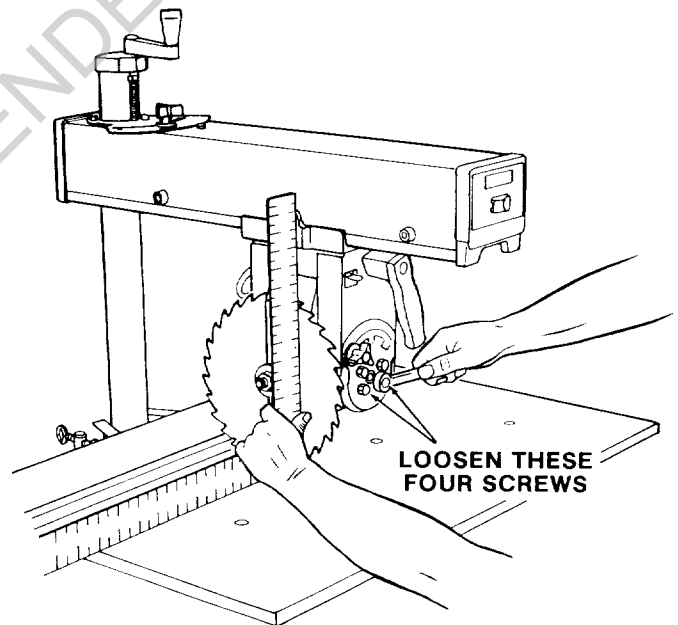
**NOTE:** If alignment procedure step one was not performed, this adjustment can not be accomplished.

1. Place a framing square on the table with the short leg against the saw blade. Do not allow the square to rest against a "set-out" tooth; it must rest flat against the blade side. The square should be parallel to the fence and square to the table.

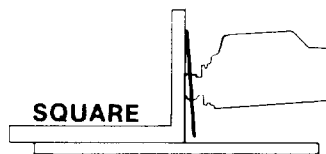


2. If the saw blade is square with the table top (no visible gap appears between the saw blade and square) then no adjustment is required. Set bevel indicator to 0° reading. If the square does not touch the saw blade as shown (with square leg held firm against the table top), perform the following adjustments:

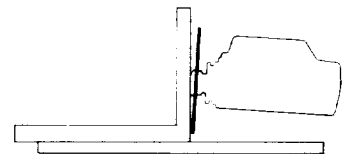
- a. Tighten carriage lock knob.
- b. Loosen the four 5/16-18 Hex Hd. Screws. Leave Bevel Lock Knob tightened. Rotate motor while holding square firmly against sawblade and table top.
- c. Slightly tighten each of the four screws and recheck . . . Now tighten each screw tight.
- d. Adjust bevel indicator on 0° reading.
- e. Loosen carriage lock knob.



**RIGHT**



**WRONG**



**WRONG**

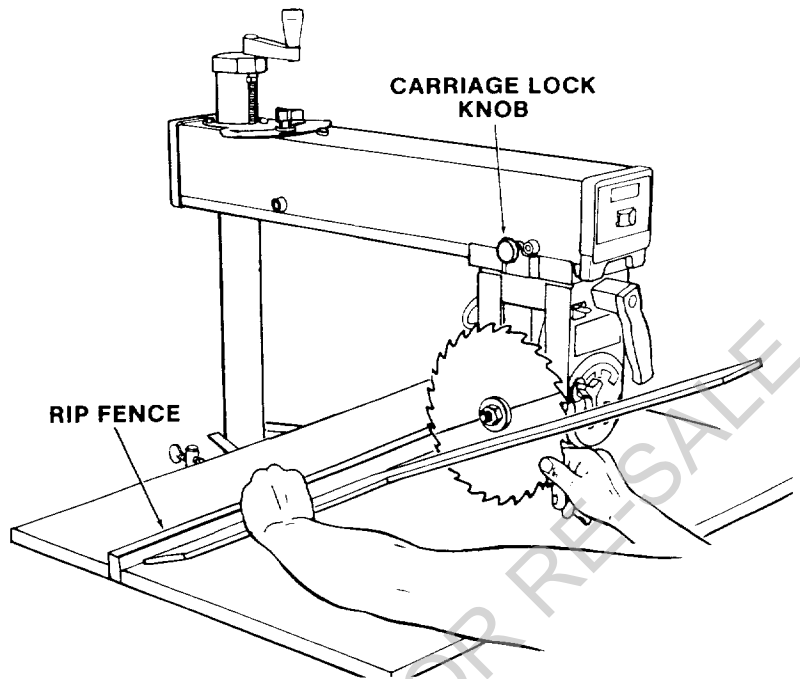
# assembly and alignment

## STEP FIVE

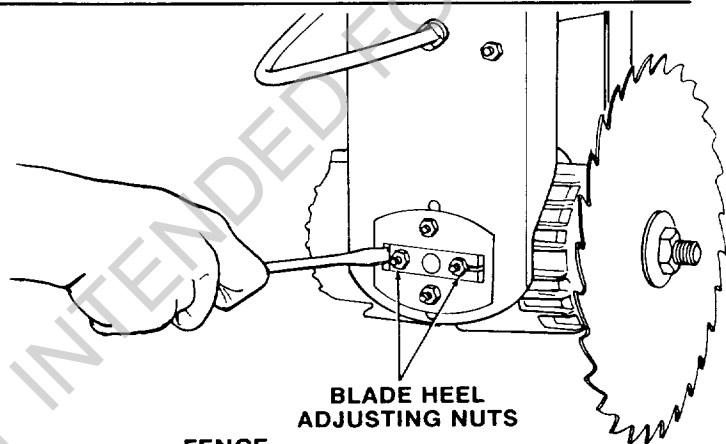
### SQUARING BLADE TO RIP FENCE — BLADE HEEL ADJUSTMENT

**NOTE:** If alignment procedure steps two, three and four were not performed, this alignment step cannot be accomplished.

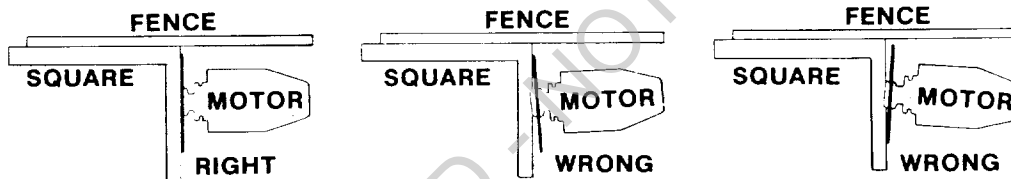
1. Position carriage to the full forward position with the Arm elevated so that the saw blade just clears the table board. Place a framing square against the fence and saw blade, as shown. The short leg of the square must be held firmly against both the fence and table top, and the long leg must rest against the side of the blade without touching any saw teeth.
2. If there is not a gap between the sawblade and the square as shown below, no further adjustment is necessary and the adjusting nuts should be tightened.



3. If there is a gap, a heel condition exists and is corrected as follows:
  - a. Loosen the (2) blade heel adjusting nuts.
  - b. Move adjusting plate as shown, until gap between sawblade and square is eliminated.
  - c. Tighten the two nuts. Check that the Adjusting Plate is flat against the bottom of the cutout in the heel adjusting plate.
  - d. Recheck for "heel".



**NOTE:** This alignment procedure will simultaneously set both yoke indexing positions for blade in and out rip.

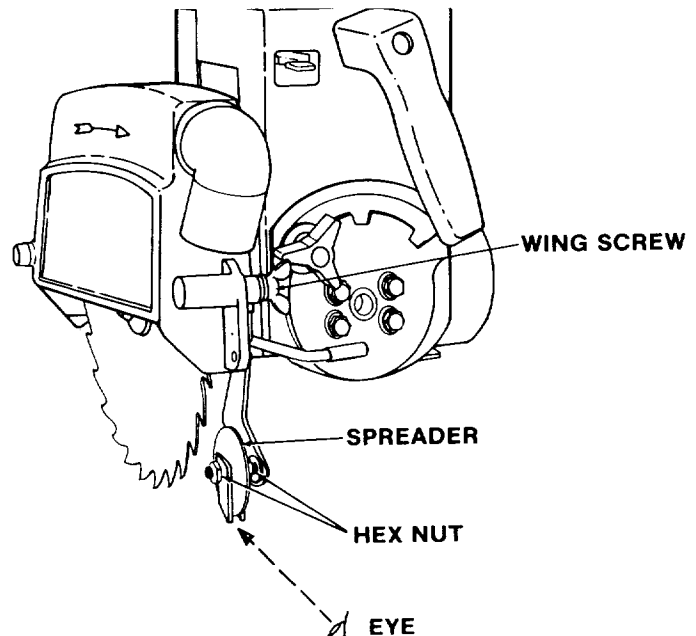


## STEP SIX

### ALIGNMENT OF SPREADER FOR RIPPING

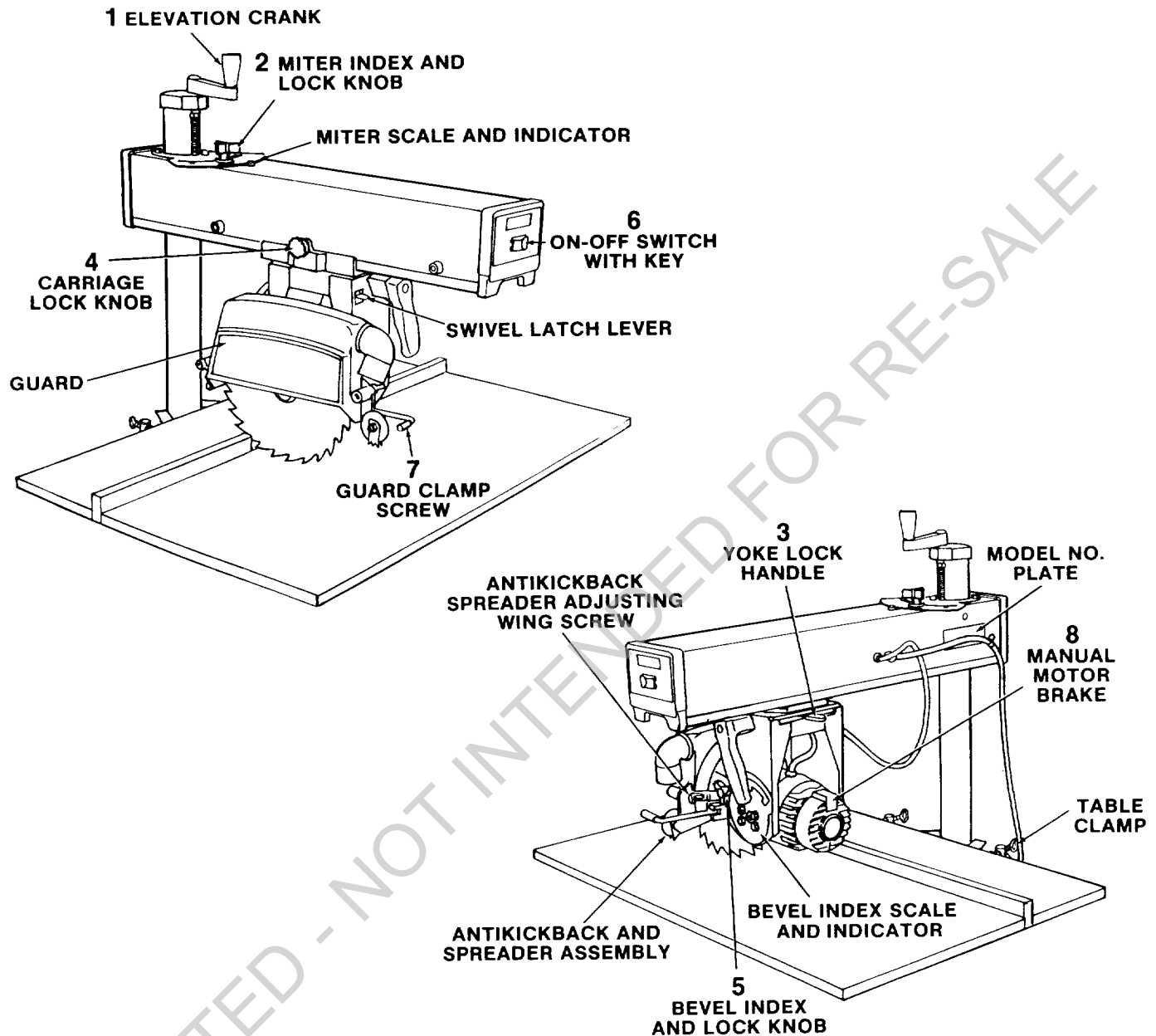
**WARNING: NEVER POSITION THE GUARD OR ANTIKICKBACK ASSEMBLY WITH POWER ON; NOR POSITION ANTIKICKBACK PAWLS BY GRASPING PAWLS OR SPREADER.**

1. Install Blade Guard and Dust Elbow.
2. Lower the spreader assembly by loosening the wing screw and sight (visually) to check for proper alignment of spreader with the sawblade as shown. If the spreader is not aligned, adjust it as follows:
  - (a) Loosen two hex nuts, one on each side of spreader.
  - (b) Rotate hex nuts with 1/2" wrench until the spreader is directly in line with sawblade.
  - (c) Retighten the assembly by holding one nut and tightening the other.





# locations and functions of controls



The versatility of the Radial Saw is due, in part, to its controls, and these are the keys to its successful operation. Learn to use the controls for all operations before actually starting to saw.

You should become familiar with the controls and the operating instructions that follow before operating your saw.

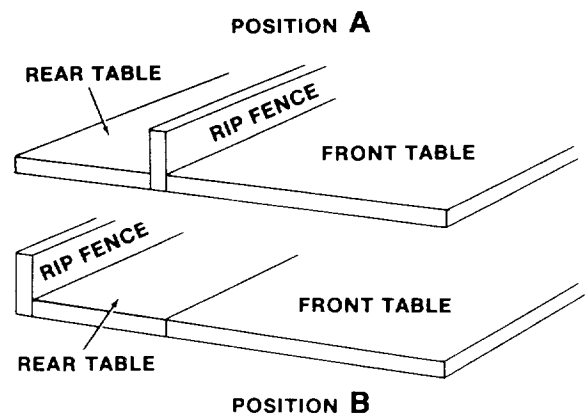
## FENCE LOCATIONS

Position (A) is used for all crosscut type and narrow ripping operations.

Position (B) is used for maximum width ripping with saw in "out-rip" position and width of rip greater than 16.

### 1. Depth of Cut (Elevation)

- The diagram shows the elevation crank which is used to raise and lower the saw blade.



# locations and functions of controls

- b. Clockwise rotation raises the blade... counterclockwise rotation lowers it. One complete turn of the handle will raise or lower the saw blade 1/16-inch.

## 2. Angle of Cut (Miter)

- a. The miter index-lock knob, unlocks and indexes the arm for Left and Right Miter cuts.
- b. The arm is rotated by loosening the miter index-lock knob, pushing knob rearward, out of index slot, and setting Arm to desired miter angle. **NOTE:** It may be necessary to rap the top of the knob with your hand after loosening, to free it from the index position. After positioning arm to the desired miter angle, lock miter index lock knob.

## 3. Yoke Pivot (Ripping)

- a. Two controls are used in this operation. They are: the swivel latch lever and the yoke clamp handle.
- b. The swivel latch lever automatically indexes the yoke at each 90° position. Push down on spring-loaded swivel latch lever to release this pin.
- c. The yoke clamp handle locks the yoke to the carriage in any position. Pull the handle forward to release the yoke; push the handle rearward to secure the yoke.

## 4. Carriage Lock

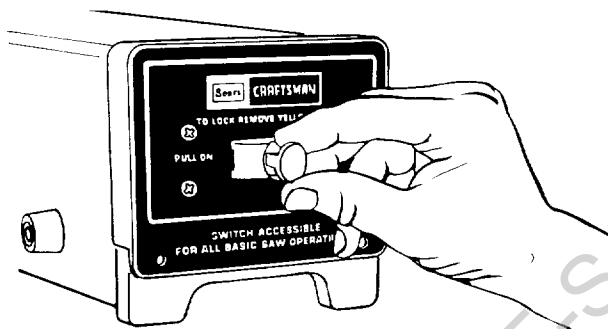
- a. The carriage lock knob is rotated clockwise to lock the carriage on the radial arm, and counterclockwise to release it.
- b. When performing crosscutting operations the carriage lock knob must be rotated counterclockwise until the carriage is free to travel along the arm. This knob should be tightened until the operator is ready to grasp the crosscut handle and make a cut.

## 5. Blade Angle (Bevel)

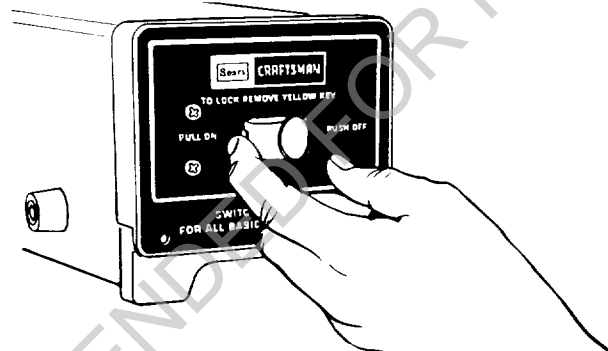
- a. The single control used in angular positioning and indexing of the motor, to provide the desired sawblade (bevel) angle, is the bevel index lock knob.
- b. The bevel index scale indicates the angular position of the motor with respect to horizontal, from 0° to 90°.
- c. The bevel index-lock knob indexes the motor at 0°, 45°, and 90°. Loosen bevel index-lock knob, push knob up and rotate motor to desired bevel angle. At any other position simply lock bevel index lock knob.

## 6. Power Switch and Key

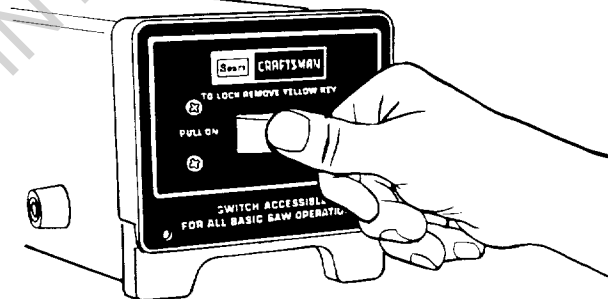
- a. Insert key into switch lock.



- b. Insert finger under end of switch lever and pull end out, to turn switch on.

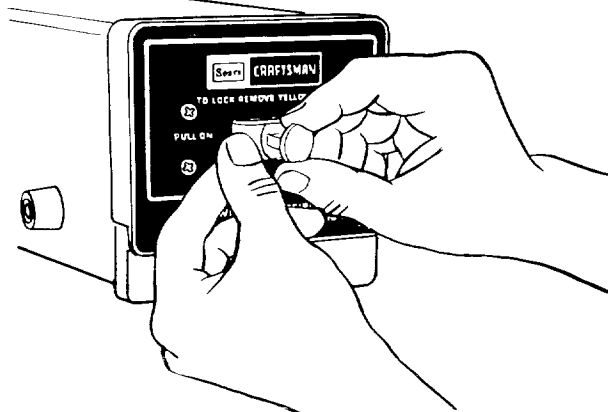


- c. Push lever in to turn switch off.



- d. Pull key out to lock switch.

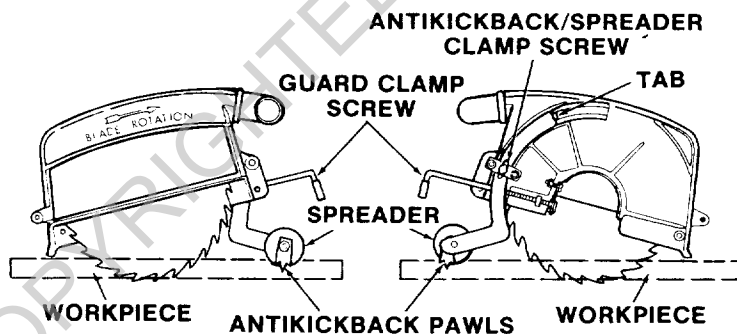
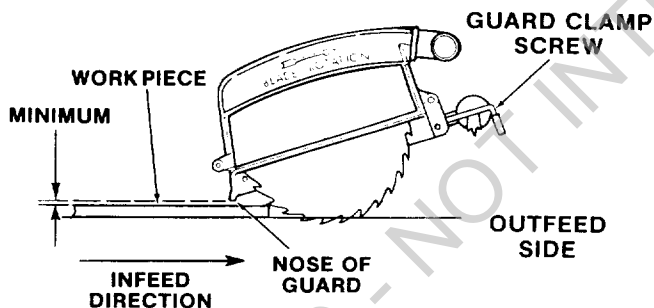
**WARNING: THIS LOCKING FEATURE IS PROVIDED TO PREVENT UNAUTHORIZED USE OF YOUR SAW. ALWAYS REMOVE THE KEY AND KEEP IT IN A SAFE PLACE. TO REMOVE KEY, HOLD THUMB ON END OF LEVER TO KEEP SWITCH IN "OFF" POSITION AND PULL KEY STRAIGHT OUT.**



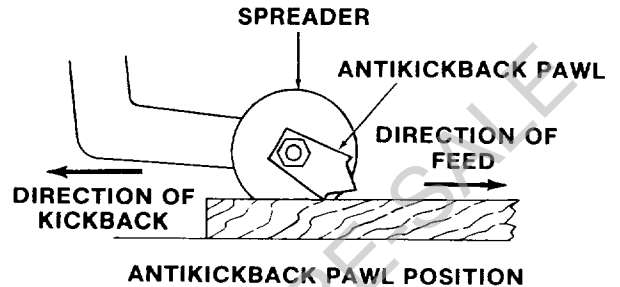
## 7. Blade Guard & Antikickback/Spreader Assembly —Positioning for Ripping

**WARNING: NEVER POSITION THE GUARD OR ANTIKICKBACK/SPREADER ASSEMBLY WITH THE SAW RUNNING. NEVER POSITION THE ANTIKICKBACK/SPREADER ASSEMBLY BY GRASPING THE PAWLS OR SPREADER; USE THE TAB LOCATED ON THE SUPPORT PIECE FOR THE ANTIKICKBACK/SPREADER ASSEMBLY.**

- The Blade Guard is positioned by loosening the guard clamp screw and rotating the guard so that the "nose" of the guard just clears the workpiece as shown.
- This adjustment is necessary to:
  - 1) Protect the operator from accidentally contacting the sawblade from the "infeed" direction.
  - 2) Prevent the workpiece from being lifted from the table by the sawblade thus minimizing lifting or fluttering (particularly with thin and/or light workpieces).
  - 3) Minimize sawdust from being thrown toward the operator.
  - 4) Minimize the possibility of a thin pusher board from riding up on top of the workpiece leading to loss of control of the workpiece.



- The Antikickback/Spreader Assembly is positioned by loosening the clamp screw and sliding the assembly down to where the antikickback pawls are positioned on the workpiece as shown.



**NOTE:** Check your set-up **without saw running** by sliding the workpiece along the blade and spreader, and under the outer antikickback pawls. Push the workpiece sharply in the direction opposite the feed direction. The pawls should dig into the workpiece. If they do not, readjust the assembly and test until the pawls will dig into the workpiece.

- Properly positioning the antikickback pawls will stop a kickback if one occurs.
  - Properly positioning the spreader will:
    - 1) Prevent the "kerf" from closing in on the sawblade which could cause a kickback.
    - 2) Prevent "wrong-way feed", which is the feeding of the workpiece into the sawblade (in the rip position) from the side containing the antikickback/spreader assembly. This can be extremely hazardous because the sawblade or cutting tool may grab the workpiece and throw it toward the nose of the guard ("infeed" side).
- NOTE:** Observe the DANGER label on the outfeed side of the guard just below the sawdust elbow.
- Act as barrier guard minimizing chance of accidental contact with the sawblade from the "outfeed" side.

## 8. The Manual Motor Brake

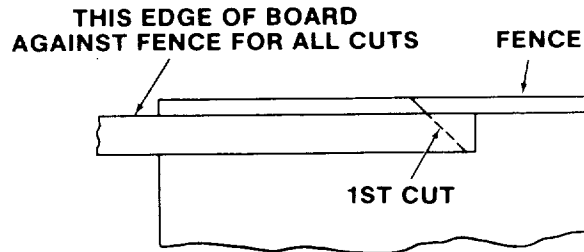
- The manual brake is located on the motor shaft at the right hand end of the motor.
- "Coasting cutting tool can be dangerous." Apply brake immediately to stop cutting tool when switch is turned off. Keep pressure on brake until sawblade or other cutting tool has come to a complete stop before removing workpiece or scrap, or taking any other action.

# locations and functions of controls

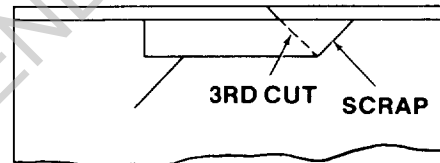
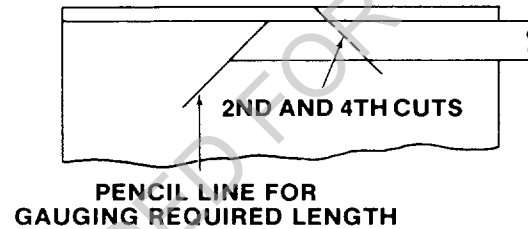
**HAVE YOU FOLLOWED ALL SIX STEPS OF THE ALIGNMENT PROCEDURE? IF YOU HAVE NOT FOLLOWED THEM IN THEIR PROPER SEQUENCE, YOU CANNOT EXPECT ACCURATE CUTTING RESULTS.**

In addition to the proper alignment of your saw, you must also become familiar with the following practices in order to expect the best results.

1. Edge of workpiece which is placed against fence must be as straight as the long side of your framing square.
2. Workpiece must be as flat as the front table board on your saw.
3. There must be no sawdust or other wood chips between the fence and front table board.
4. There must be no sawdust or other wood chips underneath workpiece or between workpiece and fence.
5. Workpiece must be held tightly against fence and down against the table . . . this is especially important when making angle cuts because the workpiece has a tendency to move.
6. Always use the correct sawblade for the Job . . . Always keep it sharp.
7. When making a four sided frame:
  - a. The two side pieces must be exactly the same length.
  - b. The top and bottom pieces must be exactly the same length.
  - c. Always place the same edge of the workpiece against the fence . . . turn the workpiece end for end for the successive cuts and mark a pencil line on the table for gauging the required length.



Turn workpiece over end for end . . . keep same edge against fence when making successive cuts.

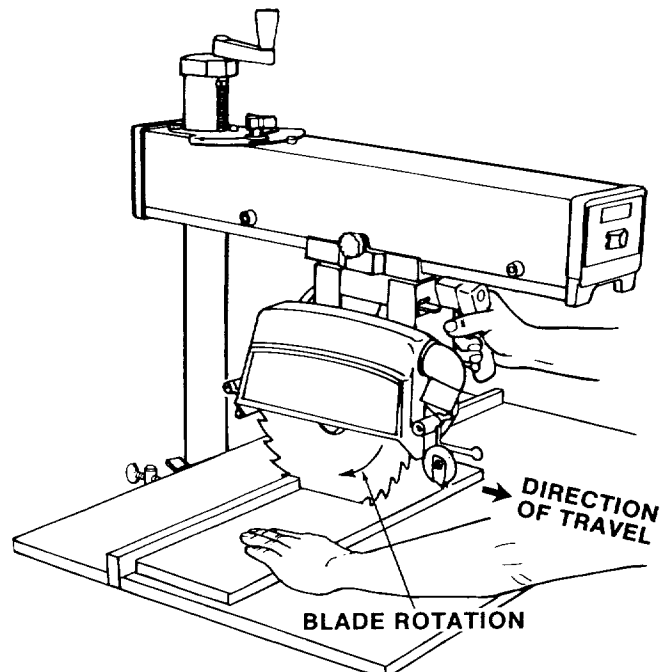


Deviation from any of the above practices will have an effect on the accuracy of the cuts that you make.

## basic saw operations

Basic saw operations are summarized into six categories, explained and illustrated in the following paragraphs. A book entitled "Power Tool Know How Radial Saw" is available at your nearest Sears Retail Store or Catalog Store. This book contains considerable data applicable to the radial saw.

**NOTE:** Refer to paragraphs under "LOCATION AND FUNCTION OF CONTROLS" for illustrations and descriptions of controls.



## REQUIREMENTS FOR CROSSCUT

Board positioned (stationary) against fence and laying flat on table top.

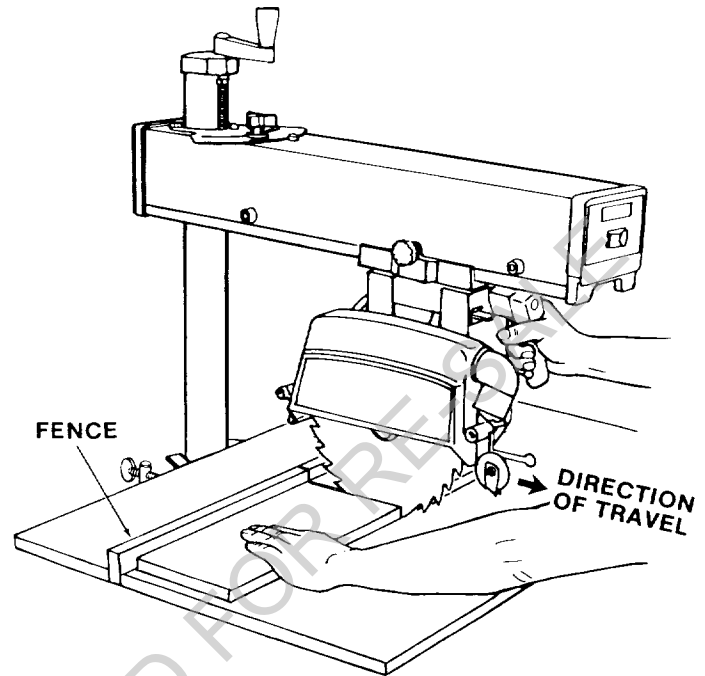
### (OPERATIONS 1 THROUGH 4)

1. Arbor nut must be tight and saw blade guard installed in horizontal position.
2. Arm control lever must be in locked position.
3. Adjust the antikickback assembly so the pawls just clear the workpiece or the fence, whichever is higher.
4. Work must be held firmly against table and fence. For workpieces thicker than the fence is high, install a higher fence (at least workpiece thickness). Always place the fence in the most forward position (farthest from the column support) compatible with the workpiece being processed and the operation being performed. With the carriage fully retracted, the blade must not contact the workpiece when placed against the fence, within the stated capacities of your saw.
5. Blade should be sharp and correctly set.
6. Hands must be kept well away from saw blade.
7. Yoke clamp handle must be in locked position.
8. Bevel index lever must be locked.
9. Blade should cut into the table or plywood cover not more than 1/32 inch.
10. **Pull the saw forward just far enough to sever the lumber.** It is dangerous if the blade has been pulled too far out beyond the piece being cut. When it is returned it can pick up the right hand piece and throw it over the fence.
11. Return carriage to the full rear position and brake blade to a complete stop before removing workpiece.
12. For operations No. 3 and No. 4, observe additional instructions under paragraph "Location and Functions of Controls" "Blade Angle".

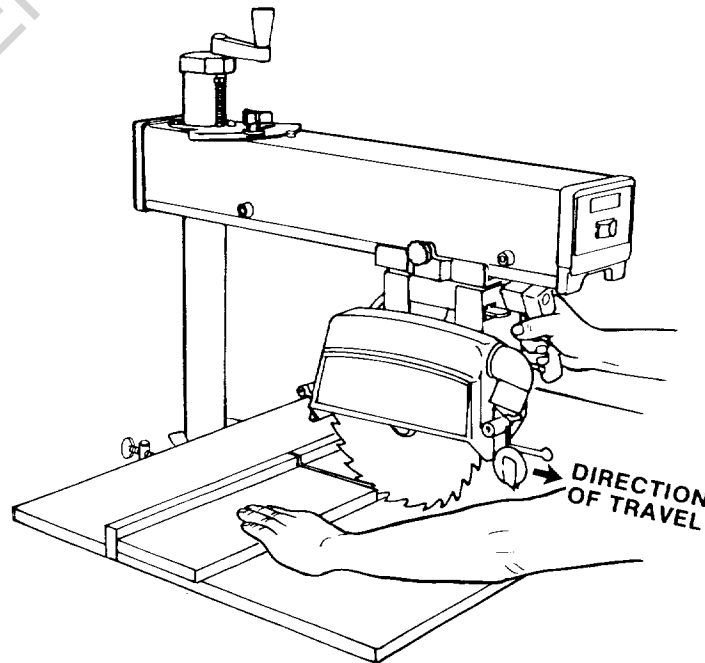
### OPERATION No. 1 — CROSSCUT

Crosscutting is the process of sawing the workpiece by pulling the saw blade through it and using the fence as a support for the edge of the workpiece. **Never crosscut free-hand, (without workpiece against the fence).** Always return carriage to the full rear position after each cut.

**WARNING: BEFORE CROSSCUTTING, MAKE SURE THE ARM MITER INDEX LOCK KNOB, BEVEL INDEX-LOCK KNOB AND YOKE ARE ALL LOCKED. NEVER USE A LENGTH STOP OR A FIXED GUIDE ON THE FREE END OR EDGE OF A WORKPIECE. DO NOT CROSSCUT WORKPIECE THAT PLACES YOUR HANDS CLOSE TO THE PATH OF THE SAWBLADE. WHEN PULLING THE SAW TOWARD YOU DURING CROSSCUTTING, THE BLADE TENDS TO FEED ITSELF THROUGH THE WORK DUE TO THE ROTATION OF THE BLADE AND THE DIRECTION OF THE FEED. THEREFORE, YOU SHOULD DEVELOP THE HABIT OF HOLDING YOUR RIGHT ARM STRAIGHT FROM THE SHOULDER TO THE WRIST.**



PROPER  
(SEE ITEM "10" AT LEFT)



IMPROPER  
(SEE ITEM "10" AT LEFT)

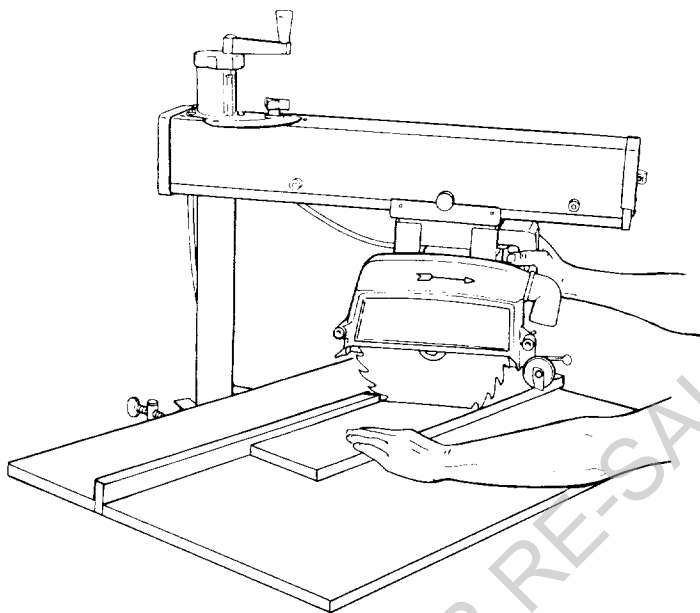
### REPETITIVE CROSSCUTTING

Clamp a "C" clamp (min. 6 inch) 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.

# basic saw operations

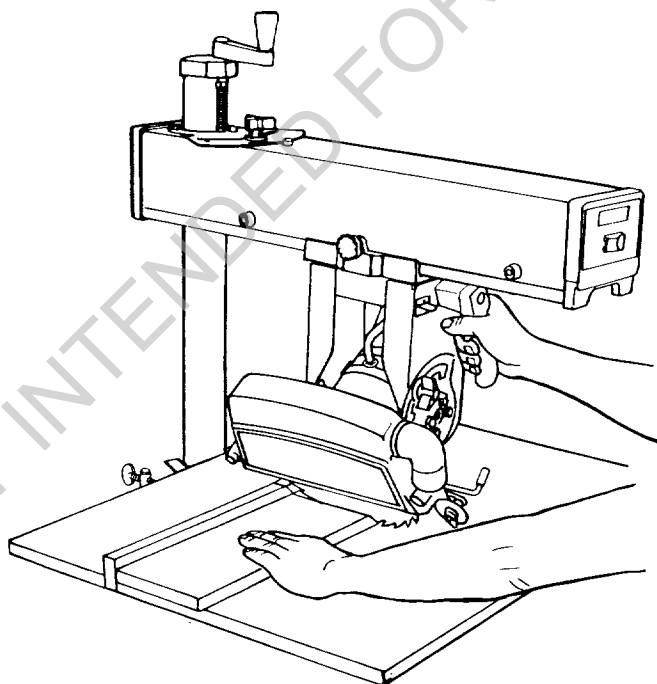
## OPERATION No. — 2 MITER CROSSCUT

Miter crosscutting is the process of sawing a board at any angle other than a 90° (square) cut. The 45° miter angle is a popular one, since two boards cut to 45° can be assembled to form a 90° corner for producing a square or rectangular frame. The radial arm is set to the desired angle of cut; yoke and bevel settings indexed at 0° (and locked) as in square crosscutting. The board being cut is held firmly against the fence (guide) and the carriage pulled forward along the radial arm to perform the desired cut. As in "Operation No. 1", the carriage must be returned to full rear position and the saw blade braked to a complete stop before removing the boards from saw table.



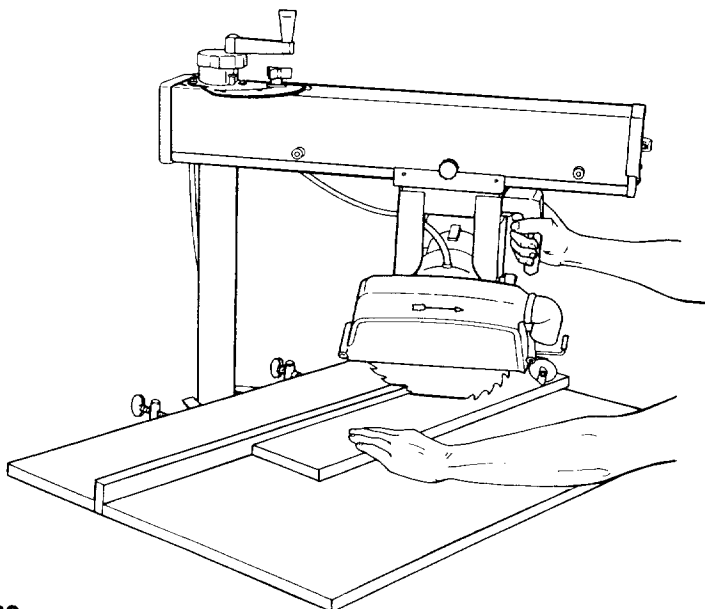
## OPERATION No. 3 — BEVEL CROSSCUT

Bevel crosscutting is the process of sawing at 90° (square) across the board with the sawblade set at an angle other than 90° to the saw table. The radial arm and yoke are indexed at 0° and locked, but the bevel is set to the desired angle of cut. The board is held firmly against the fence and the carriage pulled forward along the radial arm to produce the cut. The carriage must be returned to full rearward position and the saw blade braked to a complete stop before removing the boards from saw table.



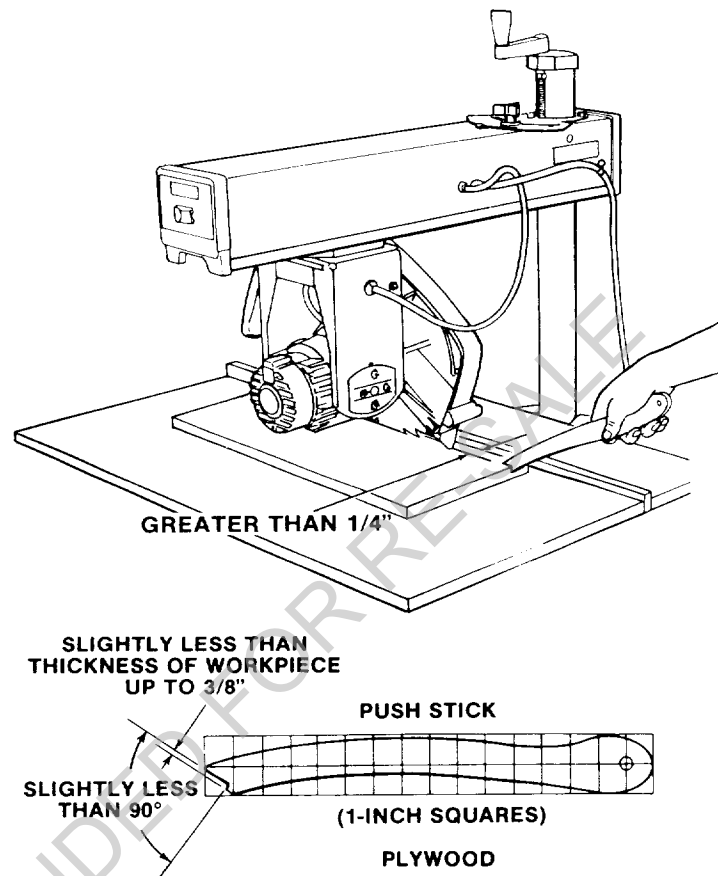
## OPERATION No. 4 — COMPOUND CROSSCUT

Compound crosscutting is the combination of miter and bevel crosscuts. The radial arm and bevel are set to produce the desired cut; the yoke is indexed at 0° and locked. The board is held firmly against the fence and the carriage pulled forward along the radial arm to produce the cut. Again, the carriage must be returned to full rearward position and the saw blade braked to a complete stop before removing boards from saw table.



## REQUIREMENTS WHEN RIPPING (OPERATIONS 5 AND 6)

1. Carriage lock knob must be locked.
2. Radial arm must be locked in 0° position.
3. Work must be held firmly against table and fence while feeding through.
4. **Guard spreader and antikickback assembly must be properly set.** OBSERVE INSTRUCTION IN PARAGRAPH "BLADE GUARD & ANTIKICKBACK/SPREADER ASSEMBLY — POSITIONING FOR RIPPING" UNDER "LOCATIONS AND FUNCTIONS OF CONTROLS."
5. Blade should be sharp and correctly set.
6. When ripping narrow stock, less than 3 inches but more than 1/4 inch between the guard and the fence (guide), use a "Push Stick" at least 1/4" thick and at least 16" long so the workpiece is clear of the blade before your hand contacts the guard.

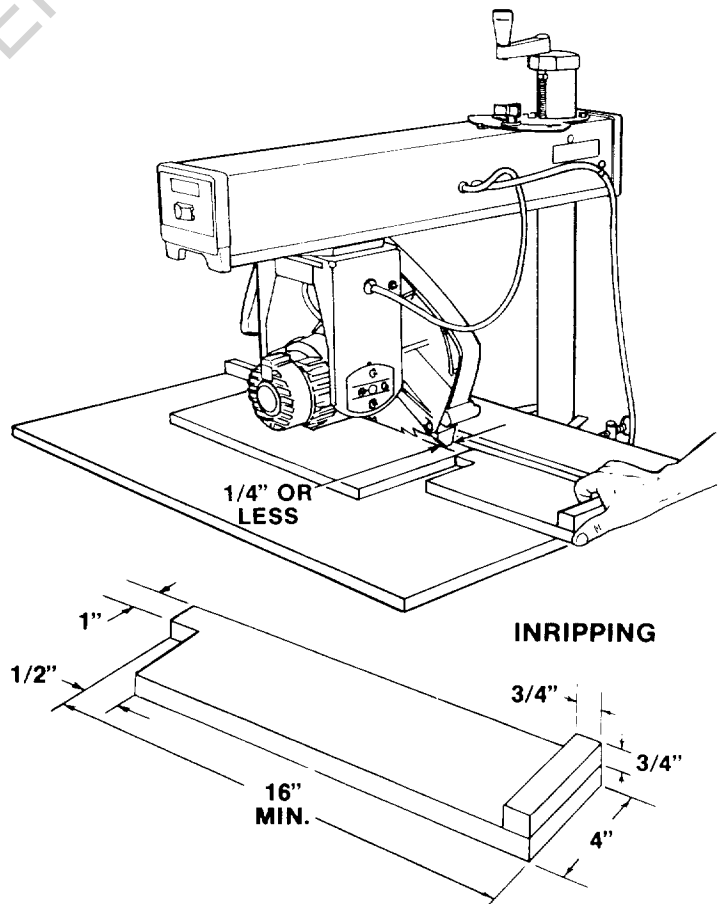


7. When ripping stock 1/4 inch or less between the blade and fence (guide) use a Pusher Board. Pusher board should not be less than 4 inches wide and 16 inches long. Nail or glue a 3/4 x 3/4 x 4 inch block to one edge of pusher board to be used as a grip.
- The pusher board should be fed into the blade behind the stock being ripped until the stock is clear of the rear of the blade (not more than 8 inches so as not to strike antikickback pawls) and then pulled back with use of the grip.
8. Hands must be kept well away from saw blade.
9. Saw blade **MUST** be parallel to fence, to minimize possibility of kickbacks.
10. For every new width of cut, a new **PUSHER BOARD** must be used.
11. The pusher board should be the same thickness as the workpiece. No thinner for strength, or no thicker since the nose of the guard must clear the top of the workpiece with minimum clearance.

### OPERATION No. 5 — OUT-RIPPING AND IN-RIPPING

1. Ripping is the process of sawing the workpiece by feeding it into the saw blade when using the fence as a guide and as a positioning device to obtain the desired width of cut. The sawblade is parallel to the fence.

**WARNING: NEVER RIP FREE-HAND (WITHOUT USING THE FENCE). BEFORE RIPPING, MAKE SURE THE GUARD, ANTIKICKBACK AND SPREADER ASSEMBLY ARE SET UP PROPERLY. ALSO, MAKE SURE THE SAWBLADE IS**

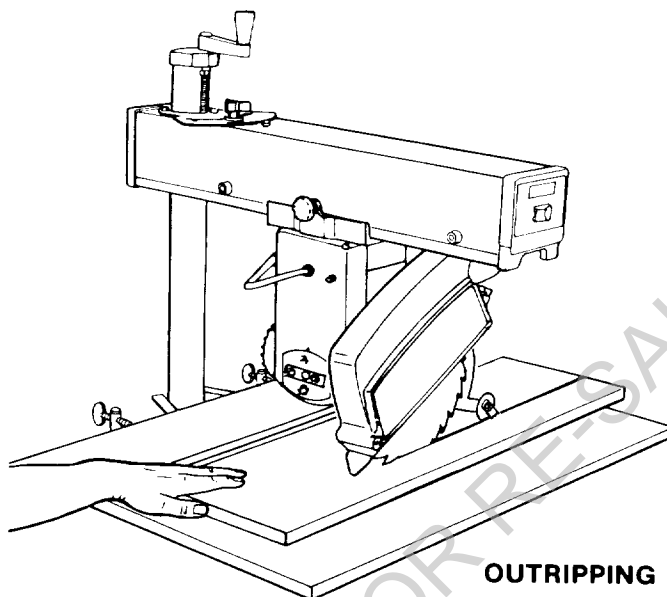


**PARALLEL TO THE FENCE. NEVER RIP WORKPIECES SHORTER THAN THE SAWBLADE DIAMETER.**

# basic saw operations

2. Since the work is pushed along the fence, it must have a straight edge in order to make sliding contact with the fence. Also, the work must make solid contact with the table, so that it will not wobble. Provide a straight edge, even if this means temporarily nailing of an auxiliary straight-edge board to the work. If the workpiece is warped, turn the hollow side down.
3. Always use the saw guard and make sure the spreader is correctly aligned with the saw kerf and antikickback pawls properly adjusted. Wood cut with the grain tends to spring the kerf closed and bind the blade and a kickback could occur.
4. Stand a little to one side of center to be clear of work in case of kickback.
5. When ripping short or narrow work, always use a push stick applied to the section of the workpiece between the blade and fence . . . push the work past the blade so it is clear of the blade. This procedure will minimize the possibility of kickbacks.

**In-Ripping.** The radial arm and bevel are indexed at 0° and locked, but the yoke is turned 90 degrees in a clockwise direction (viewed from above) from the crosscut position. Thus, when standing in front of the saw, the blade would be rotating counterclockwise. After positioning the guard and antikickback assembly the workpiece is fed from the right-hand side of the saw.

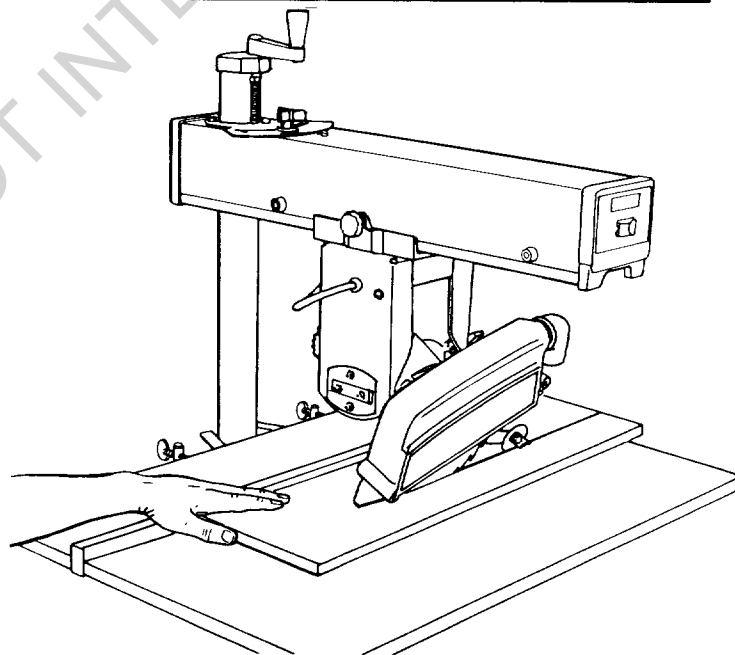


**OUTRIPPING**

**Out-Ripping.** The radial arm and bevel are indexed at 0° and locked, but the yoke is turned 90 degrees in a counterclockwise direction (viewed from above), from the crosscut position. When standing in front of the saw, the blade would be rotating clockwise. After positioning the guard and antikickback assembly the workpiece is fed from the left-hand side of the saw.

## OPERATION No. 6 — BEVEL RIPPING

Bevel ripping is either in-ripping or out-ripping as described above, except the saw blade is tilted out of perpendicular to the saw table surface. The radial arm is indexed at 0° and locked, the bevel is set to the desired bevel angle and the yoke is positioned for in-ripping (saw blade at rear) or out-ripping (saw blade at front), as required. All requirements and observations applicable to normal ripping operations also apply to bevel ripping.



## DADOING

Instructions for operating the Dado Head are contained in a booklet furnished with the Dado Head.

The saw arbor is designed for dado heads up to 13/16 inches wide. Do not install a wider dado head on the arbor. Take several passes if required dado cut exceeds 13/16 inch.

When installing the dado head on the arbor,

ALWAYS install the inside "loose collar" first. Be sure the teeth of the chippers are placed to fall in blade gullets, and chippers are approximately equally spaced around the arbor.

DO NOT install the outside loose collar. Make sure the arbor nut is tight. Install the arbor nut directly against the outer blade of dado head.

For best results and to avoid excessive load on the motor, NEVER CUT A 13/16" WIDE DADO, DEEPER THAN 1/4" IN ONE PASS.

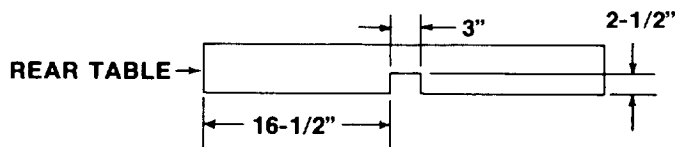


## MOLDING/SANDING

Instructions for operating the Molding Head are contained in a booklet furnished with the Molding Head.

For use of Molding Head Cutter with saw arbor vertical the rear table requires an opening (next to rear face of fence) for clearance. Cut this opening as shown.

For top-side rabbeting or molding in the in-rip position, relieve the fence by positioning the cutting tool at the desired location on the arm, locking the Carriage Lock Knob, and lowering the cutting tool slowly into the fence — remove only as much material from the fence as is necessary.



**NEVER USE A DADO HEAD OR MOLDING HEAD WITH THE SAW ARBOR VERTICAL WITHOUT INSTALLING AND ADJUSTING A MOLDING HEAD/DADO GUARD. FOR TOP-SIDE DADOING OR MOLDING, INSTALL AND ADJUST THE SAWBLADE GUARD AND ANTICKICKBACK ASSEMBLY FOR RIPPING OR CROSSCUTTING AS APPROPRIATE.**

## adjustments to compensate for wear

**WARNING:** Remove Power Cord from power source before making any adjustments.

### ADJUSTING CARRIAGE GLIDES

When properly adjusted, the carriage should slide freely on the arm, with no movement either up-and-down or side-to-side. If the carriage is hard to pull or has looseness between the glides and the arm, the glides should be adjusted.

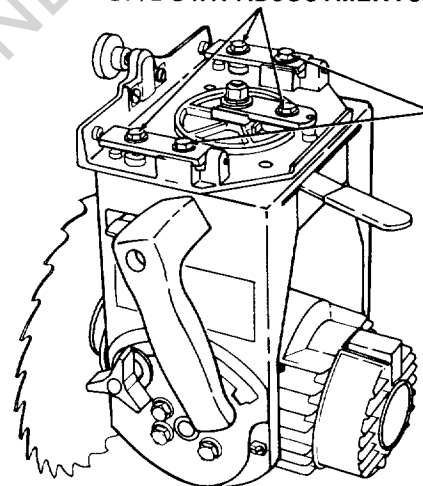
#### Adjustment for up-down movement.

1. All three sets of glides can be adjusted for up-down movement.
2. Remove front, lower arm trim. DO NOT REMOVE CARRIAGE FROM ARM.
3. Adjust the screws shown in the illustration for any set of glides that require adjustment.

#### Adjustment for side-to-side movement.

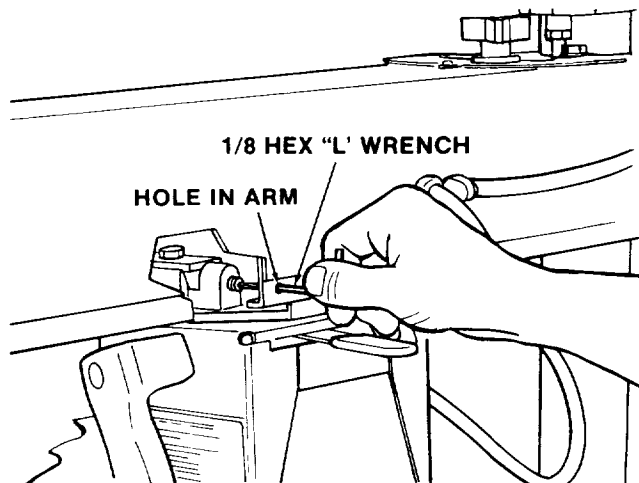
1. The two sets of glides on the left side of the arm can be adjusted for side-to-side movement.
2. Remove front, lower arm trim. DO NOT REMOVE CARRIAGE FROM ARM.
3. Loosen the screws shown in the illustration.  
**NOTE:** These screws have lock nuts which give a feeling of tightness even when the screw is loosened.
4. Sighting through the hole in the right side of the arm, line up the set screw for adjusting the side-to-side movement with this hole.
5. Using the 1/8" Hex "L" Wrench, adjust all side-to-side movement from glide being careful not to overtighten. Retighten the screws loosened in step 3. Check sliding action of carriage.
6. Repeat on other set of glides if necessary.

ADJUST SCREWS  
AS REQUIRED FOR  
UP/DOWN ADJUSTMENTS



LOOSEN THESE  
SCREWS  
THEN ADJUST  
SET SCREWS FOR  
SIDE TO SIDE  
ADJUSTMENT

ARM NOT SHOWN FOR CLARITY



# adjustments to compensate for wear

## YOKE LOCK HANDLE ADJUSTMENT

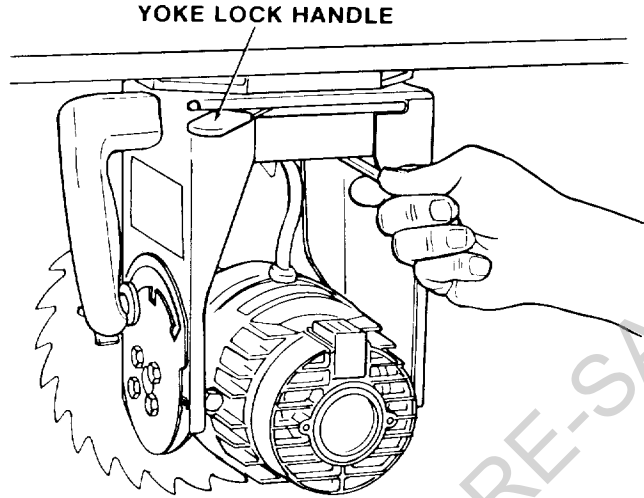
1. This handle provides a friction lock between the upper face of the yoke and the bottom face of the carriage.

It should eliminate any play or rotation between these two parts when locked. Its proper position for saw operation is approximately midway between the front and back of the yoke.

When sufficient wear has occurred to permit the handle to move to the rear, or strike the yoke before locking, the handle must be adjusted as follows:

### To Readjust

1. Set yoke lock handle at unlocked position. Tighten nut with 9/16 wrench, until lock handle locks mid-way between the front and back of the yoke.



## COLUMN CLAMPS TO ARM SUPPORT

1. With the miter index-lock knob unlocked and not in an indexed position, the arm should move firmly.

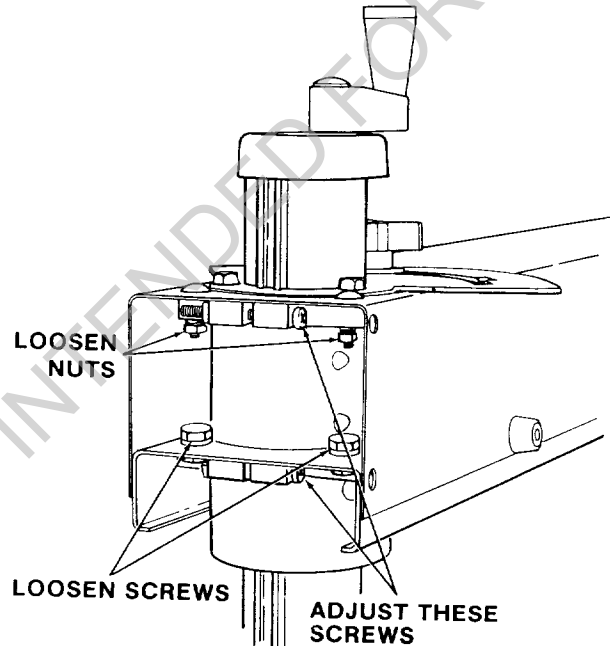
The arm should fit snugly on the column. If it does not, then it should be adjusted.

- a. Remove rear cover plate (snap fit) and loosen evenly the top two nuts and bottom two bolts at the rear of the saw as shown.

**NOTE:** Do not loosen the bolts at the front of the Column Clamps. The factory set alignment of the Arm to the column will be upset if these bolts are loosened.

- b. Using a large Philips screwdriver, (#3) adjust both top and bottom screws evenly until arm moves firmly. Retighten nuts & bolts loosened above.

- c. Re-install rear cover plate.



## ARM TO COLUMN TUBE

1. With the miter index-lock knob indexed and locked there should be no up-down or side to side movement between the Arm and the Column. If there is a movement then it will be necessary to adjust the Gib and/or the Arm Support.

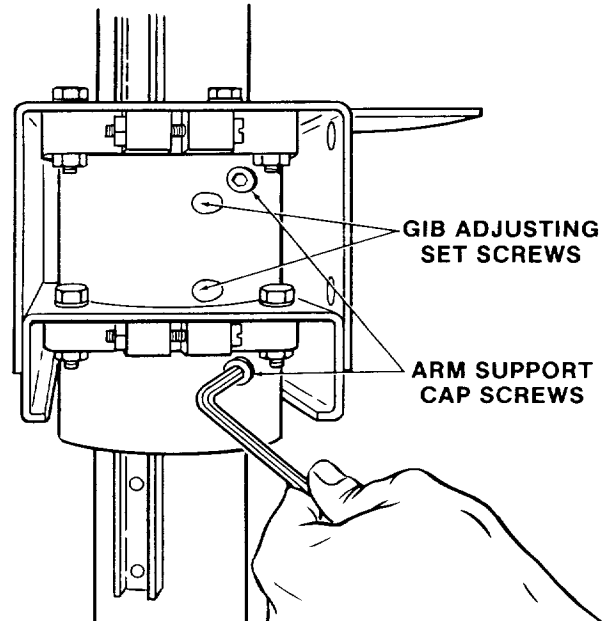
- a. Remove rear cover plate.

- b. Unlock miter index-lock knob and rotate arm to about 30° R. Miter. This will permit access to the adjusting screws at the rear of the Arm.

- c. If there is side to side movement tighten the two gib adjusting set screws as shown using the 5/32" hex wrench.

- d. If there is up-down movement tighten the two arm adjusting cap screws as shown using the 3/16" hex wrench.

- e. Check that the Arm can still be elevated smoothly. If elevation is tight, loosen the cap screws 1/8 turn and recheck elevation.



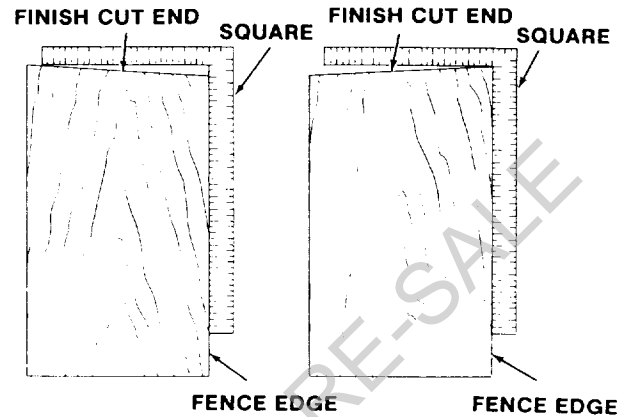
# trouble shooting

**WARNING: REMOVE POWER CORD FROM POWER SOURCE BEFORE MAKING ANY ADJUSTMENTS.**

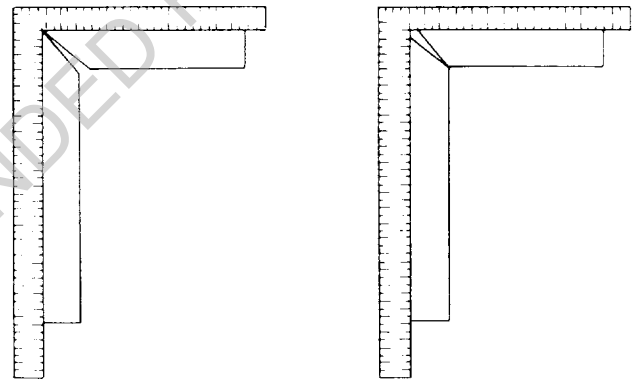
**NOTE:** Changing one adjustment will effect another. It is best to perform all of the alignment procedures when correcting any one problem. The usual operating "troubles" are listed in the following paragraphs with the necessary corrections listed.

## 1. RADIAL SAW DOES NOT MAKE ACCURATE 0° or 45° MITER CROSSCUTS.

- Looseness between column tube and arm.**  
Refer to ARM TO COLUMN adjustment in adjustments to compensate for Wear Section.
- Crosscut travel not properly adjusted.**  
Refer to Step Three in Alignment Procedure Section Squaring Crosscut Travel.
- Arm not indexing properly.**  
Make sure arm is indexed properly — Move arm off index and re-index making sure miter index-lock knob is positioned all the way in slot.
- Carriage Assembly Loose on Arm.**  
Refer to Carriage Glide Adjustment in adjustment to Compensate for Wear Sections.
- Looseness between Yoke and Carriage Assembly.**  
Refer to "Yoke Lock Handle" adjustment in adjustment to Compensate for Wear Sections.
- Sawdust between Work Piece and Fence.**  
Keep Front Work Table Clean.
- Rip Fence Not Straight.**  
Replace Fence.



FINISH CUT LOOKS LIKE THIS — 0° CROSSCUT



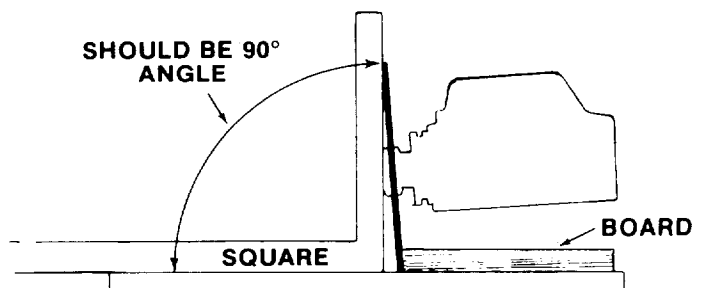
OR LIKE THIS — 45° MITER.

## 2. SAW CUTS AT ANGLE — NOT 90° TO TABLE TOP.

- Table not properly leveled.**  
Refer to Step One under Alignment Procedure Section.
- Blade not square to work table top.**  
Refer to Step Four in Alignment Procedure Section.

## 3. BLADE ANGLE (BEVEL) CUTS NOT ACCURATE.

- Corrective Action is the same as paragraph 2a and b above.**
- Carriage Glides Loose.**  
Refer to "Adjusting Carriage Glides" in "Adjustments to Compensate for Wear" section.
- Blade has "heel".**  
Check alignment per step two through step five in Assembly & Alignment section.



# trouble shooting

## 4. SAW KERF (CUT EDGE) OF STOCK ROUGH — TOOTH MARKS LEFT ON EDGE OF SAW KERF.

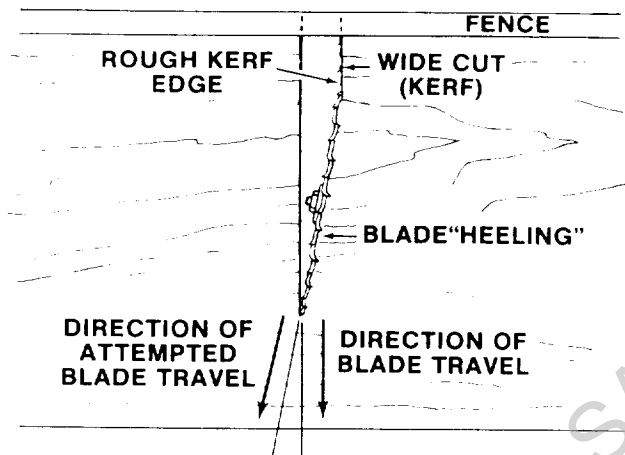
**NOTE:** This condition is commonly call "HEEL".

### a. Crosscutting or Miter Cutting

"Heeling" will tend to slide the workpiece along the guide fence, as the cut is being made, and make a square cut almost impossible.

**NOTE:** A useful way to check the travel of the sawblade to the fence and to check for "heel" is to crosscut an 11" wide x 18" long (Min.) piece of 1/2" plywood.

1. Be sure the edge of the plywood that is against the fence is straight and free of splinters.
2. Place the plywood firmly against the fence and crosscut off a 2" wide piece.
3. If there is heel in the blade it will show up by splintering up the top layer of plywood on the side to which the blade is heeling. Adjust the heel out by moving the heel adjustment plate in the direction away from the side that splintered. For example, if the right edge of the cut was splintered then you would want to adjust the adjustment plate to the left.
4. After the cut is complete, remove the remaining piece of plywood and check for a square cut by placing one edge of a framing



square against the "fence" edge of the board and the other edge along the "cut" edge. If there is a gap at the end of the leg of the square then the arm needs to be adjusted to the right. If the gap is at the corner of the square, then the arm needs to be adjusted to the left.

Refer to Step 5 under Alignment Procedure Section — "Squaring Blade to Fence."

### b. Bevel Crosscutting or Bevel Ripping

Refer to Step 2 thru 5 under Alignment Procedure Section.

### c. Using Improper Blade for Finish Cut Desired.

Use proper Smooth Cutting Blade.

## 5. WOOD BINDS, SMOKES AND MOTOR SLOWS DOWN OR STOPS WHEN RIPPING.

### a. Dull blade or warped board.

Sharpen or replace the saw blade. Avoid the attempted use of severely warped material.

### b. Feed rate too fast.

Slow Feed Rate.

### c. Saw blade heels.

Check and align as described in Alignment Procedure Section, Step 5.

### d. Fence not straight.

Replace fence.

### e. Carriage Assembly Loose in Arm.

Refer to adjusting carriage glides in Adjustments to Compensate for Wear section.

## 6. BOARD PULLS AWAY FROM FENCE WHEN RIPPING.

### a. Saw Blade has heel.

Corrective action is the same as preceding instructions explained in paragraph c.

## 7. WORKPIECE STRIKES SPREADER WHEN RIPPING.

- a. Adjust spreader per instructions in Step Six under "Alignment of Spreader for Ripping".

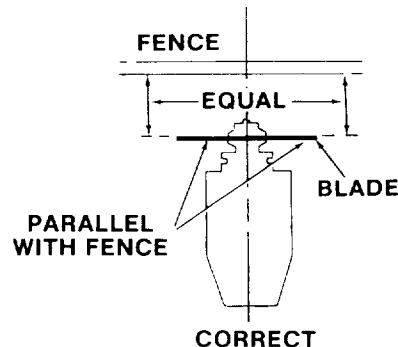
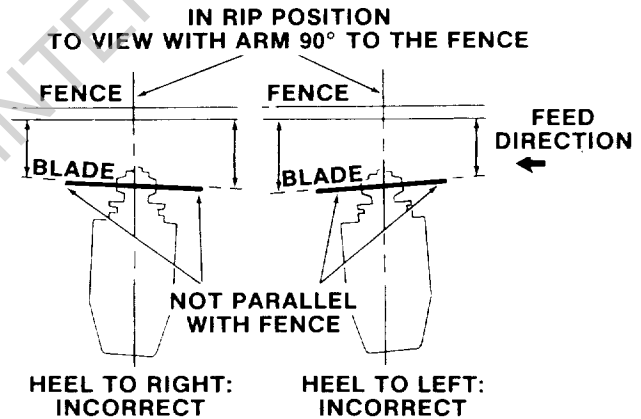
## 8. CARRIAGE DOES NOT TRAVEL SMOOTHLY ON ARM TRACK.

- a. Refer to adjusting carriage glides in Adjustments to Compensate for Wear section.

## 9. DEPTH OF CUT VARIES FROM ONE END OF WORK PIECE TO THE OTHER.

### a. Table Top not parallel with Arm.

Refer to Step One Alignment Section.



## 10. BLADE TENDS TO ADVANCE THRU LUMBER TOO FAST.

### a. Dull Blade.

Replace or sharpen blade.

### b. Not advancing Saw Blade properly.

Draw Saw Blade across lumber with a slow and steady pull. Keep right arm straight from the shoulder to the wrist.

## MOTOR TROUBLE-SHOOTING CHART

**NOTE:** Motors used on wood-working tools are particularly susceptible to the accumulation of sawdust and wood chips and should be blown out or "vacuumed" frequently to prevent interference with normal ventilation.

TROUBLE	PROBABLE CAUSE	SUGGESTED REMEDY
<b>Motor will not run.</b>	1. Low voltage	1. Check power line for proper voltage.
<b>Motor will not run and fuses "BLOW".</b>	1. Short circuit in line, cord or plug. 2. Incorrect fuse in power line.	1. Inspect line, cord and plug for damage insulation and shorted wires. 2. Install 15 amp Time Delay Fuse.
<b>Motor fails to develop full power. Note: Low Voltage</b> (Power output of motor decreases rapidly with decrease in voltage at motor terminals. For example: a reduction of 10% in voltage causes a reduction of 19% in maximum power output of which the motor is capable, while a reduction of 20% in voltage causes a reduction of 36% in maximum power output.)	1. Power line overloaded with lights, appliances and other motors. 2. Undersize wires or circuit too long. 3. General overloading of power company's facilities.	1. Reduce the line load. 2. Increase wire sizes, or reduce length of wiring. 3. Request a voltage check from the power company.
<b>Motor overheats.</b>	1. Excessive feed rate when crosscutting or ripping. 2. Improper cooling. (Air circulation restricted through motor due to sawdust, etc.) 3. Saw blade has "heel".	1. Slow down rate of feed. 2. Clean out sawdust to provide normal air circulation through motor. 3. Refer to Alignment Procedure Section of manual Step Five.
<b>Motor starts slowly or fails to come up to full speed.</b>	1. Low Voltage — will not trip starting switch. 2. Blade teeth wedge into table.	1. Correct low voltage condition. 2. Free blade from table.
<b>Motor stalls</b> (resulting in blown fuses or tripped circuit breakers).	1. Voltage too low to permit motor to reach operating speed. 2. Fuse or circuit breaker do not have sufficient capacity.	1. Correct the low line voltage condition. 2. Replace fuse with 15 amp Time Delay Fuse.
<b>Frequent opening of fuses or circuit breakers.</b>	1. Motor overloaded. 2. Fuse does not have sufficient capacity.	1. Reduce motor load. 2. Replace fuse with 15 amp Time Delay Fuse.

# maintenance and lubrication

## MAINTENANCE

**WARNING: FOR YOUR OWN SAFETY, TURN SWITCH "OFF" AND REMOVE PLUG FROM POWER SOURCE OUTLET BEFORE MAINTAINING OR LUBRICATING YOUR SAW.**

When you receive your new Craftsman radial saw, it requires no lubrication. In time, however, in order to keep your saw in perfect working order and accurate, it will be necessary to lubricate and realign. In fact, your radial saw needs more of a cleaning than a lubrication.

Make sure the teeth of the ANTICKICKBACK pawls are always sharp. Replace if not sharp.

## LUBRICATION

### PERIODICALLY LUBRICATE THESE POINTS

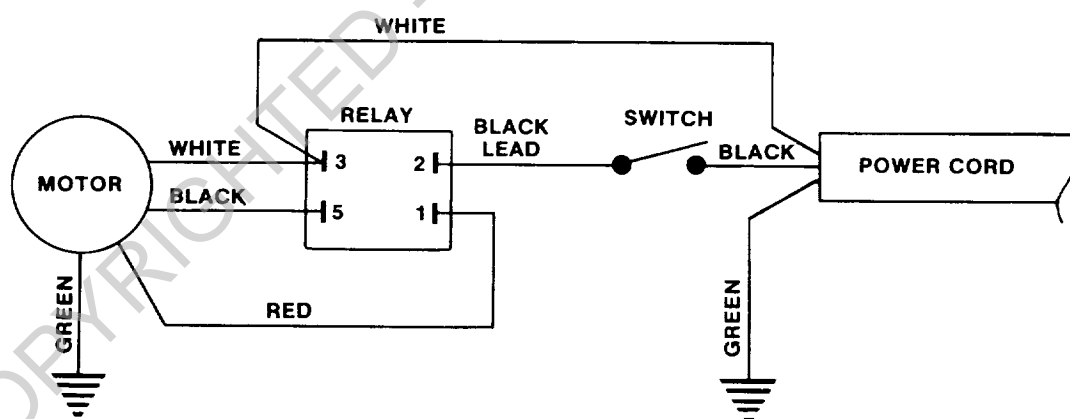
Use SAE No. 10W-30 automotive engine oil.

A light film of oil should be wiped on the face of the column tube to lubricate the fit between the column tube, and arm.

Lubricate the threads on the elevation shaft and the washers on either side of the elevation bracket.

**CAUTION: Excessive oil at any location will attract airborne dust particles and sawdust.**

## WIRING DIAGRAM



## recommended accessories

ITEM	CAT. NO.
Stand .....	9-22205
Steel Legs .....	9-22238
Casters .....	9-22221, 9-22222
*Molding Head Guard — 7-inch .....	9-29524
*Molding Head Guard — 8-inch .....	9-29523
Rotary Surface Planer — Carbide Tip ..	9-29513
Sanding Wheel — 8-inch .....	9-2274
Sanding Wheel — 10-inch .....	9-22723
Taper Jig .....	9-3233
*Satin Cut Dado — 7-inch .....	9-3257
*Satin Cut Dado — 8-inch .....	9-3253
*Molding Head Single Cutter .....	9-3215
*Molding Head Three Cutter .....	9-3218
• Lower Retractable Guard .....	9-29009
“Power Tool Know How Handbook”	
Radial Saw .....	9-2917

\*Before purchasing or using any of these accessories, read and comply with additional safety instructions No. “(D)2” on p. 5 of this manual.

The above recommended accessories are current and were available at the time this manual was printed.

- Meets OSHA Requirements as of 8-73.

**NOTE:** This lower retractable guard is designed to provide additional protection to the operator in an axial direction to the sawblade (perpendicular to the plane of the sawblade), under the following set of conditions ONLY:

- When NOT cutting,
- When lower guards are fully down touching the table,
- When the carriage is in the full rear position behind the fence, and
- When the saw is set up to perform 90° crosscut operations (Arm 90° to fence and sawblade 90° to table).

repair parts

PARTS LIST FOR CRAFTSMAN 10-INCH RADIAL SAW  
MODEL NUMBER 113.197801

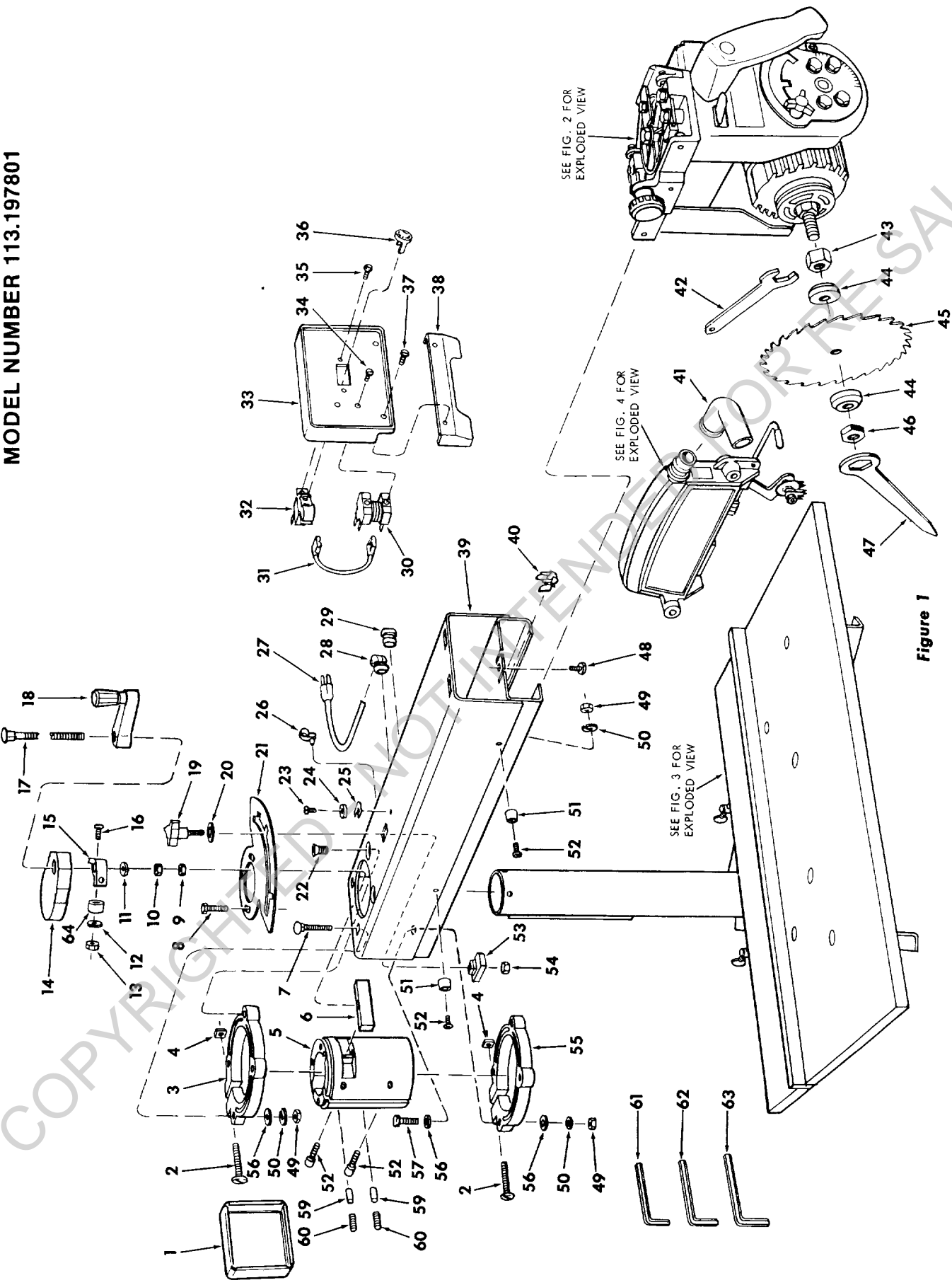


Figure 1



**PARTS LIST FOR CRAFTSMAN 10-INCH RADIAL SAW  
MODEL NUMBER 113.197801**

**FIGURE 1**

Key No.	Part No.	Description	Key No.	Part No.	Description
1	63836	Cover, Arm	35	60287	Screw, Nylon 6-32 x 5/16
2	STD 512520	*Screw, Pan Hd. 1/4-20 x 2	36	60256	Key, Switch
3	63857	Clamp, Column	37	STD 611005	*Screw, Pan Type "AB" No. 10 x 1/2
4	62636	Nut, Square 1/4	38	63835	Trim
5	63860	Support, Arm	39	63863	Arm Assembly
6	63859	Nut, Lift	40	61371	Clip, Grounding
7	60406	Bolt, Carriage Hi Strength 1/4-20 x 1	41	63258	Elbow, Dust
8	9416187	Screw, Hex Type "T" 5/16-18 x 3/4	42	63062	Wrench, Shaft
9	STD 541237	*Nut, Hex Jam 3/8-16	43	63711	Spacer, Motor
10	STD 541037	*Nut, Hex 3/8-16	44	62498	Collar, Blade
11	60408	Washer .389 x .687 x .062	45	60175	†Blade, Saw 10"
12	STD 551125	*Lockwasher, 1/4	46	30495	Nut, Shaft
13	STD 541025	Nut, Hex 1/4-20	47	3540	Wrench, Arbor
14	63811	Cap, Column	48	STD 601105	*Screw, Pan Hd. Type "T" 10-32 x 1/2
15	63810	Bracket, Elevation	49	STD 541025	*Nut, Hex 1/4
16	STD 512510	*Screw, Pan Hd. 1/4-20 x 1	50	STD 551125	*Lockwasher, 1/4
17	119380	Bolt, Carriage 3/8-16 x 8	51	60412	Bumper, Rubber
18	63809	Crank Assembly	52	60102	Screw, Hex Soc. Hd. Cap 1/4-20 x 1
19	63831	Knob	53	63855	Nut, Bevel Index
20	60439	Washer, 17/64 x 1-13/32 x 1/16	54	STD 541425	*Nut, Lock 1/4
21	63808	Lock, Miter	55	63856	Clamp, Column
22	60424	Screw, Flat Hd. Type "T" 5/16-18 x 3/4	56	STD 551012	*Washer, 17/64 x 7/16 x 1/32
23	STD 600602	*Screw, Pan Hd. Type "T" 6-32 x 1/4	57	STD 523112	*Screw, Hex 5/16-18 x 1-1/4
24	37935	Washer, Fiber			
25	63423	Indicator, Bevel	59	63858	Gib
26	68036	Hanger, Cable	60	222460	Screw, Set Hex Flat 5/16-18 x 3/8
27	63833	Cord, with Plug	61	30505	†Wrench, Hex "L" 1/8
28	37875	Relief, Strain	62	37837	†Wrench, Hex "L" 5/32
29	37818	Relief, Strain	63	30504	†Wrench, Hex "L" 3/16
30	63725	Relay	64	63873	Spacer
31	63837	Lead Assembly (Black)			
32	62442	Switch, Locking			
33	63834	Trim, Arm			
34	STD 600805	*Screw, Pan Hd. Recess 8-32 x 7/16			
					Bag of Loose Parts (Not Illustrated)
					Bag of Loose Parts (Not Illustrated)
					Bag of Loose Parts (Not Illustrated)
					Owners Manual (Not Illustrated)

\*Standard Hardware Item — May be purchased locally.

†Stock Item — May be secured through the Hardware

Department of most Sears Retail Stores or Catalog Order House

PARTS LIST FOR CRAFTSMAN 10-INCH RADIAL SAW  
MODEL NUMBER 113.197801

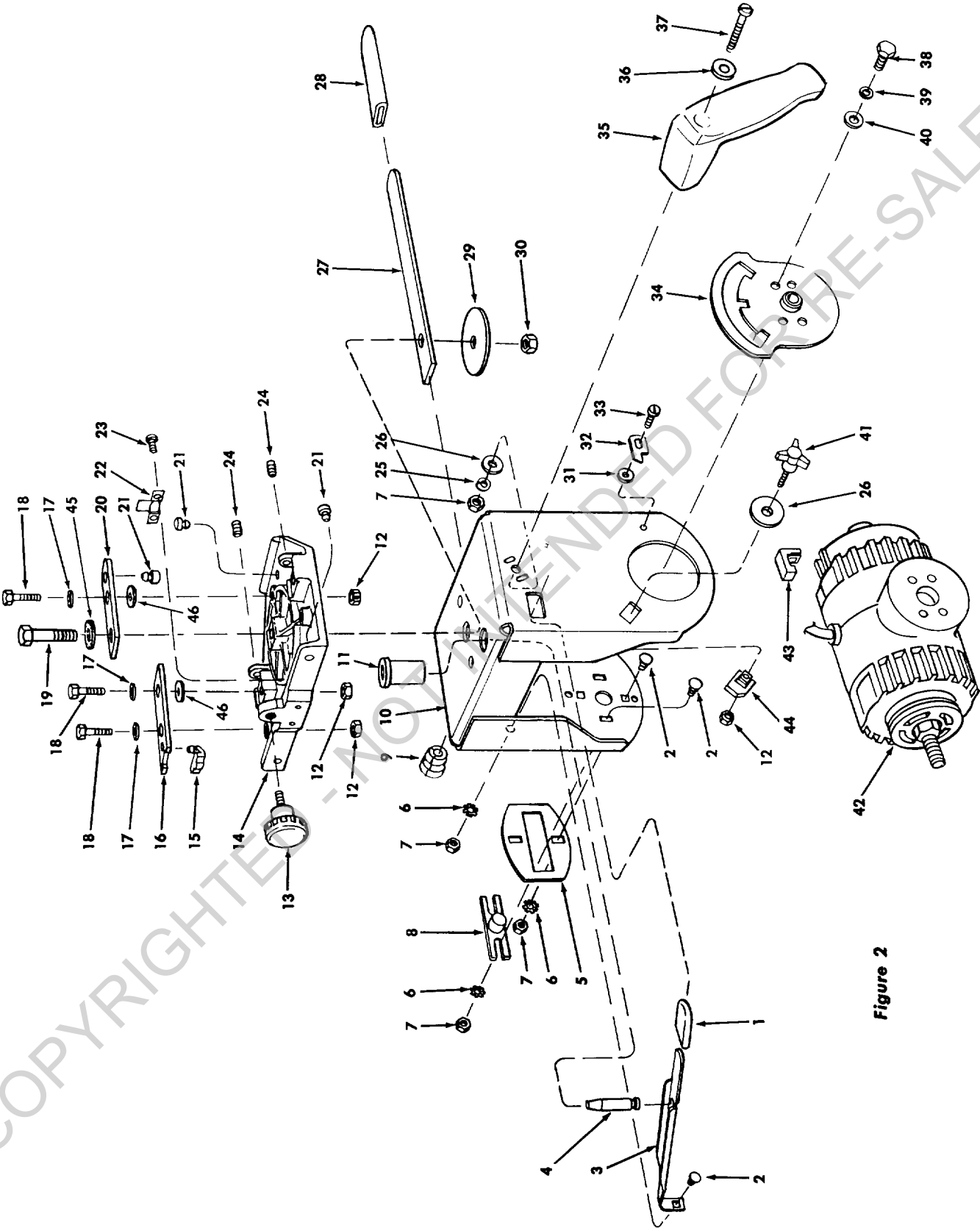


Figure 2

**PARTS LIST FOR CRAFTSMAN 10-INCH RADIAL SAW  
MODEL NUMBER 113.197801**

**FIGURE 2**

Key No.	Part No.	Description
1	63812	Grip, Handle
2	60407	Bolt, Carriage High Strength 1/4-20 x 5/8
3	63824	Spring, Swivel Index
4	63825	Pin, Swivel Index
5	63822	Plate, Heel Adjusting
6	STD 551125	* Lockwasher, External 1/4
7	STD 541025	* Nut, Hex 1/4-20
8	63862	Support Assembly, Motor
9	37818	Relief, Strain
10	63819	Yoke Assembly
11	63820	Bushing
12	STD 541425	* Nut, Lock 1/4-20
13	38531	Knob
14	63813	Carriage
15	63815	Bearing
16	63816	Support, Bearing
17	STD 551012	Washer, 17/64 x 9/16 x 3/64
18	9431566	Bolt, High Strength 1/4-20 x 3/4
19	STD 523720	* Screw, Hex Hd. 3/8 -16 x 2
20	63817	Support, Bearing
21	63814	Bearing, Carriage
22	63818	Shoe, Carriage Lock
23	STD 601103	* Screw, Pan Hd. Type "T" 10-32 x 3/8

Key No.	Part No.	Description
24	60329	Screw, Locking Set 1/4-20 x 3/8
25	STD 551125	* Lockwasher, 1/4
26	60410	Washer, 17/64 x 1-1/4 x 7/64
27	63821	Lever, Swivel Lock
28	63826	Grip, Handle
29	60409	Washer, 3/8 x 2 x 9/64
30	STD 541437	* Nut, Lock 3/8-16
31	37935	Washer, Fibre 9/64 x 1/4 x 1/32
32	63423	Indicator, Bevel
33	STD 600602	* Screw, Pan Sl. Type "T" 6-32 x 1/4
34	63861	Plate, Assembly, Index
35	63832	Handle, Yoke
36	STD 551012	* Washer, 17/64 x 7/16 x 1/32
37	STD 512515	* Screw, Hex Hd. 5/16-18 x 3/4
39	STD 551131	* Lockwasher, 5/16
40	STD 551031	Washer, 11/32 x 11/16 x 1/16
41	63831	Knob
42	63802	Motor
43	64561	Brake Shoe Assembly
44	63855	Nut, Bevel Index
45	STD 551137	* Lockwasher, External 3/8
46	60438	Washer, 3/8 x 5/8 x 1/32

\*Standard Hardware Item — May be purchased locally.

# repair parts

## PARTS LIST FOR CRAFTSMAN 10-INCH RADIAL SAW MODEL NUMBER 113.197801

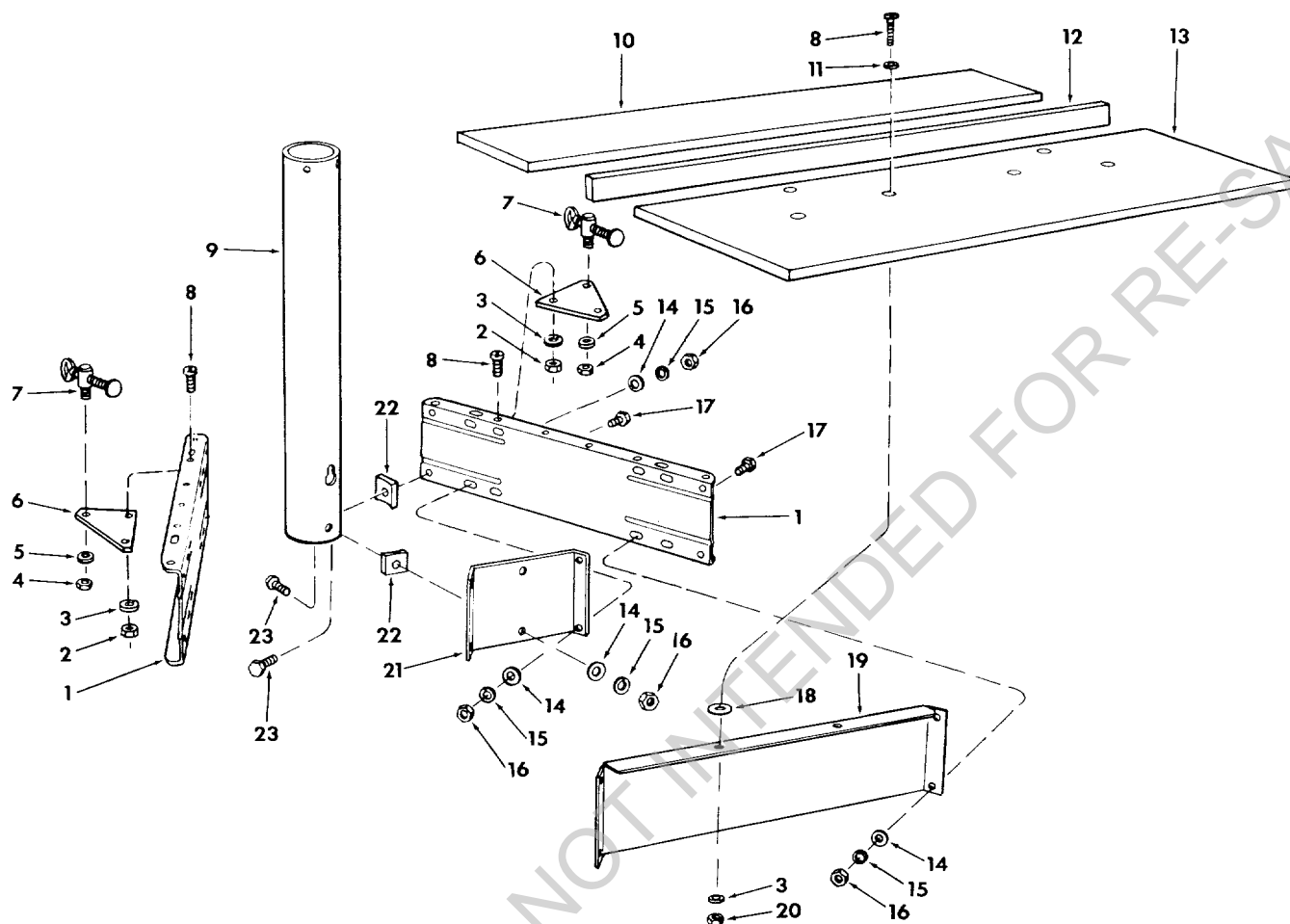


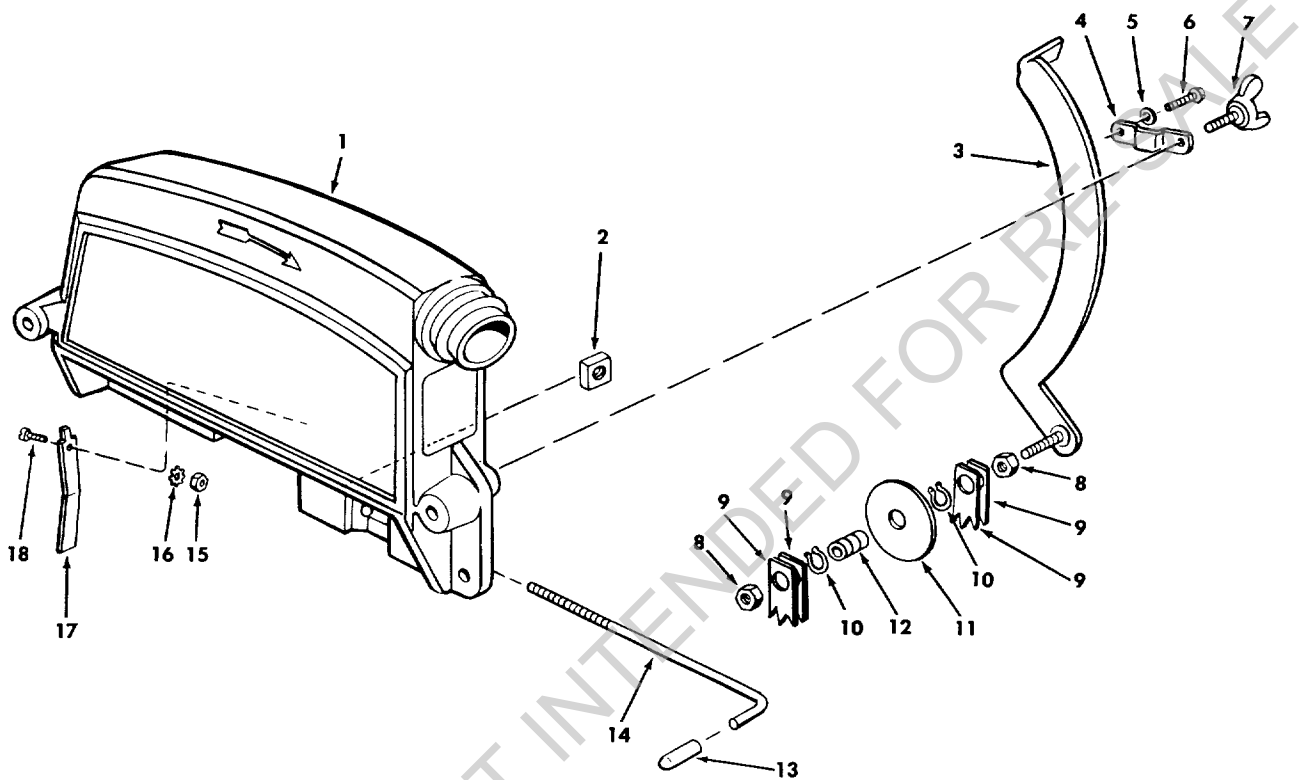
FIGURE 3

Key No.	Part No.	Description
1	63846	Channel, Table Mounting
2	STD 541411	*Nut, Hex 1/4-20
3	STD 551125	*Lockwasher, 1/4
4	STD 541431	*Nut, Lock 5/16-18
5	60024	Washer, 21/64 x 1 x 1/16
6	63864	Bracket, Clamp
7	63536	Clamp, Table
8	STD 512510	*Screw, Pan Hd. 1/4-20 x 1
9	63806	Tube, Column
10	63839	Table Rear
11	STD 551025	Washer, 17/64 x 5/8 x 1/32
12	63840	Fence, Rip

Key No.	Part No.	Description
13	63838	Table, Front
14	60013	Washer, 11/32 x 7/8 x 1/16
15	STD 551131	*Lockwasher, 5/16
16	STD 541231	*Nut, Hex 5/16-18
17	STD 523107	*Screw, Hex Hd. 5/16-18 x 3/4
18	63869	Washer, Neoprene
19	63845	Channel, Front
20	STD 541025	*Nut, Hex 1/4-20
21	63847	Bracket, Channel
22	63851	Spacer, Column
23	STD 523110	*Screw, Hex Hd. 5/16-18 x 1

\*Standard Hardware Item — May be purchased locally.

**PARTS LIST FOR CRAFTSMAN 10-INCH RADIAL SAW  
MODEL NUMBER 113.197801**



**FIGURE 4 — GUARD ASSEMBLY**

Key No.	Part No.	Description
1	63853	Guard
2	120399	Nut, Square, 5/16-18
3	63541	Bar, Antikickback
4	63540	Guide, Antikickback
5	STD 551010	*Washer, 13/64 x 5/8 x 1/32
6	STD 601103	*Screw, Type "T" Pan Hd. 10-32 x 3/8
7	60219	Screw, Wing 5/16-18 x 1/2
8	STD 541231	*Nut, Hex 5/16-18
9	63271	Pawl, Antikickback
10	STD 582043	*Ring, Retaining 7/16

Key No.	Part No.	Description
11	63270	Spreader
12	63269	Bearing
13	60435	Grip
14	63539	Screw, Guard Clamp (Includes Key #13)
15	STD 541008	*Nut, Hex 8-32
16	STD 551108	*Lockwasher, External Tooth No. 8
17	63538	Clamp, Guard
18	STD 510805	*Screw, Pan Hd. 8-32 x 1/2

\* Standard Hardware Item — May be purchased locally.

## NOTES

Handwriting practice lines consisting of 20 horizontal lines.

## NOTES

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# Sears

## *owners manual*

## SERVICE

**MODEL NO.  
113.197801**

## HOW TO ORDER REPAIR PARTS

## 10-INCH RADIAL SAW

Now that you have purchased your 10-inch radial 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.

The model number of your 10-inch radial saw will be found on a label attached to your saw, at the right rear side of arm.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

PART NUMBER	PART DESCRIPTION
MODEL NUMBER 113.197801	NAME OF ITEM 10-INCH RADIAL 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.**