

Save This Manual  
For Future Reference

**SEARS**

**owner's  
manual**

**MODEL NO.  
113.234680**

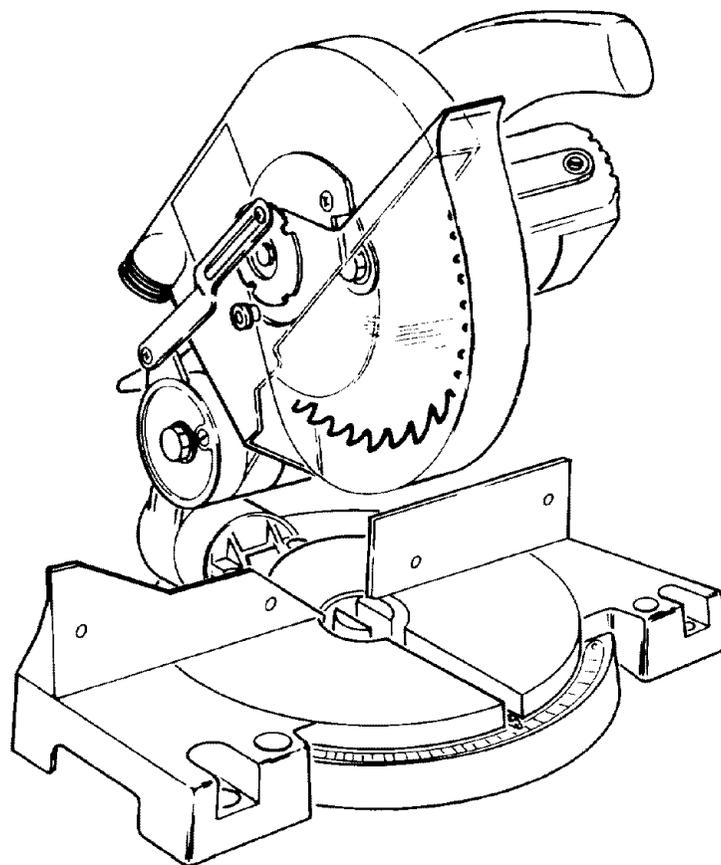
**8 $\frac{1}{4}$ " COMPOUND  
MITER SAW**

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

Model and serial numbers  
may be found at the side of  
the miter saw arm.  
You should record both  
model and serial number in  
a safe place for future use.

**FOR YOUR  
SAFETY:**

**READ ALL  
INSTRUCTIONS  
CAREFULLY**



**SEARS / CRAFTSMAN®**

**8 $\frac{1}{4}$ -INCH COMPOUND  
MITER SAW**

- assembly
- operating
- repair parts

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

Part No. SP5301

MAN 21441 8

Printed in Taiwan.

## FULL ONE YEAR WARRANTY ON CRAFTSMAN MITER SAW

If within one year from the date of purchase, this Craftsman Miter 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 SERVICE CENTER/DEPARTMENT THROUGHOUT THE UNITED STATES.

This warranty applies only while this product is used in the United States.

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

SEARS, ROEBUCK AND CO., D/817 WA Hoffman Estates, IL 60195

## SAFETY INSTRUCTIONS FOR MITER SAW

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

### BEFORE USING THE MITER SAW:

**WARNING: To avoid mistakes that could cause serious, permanent injury, do not plug the miter saw in until the following steps are completed.**

- Assembly and alignment. (See pages 10-14)
- Learn the use and function of the ON-OFF trigger switch, upper and lower blade guards, handle latch, bevel clamp, cover plate stop screw, and fence clamps. (See page 9).
- Review and understand all safety instructions and operating procedures in this manual.
- Review the maintenance methods for this miter saw. (See page 22).

Read the following DANGER label found on the motor of the miter saw:

**DOUBLE-INSULATED**  
When servicing use only identical replacement parts.

Electrical: 120 volts  
60 Hz AC only, 9 amps  
5200 RPM

  
E85575

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**FOR YOUR OWN SAFETY:**  
Know this tool—Read and Understand the Owner's Manual before using this tool.

**DANGER**

- Wear safety goggles complying with ANSI Z87.1
- Tighten arbor screw and all clamps before sawing.
- Keep guards in place and working properly.
- Keep hands out of sawblade path.
- Never cut anything "free hand."
- Never reach behind or beneath the sawblade.
- Wait for blade to stop before moving workpiece, servicing or adjusting tool.
- To avoid electrical shock do not expose to rain.

### WHEN INSTALLING OR MOVING THE MITER SAW.

Before moving the saw, lock the miter, bevel and power head positions. Unplug the power cord.

NEVER carry the saw by the cord or power head handle. Damage to insulation could cause an electric shock. Damage to wire connections could cause a fire.

AVOID DANGEROUS ENVIRONMENT. Use the miter saw in a dry, indoor place protected from rain. Keep work area well lighted.

Place the miter saw so neither the user or bystanders are forced to stand in line with the blade. Thrown debris could injure people in its path.

#### To avoid injury from unexpected saw movement:

- Put the miter saw on a firm level surface where there is plenty of room for handling and properly supporting the workpiece.
- Support the miter saw so the table is level and the saw does not rock.
- Bolt or clamp the saw to its support.
- NEVER STAND ON TOOL. Serious injury could occur if the tool tips or you accidentally hit the cutting tool. Do not store anything above or near the tool where anyone might stand on the tool to reach them.

#### To avoid injury or death from electrical shock:

- THIS TOOL IS DOUBLE INSULATED to give you added protection. Double insulation does not take the place of normal safety precautions when operating this tool. When servicing this double insulated tool, use only identical parts.
- Make sure your fingers do not touch the plug's metal prongs when plugging or unplugging the miter saw.

### BEFORE EACH USE:

#### Inspect your miter saw.

DISCONNECT THE MITER SAW. To avoid injury from accidental starting, unplug the saw, before changing the setup, changing the blade or adjusting anything.

Compare the direction of rotation arrow on the guard to the direction arrow on the blade. The blade teeth should always point downward at the front of the saw.

Tighten the arbor screw.

Tighten the cover plate stop screw.

**CHECK DAMAGED PARTS. Check for:**

- Alignment of moving parts,
- Damaged electric cords.
- Binding of moving parts.
- Broken parts,
- Stable mounting,
- Function of arm return spring and lower guard: Push the arm all the way down, then let it rise up until it stops by itself. Check the lower guard to see if it closed fully. If it did not, follow the instructions in the Trouble Shooting section.
- Other conditions that may affect the way the miter saw works.

**KEEP GUARDS IN PLACE**, in working order, and in proper adjustment.

If any part is missing, bent, or broken in any way, or any electrical parts don't work, turn the saw off and unplug it. **REPLACE** damaged, missing, or failed parts before using the saw again.

**MAINTAIN TOOLS WITH CARE.** Keep the miter saw clean for best and safest performance. Follow instructions for lubricating. **DON'T** put lubricants on the blade while it's spinning.

**REMOVE ADJUSTING KEYS AND WRENCHES** from tool before turning it on.

**To avoid injury from jams, slips or thrown pieces:**

- **USE ONLY RECOMMENDED ACCESSORIES.** (See page 22). Consult this Owner's manual for recommended accessories. Follow the instructions that come with the accessories. The use of improper accessories may cause risk of injury to persons.
- Choose the right 8¼ inch diameter blade for the material and the type of cutting you plan to do.
- Make sure the blade is sharp, undamaged and properly aligned. With the saw unplugged, push the power-head all the way down. Hand spin the blade and check for clearance. Tilt the power-head to 45 degree bevel and repeat the check. If the blade hits anything, make the adjustments shown in the Maintaining Maximum Cutting Capacity section.
- Make sure the blade and arbor collars are clean.
- Make sure the arbor collar's recessed sides are facing the blade.
- Using a 1/2-inch box wrench, make sure the arbor cap screw is firmly hand tightened.
- Make sure all clamps and locks are tight and no parts have excessive play.
- **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents. Floor must not be slippery.

To avoid burns or other fire damage, never use the miter saw near flammable liquids, vapors or gases.

**Plan ahead to protect your eyes, hands, face, ears.**

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

To avoid injury from accidental contact with moving parts, don't do layout, assembly, or setup work on the miter saw while any parts are moving.

**AVOID ACCIDENTAL STARTING.** Make sure switch is "OFF" before plugging miter saw into a power outlet.

**Plan your work.**

**USE THE RIGHT TOOL.** Don't force tool or attachment to do a job it was not designed to do. Use a different tool for any workpiece that can't be held in a solidly braced, fixed position.

**CAUTION: This machine is not designed for cutting ferrous metals (steel, iron and iron based metals). Use this miter saw to cut only wood, wood like products or soft metals like aluminum. Other materials may shatter, bind on the blade, or create other dangers.**

**CAUTION: When cutting any metals, sparks or hot fragments could cause a fire. To avoid this, disconnect any dust collecting hose from the miter saw, and remove all traces of wood dust from inside dust traps in the miter saw.**

**Dress for safety.**



Any power miter saw can throw foreign objects into the eyes. This can cause permanent eye damage. Wear safety goggles (not glasses) that comply with ANSI Z87.1 (shown on package). Everyday eyeglasses have only impact resistant lenses. They are not safety glasses. Safety goggles are available at Sears retail catalog stores. Glasses or goggles not in compliance with ANSI Z87.1 could seriously hurt you when they break.

- Do not wear loose clothing, gloves, neckties or jewelry (rings, wrist watches) They can get caught and draw you into moving parts.
- Wear nonslip footwear.
- Tie back long hair.
- Roll long sleeves above the elbow.

- Noise levels vary widely. To avoid possible hearing damage, wear ear plugs or muffs when using miter saw for hours at a time.
- For dusty operations, wear a dust mask along with the safety goggles.

#### **Inspect your workpiece.**

- Make sure there are no nails or foreign objects in the part of the workpiece to be cut.

#### **Plan your work to avoid THROWBACKS—when the workpiece binds on the blade and is torn from your hands.**

Plan the way you will hold the workpiece from start to finish:

Avoid awkward operations and hand positions where a sudden slip could cause fingers or hand to move into the blade.

**DON'T OVERREACH.** Keep good footing and balance.

Keep your face and body to one side, out of line with a possible throwback.

#### **Never cut FREEHAND:**

- Brace your workpiece solidly against the fence and table top so it will not rock or twist during the cut.
- Make sure there's no debris between the workpiece and its supports.
- Make sure no gaps between the workpiece, fence and table will let the workpiece shift after it is cut in two.
- Never cut more than one workpiece at a time.
- Keep the cut off piece free to move sideways after it's cut off. Otherwise, it could get wedged against the blade and thrown violently.
- Cut only one workpiece at a time.
- Clear everything except the workpiece and related support devices off the table before turning the miter saw on.
- **SECURE WORK.** Use clamps or a vise to help hold the work when it's practical.

#### **Use extra caution with large, very small or awkward workpieces:**

- Use extra supports (tables, saw horses, blocks, etc.) for any workpieces large enough to tip when not held down to the table top.
- **NEVER** use another person as a substitute for a table extension, or as additional support for a workpiece that is longer or wider than the basic miter saw table, or to help feed, support or pull the workpiece.
- Do not use this saw to cut pieces too small to let you easily hold the work while you keep the thumb side of your index (pointer) finger against the outside edge of the fence.
- When cutting irregularly shaped workpieces, plan your work support so it will not slip, pinch the blade and be torn from your hands. A piece of molding, for example, must lie flat or be held by a fixture or jig that will not let it twist, rock or slip while being cut.
- Properly support round material such as dowel rods, or tubing. They have a tendency to roll while being cut, causing the blade to "bite". To avoid this, always use a fixture designed to properly hold your workpiece.

**WARNING:** If planning to cut aluminum or other non-ferrous metals: Under adverse conditions, the blade can grab and throw the workpiece suddenly and unexpectedly. To avoid injury, follow all applicable safety instructions, as you normally would, and:

- Use only sawblades specifically recommended for non-ferrous metal cutting.
- Do not cut metal workpieces that must be hand held. Use auxiliary clamps or other equipment as needed.
- Cut non-ferrous metals only if you are experienced or under the supervision of an experienced person.

#### **WHENEVER SAW IS RUNNING.**

**WARNING:** Don't let familiarity (gained from frequent use of your miter saw) cause a careless mistake. A careless fraction of a second is enough to cause a severe injury.

Before starting your cut, watch the miter saw while it runs. If it makes an unfamiliar noise or vibrates a lot, stop immediately. Turn the miter saw off. Unplug the miter saw. Do not restart until finding and correcting the problem.

**KEEP CHILDREN AWAY.** Keep all visitors a safe distance from the miter saw. Make sure bystanders are clear of the miter saw and workpiece.

Never confine the piece being cut off. Never hold it, clamp it, touch it, or use length stops against it while the blade is spinning. It must be free to move sideways on its own. If confined, it could get wedged against the blade and thrown violently.

Let the blade reach full speed before cutting.

**DON'T FORCE TOOL.** It will do the job better and safer at its designed rate. Feed the blade into the workpiece only fast enough to let it cut without bogging down or binding.

#### **Before freeing any jammed material:**

- Turn miter saw "OFF" by releasing trigger switch.
- Unplug the miter saw.
- Wait for all moving parts to stop.

#### **After finishing a cut:**

- Keep holding the power head down,
- Release the switch, and wait for all moving parts to stop before moving your hands.
- If blade doesn't stop within six 6 seconds, unplug the saw and follow the instructions in the Trouble Shooting section for fixing the blade brake before using the saw again.

#### **BEFORE LEAVING THE SAW:**

**NEVER LEAVE TOOL RUNNING UNATTENDED.** Turn power off. Wait for all moving parts to stop.

Make workshop child-proof. Lock the shop. Disconnect master switches. Store the tool away from children and others not qualified to use it.

# glossary of terms for woodworking

## Arbor

The shaft on which a cutting tool is mounted.

## Bevel Cut

An angle cutting operation made through the face of the work piece.

## Compound Cut

A simultaneous bevel and miter cutting operation.

## Crosscut

A cutting operation made across the width of the work-piece.

## Freehand

Performing a cut without the use of fence (guide), hold down or other proper device to prevent the workpiece from twisting during the cutting operation. Twisting of the workpiece can cause it to be thrown.

## Gum

A sticky, sap based residue from wood products.

## Heel

Misalignment of the blade.

## Kerf

The amount of material removed by the blade in a through cut or the slot produced by the blade in a non-through or partial cut.

## Miter Cut

An angle cutting operation made across the width of the workpiece.

## Resin

A sticky, sap based substance that has hardened.

## Revolutions Per Minute (RPM)

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

## Sawblade Path

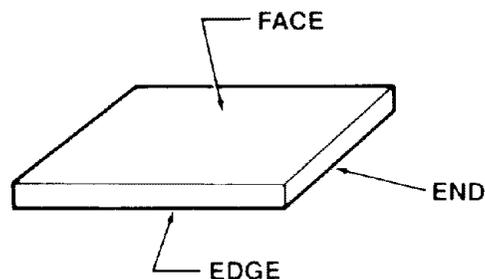
The area of the workpiece or table top directly in line with either the travel of the blade or the part of the workpiece which will be, or has been, cut by the blade.

## Set

The distance that the tip of the sawblade tooth is bent (or set) outward from the face of the table.

## Workpiece

The item on which the cutting operation is being performed. The surfaces of a workpiece are commonly referred to as faces, ends, and edges.



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## electrical connections

### POWER SUPPLY

#### Motor Specifications

The AC motor used in this saw is a universal, nonreversible type having the following specifications:

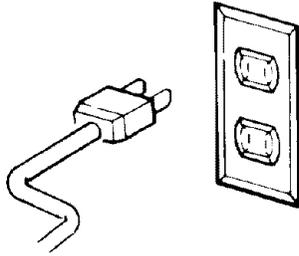
Maximum Developed H.P.	1½
Voltage	120
Amperes	9
Hertz (Cycles)	60
Phase	Single
RPM	5200
Rotation of Shaft	Clockwise
Brake	Automatic

**WARNING:** To avoid electrical hazards, fire hazards, or damage to the tool, use proper circuit protection. Your saw is wired at the factory for 120V operation. Connect to a 120V, 15-AMP, branch circuit and use a 15-AMP time delay fuse or circuit breaker. To avoid shock or fire, if power cord is worn or cut, or damaged in any way, have it replaced immediately.

## DOUBLE INSULATED

The miter saw is double insulated to provide a double thickness of insulation between you and the tool's electrical system. All exposed metal parts are isolated from the internal metal motor components with protecting insulation.

Your unit has a plug that looks like the one shown below.



This power tool is equipped with a 2-conductor cord listed by Underwriters Laboratories (UL). The plug permits you to use any conventional 120-volt electrical outlet without necessity for maintaining a ground connection.

**CAUTION:** Double insulation does not take the place of normal safety precautions when operating this tool.

**DANGER:** To avoid electrocution:

1. Use only identical replacement parts when servicing a tool with double insulation. Servicing should be performed by a qualified service technician.
2. Do not use in rain or where floor is wet.  
This tool is intended for indoor residential use only.

## MOTOR SAFETY PROTECTION

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

1. Connect this tool to a 120V, 15-amp branch circuit with a 15-amp time delay fuse or circuit breaker. Using the wrong size fuse can damage the motor.
2. If the motor won't start, release the trigger switch immediately. UNPLUG THE TOOL. Check the saw blade to make sure it turns freely. If the blade is free, try to start the motor again. If the motor still does not start, refer to the "Motor Trouble-Shooting Chart."

3. If the motor suddenly stalls while cutting wood, release the trigger switch, unplug the tool, and free the blade from the wood. The motor may now be restarted and the cut finished.
4. Fuses may "blow" or circuit breakers may trip frequently if:
  - a. **MOTOR IS OVERLOADED**—Overloading can occur if you feed too rapidly or make too many start/stops in a short time.
  - b. Voltages not more than 10% above or below the nameplate voltage can handle normal loads. For heavy loads, however, the voltage at motor terminals must equal the voltage specified on nameplate.
5. Most motor troubles may be traced to loose or incorrect connections, overload, low voltage (such as small size wire in the supply circuit) or to overly long supply circuit wire. Always check the connections, the load and the supply circuit whenever motor doesn't work well. Check wire sizes and length with the Wire Size Chart below.

## WIRE SIZES

The use of any extension cord will cause some loss of power. To keep this to a minimum and to prevent overheating and motor burn-out, use the table below to determine the minimum wire size (A.W.G.) extension cord.

For circuits that are farther than 100 feet away from electrical service box, the wire size must be increased proportionately in order to deliver ample voltage to the saw motor.

Length of the Conductor	Wire Sizes Required For 120V (American Wire Gage Number)
0–25 Ft.	14
26–100 Ft.	12
Over 100 Ft.	8

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## UNPACKING AND PREASSEMBLY

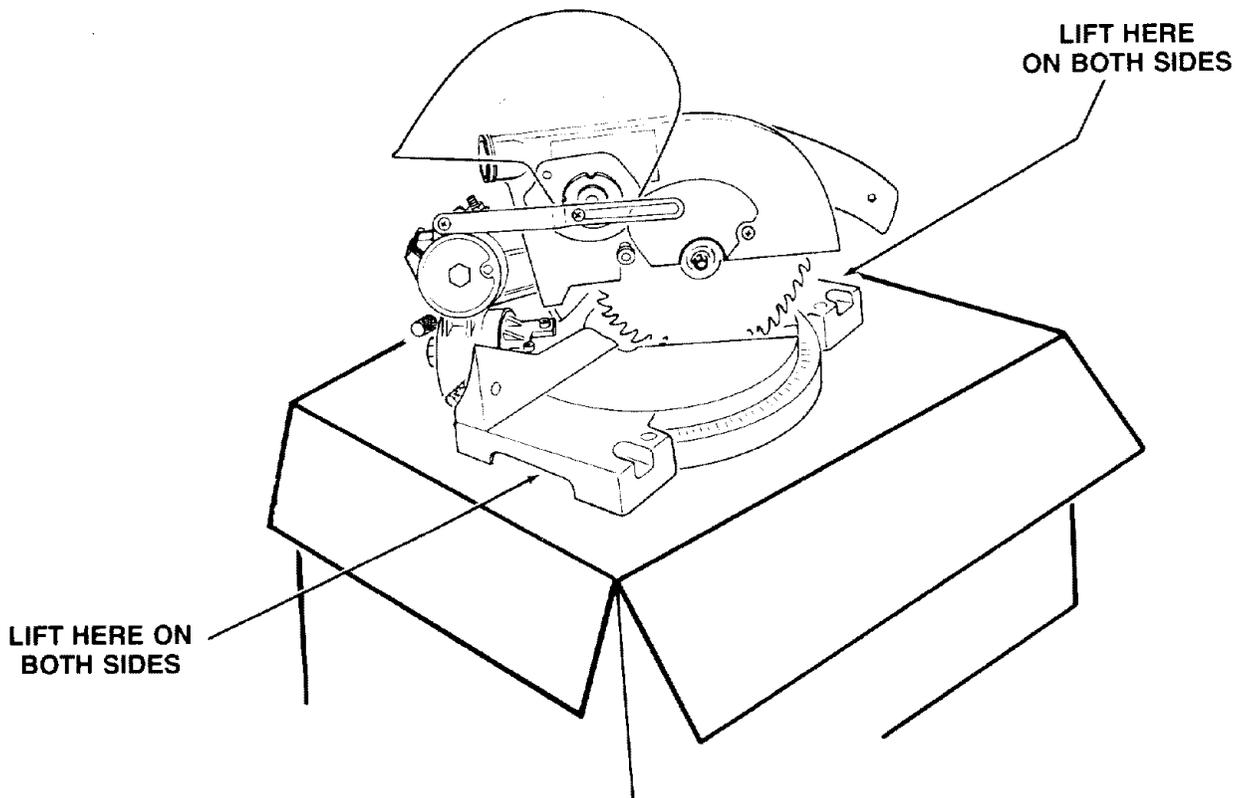
**WARNING:** To avoid injury from unexpected starting or electrical shock, do not plug the power cord into a source of power during unpacking and assembly. This cord must remain unplugged whenever you are working on the saw.

Model 113.234680 Miter Saw is shipped complete in one box.

1. Remove the miter saw from the carton by lifting the saw by the base.

**WARNING:** If any part is missing or damaged, do not plug the saw in until the missing or damaged part is correctly replaced. To avoid electric shock, use only identical replacement parts when servicing double insulated tools.

2. Place the saw on a secure stationary work surface and look the saw over carefully.



# tools needed

Tools required for assembly and alignment:

- Medium Screwdriver
- #2 Phillips Screwdriver
- Combination Square
- 1/2 Box End/Open End Wrench or Socket
- 2-3/4" Box End/Open End Wrenches or Adjustable Wrenches or Socket Wrenches
- 1/4" Hex "L" Wrench



**MEDIUM SCREWDRIVER**



**#2 PHILLIPS SCREWDRIVER**



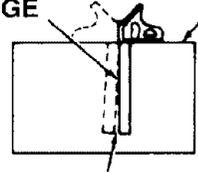
**COMBINATION SQUARE**



**1/4" HEX "L" WRENCH**

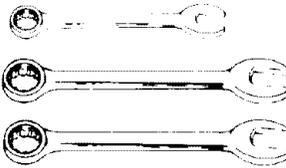
## COMBINATION SQUARE MUST BE TRUE

**DRAW LIGHT LINE ON BOARD ALONG THIS EDGE**



**STRAIGHT EDGE OF BOARD 3/4" THICK; THIS EDGE MUST BE PERFECTLY STRAIGHT**

**SHOULD BE NO GAP OR OVERLAP WHEN SQUARE IS FLIPPED OVER IN DOTTED POSITION**



**1/2" WRENCH**

**3/4" BOX END/OPEN END WRENCHES**

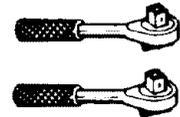


**ADJUSTABLE WRENCH**



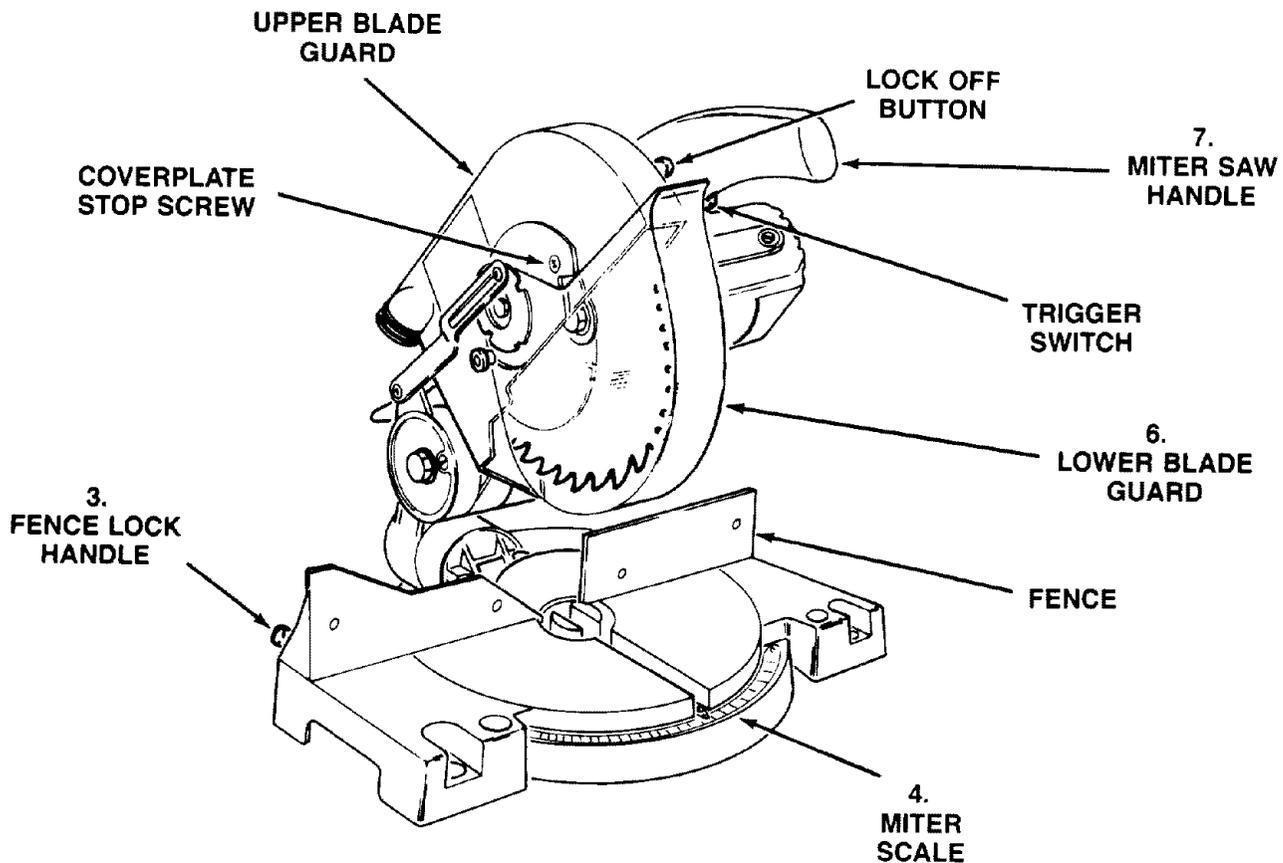
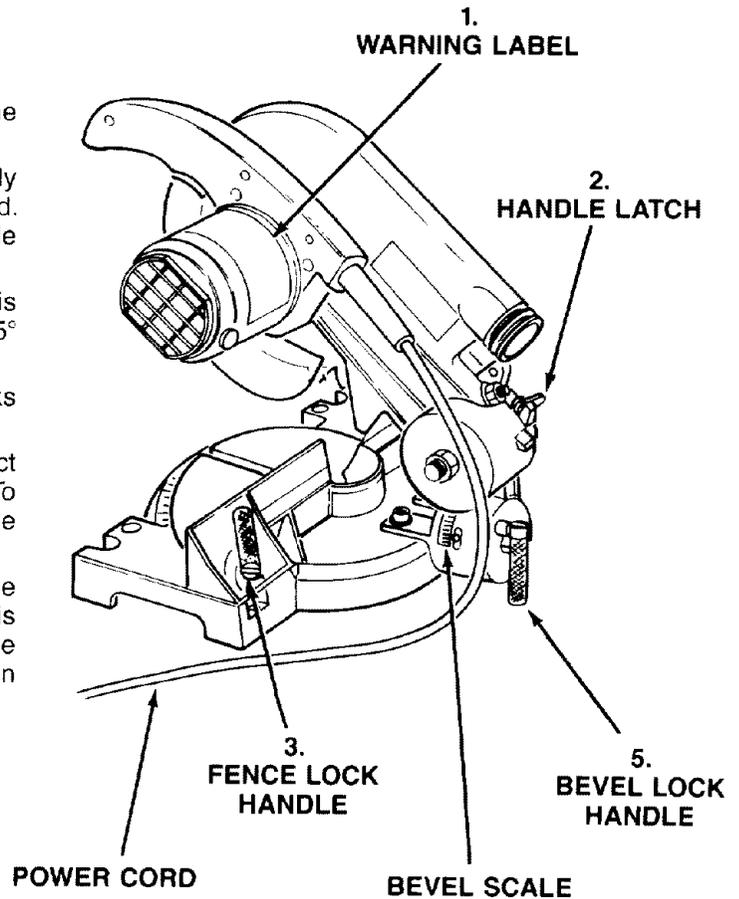
**1/2" SOCKET**

**3/4" SOCKETS & SOCKET WRENCHES**



# knowing your miter saw

1. Warning label.
2. Handle Latch—The miter saw can be locked in the lowered position for compact storage.
3. Fence Lock Handles—The fence automatically moves to the best location as miter angle is adjusted. The lock handles secure the fence and miter (table rotation) positions.
4. Miter Scale—Indicates what angle the sawblade is set at. Index points have been provided at 0°, 25.5° R/L, and 45° R/L.
5. Bevel Lock Handle—The bevel lock handle locks the miter saw at a desired bevel angle.
6. Lower Blade Guard—The blade guard helps protect your hands from the blade in the raised position. To avoid binding on the workpiece, it retracts as the blade is lowered.
7. Miter Saw Handle—The saw handle contains the trigger switch with a lock-off button. The blade is lowered into the workpiece by pushing down on the handle. The saw will return to its upright position when handle pressure is released.



# assembly and alignment

**WARNING:** For your own safety, never connect plug to power source outlet until all assembly steps are complete, and you have read and understood the safety and operational instructions.

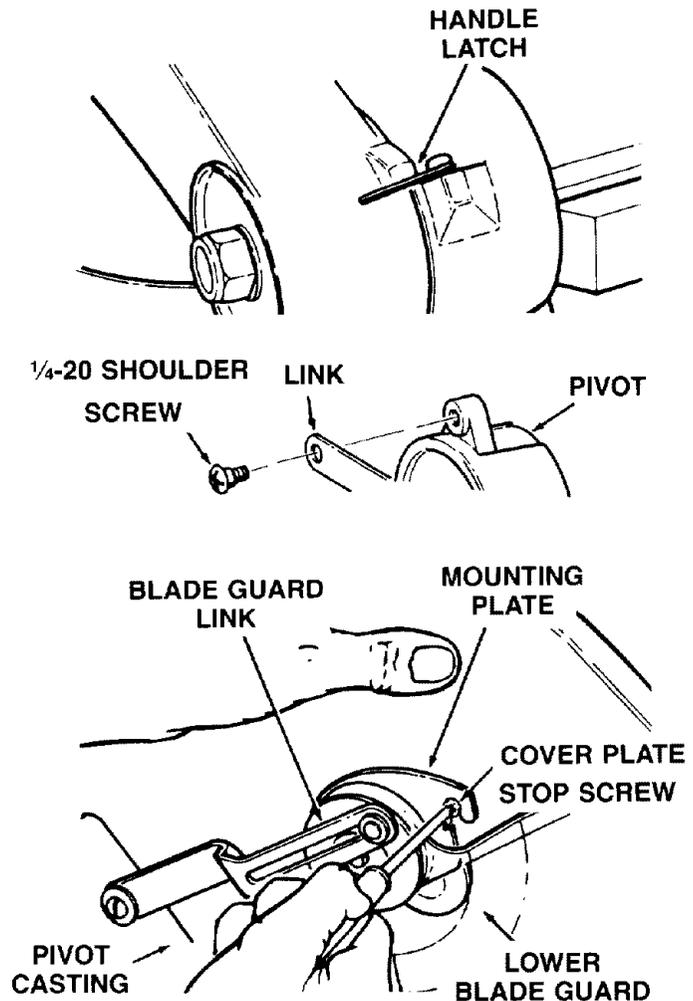
## ASSEMBLY AND ALIGNMENT

### Assembling the Lower Blade Guard

**NOTE:** For compact shipment the lower blade guard has been partially disconnected.

1. The miter saw is equipped with a handle latch used to lock the miter saw in the lowered position. To release, push the handle down slightly and turn the handle latch to the other side.
2. Release the handle latch and raise the saw to its up position.
3. Slide the lower guard assembly down until the groove in the mounting plate rests on the front screw. Tighten the screw with a phillips screwdriver.
4. Remove the shoulder screw from the pivot casting as illustrated. Attach the blade guard link to the pivot casting with a phillips screwdriver.

**NOTE:** With the blade guard link attached, the guard should raise as the blade is lowered towards the work table and drop to cover the blade as the power head is raised. This link helps prevent guard hangups and binding while you are cutting.

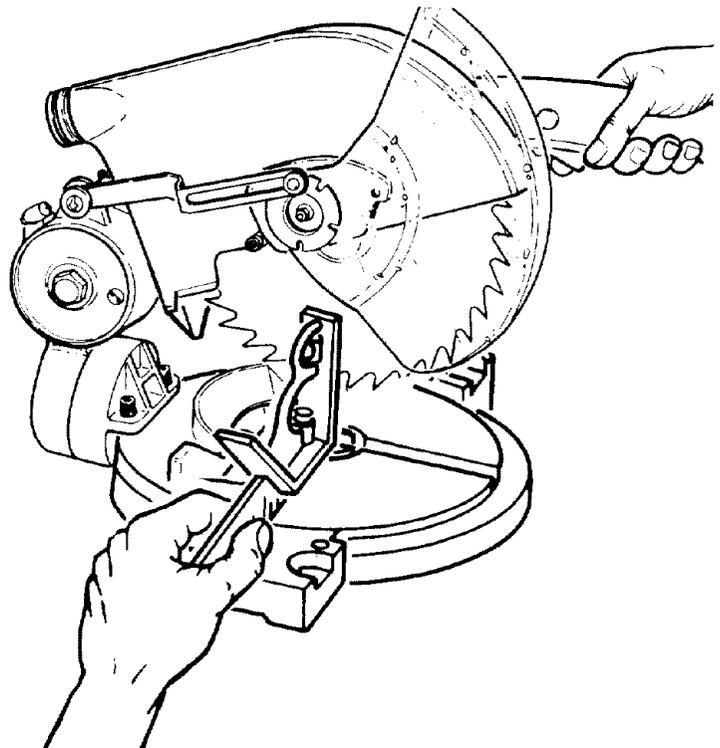


## Assembly and Alignment

### Step One—Blade Square to Table

**NOTE:** The miter saw was assembled, aligned, and inspected before shipment. Alignment should be checked and any adjustments made to insure accurate cuts.

1. Partially lower the blade as shown. Use the combination square to check blade squareness to table. If the blade does not contact the full length of the square, follow the alignment procedure.
  - a. Loosen bevel lock handle.
  - b. Grasping metal upper guard, move the cutting head left or right until blade makes contact with the full length of the square.
  - c. Tighten the bevel lock handle.
2. Check the bevel indicator. If indicator needs adjustment use a phillips screwdriver and slide the indicator to the 0° on the scale.



## Step Two—Depth Stop

The depth stop limits the blade's downward travel. It allows the blade to go below the work table enough to maintain full cutting capacities. The depth stop positions the blade about  $\frac{1}{4}$ " from the turn-table structure.

### Maintaining Maximum Cutting Capacity

**WARNING: To avoid injury from unexpected starting or electrical shock, do not plug the saw in. The power cord must remain unplugged whenever you are working on the saw.**

Unplug the saw before any adjustment is attempted.

This tool is factory set to provide maximum cutting capacity for the saw blade provided. When the diameter of the blade has been reduced due to sharpening, it may be necessary to adjust depth stop to provide maximum cutting capacity. When a new blade is installed, it is necessary to check the clearance of the blade to the turn table structure. In order to obtain maximum cutting capacity the blade needs to be adjusted so it is  $1\frac{1}{16}$ " below the table surface and the cutting width is  $5\frac{1}{2}$  inches; measured along the blade at the table surface.

1. To adjust the depth stop use an adjustable wrench and loosen the hex nut at the rear of the miter saw arm.
2. Use a flat blade screwdriver to adjust the depth stop adjusting bolt. The saw blade is lowered by turning the bolt counterclockwise and raised by turning the bolt clockwise.
3. Lower the blade into the slot of the turn table. Check blade clearance and maximum cutting width. Readjust if necessary.

**WARNING: Do not start the miter saw without checking for interference between the blade and the turn table structure. Damage could result to the blade if it strikes the turn table structure during operation of the saw. Broken saw parts could hit you or others.**

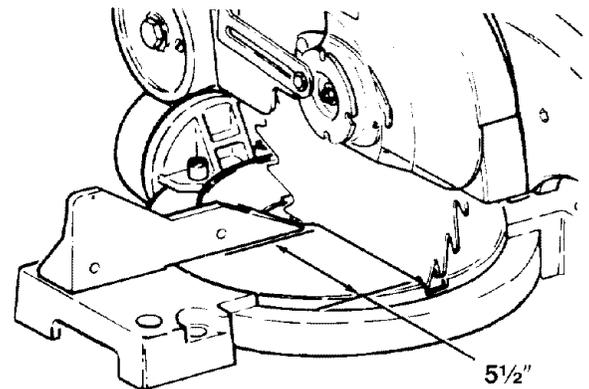
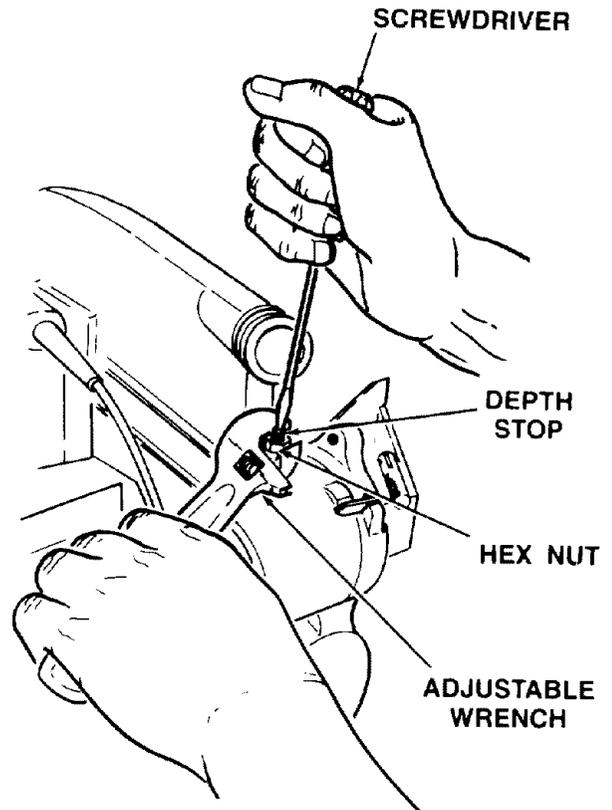
4. Tighten the hex nut with an adjustable wrench while carefully holding the depth stop adjusting bolt with the flat blade screwdriver so it will not turn while tightening hex nut.

**WARNING: Failure to tighten the jam nut could let the depth stop slip and let the blade strike the saw table. Broken saw parts could hit you or others.**

**WARNING: To avoid injury from unexpected starting or electrical shock, do not plug the saw in. The power cord must remain unplugged whenever you are working on the saw.**

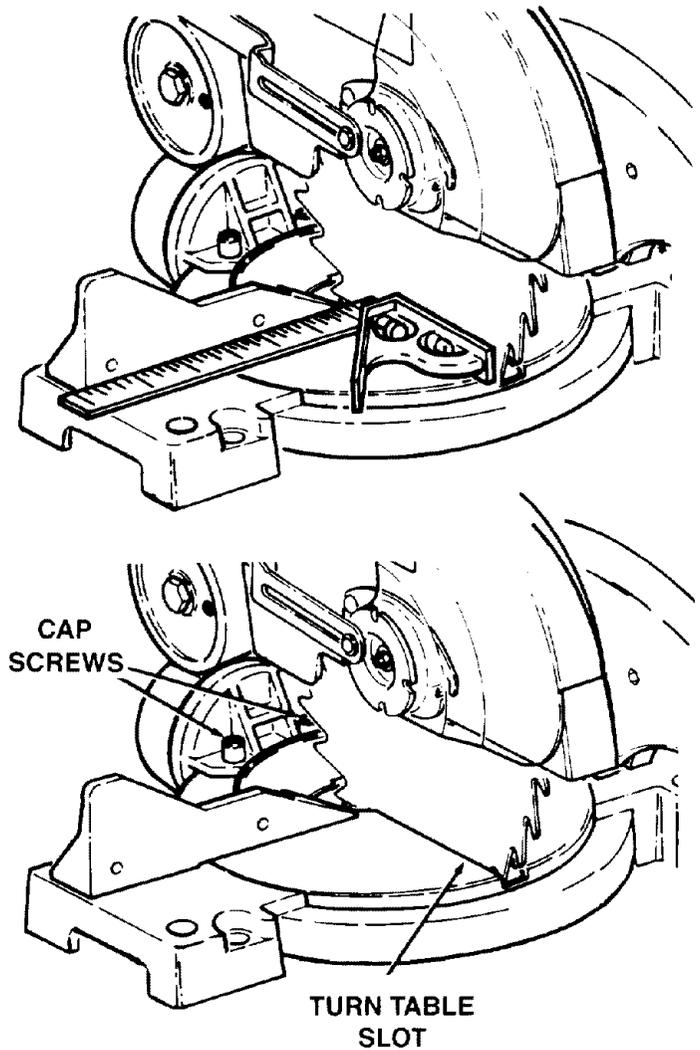
## Step Three—Checking and Adjusting Position of Cutting Head

1. There are three(3) settings that must be checked for proper position of cutting head.
  - a. The blade must be square to the fence.



- b. The blade preferably should be slightly left of center of turntable slot.
- c. The blade must break the plane of the fence in order to cut completely through the workpiece

2. To check these three (3) settings position the blade at 0° miter index point and make sure the fence lock handles are securely tightened.
  - a. To check blade squareness to fence place a combination square against the fence and next to the blade as illustrated. Place the square so the set in the teeth won't hold it from the blade. The blade should contact the full length of the square.
  - b. To check position of blade in slot lower the blade and lock the handle latch. Check to see that the blade is centered or preferably slightly to left of center of turntable slot.
  - c. In order to check that the saw blade will cut completely through the workpiece push the cutting head down against the depth stop. Visually check from the side of the saw and make sure the teeth of the blade will break the plane of the fence.
  - d. When checking position of cutting head make sure the blade does not come in contact with the turn table slot. Set the blade to 0° miter and spin it a few times by hand to make sure it does not strike the slot. Also set blade to 45° bevel and spin blade by hand to make sure it clears table slot.
3. If the cutting head is correctly positioned go on to Step Four. If any of the settings have to be adjusted follow the alignment procedure.
  - a. Use a 1/4" Hex "L" wrench to loosen (but do not remove) the two cap screws that attach pivot support to turn table.
  - b. Make any adjustments that are necessary. Ideally the blade should be positioned slightly left of center in table slot. This will provide necessary clearance when the blade is set at 45° bevel.
  - c. Securely tighten cap screws. Recheck blade position and readjust if necessary.



**WARNING:** Do not start the miter saw without checking for interference between the blade and the turn table structure. Damage could result to the blade if it strikes the turn table structure during operation of the saw. Broken saw parts could hit you or others.

#### Adjustment of Miter Scale Indicator

1. The miter scale indicator may have to be adjusted to point to "0° miter."
2. Loosen the phillips screws that hold the indicator in place. Reposition the indicator and retighten screw.

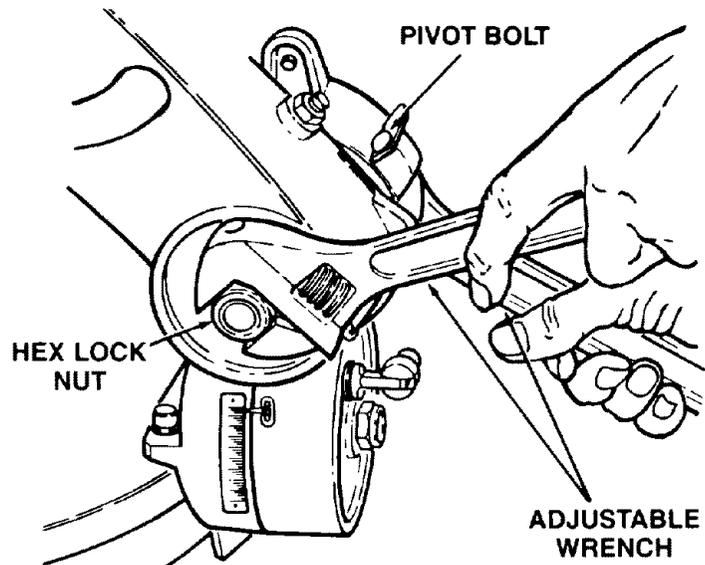
#### Step Four—Pivot Adjustments

**NOTE:** These adjustments were made at the factory and normally do not require readjustment.

1. The miter saw should rise completely to the up position by itself. If the saw will not raise by itself or if there is play in the pivot joints the following adjustments are necessary.

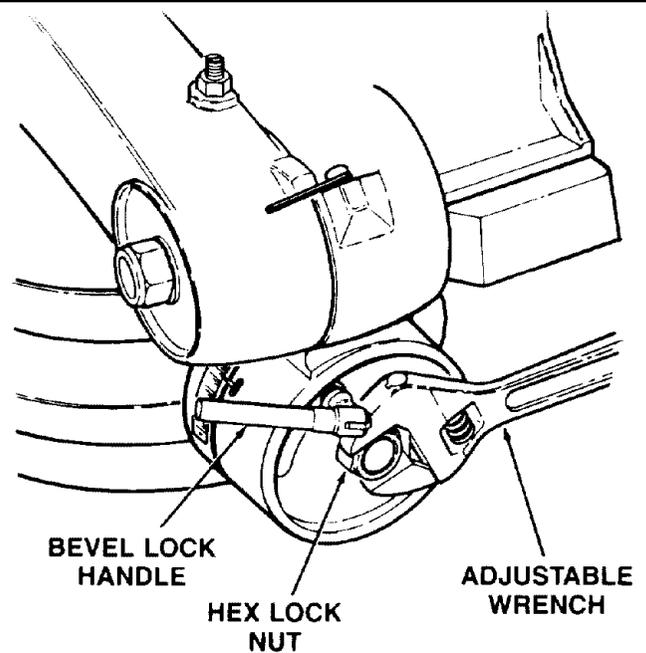
#### Travel Pivot Adjustments

- a. Hold the pivot bolt with an adjustable or 3/4" wrench. Loosen the hex lock nut with an adjustable or 3/4" wrench.
- b. Recheck the saw travel. Saw should rise freely to its up travel stop. Check to see that the saw will raise from all positions and there is no looseness in the pivot. If saw still won't fully rise, have Sears Service check and repair it.



## Bevel Pivot Adjustment

1. The miter saw should bevel easily by loosening the bevel lock handle and tilting the power head to the left. If movement is tight or if there is looseness in the pivot follow the adjustment procedure.
  - a. Loosen the bevel lock handle.
  - b. Turn the hex lock nut with an adjustable or 3/4" wrench.
  - c. Recheck bevel movement of the miter saw. Re-adjust if necessary.



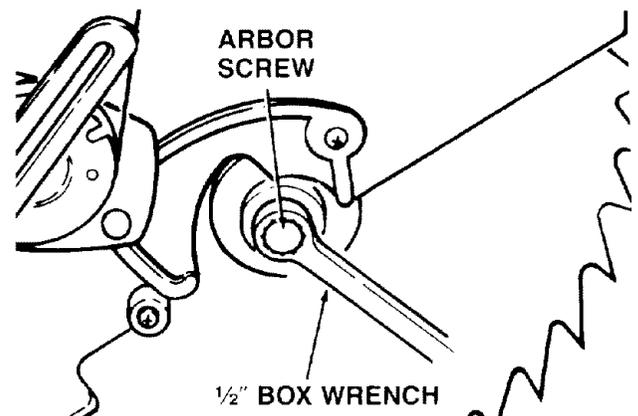
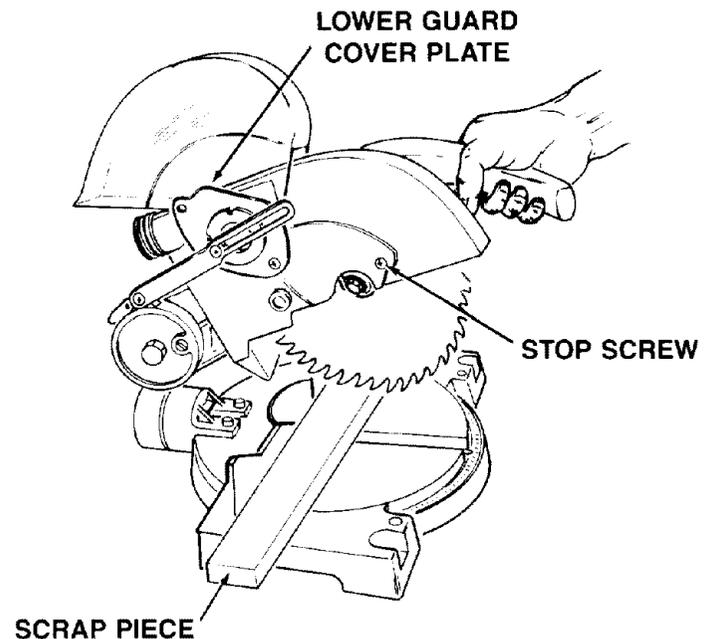
## Removing or Installing the Blade

**WARNING:** To avoid injury from a thrown workpiece or thrown pieces of blade, do not use a blade larger or smaller than 8-1/4" diameter.

**WARNING:** To avoid injury from unexpected starting, unplug the saw whenever you are removing or installing the blade.

1. Unplug the saw from the outlet.
2. Raise the saw to the up position.
3. Loosen the stop screw holding the lower guard cover plate to the upper guard with a phillips screwdriver.
4. Lift the lower guard up and tilt the lower guard assembly back so the arbor screw is exposed.
5. Lower the blade down on to a scrap piece of wood positioned against the FRONT of the fence.
6. While holding the saw firmly in this position use a 1/2" box end wrench to turn the arbor screw CLOCKWISE.
7. Remove the arbor screw outer blade collar, and the blade.
8. Raise the saw to the up position.

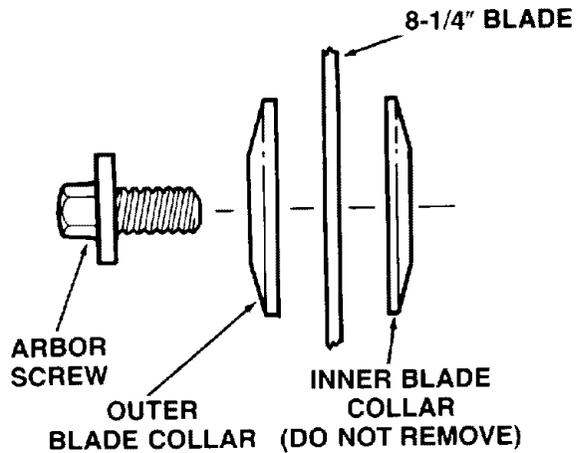
**NOTE:** Pay attention to pieces removed, noting their position and direction they face (see illustration). Wipe the blade collars clean of any sawdust before installing the new blades.



9. Install the new 8-1/4" blade (see recommended accessory list). Make sure the rotation arrow on the blade matches the clockwise rotation arrow on the upper guard.
10. Install the outer blade collar and arbor screw. Once again lower the blade down on to a scrap piece of wood positioned against the REAR of the fence.
11. While holding the saw firmly in this position use a 1/2" box end wrench to turn the arbor screw COUNTERCLOCKWISE. Tighten the arbor screw securely.
12. Lower the lower blade guard until the slot in mounting plate rests all the way down on the locking screw. Tighten the screw with phillips screwdriver.

**DANGER:** Never use saw without mounting plate securely in place. It keeps the arbor screw from falling out if it accidentally loosens, and prevents the spinning blade from coming off the machine.

**WARNING:** After installing a new blade, make sure the blade clears the table slot at the 0° and 45° bevel positions. Lower the blade into the lower table and check for any contact with the base or turn table structure.



If the blade contacts turn table, refer to assembly and alignment, step three for adjustment.

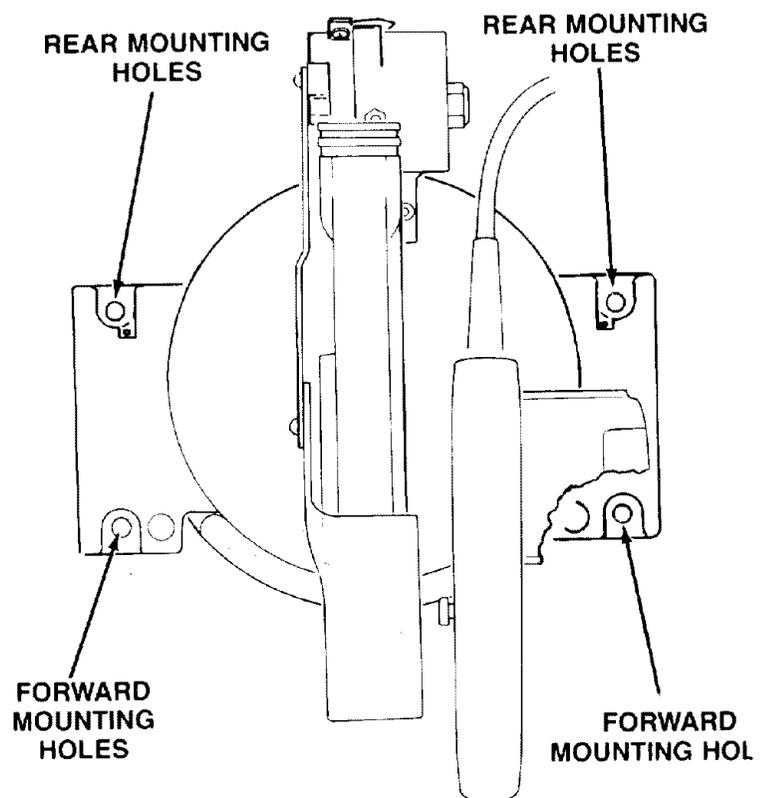
If blade bottoms out on turn table structure, refer to assembly and alignment, depth stop section for adjustment.

## MOUNTING THE SAW

**WARNING:** To avoid injury from unexpected saw movement:

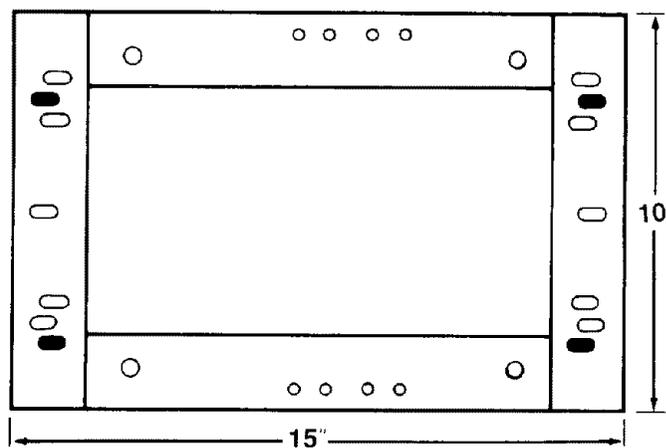
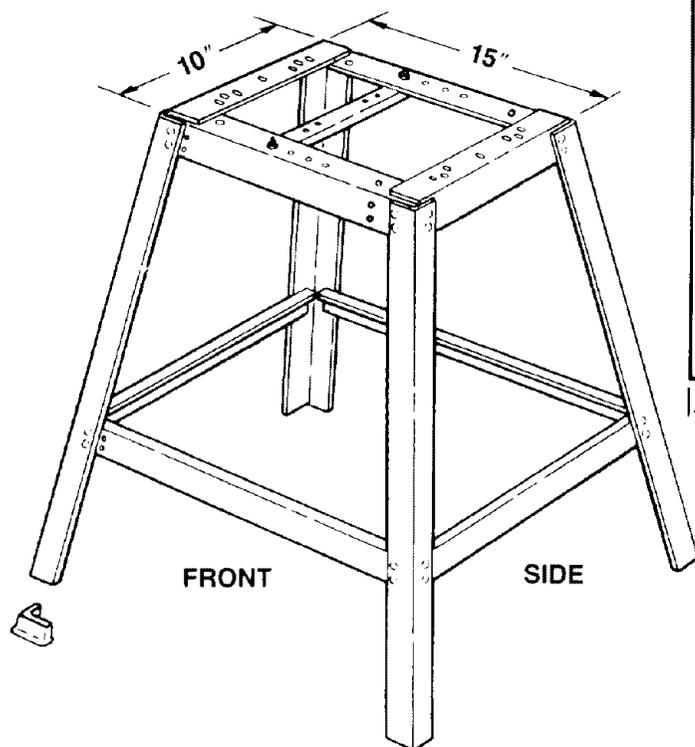
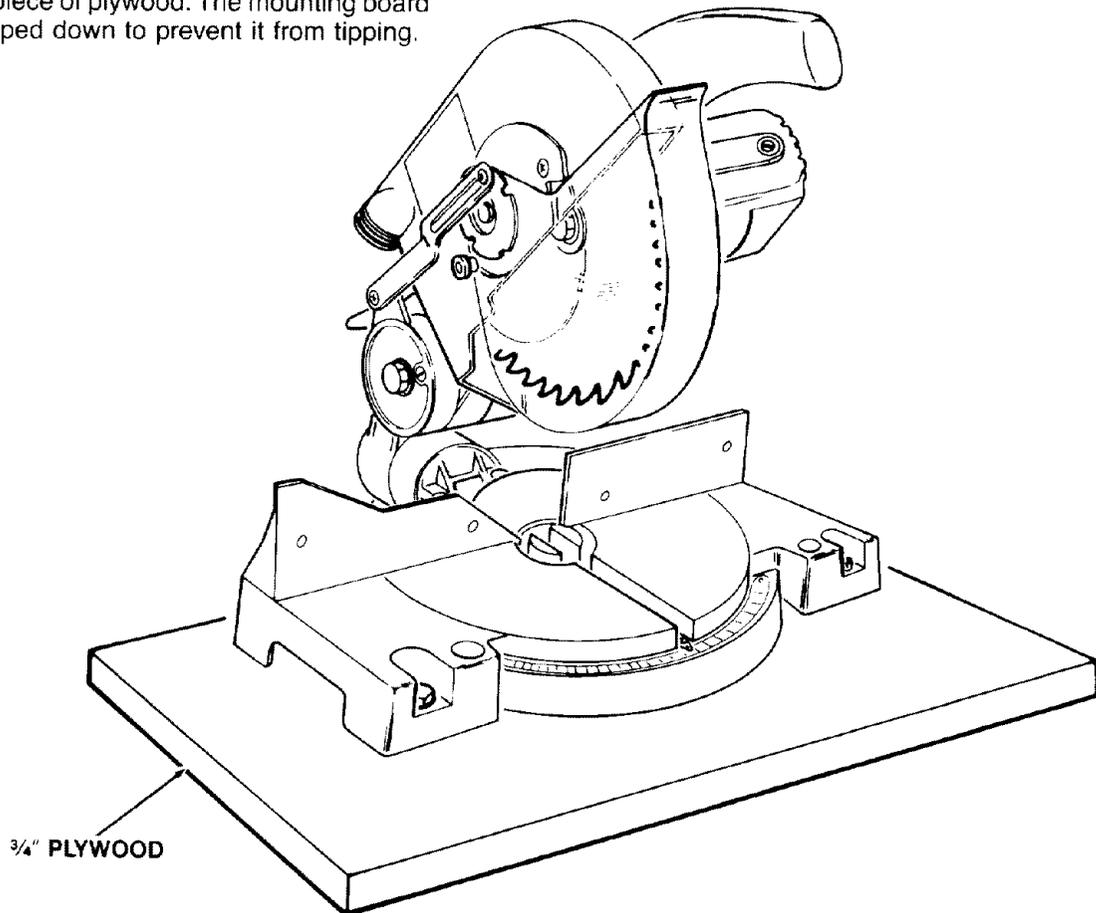
- a. Before moving the saw, lock the miter, bevel and power-head positions. Unplug electric cord.
- b. To avoid back injury, get help when you need to lift the saw more than 10 inches. Hold the tool close to your body. Bend your knees so you can lift with your legs, not your back. Lift by using the hand-hold areas at the bottom of the base.
- c. Never carry the miter saw by the power cord or the plastic handle. Carrying the tool by the power cord could cause damage to the insulation or the wire connections resulting in electric shock or fire.
- d. Place the saw so other people cannot stand behind it. Thrown debris could injure people in its path.
- e. Place the saw on a firm, level surface where there is plenty of room for handling and properly supporting the workpiece.
- f. Support the saw so the table is level and the saw does not rock.
- g. Bolt or clamp the saw to its support.

Place the saw in the desired location either on a work bench or the recommended leg set. The base of the saw has four holes to mount the miter saw (see illustration).



**NOTE:** Fence must be removed.

If the saw is to be used in a portable application, mount the saw to a 3/4" piece of plywood. The mounting board can then be clamped down to prevent it from tipping.



FRONT OF MITER SAW

**CATALOG NO. 9-22244 LEG SET**

(not included with miter saw)

Recommended hardware (not included) for Mounting Miter Saw to Legset:

- 4 — 1/4-20 x 1-1/2 hex head bolts
- 4 — 1/4-20 hex nuts
- 4 — 1/4 lock washers
- 4 — 1/4 flat washers

Attach miter saw to holes indicated.

# Basic Saw Operation

## BEFORE USING THE MITER SAW:

**WARNING:** To avoid mistakes that could cause serious, permanent injury, do not plug the miter saw in until the following steps are completed.

- Assembly and alignment. (See pages 10-14)
- Learn the use and function of the ON-OFF trigger switch, upper and lower blade guards, handle latch, bevel clamp, cover plate stop screw, and fence clamps. (See page 9).
- Review and understand all safety instructions and operating procedures in this manual.
- Review the maintenance methods for this miter saw. (See page 22).

Read the DANGER label found on the front of the miter saw.

## WHEN INSTALLING OR MOVING THE MITER SAW.

Before moving the saw, lock the miter, bevel and power head positions. Unplug the power cord.

To avoid back injury, get help whenever you need to lift the miter saw more than 10 inches.

NEVER carry the saw by the cord or power head handle. Damage to insulation could cause an electric shock. Damage to wire connections could cause a fire.

AVOID DANGEROUS ENVIRONMENT. Use the miter saw in a dry, indoor place protected from rain. Keep work area well lighted.

Place the miter saw so neither the user or bystanders are forced to stand in line with the blade. Thrown debris could injure people in its path.

### To avoid injury from unexpected saw movement:

- Put the miter saw on a firm level surface where there is plenty of room for handling and properly supporting the workpiece.
- Support the miter saw so the table is level and the saw does not rock.
- Bolt or clamp the saw to its support.
- NEVER STAND ON TOOL. Serious injury could occur if the tool tips or you accidentally hit the cutting tool. Do not store anything above or near the tool where anyone might stand on the tool to reach them.

### To avoid injury or death from electrical shock:

- THIS TOOL IS DOUBLE INSULATED to give you added protection. Double insulation does not take the place of normal safety precautions when operating this tool. When servicing this double insulated tool, use only identical parts.
- Make sure your fingers do not touch the plug's metal prongs when plugging or unplugging the miter saw.

## BEFORE EACH USE:

### Inspect your miter saw.

DISCONNECT THE MITER SAW. To avoid injury from accidental starting, unplug the saw, before changing the setup, changing the blade or adjusting anything.

Compare the direction of rotation arrow on the guard to the direction arrow on the blade. The blade teeth should always point downward at the front of the saw.

Tighten the arbor screw.

Tighten the cover plate stop screw.

### CHECK DAMAGED PARTS. Check for:

- Alignment of moving parts,
- Damaged electric cords.
- Binding of moving parts,
- Broken parts,
- Stable mounting,
- Function of arm return spring and lower guard: Push the arm all the way down, then let it rise up until it stops by itself. Check the lower guard to see if it closed fully. If it did not, follow the instructions in the Trouble Shooting section.
- Other conditions that may affect the way the miter saw works.

KEEP GUARDS IN PLACE, in working order, and in proper adjustment.

If any part is missing, bent, or broken in any way, or any electrical parts don't work, turn the saw off and unplug it. REPLACE damaged, missing, or failed parts before using the saw again.

MAINTAIN TOOLS WITH CARE. Keep the miter saw clean for best and safest performance. Follow instructions for lubricating. **DON'T** put lubricants on the blade while it's spinning.

REMOVE ADJUSTING KEYS AND WRENCHES from tool before turning it on.

### To avoid injury from jams, slips or thrown pieces:

- USE ONLY RECOMMENDED ACCESSORIES. (See page 30). Consult this Owner's manual for recommended accessories. Follow the instructions that come with the accessories. The use of improper accessories may cause risk of injury to persons.
- Choose the right 8¼ inch diameter blade for the material and the type of cutting you plan to do.
- Make sure the blade is sharp, undamaged and properly aligned. With the saw unplugged, push the power-head all the way down. Hand spin the blade and check for clearance. Tilt the power-head to 45 degree bevel and repeat the check. If the blade hits anything, make the adjustments shown in the Maintaining Maximum Cutting Capacity section.
- Make sure the blade and arbor collars are clean.

- Make sure the arbor collar's recessed sides are facing the blade.
- Using a 1/2-inch box wrench, make sure the arbor cap screw is firmly hand tightened.
- Make sure all clamps and locks are tight and no parts have excessive play.
- **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents. Floor must not be slippery.

To avoid burns or other fire damage, never use the miter saw near flammable liquids, vapors or gases.

### **Plan ahead to protect your eyes, hands, face, ears.**

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

To avoid injury from accidental contact with moving parts, don't do layout, assembly, or setup work on the miter saw while any parts are moving.

**AVOID ACCIDENTAL STARTING.** Make sure switch is "OFF" before plugging miter saw into a power outlet.

#### **Plan your work.**

**USE THE RIGHT TOOL.** Don't force tool or attachment to do a job it was not designed to do. Use a different tool for any workpiece that can't be held in a solidly braced, fixed position.

**CAUTION: This machine is not designed for cutting ferrous metals (steel, iron and iron based metals). Use this miter saw to cut only wood, wood like products or soft metals like aluminum. Other materials may shatter, bind on the blade, or create other dangers.**

**CAUTION: When cutting any metals, sparks or hot fragments could cause a fire. To avoid this, disconnect any dust collecting hose from the miter saw, and remove all traces of wood dust from inside dust traps in the miter saw.**

### **Dress for safety.**

Any power miter saw can throw foreign objects into the eyes. This can cause permanent eye damage. Wear safety goggles (not glasses) that comply with ANSI Z87.1 (shown on package). Everyday eyeglasses have only impact resistant lenses. They are not safety glasses. Safety goggles are available at Sears retail catalog stores. Glasses or goggles not in compliance with ANSI Z87.1 could seriously hurt you when they break.

- Do not wear loose clothing, gloves, neckties or jewelry (rings, wrist watches) They can get caught and draw you into moving parts.
- Wear nonslip footwear.
- Tie back long hair.
- Roll long sleeves above the elbow.
- Noise levels vary widely. To avoid possible hearing damage, wear ear plugs or muffs when using miter saw for hours at a time.
- For dusty operations, wear a dust mask along with the safety goggles.

### **Inspect your workpiece.**

- Make sure there are no nails or foreign objects in the part of the workpiece to be cut.

### **Plan your work to avoid THROWBACKS—when the workpiece binds on the blade and is torn from your hands.**

Plan the way you will hold the workpiece from start to finish:

Avoid awkward operations and hand positions where a sudden slip could cause fingers or hand to move into the blade.

**DON'T OVERREACH.** Keep good footing and balance.

Keep your face and body to one side, out of line with a possible throwback.

#### **Never cut FREEHAND:**

- Brace your workpiece solidly against the fence and table top so it will not rock or twist during the cut.
- Make sure there's no debris between the workpiece and its supports.
- Make sure no gaps between the workpiece, fence and table will let the workpiece shift after it is cut in two.
- Keep the cut off piece free to move sideways after it's cut off. Otherwise, it could get wedged against the blade and thrown violently.
- Clear everything except the workpiece and related support devices off the table before turning the miter saw on.
- **SECURE WORK.** Use clamps or a vise to help hold the work when it's practical.

#### **Use extra caution with large, very small or awkward workpieces:**

- Use extra supports (tables, saw horses, blocks, etc.) for any workpieces large enough to tip when not held down to the table top.
- **NEVER** use another person as a substitute for a table extension, or as additional support for a workpiece that is longer or wider than the basic miter saw table, or to help feed, support or pull the workpiece.
- Do not use this saw to cut pieces too small to let you easily hold the work while you keep the thumb side of your index (pointer) finger against the outside edge of the fence.
- When cutting irregularly shaped workpieces, plan your work support so it will not slip, pinch the blade and be torn from your hands. A piece of molding, for example, must lie flat or be held by a fixture or jig that will not let it twist, rock or slip while being cut.
- Properly support round material such as dowel rods, or tubing. They have a tendency to roll while being cut, causing the blade to "bite". To avoid this, always use a fixture designed to properly hold your workpiece.

**WARNING:** If planning to cut aluminum or other non-ferrous metals: Under adverse conditions, the blade can grab and throw the workpiece suddenly and unexpectedly. To avoid injury, follow all applicable safety instructions, as you normally would, and:

- Use only sawblades specifically recommended for non-ferrous metal cutting.
- Do not cut metal workpieces that must be hand held. Use auxiliary clamps or other equipment as needed.
- Cut non-ferrous metals only if you are experienced or under the supervision of an experienced person.

### WHENEVER SAW IS RUNNING.

**WARNING:** Don't let familiarity (gained from frequent use of your miter saw) cause a careless mistake. A careless fraction of a second is enough to cause a severe injury.

Before starting your cut, watch the miter saw while it runs. If it makes an unfamiliar noise or vibrates a lot, stop immediately. Turn the miter saw off. Unplug the miter saw. Do not restart until finding and correcting the problem.

**KEEP CHILDREN AWAY.** Keep all visitors a safe distance from the miter saw. Make sure bystanders are clear of the miter saw and workpiece.

Never confine the piece being cut off. Never hold it, clamp it, touch it, or use length stops against it while the blade is spinning. It must be free to move sideways on its own. If confined, it could get wedged against the blade and thrown violently.

Let the blade reach full speed before cutting.

**DON'T FORCE TOOL.** It will do the job better and safer at its designed rate. Feed the blade into the workpiece only fast enough to let it cut without bogging down or binding.

#### Before freeing any jammed material:

- Turn miter saw "OFF" by releasing trigger switch.
- Unplug the miter saw.
- Wait for all moving parts to stop.
- After finishing a cut, keep holding the power head down, release the switch, and wait for all moving parts to stop before moving your hands. If blade doesn't stop within six (6) seconds, unplug the saw and follow the instructions in the Trouble Shooting section for fixing the blade brake before using the saw again.

#### BEFORE LEAVING THE SAW:

**NEVER LEAVE TOOL RUNNING UNATTENDED.** Turn power off. Wait for all moving parts to stop.

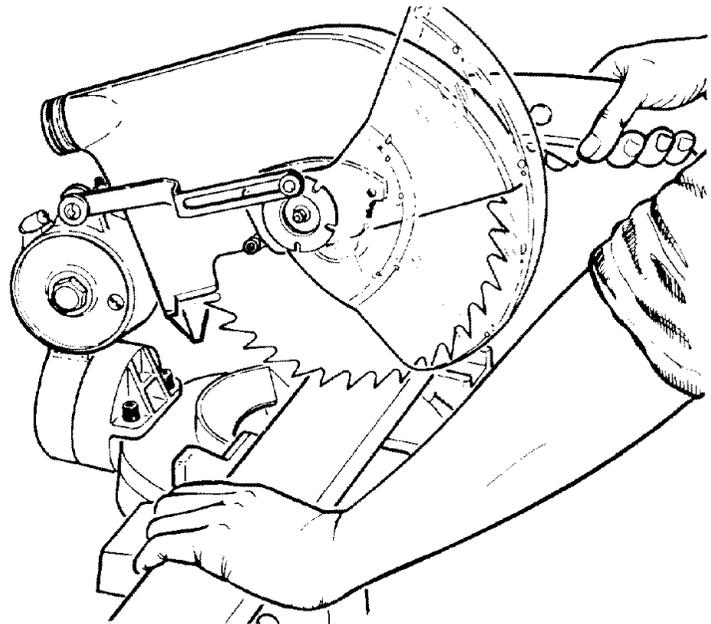
Make workshop child-proof. Lock the shop. Disconnect master switches. Store the tool away from children and others not qualified to use it.

## BASIC SAW OPERATIONS

### Body and Hand Position

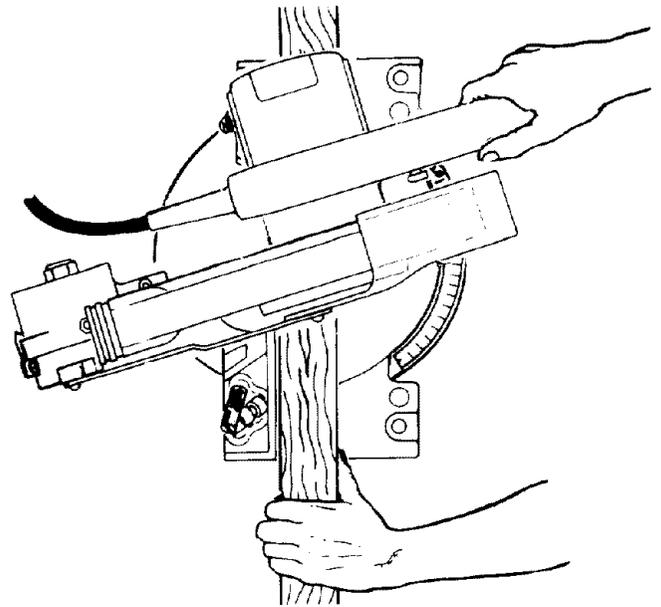
Proper positioning of your body and hands when operating the miter saw will make cutting easier and safer. Never place hands near cutting area. Place hand at least 4" from path of blade. Hold workpiece firmly to the fence to prevent movement toward the blade. Keep hands in position until trigger has been released and the blade has completely stopped. Before making a cut, make a "dry run" with the power off so you can see the path of the blade.

**WARNING:** Do not try to cut short pieces. You cannot properly support the workpiece and keep your hand down the required distance from the blade.



## Miter Cut

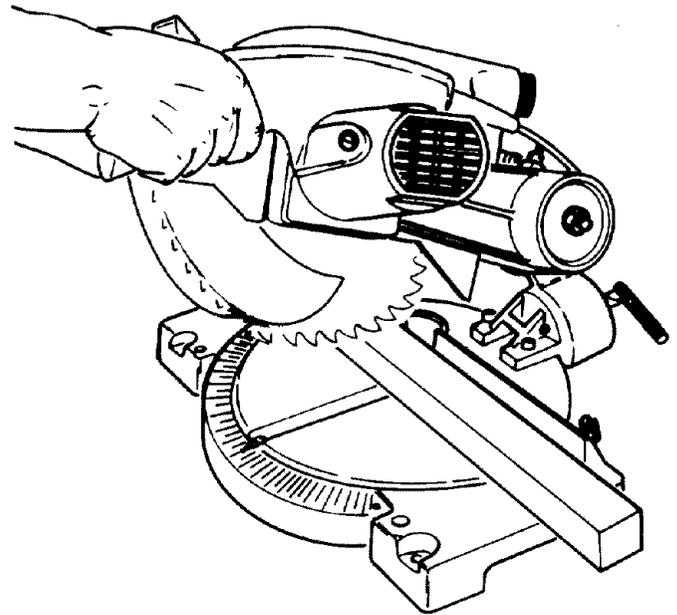
When a miter cut is required loosen the fence lock handles and rotate the saw to the desired angle. The fence will automatically move to the best location as the miter angle is adjusted. Re-tighten the fence lock handles. Do not stand in front of the saw table. Move with the handle to the miter angle to make the cut.



## Bevel Cut

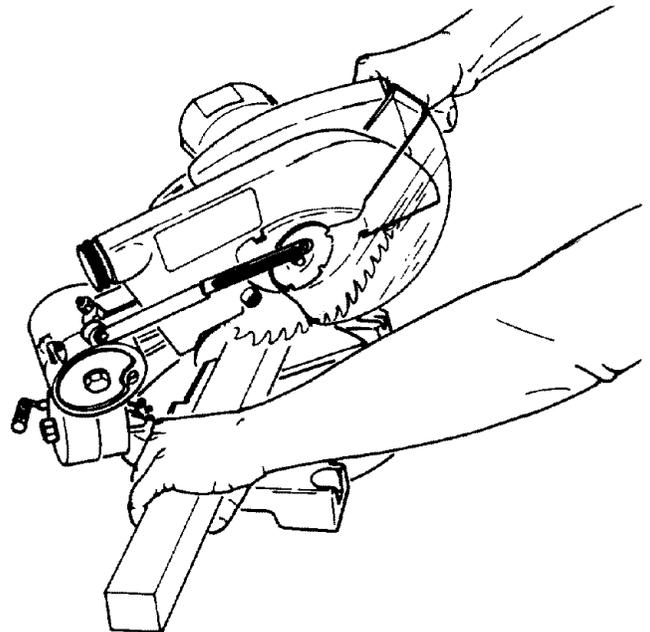
When a bevel cut is required:

1. Loosen the bevel lock handle
2. Tilt the blade to desired bevel angle.
3. Tighten the bevel lock handle. Stand to the left side of the handle to make the cut.



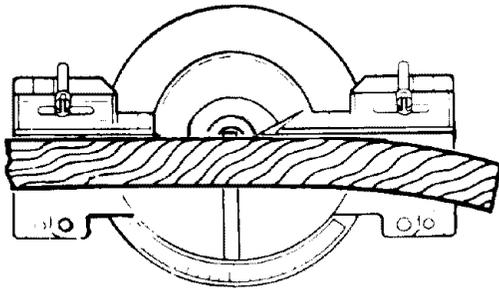
## Compound Cut

When a compound cut is required, select the correct bevel and miter position. Move with the handle to the miter angle to make the cut. Loosen the two lock handles before changing the miter angle.

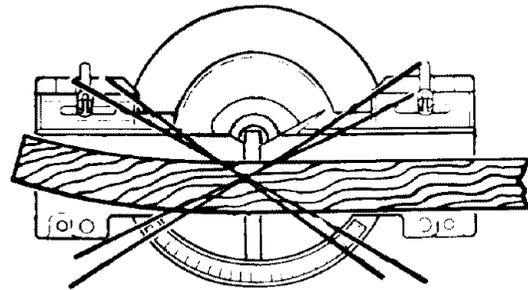


## Cutting Bowed Material

Before cutting a workpiece, check to make sure it is not bowed. If it is bowed the workpiece must be positioned and cut as illustrated. Do not position workpiece incorrectly or try to cut the workpiece without the support of the fence. This will cause pinching of the workpiece on the blade. The workpiece could suddenly jump or move and your hand could hit the blade.



**CORRECT**

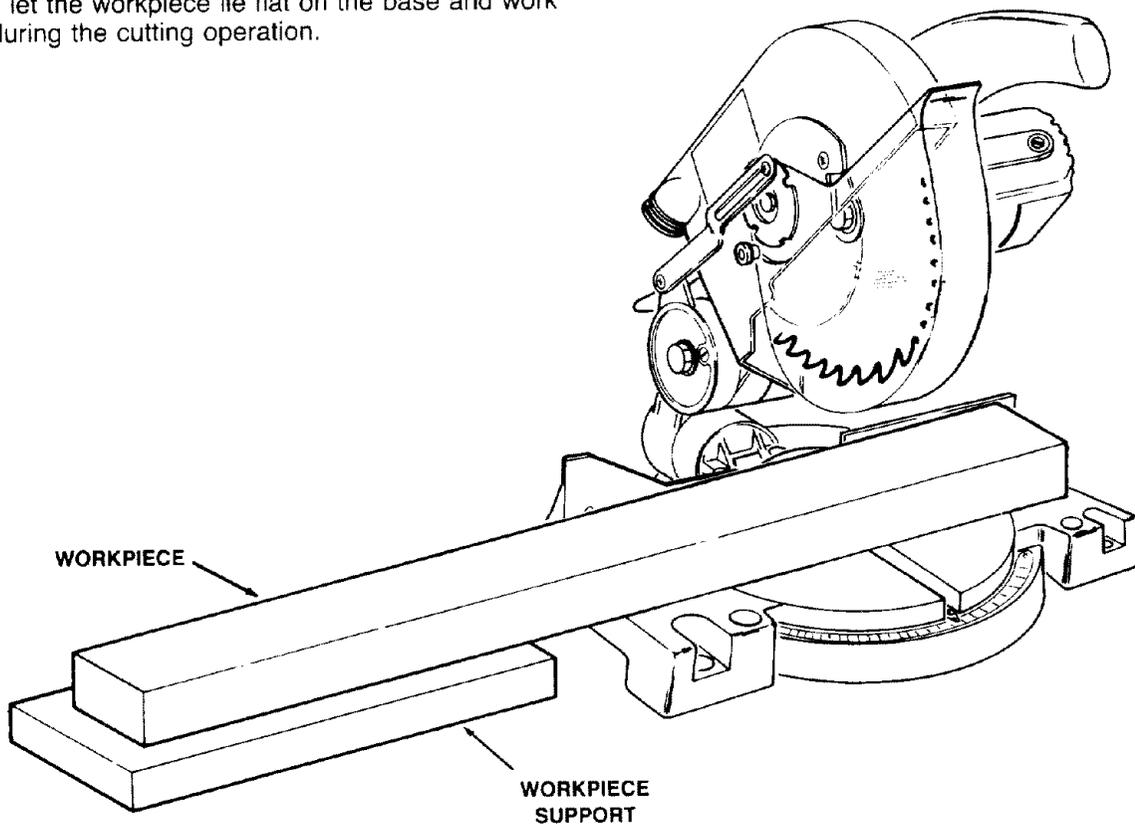


**INCORRECT**

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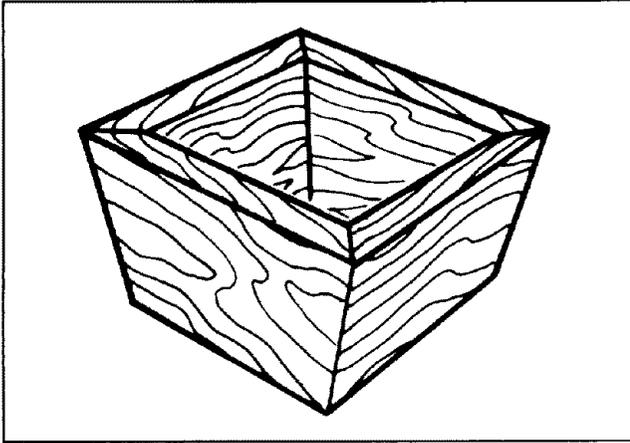
## Workpiece Support

Long pieces need extra supports. The supports should be placed along the workpiece so the workpiece does not sag and your hand holding the workpiece is positioned 4" or more from the blade path. The support should let the workpiece lie flat on the base and work table during the cutting operation.



## TIPS FOR CUTTING COMPOUND MITERS

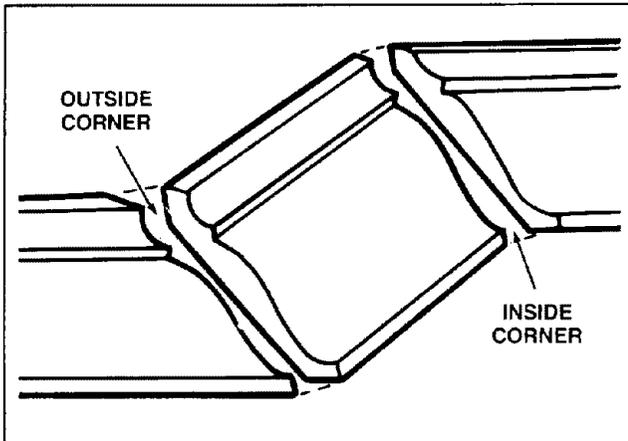
A compound miter is a cut requiring both a miter setting and bevel setting. A compound miter is used for making frames or boxes that have sloping sides and are wide at one end and narrow at the opposite end. Compound miters are "tricky" to make because the miter setting and bevel setting are directly related to each other. Every time the miter setting is changed the bevel setting must also be adjusted; likewise every adjustment to bevel requires a corresponding adjustment to miter. Because it may take several tries to obtain the desired angle it is advisable to make test cuts in a scrap piece of material.



## TIPS FOR CUTTING CROWN MOLDING

A compound miter saw is excellent for cutting crown molding. Crown molding is difficult to cut because in order to fit correctly it must be precisely mitered.

All Standard (U.S.) crown molding has a top rear angle (fits next to ceiling) of 52° and a bottom rear angle (fits against wall) of 38°.



## MITER AND BEVEL SETTINGS FOR STANDARD CROWN MOLDING

BEVEL SETTING	MITER SETTING	TYPE OF CUT
33.8	31.6	LEFT SIDE, INSIDE CORNER: 1. Position top of molding against fence. 2. Left side is finished piece.
33.8	31.6	RIGHT SIDE, INSIDE CORNER: 1. Position bottom of molding against fence. 2. Left side is finished piece.
33.8	31.6	LEFT SIDE, OUTSIDE CORNER: 1. Position bottom of molding against fence. 2. Right side is finished piece.
33.8	31.6	RIGHT SIDE, OUTSIDE CORNER: 1. Position top of molding against fence. 2. Right side is finished piece.

**NOTE:** On all above cuts lay molding with broad back surface flat on table.

**PRETESTING COMPOUND SETTINGS ON SCRAP MATERIAL IS EXTREMELY IMPORTANT!**

# maintenance and lubrication

## Maintenance

Always unplug the power cord before any maintenance check on this saw.

**DANGER:** Never put lubricants on the blade while it's spinning.

**WARNING:** To avoid injury from unexpected starting or electrical shock, unplug the power cord before working on the saw.

**WARNING:** For your safety, this saw is double insulated. To avoid electrical shock, fire or injury, use only parts identical to those identified in the parts list. Reassemble exactly as original assembly to avoid electrical hazards.

## Replacing Carbon Brushes

The carbon brushes furnished will last approximately 10,000 on/off cycles. Replace both carbon brushes when either has less than 1/4" length of carbon remaining. To inspect or replace first unplug the saw. Then remove the black plastic cap on the side of the motor (caution, this cap is spring loaded by the brush assembly). Then pull out the brush. Repeat for the other side. To reassemble reverse the procedure. The ears on the metal end of the brush assembly go in the same hole the carbon part fits into. Tighten the cap snugly but do not overtighten. Brake may not actuate at first until brushes are seated by some running.

## Lower Blade Guard

Do not use the saw without the lower guard. The lower blade guard is attached to the saw for protection. Should the lower guard become damaged, do not use the saw until damaged guard has been replaced. Develop a regular check to make sure the lower guard is working properly. Clean the lower guard of any dust or build up with a damp cloth.

**CAUTION:** Do not use solvents on the guard. They could make the plastic "cloudy" and brittle.

**WARNING:** When cleaning lower guard unplug the saw from the outlet to avoid unexpected start-up.

## Saw Dust

Periodically, sawdust will accumulate under the work table and base. This could cause difficulty in the movement of the work table when setting up a miter cut. Frequently blow out or vacuum up the sawdust.

**WARNING:** If blowing sawdust, wear proper eye protection to keep debris from blowing into eyes.

## Recommended Accessories

**WARNING:** To avoid injury from unsafe accessories, use only accessories shown on the recommended accessories list in this manual.

Prohibited Accessories—The use of any cutting tool except 8 1/4" saw blades which meet the requirement under recommended accessories is prohibited. Do not use accessories such as shaper cutters or dado sets. Ferrous metal (metal with iron in it) cutting and the use of abrasive wheels are prohibited. See CAUTION NOTE (Safety Instructions For Miter Saw) if planning to saw non-ferrous metal.

Leg Sets ..... 9-22244

### Carbide-Tipped Blades:

Trim Saw ..... See Catalog  
Cut-Off ..... See Catalog  
Combination ..... See Catalog  
Plywood/Particle Board ..... See Catalog

### Non-Carbide Tipped Blades:

Cross Cut/Plywood ..... See Catalog  
Combination ..... See Catalog

## Basic Blade Requirements

8 1/4" Diameter

Blades marked for 5,500 RPM or higher.

5/8" Arbor Hole

## Lubrication

All the motor bearings in this tool are lubricated with a sufficient amount of high grade lubricant for the life of the unit under normal operating conditions, therefore, no further lubrication is required. (See below.)

### Infrequent Lubrication as Required:

1. Lubrication of arm pivot for free movement.
  - a. By loosening nut and applying oil to washer and to contact face (minor).
  - b. Dis-assembly means required to grease pivot bolt and contact faces (major).

**NOTE:** Disassembly should be done by an authorized service technician. Removal of the upper guard and the bolt stop is necessary before pivot can be disassembled. Pay close attention to the spring-end positions in the castings....mark with chalk to avoid later confusion.

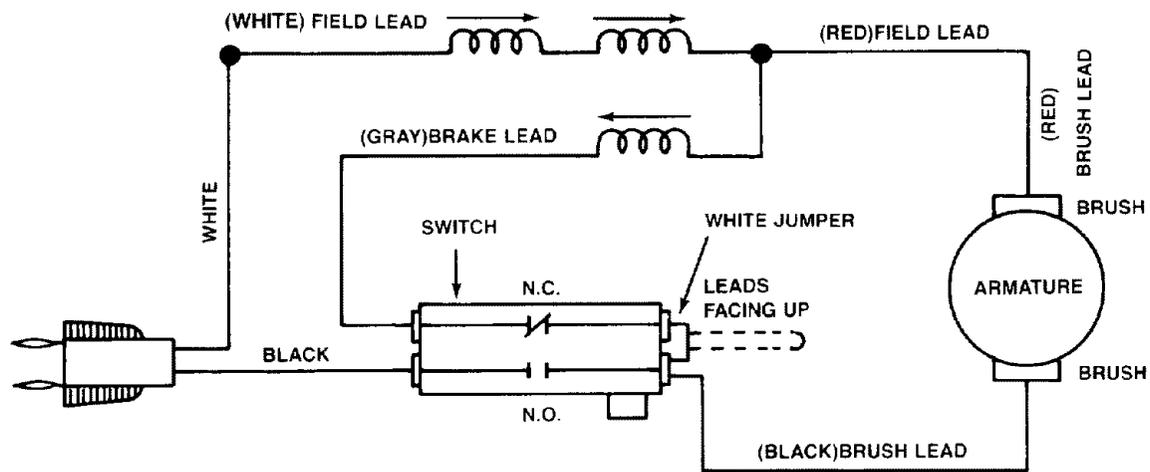
2. Lubrication of mechanism which pivots lower guard: Use light household oil (sewing machine oil) on metal-to-metal or metal-to-plastic guard contact areas as required for smooth, quiet operation. Avoid excess oil, to which sawdust will cling.

## TROUBLE SHOOTING GUIDE - MOTOR

PROBLEM	PROBABLE CAUSE	SUGGESTED CORRECTIVE ACTION
<b>Brake does not stop blade within six (6) seconds.</b>	<ol style="list-style-type: none"> <li>1. Brushes not seated or lightly sticking.</li> <li>2. Motor brake winding—overheated from use of not-recommended accessory or rapid on/off cycling.</li> <li>3. Arbor screw loose.</li> <li>4. Other.</li> </ol>	<ul style="list-style-type: none"> <li>— Inspect/clean/replace brushes (see maintenance section).</li> <li>— Use a recommended blade.</li> <li>— Let cool down.</li> <li>— Retighten</li> <li>— Authorized service. See instructions under circuit diagram.</li> </ul>
<b>Motor does not start.</b>	<ol style="list-style-type: none"> <li>1. Fuse.</li> <li>2. Brushes worn.</li> <li>3. Other.</li> </ol>	<ul style="list-style-type: none"> <li>— 15-Amp time delay fuse, or CKT. breaker.</li> <li>— See "Maintenance," page</li> <li>— Authorized service.</li> </ul>
<b>Brush sparking when switch released.</b>	<ol style="list-style-type: none"> <li>1. Normal—automatic brake working properly.</li> </ol>	

## TROUBLE SHOOTING GUIDE - GENERAL

PROBLEM	PROBABLE CAUSE	SUGGESTED CORRECTIVE ACTION
<b>Blade hits table.</b>	<ol style="list-style-type: none"> <li>1. Misalignment.</li> <li>2. Damaged depth stop.</li> </ol>	<ul style="list-style-type: none"> <li>— See Assembly and Alignment, pages 10–14.</li> <li>— Get authorized Sears Service.</li> </ul>
<b>Angle of cut not accurate.</b>	<ol style="list-style-type: none"> <li>1. Misalignment.</li> </ol>	<ul style="list-style-type: none"> <li>— See Assembly and Alignment, pages 10–14.</li> </ul>
<b>Can't move miter adjustment.</b>	<ol style="list-style-type: none"> <li>1. Fence clamps still tight.</li> <li>2. Sawdust under table.</li> </ol>	<ul style="list-style-type: none"> <li>— Loosen fence clamps. Retighten before starting next cut.</li> <li>— Vacuum or blow out dust. <b>WEAR EYE PROTECTION</b></li> </ul>
<b>Power-head wobbles.</b>	<ol style="list-style-type: none"> <li>1. Loose pivot points.</li> </ol>	<ul style="list-style-type: none"> <li>— See Assembly and Alignment, Step 4, pages 11–12.</li> </ul>
<b>Power-head won't fully rise.</b>	<ol style="list-style-type: none"> <li>1. Pivot misadjustment.</li> <li>2. Part failure.</li> <li>3. Pivot spring not replaced properly after service.</li> </ol>	<ul style="list-style-type: none"> <li>— See Assembly and Alignment, Step 4, pages 11–12.</li> <li>— Get authorized Sears Service.</li> <li>— Get authorized Sears Service.</li> </ul>
<b>Blade binds, jams, burns wood.</b>	<ol style="list-style-type: none"> <li>1. Improper operation.</li> <li>2. Dull blade.</li> <li>3. Improper blade</li> <li>4. Warped blade.</li> </ol>	<ul style="list-style-type: none"> <li>— See Basic Saw Operation, pages 18–21.</li> <li>— Replace or sharpen blade.</li> <li>— Replace with 8¼" diameter blade designed for the material being cut.</li> <li>— Replace blade.</li> </ul>
<b>Tool vibrates or shakes.</b>	<ol style="list-style-type: none"> <li>1. Saw blade not round.</li> <li>2. Saw blade damaged.</li> <li>3. Saw blade loose.</li> <li>4. Other.</li> </ol>	<ul style="list-style-type: none"> <li>— Replace blade.</li> <li>— Replace blade.</li> <li>— Tighten arbor screw.</li> <li>— Get authorized Sears Service.</li> </ul>



### WIRING DIAGRAM

**WARNING:** For your safety, this miter saw is double insulated. To avoid electrical shock, fire, or injury use only parts identical to those identified in the parts list. Reassemble exactly as originally assembled.

#### TROUBLE-SHOOTING OF BRAKE BY QUALIFIED SERVICE PERSON ONLY:

1. Unplug the power cord. Remove brush caps and brushes. Use ohmmeter to check for continuity from brass brush-holder to brush-holder. If open, locate exact place using ohmmeter. As indicated by test, tighten a connection or replace field assembly or replace switch.
2. If above test does not uncover a problem; then replace armature assembly. Armature bearing fits are press fit on shaft and snug assembly to housing.



# repair parts

## PARTS LIST FOR CRAFTSMAN 8<sup>1</sup>/<sub>4</sub>" COMPOUND MITER SAW MODEL NO. 113.234680

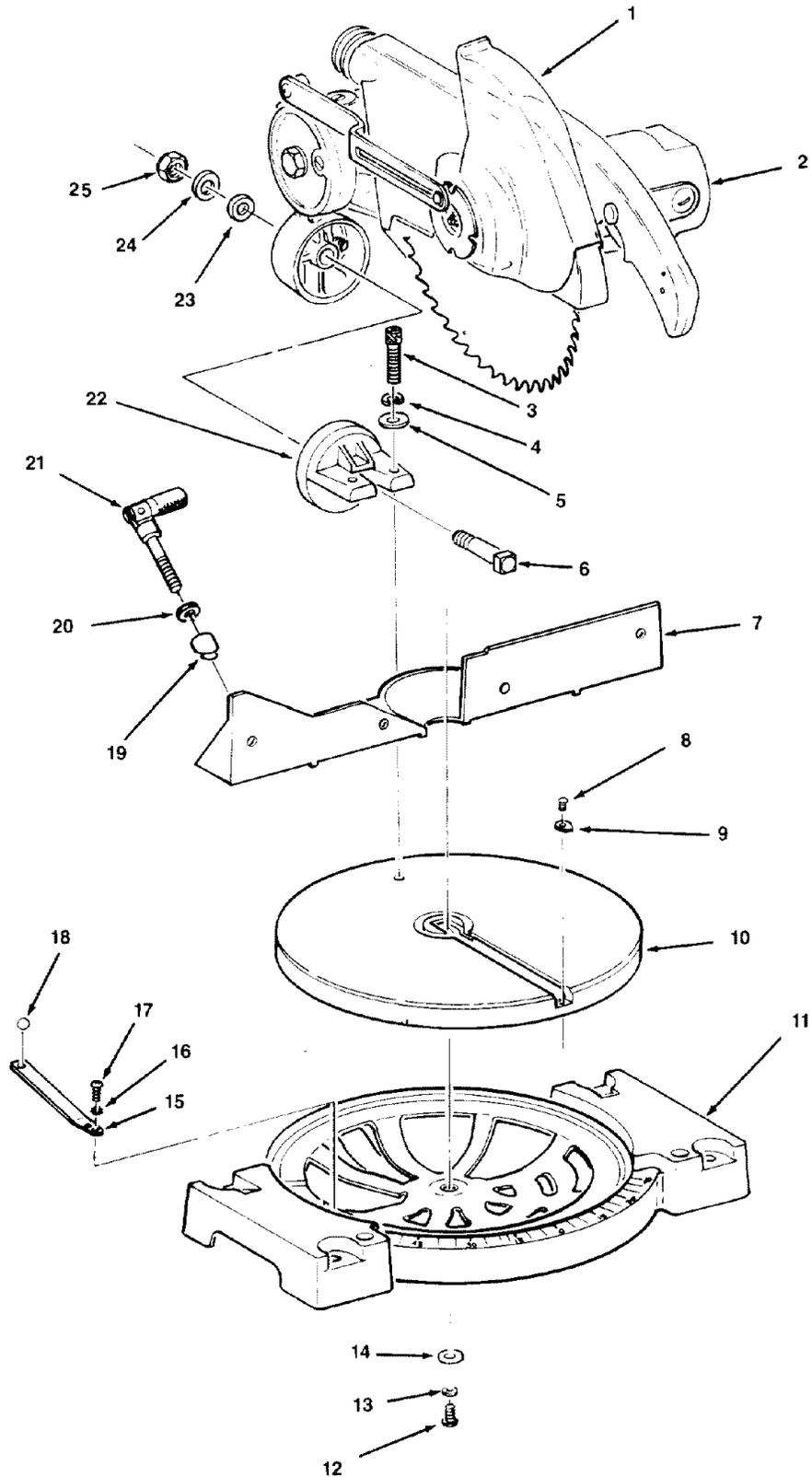


FIGURE 1

# repair parts

## PARTS LIST FOR CRAFTSMAN 8¼" MITER SAW MODEL NO. 113.234680

Always order by Part Number—Not by Key Number

FIGURE 1

**WARNING:** For your safety, this miter saw is specially insulated. To avoid electrical shock, fire or injury, use only parts identical to those identified in the parts list. Reassemble exactly as originally assembled.

Key No.	Part No.	Description	Key No.	Part No.	Description
1	—	Upper Guard Asm. (See Figure 2)	13	STD551210	* Lockwasher-#10
2	—	Motor & Gear Box Asm. (See Figure 3)	14	STD551010	* Washer-13/64 x 3/4 x 1/32
3	141594-13	Screw-Hex Soc. Cap 5/16-18 x 1-1/4	15	818650	Spring-Index
4	STD551131	* Lockwasher 5/16	16	STD551208	* Lockwasher-#8
5	60465	Washer- 21/64 x 47/64 x 1/16	17	STD510805	* Screw-Pan Hd 8-32 x 1/2
6	818653	 Bolt-Bevel	18	818677	Ball-Index 5/16 Dia.
7	818632	Fence	19	818649	Bushing-Fence
8	STD510602	* Screw-Pan Hd 6-32 x 5/16	20	STD551031	* Washer- 11/32 x 11/16 x 1/16
9	818680	Indicator-Miter	21	816863-3	Clamp-Bolt
10	818627	Table	22	818945	Support-Pivot w/Scale
11	818944	Base w/Scale	23	819179	Washer-Spring
12	STD511105	* Screw-Pan Hd 10-32 x 1/2	24	805561-4	Washer-.505 x 13/16 x 1/32
			25	818656	 Nut Lock M12 x 1.75
			—	SP5301	Owner's Manual (Not Illustrated)

- Any Attempt To Repair Or Replace Electrical Parts On This Unit May Create A **HAZARD** Unless Repair Is Done By A Qualified Service Technician. Repair Service Is Available At Your Nearest Sears Store.

\*Standard Hardware Item—May Be Purchased Locally.

 **WARNING:** These Items Are Important To The Safety Of This Tool. Do Not Substitute Common Parts.

# repair parts

## PARTS LIST FOR CRAFTSMAN 8 1/4" MITER SAW MODEL NO. 113.234680

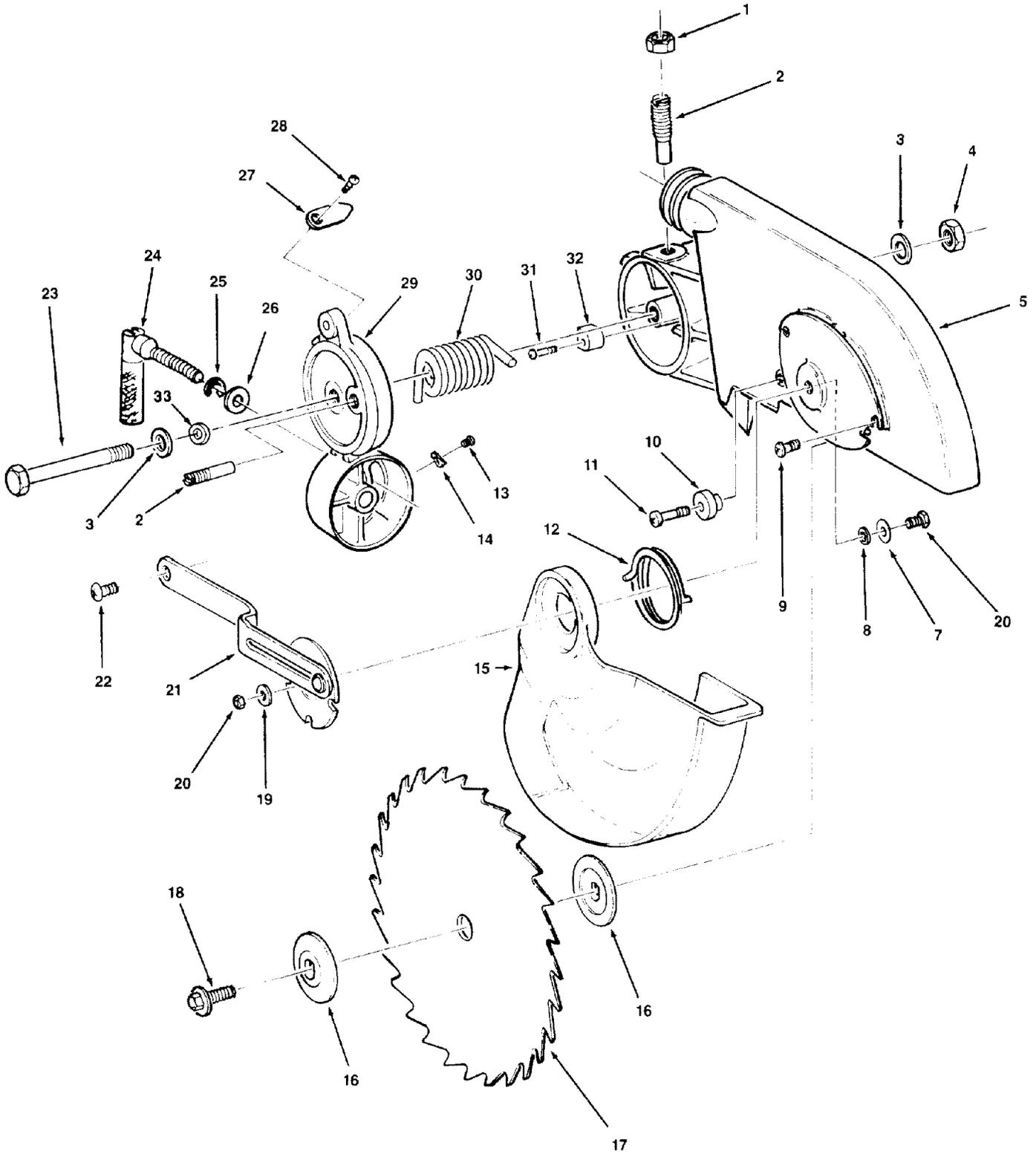


FIGURE 2

# repair parts

## PARTS LIST FOR CRAFTSMAN 8¼" MITER SAW MODEL NO. 113.234680

Always order by Part Number—Not by Key Number

FIGURE 2

**WARNING:** For your safety, this miter saw is specially insulated. To avoid electrical shock, fire or injury, use only parts identical to those identified in the parts list. Reassemble exactly as originally assembled.

Key No	Part No.	Description
1	STD841015	* Nut-Hex M10 x 1.5
2	818679	▲ Bolt-Shop
3	805561-4	Washer .505 x 13/16 x 1/32
4	818656	▲ Nut Lock M12 x 1.75
5	818942	▲ Guard Asm.-Upper
7	821629	▲ Washer-13/64 x 1/2 x 1/16 (Includes Key #20)
8	816849-1	▲ Spacer
9	STD511103	* Screw-Pan Hd 10-32 x 3/8
10	816818	Sleeve-Rubber
11	817145	Screw-Shoulder 10-32 x 13/16
12	816677	▲ •Spring-Guard (Includes Key #20)
13	STD510602	Screw Pan Hd 6-32 x 5/16
14	816686	Indicator-Bevel
15	818635	▲ Guard-Lower
16	818671	Collar-Blade
17	9-32546	† Blade-8-1/4" 44 Tooth

Key No	Part No.	Description
18	816703-1	▲ Screw-Hex Hd L.H. M8 x 1.25-14
19	821627	▲ Washer-13/64 x 7/16 x 1/32 (Includes Key #20)
20	821626	▲ Nut-Lock 10-32 w/screw
21	818941	▲ Link w/Retainer Guard
22	817144	Screw-Shoulder 1/4-20
23	818652	▲ Bolt Pivot
24	816863	Clamp-Bolt
25	STD551131	* Lockwasher-5/16
26	STD551031	* Washer - 11/32 x 11/16 x 1/16
27	816664	Plate-Lock
28	816674	Screw-Pan Hd Shoulder M6
29	818626	Pivot
30	818638	▲ •Spring, Torsion
31	813313-2	Screw-Pan Hd M5 x 0.8-20
32	816668	Cushion
33	819179	Washer-Spring

\* Standard Hardware Item—May Be Purchased Locally.

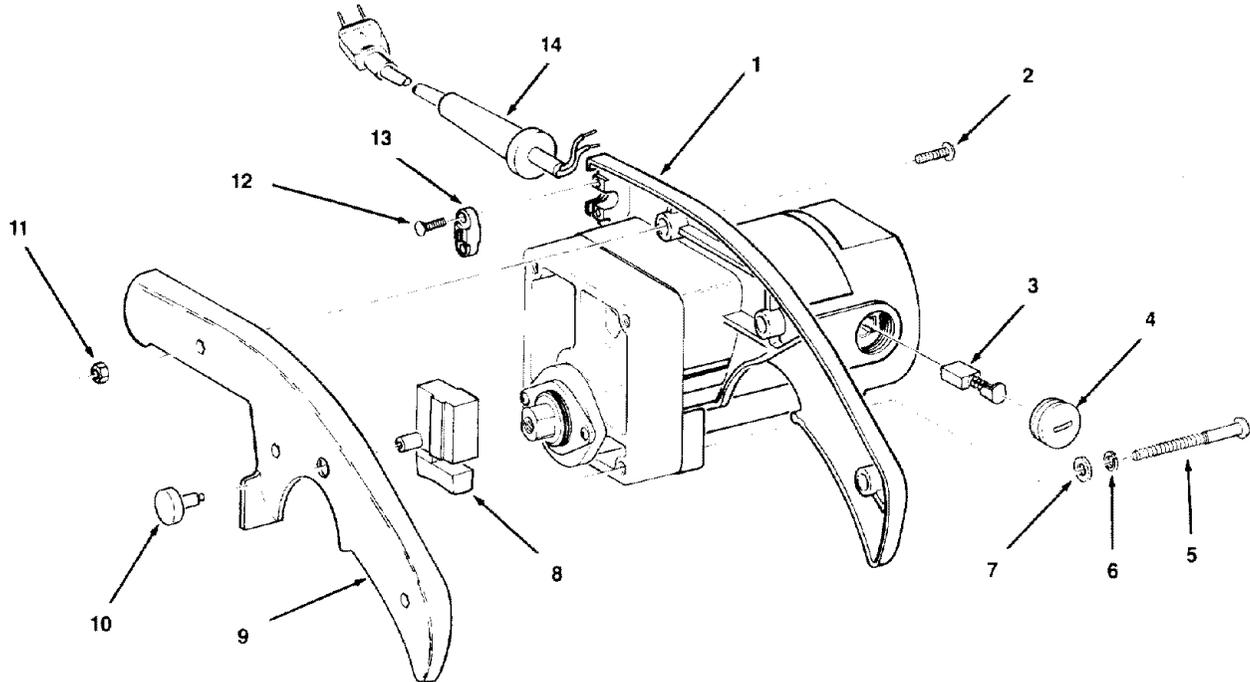
▲ **WARNING:** These Items Are Important To The Safety Of This Tool. Do Not Substitute Common Parts.

• **WARNING:** Uncontrolled Spring Release Or Misinstallation Of These Parts May Create A HAZARD Unless Repair Is Done By A Qualified Service Technician. Repair Service Is Available At Your Nearest Sears Store.

† Stock Item—May Be Secured Through The Hardware Department Of Most Sears Retail Stores Or Catalog Order Houses.

# repair parts

## PARTS LIST FOR CRAFTSMAN 8 1/4" MITER SAW MODEL NO. 113.234680



Always order by Part Number—Not by Key Number

FIGURE 3

**WARNING:** For your safety, this miter saw is specially insulated. To avoid electrical shock, fire or injury, use only parts identical to those identified in the parts list. Reassemble exactly as originally assembled.

Key No.	Part No.	Description
1	818952	⚠ • Motor and Gear Box
2	816743	⚠ Screw-Pan Hd. M4 x 0.7-15
3	818664	⚠ Brush
4	818686	⚠ Cap-Brush Holder
5	808277-11	⚠ Screw-Pan Hd. 10-32 x 2.25
6	STD551110	* Lockwasher #10
7	STD551010	Washer- 13/64 x 7/16 x 1/32

Key No.	Part No.	Description
8	508203	⚠ • Switch (Includes Key #10)
9	818641	⚠ Handle-L.H.
10	818786	⚠ Button-Lock
11	STD840407	* Nut-Hex M4 x 0.7
12	817357-1	⚠ Screw-M4 x 16-12 TY.E
13	818670	⚠ Clamp-Cord
14	818676	⚠ • Cord-Power

• **WARNING:** Any Attempt To Repair Or Replace Electrical Parts On This Unit May Create A HAZARD Unless Repair Is Done By A Qualified Service Technician. Repair Service Is Available At Your Nearest Sears Store.

\*Standard Hardware Item—May Be Purchased Locally.

⚠ **WARNING:** These Items Are Important To The Safety Of This Tool. Do Not Substitute Common Parts.



**SEARS**

**owner's  
manual**

**SERVICE**

**MODEL NO.  
113.234680**

**8¼" COMPOUND  
MITER SAW**

**HOW TO ORDER  
REPAIR PARTS**

## **8¼-INCH COMPOUND MITER SAW**

Now that you have purchased your 8¼-inch Compound Miter 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 8¼-inch Compound Miter Saw will be found on a plate attached to your saw, at the side of the Miter Saw arm.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

<b>PART NUMBER</b>	<b>PART DESCRIPTION</b>
<b>MODEL NUMBER</b> 113.234680	<b>NAME OF ITEM</b> 8¼" COMPOUND MITER 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.**