

Sears, Roebuck and Co., Hoffman Estates, IL 6017 Sater Part No. 137245130001

# TABLE OF CONTENTS

## SECTION

	r	
arranty	ł	AGE
roduct Specifications		2
afety Instructions		2
ccessories and Attachments		3
ools Needed		6
arton Contents		6
now Your Miter Saw		6
ossary of Terms		8
sembly and Adjustments		9
peration	• • • • • •	10
aintenance		15
oubleshooting guide	• • • • • •	22
irts	• • • • • •	23
		24

## WARRANTY

## FULL ONE YEAR WARRANTY

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

Contact a Sears Service Center for repair.

If this product is used for commercial or rental purposes, this warranty applies only for 90 days from the date of purchase.

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

Sears, Roebuck and Co., Dept. 817 WA, Hoffman Estates, IL 60179

# PRODUCT SPECIFICATIONS

#### MOTOR

Power Source	120V AC 60 Hz 13 Amos
Horsepower	2.5 Hp (Max Developed)
Speed	4500 RPM
Brake	Electric
Double Insulated	Vec
Double insulated	. Yes

#### **MITER SAW**

#### **Cutting capacity:**

Crosscut	.2-5/8" x 5-11/16"
Miter 45° R. & L.	.2-7/8" x 3-1/2"
Bevel 45° L.	.1-9/16" x 5-11/16"
Compound 45° L., 45° R. & L	.1-9/16" x 3-1/2"

#### **Rotation Table:**

 Diameter
 .12-3/4"

 Miter Detente Stops
 .0, 15, 22.5, 31.6, 45° R. & L.

 Bevel positive stops
 .0°, and 45° L.

 Base dimensions
 .19-11/16" x 12-11/16"

 Net weight
 .28.6 Lb.

Dust collection ......Yes Extension wing .....Yes

## **A WARNING**

To avoid electrical hazards, fire hazards, or damage to the tool, use proper circuit protection.

Your miter saw is wired at the factory for 120V operation. Connect to a 120V, 15 AMP time delay fuse or circuit breaker. To avoid shock or fire, replace power cord immediately if it is worn, cut or damaged in any way.

## SAFETY

## **GENERAL SAFETY INSTRUCTIONS**

## **BEFORE USING THE MITER SAW**

Safety is a combination of common sense, staying alert and knowing how to use your miter saw.

## A WARNING

To avoid mistakes that could cause serious injury, do not plug the miter saw in until you have read and understood the following:

- 1. **READ** and become familiar with this entire instruction manual. LEARN the tool's applications, limitations, and possible hazards.
- 2. KEEP GUARDS IN PLACE and in working order.
- REMOVE ADJUSTING KEYS AND WRENCHES. Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning ON.
- 4. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
- DON'T USE IN A DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
- 6. **KEEP CHILDREN AWAY.** All visitors should be kept at a safe distance from the work area.
- 7. MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starter keys.
- 8. **DON'T FORCE THE TOOL.** It will do the job better and safer at the rate for which it was designed.
- 9. USE THE RIGHT TOOL. Don't force tool or the attachment to do a job for which it was not designed.
- 10. USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The table on page 5 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.
- 11. WEAR PROPER APPAREL. DO NOT wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.

12. WEAR YOUR SAFETY GOGGLEST \* FORESIGNT IS BETTER THAN NO SIGHT

#### ALWAYS WEAR EYE

**PROTECTION.** Any miter saw can throw foreign objects into the eyes which could cause permanent eye damage. ALWAYS wear Safety Goggles (not glasses)

that comply with ANSI safety standard Z87.1. Everyday eyeglasses have only impact-resistant lenses. They ARE NOT safety glasses. Safety Goggles are available at Sears. **NOTE:** Glasses or goggles not in compliance with ANSI Z87.1 could seriously hurt you when they break.

- 13. WEAR A FACE MASK OR DUST MASK. Sawing operation produces dust.
- 14. SECURE WORK. Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
- 15. **DISCONNECT TOOLS** before servicing, and when changing accessories, such as blades, bits, cutters, and the like.
- 16. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure the switch is in OFF position before plugging in.
- USE RECOMMENDED ACCESSORIES. Consult the owner's manual for the recommended accessories. The use of improper accessories may cause risk of injury to persons.
- NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
- 19. CHECK FOR DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- 20. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN THE POWER OFF. Don't leave the tool until it comes to a complete stop.
- 21. DON'T OVERREACH. Keep proper footing and balance at all times.
- 22. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

- DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
- 24. WARNING: Dust generated from certain materials can be injurious to your health. Always operate saw in well ventilated areas and provide for proper dust removal.

## SPECIFIC SAFETY INSTRUCTIONS FOR THIS MITER SAW

- 1. USE ONLY CROSS-CUTTING SAW BLADES. When using carbide tipped blades, make sure they have a negative hook angle. Do not use blades with deep gullets as they can deflect and contact guard.
- 2. **DO NOT** operate the miter saw until it is completely assembled and installed according to the instructions.
- 3. **IF YOU ARE NOT** thoroughly familiar with the operation of miter saws, obtain advice from your supervisor, instructor, or other qualified person.
- 4. ALWAYS hold the work firmly against the fence and table. DO NOT perform any operation freehand.
- KEEP HANDS out of the path of the saw blade. If the workpiece you are cutting would cause your hand to be within 6-1/2 inches of the saw blade, the workpiece should be clamped in place before making the cut.
- 6. **BE SURE** the blade is sharp, runs freely, and is free of vibration.
- 7. ALLOW the motor to come up to full speed before starting cut.
- 8. KEEP the motor air slots clean and free of chips.
- ALWAYS MAKE SURE all handles are tight before cutting, even if the table is positioned in one of the positive stops.
- 10. **BE SURE** blade and collar are clean and that the arbor screw is tightened securely.
- 11. USE only blade collars specified for your saw.
- 12. NEVER use blades larger or smaller in diameter than recommended.
- 13. NEVER apply lubricants to the blade when it is running.
- 14. ALWAYS check the blade for cracks or damage before operation. Replace a cracked or damaged blade immediately.
- 15. **NEVER** use blades recommended for operation at less than 4500 RPM.
- 16. USE the blade guards at all times.
- 17. ALWAYS keep the lower blade guard in place.
- 18. NEVER reach around the saw blade.

- 19. MAKE SURE the blade is not contacting the workpiece before the switch is turned on.
- 20. **NEVER** unplug the saw with the switch in the ON position.
- 21. **IMPORTANT:** After completing the cut, release the power switch and wait for the coasting blade to stop before returning the saw to the raised position.
- 22. MAKE SURE the blade has come to a complete stop before removing or securing the workpiece, changing the workpiece angle, or changing the angle of the blade.
- 23. NEVER cut ferrous metals or masonry.
- 24. NEVER recut small pieces.
- 25. **PROVIDE** adequate support to the sides of the saw table for long workpieces.
- 26. NEVER use the miter saw in an area with flammable liquids or gases.
- 27. **NEVER** use solvents to clean plastic parts. Solvents could possibly dissolve or otherwise damage the material.
- 28. SHUT OFF the power before servicing or adjusting the tool.
- 29. **DISCONNECT** the saw from the power source and clean the machine before leaving it.
- 30. MAKE SURE the work area is clean before leaving the machine.
- 31. **SHOULD** any part of your miter saw be missing, damaged, or fail in any way, or any electrical component fail to perform properly, shut off the switch and remove the plug from the power supply outlet. Replace missing, damaged, or failed parts before resuming operation.

## ELECTRICAL REQUIREMENTS

#### POWER SUPPLY AND MOTOR SPECIFICATIONS

The AC motor used in this saw is a universal, nonreversible type. See "MOTOR" in the "**PRODUCT SPECIFICATIONS**" section on page 2.

## A 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. 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.

**Replacement parts -** When servicing use only identical replacement parts.

**Polarized plugs -** This saw has a plug that looks like the one shown below:



To reduce the risk of electrical shock, this saw has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

### **A**WARNING

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

## **A** WARNING

To avoid electrocution:

- Use only identical replacement parts when servicing a tool with double insulation. Servicing should be performed by a qualified technician.
- Do not use power tools in wet or damp areas or expose them to rain. This tool is intended for indoor use only.

#### **MOTOR SAFETY PROTECTION**

#### **IMPORTANT:**

To avoid motor damage, the motor should be blown out or vacuumed frequently to keep sawdust from interfering with the motor ventilation.

- 1. **CONNECT** this saw to a 120V, 15 amp. circuit with a 15 amp. time delay fuse or circuit breaker. Using the wrong size fuse can damage the motor.
- IF the motor won't start, release the trigger switch immediately. UNPLUG THE SAW. Check the saw blade to make sure it turns freely. If the blade is free, try to start the saw again. If the motor still does not start, refer to the "TROUBLESHOOTING CHART".
- IF the saw suddenly stalls while cutting wood, release the trigger switch, unplug the tool, and free the blade from the wood. The saw 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. LINE VOLTAGE is more than 10% above or below the nameplate voltage rating. For heavy loads, however, the voltage at motor terminals must equal the voltage specified on the name plate.
    c. IMPROPER or dull saw blades are used.
- Most motor troubles may be traced to loose or incorrect
  - connections, overload, low voltage or inadequate power supply wiring. Always check the connections, the load and the supply circuit if the motor doesn't run well. Check wire sizes and length with the Extension Cord Chart below.

## **GUIDELINES FOR EXTENSION CORDS**

USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage, resulting in loss of power and cause overheating. The table below shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

**Be sure your extension cord is properly wired** and in good condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it. Protect your extension cords from sharp objects, excessive heat and damp or wet areas.

Use a separate electrical circuit for your tools. This circuit must not be less than #12 wire and should be protected with a 15 Amp time delay fuse. Before connecting the motor to the power line, make sure the switch is in the OFF position and the electric current is rated the same as the current stamped on the motor nameplate. Running at a lower voltage will damage the motor.

A	MINIMUM GAUGE FOR EXTENSION CORDS (AWG)				
	(when using 120 volts only)				
Ampere Rating Total length of cord in feet				t	
more than	not more than	25'	50'	100'	150'
0	6	18	16	16	14
6	10	18	16	14	12
10	12	16	16	14	12
12	16	14	12	Not rec	ommended

**CAUTION:** In all cases, make certain the receptacle in question is properly grounded. If you are not sure have a certified electrician check the receptacle.

#### **A**WARNING

This miter saw is for indoor use only. Do not expose to rain or use in damp locations.

# ACCESSORIES AND ATTACHMENTS

## **TOOLS NEEDED**

## **PROHIBITED ACCESSORIES**

## A WARNING

Use only accessories recommended for this miter saw. Follow instructions that accompany accessories. Use of improper accessories may cause hazards.

The use of any cutting tool except 10 inch saw blades which meet the requirements under recommended accessories is prohibited. Do not use accessories such as shaper cutters or dado sets. Ferrous metal cutting and the use of abrasive wheels is prohibited.

### A WARNING

Do not attempt to modify this tool or create accessories not recommended for use with this tool. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious injury.

## RECOMMENDED ACCESSORIES

Visit your Sears Hardware Department or see the Power and Hand Tools Catalog to purchase recommended accessories for this power tool.

### A WARNING

To avoid the risk of personal injury, do not modify this power tool or use accessories not recommended by Sears.

#### A WARNING

Read warnings and conditions on your **CARBIDE TIPPED SAW BLADE**. Do not operate the saw without the proper saw blade guard in place. Carbide is a very hard but brittle material. Care should be taken while mounting, using, and storing carbide blades to prevent accidental damage. Slight shocks, such as striking the tip while handling, can seriously damage the blade. Foreign objects in the workpiece, such as wire or nails, can also cause tips to crack or break off. Before using, always visually examine the blade and tips for bent blade, cracks, breakage, missing or loose tips, or other damage. Do not use if damage is suspected. Failure to heed safety instructions and warnings can result in serious bodily injury.



#### **COMBINATION SQUARE MUST BE TRUE**



in dotted position

## **UNPACKING YOUR MITER SAW**

## **A 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.

1. Remove the miter saw from the carton.

**IMPORTANT:** Do not lift the miter saw by the switch handle or miter table handle. It may cause misalignment. ALWAYS LIFT THE MACHINE BY THE BASE HAND HOLDS.

- 2. Place the saw on a secure stationary work surface.
- 3. Separate all parts from the packing material. Check each one with the illustration to make certain all items are accounted for, before discarding any packing material.

## **A WARNING**

If any part is missing or damaged, do not attempt to assemble the miter saw, or plug in the power cord until the missing or damaged part is correctly replaced. To avoid electric shock, use only identical replacement parts when servicing double insulated tools.



# KNOW YOUR MITER SAW



2011. 《学校》中《学校》中》《学校》中》《学校》中《学校》中《学校》中》(《学校》》)。《学校》中》(《学校》中》(《学校》中》(《学校》中》(《学校》)(《学校》)。

## **COMPANION COMPOUND MITER SAW TERMS**

**ARBOR LOCK –** Allows the user to keep the blade from rotating while tightening or loosening the arbor screw during blade replacement or removal.

**BASE** – Supports the table, holds accessories and allows for workbench or leg set mounting.

**BEVEL LOCK HANDLE** – Locks the miter saw at a desired bevel angle.

**BEVEL SCALE –** To measure the bevel angle of the saw blade 0° to 45° left.

**COVER PLATE SCREW** – Loosen this screw and rotate the plate for access to the blade arbor screw.

DUST CHUTE - Exhausts debris away from the user.

**EXTENSION WINGS** – Extend the width of the work table for support while cutting long workpieces. They can be used with or without a stop block as an additional side fence.

FENCE – Helps to keep the workpiece from moving when sawing. Scaled to assist with accurate cutting.

HAND HOLD - For moving the saw when unplugged.

**LOCK-OFF SLIDE SWITCH –** must be pushed forward to activate the trigger switch.

**LOWER BLADE GUARD** – Helps protect your hands from the blade in the raised position, it retracts as the blade is lowered.

**MITER HANDLE –** Use to lock and unlock the miter table, and to rotate the saw to a right or left cutting position.

MITER SCALE - To measure the miter angle 0° to 45° left, 0° to 45° right.

**MITER SPRING LOCK** – With the miter handle, locks the miter saw at a preset positive stop for the desired miter angle.

**MOUNTING HOLES** – To mount the miter saw to a stable surface.

**ON/OFF TRIGGER SWITCH** – To prevent the trigger from being accidentally engaged, a lock-off slide switch is provided. To start the tool, push the lock-off slide switch forward and squeeze the trigger. Release the trigger to stop the miter saw.

**STOP LATCH** – Locks the miter saw in the lowered position for compact storage and carrying.

**SWITCH HANDLE** – The saw handle contains the trigger switch and a lock-off slide switch. The blade is lowered into the workpiece by pushing down on the handle. The saw will return to its upright position when the handle is released.

WARNING LABEL - Read for your own safety.

**WRENCH STORAGE** – Convenient storage to prevent misplacing the blade wrench.

#### **WOODWORKING TERMS**

ARBOR - The shaft on which a blade is mounted.

**BEVEL CUT** – An angle cut made through the face of the workpiece.

COMPOUND CUT - A simultaneous bevel and miter cut.

**CROSS CUT –** A cut made across the width of the workpiece.

**FREEHAND** – Performing a cut without using a fence (guide), hold down or other proper device to prevent the workpiece from twisting during the cutting operation.

GUM - A sticky sap from wood products.

HEEL - Misalignment of the blade.

KERF - The amount of material removed by a blade cut.

**MITER CUT** – An angle cut made across the width of the workpiece.

**RESIN** – A sticky sap that has hardened.

**REVOLUTIONS PER MINUTE (RPM)** – The number of turns completed by a spinning object in one minute.

**SAW BLADE PATH** – The area of the workpiece or table top directly in line with the travel of the blade or the part of the workpiece which will be cut.

**SET –** The distance between two saw blade tips, bent outward in opposite directions to each other. The further apart the tips are, the greater the set.

**WORKPIECE** – The item being cut. The surfaces of a workpiece are commonly referred to as faces, ends, and edges.

# ASSEMBLY AND ADJUSTMENTS

## **ASSEMBLY INSTRUCTIONS**

## **A** WARNING

To avoid injury, do not connect this miter saw to the power source until this machine is completely assembled and adjusted, and you have read and understood this instruction manual.

## INSTALLING THE MITER HANDLE (FIG. A)

- 1. Carefully thread the miter handle (1) into the hole (2) located at the front of the miter table.
- 2. Tighten.
- 3. Loosen handle 1/4 turn or more to unlock the miter table from its set position. To lock, tighten the handle.

### Fig. A



#### SAW BLADE WRENCH (FIG. B)

1. Store the blade wrench (1) in the saw housing slot (2), at the rear of the saw base, to prevent loss.

#### Fig. B



### **RAISING THE CUTTING HEAD (FIG. C)**

- 1. Push down slightly on the cutting head handle (1).
- 2. Pull out the stop latch knob (2).
- 3. Allow the cutting head (3) to raise to the up position.

## A WARNING

To avoid injury and damage to the saw, transport or store the miter saw with the cutting head locked in the down position. NEVER use the stop latch to hold the cutting head in a down position for cutting operations.



#### LOCKING THE CUTTING HEAD (FIG. C)

When transporting or storing the miter saw, the cutting head should always be locked in the down position.

- 1. Push the cutting head (3) down to its lowest position.
- 2. Push the stop latch (2) into the locking hole (4).

**IMPORTANT:** To avoid damage, never carry the miter saw by the switch handle, the cutting arm, or the miter table handle. ALWAYS use the hand holds in the base.

#### INSTALLING THE DUST BAG (FIG. D)

- 1. To install the dust bag (1), squeeze the metal collar wings (2) to enlarge the neck opening.
- 2. Place the dust bag opening around the dust exhaust port (3), and release the metal collar wings.

#### Fig. D



#### INSTALLING THE EXTENSION WINGS (FIG. E)

#### **A WARNING**

To avoid personal injury or possible damage, support long workpieces while cutting by installing the extension wings to increase the width of the workpiece.

NOTE: The extension wings are provided with an end stop bracket (1), and may be installed with or without it.

#### To install with the end stop:

- 1. Place bracket (2) on the ends of the extension wing (3).
- 2. Insert the ends of the extension rod into the holes (4) at the side of the table.
- 3. Align the top bracket hole (5) to the table hole (6) from the underside of the table.
- 4. Thread the Phillips head bolt (7) through the hole in the table top, and through the bracket.
- 5. Adjust the length of the rods and tighten the bolt.
- Adjust the position of the end stop block (1) by loosening the wing nut (8) and sliding the end stop to the desired position. Tighten the wing nut.

#### To install without the end stop:

1. Loosen the wing nut and slide the end stop off the extension rod before installing as above.



## **REMOVING OR INSTALLING THE BLADE**

## **A WARNING**

Use only a 10 inch diameter blade.

## A WARNING

To avoid injury from an accidental start, make sure the switch is in the OFF position and the plug is not connected to the power source outlet.

## REMOVING BLADE (FIG. F, G, H)

- 1. Unplug the saw from the outlet.
- 2. (Figure F) Allow the miter saw to rise to the upright position. Raise the lower blade guard (1) to the up position.

- 3. Loosen the cover plate screw (2) with a Phillips screwdriver.
- 4. Rotate the cover plate (3) to expose the arbor screw (4).
- 5. Place the blade end wrench over the arbor screw.

### Fig. F



- 6. (Figure G) Locate the arbor lock (5) on the motor, below the miter saw switch handle.
- 7. Press the arbor lock, holding it in firmly while turning the blade wrench clockwise. The arbor lock will engage after turning the wrench. Continue to hold the arbor lock in to keep it engaged, while turning the wrench clockwise to loosen the arbor screw.





8. (Figure H) Remove the arbor screw (4), arbor washer (6), outer blade collar (7), and the blade (8). Do not remove the inner blade collar.

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

## Fig. H



## INSTALLING BLADE (FIG. F, G, H)

- Install a 10" blade, making sure the rotation arrow on the blade matches the clockwise rotation arrow on the upper guard, and the blade teeth are pointing downward.
- 10. Place the arbor washer (6) on the arbor screw (4). Install the outer blade collar (7) and the arbor screw and washer. (FIG. H)

**IMPORTANT:** Make sure the flats of the blade collar are engaged with the flats on the arbor shaft.

- 11. Place the blade wrench on the arbor screw.
- Press the arbor lock (5), holding it in firmly while turning the blade wrench counterclockwise.
   When it engages continue to press the arbor lock in, while tightening the arbor screw securely. (FIG. G)
- Rotate the cover plate (3) back until the slot in the cover plate engages with the cover plate screw (2). Tighten the screw with a Phillips screwdriver.
- 14. Lower the blade guard (1). (FIG. F)
- 15. Be sure the arbor lock is released so the blade turns freely.

## **A WARNING**

To avoid injury, never use the saw without the cover plate securely in place. It keeps the arbor screw from falling out if it accidentally loosens, and helps prevent the spinning blade from coming off the saw.

## **A** WARNING

Make sure the collars are clean and properly arranged. 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 metal base or the turn table.

# ADJUSTMENTS

## **A WARNING**

To avoid injury from an accidental start, make sure the switch is in the OFF position and the plug is not connected to the power source outlet.

#### ADJUSTING FENCE SQUARENESS TO BLADE (FIG.I)

- 1. Loosen the two fence locking screws (1).
- 2. Using a square, lay the heel of the square against the blade, and the rule against the fence (2) as shown. Check to see if the fence is 90° to the blade.
- Adjust the fence to be 90° to the blade and tighten the two fence locking screws.

**CAUTION:** If the saw has not been used recently, recheck blade squareness to the fence and readjust if needed.





## MITER SCALE (FIG. J)

The miter scale on the table has nine angle settings with positive stops, to position a desired angle miter fast and accurately.

#### To Adjust the Angle:

- 1. Unlock the miter table by turning the miter handle (1) counterclockwise.
- 2. Press down the miter spring lock (2) while holding the miter handle, and rotate the table to the desired angle.

#### To Adjust the Indicator:

- 1. Place the miter table at the zero position stop (3).
- Loosen the indicator screw (4) with a screwdriver. Adjust the indicator to the 0° mark on the miter scale and tighten the screw.



## **CUTTING ARM TRAVEL (FIG. K, L)**

#### Cutting arm pivot (FIG. J)

The pivot movement of the cutting arm (1) should not be too tight, restricting movement, nor too loose, affecting the accuracy of the saw cut. The correct adjustment is snug with no side movement. To adjust, tighten or loosen the adjusting nut (2).

#### Fig. K



#### Cutting head downward travel (FIG. L)

Before each cutting operation, check the position of the blade. If it contacts any metal surface, the depth of movement can be adjusted.

- 1. Lower the blade as far as possible.
- 2. Loosen the locknut (1).
- 3. Turn the adjusting screw (2) in or out.
- 4. Rotate the blade by hand to check for contact.
- 5. Repeat until adjusted properly, and tighten the locknut.

Fig. L



## **A**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.

#### BEVEL STOP ADJUSTMENTS (FIG. M, N)

**NOTE:** To ensure accurate cuts, alignment should be checked and adjustments made prior to use.

#### 90" Bevel adjustment (FIG. M)

- 1. Loosen the bevel lock handle (1) and tilt the cutting arm completely to the right. Tighten the bevel lock handle.
- 2. Using a combination square (3), place the square rule on the table and the heel against the blade. Check that the blade is 90° to the table. (FIG. M)
- To adjust, loosen the locknut, and turn the screw (2) until the blade is 90° to the table. Tighten the locknut.

## Fig. M



#### **Bevel indicator (FIG. N)**

- 1. When the blade is exactly 90° to the table as shown by the combination square, loosen the positive stop hex head bolt (1).
- 2. Adjust the red indicator (2) to the "0" mark (3) and tighten the bolt.

#### Fig. N



## 45° Bevel adjustment (FIG. M, N)

- 1. Adjust the blade to 90° with the combination square, and the bevel indicator to show "0" as explained above.
- 2. Unlock the bevel lock handle and tilt the cutting arm as far as possible.
- 3. The blade tilt will stop at a 45° bevel, and the indicator will point at the "45" mark.
- 4. Tighten the bevel lock handle.

**NOTE:** Once the 90° adjustment is made correct, the 45° adjustment will be correct.

### MOUNTING THE MITER SAW (FIG. O)

#### **A**WARNING

To avoid injury from unexpected saw movement:

 Before moving the saw, disconnect the power cord from the outlet, and lock the cutting arm in the lower position using the stop latch.

**NOTE:** The stop latch is for carrying and storage use only. It is NOT to be used for holding the saw while cutting.

- To avoid back injury, lift by using the hand hold access at the bottom of the base. Bend with your knees, not your back.
- Never carry the miter saw by the power cord or by the switch handle. Carrying the tool by the power cord could cause damage to the insulation or the wire connections resulting in electric shock or fire.
- To avoid injury from flying debris, do not allow visitors to stand behind the saw.

- Place the saw on a firm, level work-surface where there is room for handling and properly supporting the workpiece.
- Support the saw on a level work surface.
- Bolt or clamp the saw to its support.

Place the saw in the desired location, either on a work bench or recommended leg set. The base of the saw has four mounting holes (1).

For stationary use, fasten the saw to a workbench.

For portable use, fasten the saw to a 3/4" piece of plywood. This mounting board can then be clamped to a secure surface.

## Fig. O





# SAFETY INSTRUCTIONS FOR BASIC SAW OPERATION

#### BEFORE USING THE MITER SAW

## **A WARNING**

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

- Completely assemble and adjust saw, following the instructions. (See ASSEMBLY AND ADJUSTMENTS Section)
- Learn the use and function of the ON/OFF switch, lock-off switch, upper and lower blade guards, stop latch, bevel lock handle, and cover plate screw.
   (See KNOW YOUR MITER SAW Section)
- Review and understand all safety instructions and operating procedures in this owner's manual. (See SAFETY & OPERATIONS Sections)
- Review the care and troubleshooting instructions for your miter saw. (See MAINTENANCE Section)
- To avoid injury or death from electrical shock: Make sure your fingers do not touch the plug's metal prongs when plugging or unplugging your miter saw. (See SAFETY - ELECTRICAL REQUIREMENTS Section)

#### **BEFORE EACH USE**

#### Inspect your saw.

- Disconnect the mitter saw. To avoid injury from accidental starting, unplug the saw before any adjustments, including set-up and blade changes.
- 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 screw.
- · Check for damaged parts. Check for:
  - Alignment of moving parts
  - Damaged electric cords
  - Binding of moving parts
  - Mounting holes
  - Function of arm return spring and lower guard: Push the cutting arm all the way down, then let it rise until it stops. The lower guard should fully close. Follow instructions in TROUBLESHOOTING for adjustment.
  - Other conditions that may affect the way the miter saw works.

• Keep all guards in place, in working order and proper adjustment.

If any part of this miter saw is missing, bent, damaged or broken in any way, or any electrical parts don't work, turn the saw off and unplug it. Replace damaged, missing, or defective 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 wrench from the tool before turning it on.
- To avoid injury from jams, slips, or thrown pieces:

#### **USE ONLY RECOMMENDED ACCESSORIES**

- Consult the ACCESSORIES section of this Owner's Manual for recommended accessories. Follow the instructions that come with the accessory. The use of improper accessories may cause risk of injury to persons.
- Choose the right 10 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 cutting arm all the way down. Hand spin the blade and check for clearance. Tilt the cutting head to a 45° bevel and repeat the check.
- Make sure the blade and arbor collars are clean.
- Make sure all clamps and locks are tight and there is no excessive play in any parts.

#### **KEEP YOUR WORK AREA CLEAN**

Cluttered areas and benches invite accidents. The floor must not be slippery.

## **A** WARNING

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 the switch is OFF before plugging the miter saw into a power outlet.

#### **PLAN YOUR WORK**

 Use the right tool. Don't force a 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 material may shatter, bind the blade, or create other dangers. Remove all nails that may be in the workpiece to prevent sparking that could cause a fire.

#### **DRESS FOR SAFETY**

Any power miter saw can throw foreign objects into the eyes. This can result in permanent eye damage. Wear safety goggles (not glasses) that comply with ANSI Z87.1. Everyday eyeglasses have only impact resistant lenses. They are not safety glasses. Safety goggles are available at Sears retail 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, watches). They can get caught and draw you into moving parts.
- Wear non-slip footwear.
- Tie back long hair.
- Roll long sleeves above the elbow.
- Noise levels vary widely. To avoid possible hearing damage, wear ear plugs when using any miter saw.
- For dusty operations, wear a dust mask along with safety goggles.

#### **INSPECT YOUR WORKPIECE**

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

#### Plan your work to avoid thrown pieces caused if 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 your fingers or hand to move into the blade.

#### DON'T OVER-REACH

Keep good footing and balance. Keep your face and body to one side, out of the line of a possible throwback.

#### Never cut freehand:

- Brace your workpiece firmly against the fence and table top so it will not rock or twist during the cut.
- Make sure there is no debris between the workpiece and the table or fence.

- Make sure there are no gaps between the workpiece, fence and table that will let the workpiece shift after it is cut.
- Keep the cut off piece free to move sideways after it is cut. Otherwise, it could get wedged against the blade and thrown violently.
- Only the workpiece should be on the saw table.
- Secure work. Use clamps or a vise to help hold the work when it's practical.

# USE EXTRA CAUTION WITH LARGE, VERY SMALL, OR ODD SHAPED WORKPIECES.

- Use extra supports (tables, sawhorses, extension wings [included], blocks, etc.) for any workpiece 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 an 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. If the workpiece being cut would cause your hand or fingers to be within 6-1/2 inches of the saw blade, the workpiece must be clamped in place before cutting. Keep hands and fingers out of the "no hands zone" area marked on the saw table.
- When cutting odd shaped workpieces, plan your work so it will not bind in the blade and cause possible injury. Molding, for example, must lie flat or be held by a fixture or jig that will not let it move when cut.
- Properly support round material such as dowel rods, or tubing, which have a tendency to roll when cut, causing the blade to "bite".

## A WARNING

To avoid injury, follow all applicable safety instructions, when cutting non-ferrous metals:

- Use only saw blades specifically recommended for non-ferrous metal cutting.
- Do not cut metal workpieces that must be hand held. Clamp workpieces securely.
- Cut non-ferrous metals only if you are experienced or under the supervision of an experienced person.

## WHEN SAW IS RUNNING

#### A WARNING

Don't allow familiarity gained from frequent use of your miter saw to result in a careless mistake. A careless fraction of a second is enough to cause a severe injury.

Before cutting, if the saw makes an unfamiliar noise or vibrates, stop immediately. Turn the saw off. Unplug the saw. Do not restart until finding and correcting the problem.

## **BASIC SAW OPERATIONS**

## **A**WARNING

For your convenient use, your saw has a blade brake. The brake is not a safety device. Never rely on it to replace the proper use of the guard on your saw. If the blade does not stop within 6 seconds, unplug the saw and follow the instructions in the **TROUBLESHOOTING** Section for adjusting the brake before continued use.

# TO TURN THE MITER SAW OFF, RELEASE THE TRIGGER SWITCH.

## TO TURN THE SAW ON (FIG. P)

This miter saw is equipped with an ON/OFF trigger switch (1) and a slide lock-off switch (2). The slide lock-off switch must be pushed forward to unlock, and the trigger switch squeezed, to turn the miter saw ON.

**NOTE:** Make the ON/OFF switch child-proof. Insert a padlock, or chain with padlock, through the holes in the trigger switch, locking the tool's switch, preventing children and other unauthorized users from turning the machine on.

The miter saw is equipped with an automatic blade brake. When the trigger switch is released, the electric blade brake will stop the blade in seconds.

## **A WARNING**

To avoid injury, after completing a cut and releasing the trigger switch, allow the blade brake to activate and stop the blade before raising the cutting head.

## A WARNING

To avoid injury, check and tighten the arbor screw periodically.



## BODY AND HAND POSITION (FIG. Q)

Proper positioning of your body and hands when operating the miter saw will make cutting easier and safer. Never place hands near the cutting area. Place hand at least 6-1/2" away from the path of the blade. Hold workpiece firmly against the fence to prevent movement toward the • blade. Keep hands in position until the trigger has been released and the blade has completely stopped. Before making a cut, with the power switch in the OFF position bring the saw blade down to the workpiece to see the cutting path of the blade.

- Keep children away. Keep all visitors a safe distance from the miter saw. Make sure bystanders are clear of the miter saw and workpiece.
- **Don't force tool.** It will do the job better and safer at its designed rate. Feed the saw into the workpiece slowly with a firm downward motion.
- Before freeing jammed material:
  - Turn switch OFF.
    - 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 the blade doesn't stop within 6 seconds, unplug the saw and follow the instructions in the TROUBLESHOOTING Section for adjusting 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 tool away from children and other unqualified users.

#### MITER CUT (FIG. R)

When a miter cut is required, unlock the miter table by turning the miter handle (1) counterclockwise. While holding the handle, press down the spring lock (2) to release the table from the positive stops. Rotate the table to the right or left with the miter handle. When the table is in the desired position as shown on the miter scale (3), release the spring lock and tighten the miter handle.

The table is now locked at the desired angle. Positive stops are provided at 0, 15, 22.5, 31.6, and 45'.

**IMPORTANT:** ALWAYS TIGHTEN the miter table lock handle before cutting.



#### **BEVEL CUT (FIG. S)**

When a bevel cut is required, loosen the bevel lock handle (1).

Tilt the cutting head to the desired angle as shown on the bevel scale (2). The blade can be positioned at any angle, from a 90° straight cut (0° on the scale) to a 45° left bevel. Tighten the lock handle (1) to lock the cutting head in position. Positive stops are provided at 0 and 45°.



#### COMPOUND CUT (FIG. T)

When a compound cut is required,

- 1. Loosen the bevel lock handle (1) and position the cutting head at the desired bevel position. Lock the bevel lock handle.
- 2. Loosen the miter table lock handle (2). Press down the miter spring lock (3) and position the table at the desired angle. Release the spring lock and lock the miter handle.



#### **CUTTING BOWED MATERIAL (FIG. U)**

A bowed 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 the blade to bind and could result in personal injury.

#### Fig. U



#### WORKPIECE SUPPORT (FIG. V)

Fig. V

Long pieces need extra support. Use the extension wings packed with your saw, or place other support under the workpiece. Keep your hand holding the workpiece positioned 6-1/2" or more away from the blade. The support must let the workpiece lay flat on the work table during the cutting operation.

**NOTE:** When mounted on a flat surface, the miter saw table is 3-13/16 inches high.

#### AUXILIARY WOOD FENCE (FIG. W)

When making multiple or repetitive cuts that result in cut-off pieces of one inch or less, it is possible for the saw blade to catch the cut-off piece and throw it out of the saw or into the blade guard and housing, possibly causing damage or injury. To minimize this an auxiliary wood fence can be mounted to your saw.

Holes are provided in the saw fence to attach an auxiliary wood fence. This fence is constructed of straight wood approximately 11/16 inch thick by 3 Inches high by 19-1/2 inches long.

Attach the wood fence securely and make a full depth cut to make a blade slot.

Check for interference between the wood fence and the lower blade guard. Adjust if necessary.

**NOTE:** This auxiliary fence is used only with the saw blade in the 0° bevel position (90° to the table). The auxiliary wood fence must be removed when bevel cutting.



Cutting capacity with auxiliary fence			
Crosscut	3-1/2" x 3-9/16"		
Miter 45° R. & L. 3-1/2" x 2-3/8"			
Bevel 45° L. 2-3/16" x 3-11/1			
Compound 45° L., 45° R. & L.	1-3/4" x 2-1/4"		



#### CUTTING A DIMENSIONAL 4X4 (3-1/2" X 3-1/2") WITH ONE CUT (FIG. X)

A dimensional  $4 \times 4$  may be cut in half with one cut by attaching an auxiliary wood fence of 1/2 inch thick. See **AUXILIARY WOOD FENCE** above.



#### VERTICAL MITER CUTTING (FIG. Y)

To make a miter cut in a  $2 \times 4$  workpiece (1-5/8" x 3-1/2") in the vertical position on edge a spacer such as the auxiliary wood fence described in the **AUXILIARY WOOD FENCE** Section is required.

### Fig. Y



## CUTTING BASE MOLDING (FIG. Z)

Base moldings and many other moldings can be cut on a compound miter saw. The setup of the saw depends on molding characteristics and application, as shown. Perform practice cuts on scrap material to achieve best results:

- 1. Always make sure moldings rest firmly against fence and table. Use hold-down or C-clamps, whenever possible, and place tape on the area being clamped to avoid marks.
- 2. Reduce splintering by taping the cut area prior to making cut. Mark cutline directly on the tape.
- 3. Splintering typically happens due to wrong blade application and thinness of the material.



**NOTE:** Always perform a dry run cut so you can determine if the operation being attempted is possible before power is applied to the saw.

#### **CUTTING CROWN MOLDING (FIG. AA, BB)**

Your compound miter saw is suited to the difficult task of cutting crown molding. To fit properly, crown molding must be compound-mitered with extreme accuracy. The two surfaces on a piece of crown molding that fit flat against the ceiling and wall are at angles that, when added together equal exactly 90°.

Most crown molding has a top rear angle (the section that fits flat against the ceiling) of  $52^{\circ}$  and a bottom rear angle (the section that fits flat against the wall) of  $38^{\circ}$ .

In order to accurately cut crown molding for a 90° inside or outside corner, lay the molding with its broad back surface flat on the saw table.

When setting the bevel and miter angles for compound miters, remember that the settings are interdependent; changing one changes the other, as well. Also keep in mind that the angles from crown molding are very precise and difficult to set exactly. Since it is very easy for these angles to shift slightly, all settings should be tested on scrap molding.



Workpiece lying flat

Settings for standard crown molding lying flat on compound miter saw table (Fig. BB)





Compound cut crown moldings

#### **Bevel / Miter Settings**

KEY	BEVEL SETTING	MITER Setting	TYPE OF CUT	
			Inside corner - Left side	
IL.	33.9°	31.6⁰ Right	<ol> <li>Position top of molding against fence.</li> <li>Miter table set at RIGHT 31.6°.</li> <li>LEFT side is finished piece.</li> </ol>	
		·	Inside corner - <u>Right side</u>	
IR	33.9°	31.6º Left	<ol> <li>Position bottom of molding against fence.</li> <li>Miter table set at LEFT 31.6°.</li> <li>LEFT side is finished piece.</li> </ol>	
	Qutside corner - Left side			
OL	33.9°	31.6° Left	<ol> <li>Position bottom of molding against fence.</li> <li>Miter table set at LEFT 31.6°.</li> <li>RIGHT side is finished piece.</li> </ol>	
	Qutside corner - Right side			
OR	33.9°	31.6° Right	<ol> <li>Position top of molding against fence.</li> <li>Miter table set at RIGHT 31.6°.</li> <li>RIGHT side is finished piece.</li> </ol>	

## MAINTENANCE

## MAINTENANCE

#### DANGER

Never put lubricants on the blade while it is spinning.

## A WARNING

To avoid fire or toxic reaction, never use gasoline, naphtha, acetone, lacquer thinner or similar highly volatile solvents to clean the miter saw.

## A WARNING

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

## **A 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 the original assembly to avoid electrical shock.

#### **REPLACING CARBON BRUSHES (FIG. CC)**

The carbon brushes furnished will last approximately 50 hours of running time, or 10,000 ON / OFF cycles. Replace both carbon brushes when either has less than 1/4" length of carbon remaining, or if the spring or wire is damaged or burned. To inspect or replace brushes, first unplug the saw. Then remove the black plastic cap (1) on the side of the motor (2). **Remove the cap cautiously, because it is springloaded.** Then pull out the brush and replace. Repeat for the other side. To reassemble reverse the procedure. The ears on the metal end of the assembly go in the same hole the carbon part fits into. Tighten the cap snugly, but do not overtighten.

**NOTE:** To reinstall the same brushes, first make sure the brushes go back in the way they came out. This will avoid a break-in period that reduces motor performance and increases wear.



#### LOWER BLADE GUARD

Do not use the saw without the lower blade guard. The lower blade guard is attached to the saw for your protection. Should the lower guard become damaged, do not use the saw until the 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 buildup with a damp cloth.

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

## **A** WARNING

When cleaning the lower guard, unplug the saw from the power source receptacle to avoid unexpected startup.

#### SAWDUST

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

## **A**WARNING

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

#### 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:

**Chop pivot:** light machine oil or aerosol will penetrate from the ends and junction points. A qualified service technician can remove the pivot upstop to relieve tension, and the 2 metric set screws holding the shaft, in order to drive the shaft about 3/4" right. Exposed surfaces are lubricated with automotive type oil.

**Central plvot of plastic 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 excessive oil, to which sawdust will cling.

**Bevel lock handle:** Unscrew the handle assembly and grease the threads.

Link: (which actuates the lower guard movement) may be oiled at the rear pivot, greased at ball bearing contact, and oiled where the link actuates the acetyl roller of the lower guard, if the down chop motion is hard to start.

## TROUBLESHOOTING

## **A**WARNING

To avoid injury from an accidental start, turn the switch OFF and always remove the plug from the power source before making any adjustments.

Consult your Sears Service Center if for any reason the motor will not run.

## **TROUBLESHOOTING GUIDE - MOTOR**

PROBLEM	PROBABLE CAUSE	SUGGESTED CORRECTIVE ACTION	
Brake does not stop blade within 6 seconds	<ol> <li>Motor brushes not sealed or lightly sticking.</li> <li>Motor brake overheated from use of defective or wrong size blade or rapid ON/OFF cycling.</li> <li>Arbor screw loose.</li> <li>Other.</li> </ol>	<ol> <li>Inspect / clean / replace brushes See MAINTENANCE Section.</li> <li>Use a recommended blade. Let cool down.</li> <li>Retighten.</li> <li>Sears Service Center.</li> </ol>	
Motor does not start	<ol> <li>Fuse</li> <li>Brush worn.</li> <li>Other.</li> </ol>	<ol> <li>15-Amp time delay fuse, or circuit breaker.</li> <li>See MAINTENANCE Section.</li> <li>Sears Service Center.</li> </ol>	
Brush spark when switch released.	1. Normal - automatic brake operation.	1. None.	

## **TROUBLESHOOTING GUIDE - SAW OPERATION**

PROBLEM	PROBABLE CAUSE	SUGGESTED CORRECTIVE ACTION
Blade hits table.	1. Misalignment	1. Sears Service Center. See ALIGNMENT Section.
Angle of cut not accurate. Can't adjust miter.	<ol> <li>Miter table locked.</li> <li>Sawdust under table.</li> </ol>	<ol> <li>Squeeze miter spring lock up. See OPERATION Section.</li> <li>Vacuum or blow out dust, WEAR EYE PROTECTION.</li> </ol>
Cutting arm wobble	1. Loose pivot points.	1. See ALIGNMENT Section.
Cutting arm won't fully raise, or blade guard won't fully close	<ol> <li>Part failure.</li> <li>Pivot spring not replaced properly after service.</li> <li>Sawdust build-up.</li> </ol>	<ol> <li>Sears Service Center.</li> <li>Sears Service Center.</li> <li>Clean and lubricate moving parts.</li> </ol>
Blade binds, jams, burns wood.	<ol> <li>Improper operation.</li> <li>Dull blade.</li> <li>Improper blade size.</li> <li>Warped blade.</li> </ol>	<ol> <li>See BASIC SAW OPERATION Section.</li> <li>Replace or sharpen blade.</li> <li>Replace with 10" diameter blade designed for the material being cut.</li> <li>Replace blade.</li> </ol>
Saw vibrates or shakes.	<ol> <li>Saw blade not round.</li> <li>Saw blade damaged.</li> <li>Saw blade loose.</li> <li>Other.</li> </ol>	<ol> <li>Replace blade.</li> <li>Replace blade.</li> <li>Tighten arbor screw.</li> <li>Sears Service Center.</li> </ol>

## **COMPANION COMPOUND MITER SAW**

## **A** WARNING

DADTS HIST FOD FIGURE A

When servicing use only COMPANION replacement parts. Use of any other parts may create a HAZARD or cause product damage.

Any attempt to repair or replace electrical parts on this miter saw may create a HAZARD unless repair is done by a qualified service technician. Repair service is available at your nearest Sears Service Center.

Order by PART NUMBER, not by key number

Key No.	PART NUMBER	Description	Size	Qtv
1 2 3 4 5 6 7	165001010 16933401 16302302 26600MBCE16 16300605 16500601 2617BBLD60	Base Hex wrench Follower plate Pan head tapping screw Fence Warning label Hex soc, head cap screw	M5 x 12-10 M8 x 1.25-45	1 1 1 1 1 1 2
9 10 11 12	165030101 16500901 14704401 2668BZDA23 2606BDLA38	Center shaft Slide plate Angle pointer Pan head screw Hex soc. set screw	M5 x 0.8-8 M6 x 1.0-10	1 3 1 1 1
13 15 16 17 18A 19 20 21 22 23 24 25	2615BBDC22 2615BBDC22 2501NBDN12 16501701 16501801A1 16502001 16302504 2601BBDA76 2501MBDN08 2705FBD108 16502501 2602BBLA39	Hex head screw & washer Hex head screw & washer Flat washer Washer Handle Coil spring Table Hex head bolt Flat washer Nut chuck Needle pointer Hex soc, head cap bolt	M6 x 1.0-20 M6 x 1.0-20 1/4 x 5/8 - 1/16 M10 x 1.5-65 8 x 16-2.5 M8 x 1.25 T=8 M6 x 1.0.12	2   
26 27 28 29 30 31 32 33 34 35 36 37	16502701 16502801 2602BBLB43 2701FBD106 16503101 2501NBDN40 2705FBD112 16503401 2574B55R02 16503601 2701FBD106 2603BBLA42	Anchor block Pivot shaft Hex soc head cap bolt Hex nut Angle regulator Flat washer Nut chuck Bracket stop O-Ring rod Shaft Hex nut Hex soc set screw	M6 x 1.0-30 M6 x 1.0 T=5 1/2 x 1-3/64 M12 x 1.75 T=12 P5 M6 x 1.0 T=5 M6 x 1.0-25	1 1 2 2 1 1 1 1 2 2
38 39 40 41A 42 43 44 45 46 47 48	2501NBDN32 2705FBD110 2501MBDN26 16304201A1 2701FBD106 2601BBDA41 2701FBD105 2502ABC417 16600801 16302402 2668BBDA08	Flat washer Nut chuck Flat washer Locking handle assembly Hex nut Hex head bolt Hex nut Spring washer Knob handle Table insert Pan head screw	3/8 x 29/32-5/64 M10 x 1.5 T=10 10 x 20-1 M6 x 1.0 T=5 M6 x 1.0-20 M5 x 0.8 T=4 6 M4 x 0.7-10	- 1 1 1 1 5 1 1 1 4

#### 137.245130

## **COMPANION COMPOUND MITER SAW**

## **FIGURE A**



# PARTS

## COMPANION COMPOUND MITER SAW

## 137.245130

#### PARTS LIST FOR FIGURE B

Key No.	PART NUMBER	Description	Size	Qty
49 50 51 52 53 54	2607BBLW55 16930402 14930201 16510401 16510501 16510601	Hex washer head bolt Arbor collar Blade Shaft sleeve Torsion spring Housina	M8 x 1.25-20	1 2 1 2 1
55 56 57	2642BEDA49 16510801 2636BBDA40	Truss head round neck screw Lever Count head screw	M6 x 1.0-10	2
58 59 60A 61	2660PBCK14 16511101 16511202A1 16821601	Pan head tapping screw Collar PC guard assembly Spring guard	M4 x 18-16	3
62 63	2636BBDA24 16511501	Cover plate screw Cutter shaft auard	M5 x 0.8-12	1
64 65A 66 67	2705FBD106 8396529121 16511804 16211001	Nut chuck Motor Trade mark label Bumper	M6 x 1.0 T=6	
68 69 70 71	2690MZA104 2603BBLA38 16512201 16512301	Blind rivet Hex soc set screw Shim Anchor block	3/16-17/32 M6 x 1.0-10	
72 73A 74	2602BBLA39 16933301A1 16512605	Hex soc head cap bolt Dust bag assembly Label	M6 x 1.0-12	 
75 <u>76</u>	2501MBDN06 16512901	Flat washer Bracing plate	6 x 13-1	1
// 78 79 80	2653MBDE11 2855E55616 17609301 16520401	Truss head tapping screw Trigger switch Spring Button switch	M4 x 16-12	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
81 82	2660PBCK23 16520701	Pan head tapping screw Handle cover	M4 x 18-25	5 1
83 84 85 86 87	2653MBDE15 83990121 83990141 2807BS08Y5 2805U5HN16	Truss head tapping screw Cord clamp Cord guard Power cable Terminal	M4 x 16-20	2 1 1 1 1
88 89 90 91 92	16530101A1 2671QZDK36 16530401 16530501 2668BBDAA8	Stop block Wing nut Table bracket Extension wing rod Screw	M9 × 1 25 20	1 1 2 2
*	137245130001	Instruction manual	M6 X 1.25-20	1
* Optional A	Accessories - Quick clamp as 16230201 16230302 16230903 16231701 16540501	sembly Foot pad Foot disc Clamp knob Clamp arm Clamp rod		
	2603BBLA38 16300101	Socket set screw Clamp bolt	M6 x 1.0-10 M5 x 0.8-15	1

\* Not shown N/A Not applicable

26

## **COMPANION COMPOUND MITER SAW**



For in-home major brand repair service: Call 24 hours a day, 7 days a week **1-800-4-MY-HOME**<sup>™</sup> (1-800-469-4663) Para pedir servicio de reparación a domicilio - 1-800-676-5811 In Canada for all your service and parts needs call - 1-800-665-4455 Au Canada pour tout le service ou les pièces For the repair or replacement parts you need: Call 6 a.m. - 11 p.m. CST, 7 days a week PartsDirect\* 1-800-366-PART (1-800-366-7278) Para ordenar piezas con entrega a domicilio - 1-800-659-7084 For the location of a Sears Service Center in your area: Call 24 hours a day, 7 days a week 1-800-488-1222 To purchase or inquire about a Sears Maintenance Agreement: Call 7 a.m. - 5 p.m. CST, Monday - Saturday 1-800-827-6655 Companion