Model # CMS814UL 8-1/4" Compound Miter Saw INSTRUCTION MANUAL



Thank you for purchasing this Model CMS814UL Compound Miter Saw. This manual provides important information on properly operating and maintaining this Model CMS814UL Compound Miter Saw. Every effort has been made to ensure the accuracy of this manual. We reserve the right to change this product at any time without prior notice.

This manual contains important information regarding safety, operation, maintenance and storage of this product. Before use, read carefully and understand all warnings, cautions, instructions and labels. Failure to do so could result in serious personal injury, property damage or even death.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

STOP!

DO NOT RETURN THIS TOOL TO THE RETAILER.

Questions? Problems? CONTACT CUSTOMER SERVICE.

If you experience a problem or need to return this product for repair, call our customer help line at 1-888-287-6981, Monday-Friday, 8 AM - 4 PM Central Time. A copy of the sales receipt is required.

Model CMS814UL Compound Miter Saw



FEATURES:

- Cross Cuts Up To 2" High Or 4 3/4" Wide At 90°
 Miter Up To 2" High Or 3 3/8" Wide At 45°
 Bevels Up To 1 3/8" High Or 4 3/4" Wide

- Includes 1-24 Tooth Carbide Tip Saw Blade

SPECIFICATIONS

Rated Current 10.5 AMP / 1200 Watts

Rated Voltage 120V / 60 Hz

No-Load Speed 5,000 RPM No-Load

5/8" Bore 8 1/4" Blade Diameter

FOR CONSUMER USE ONLY - NOT FOR PROFESSIONAL USE

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RECOGNIZE SAFETY SYMBOLS, WORDS AND LABELS

What You Need to Know About Safety Instructions

Warning and Important Safety Instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution and care must be exercised when operating or cleaning tools and equipment.

Always contact your dealer, distributor, service agent or manufacturer about problems or conditions you do not understand.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.



NOTE provides additional information that is useful for proper use and maintenance for this tool. If a NOTE is indicated make sure it is fully understood.

AWARNING

Keep your work area clean and well lit. Cluttered work benches and dark work areas may cause accidents or injury.

Do not operate power tools in explosive areas, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.

Keep bystanders, children and visitors away while operating a power tool. Distractions can cause you to lose control.

AWARNING

Double insulated tools are equipped with 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 a polarized outlet. Do not change the plug in any way. Double insulation eliminates the need for the three wire grounded power cord and grounded power supply system.

Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.

Do not abuse the cord. Never use the cord to carry the tool or pull the plug from an outlet. Keep the cord away from heat, oil, sharp edges, or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

When operating the tool outside, use an outdoor extension cord marked "WA" or "W." These cords are rated for outdoor use and reduce the risk of electric shock. Make sure the extension cord being used is in good condition. If there are any cuts or nicks (no matter how deep) in the insulation, DO NOT use that cord. Also, make sure the extension cord is heavy enough to carry the current needed. DO NOT use small "around-the-house" lamp extension cords. These cords can easily overheat and/or catch fire when used with power tools.

A CAUTION

Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.

Do not use the tool if the power switch does not turn it "ON" or "OFF". Any tool that cannot be controlled with the switch is dangerous and must be repaired.

Disconnect the power cord plug from the power source before making any adjustments, changing accessories or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.

Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.

A DANGER

People with pacemakers or other electronic devices should consult with a physician before operating this product. Interruption or failure of the pacemaker could occur when electrical equipment is operated within close proximity of electrical devices.

▲ WARNING

Wash hands after handling the power cord. Touching the power cord could expose you to lead, which is known in the State of California to cause cancer, birth defects and other reproductive harm.

AWARNING

All work areas should be clean and well lit. Accidents are more likely to occur in poorly lit and cluttered areas.

AWARNING

Keep children, and other distractions at a distance while operating power tools.

▲ WARNING

Keep the power cord in good condition, and replace damaged cords immediately. Do not use the cord to pull the plug from the outlet. Keep the cord away from materials and surfaces that could damage cords. The risk of electric shock increases when the power cord is damaged.

▲ WARNING

Always use the appropriate extension cord, making sure it is rated for use with power tools. Always be sure the extension cords are in good condition, free of cuts or nicks in the insulation. If using the power tool in an outside area with an extension cord, make sure the cord is rated for outdoor use.

▲ WARNING

Do not make contact with a grounded surface while using this power tool. Contact with surfaces like pipes, radiators or major appliances increases your risk of electric shock.

WARNING

Use common sense while operating this power tool.

Do not use this tool if you are:

- Feeling tired or are under the influence of alcohol or drugs.
- Wearing loose clothing or jewelry. Keep long hair pulled back and away from moving parts.
- Overreaching or have improper footing. Handling the tool in this way could cause serious injury.

When using this power tool always:

- Wear the proper safety equipment, such as safety goggles, dust masks, non-skid shoes, etc.
- Check to be sure all adjusting keys or wrenches have been removed before starting the power tool.
- Check to be sure the power switch is in the "OFF" position before plugging the power tool into an electrical outlet.

▲ CAUTION

Follow these steps to maintain safe working conditions and good working condition of power tools. Improper care can result in electric shock or serious injury.

- Secure and support the work piece using clamps. Do not use your hands to hold the piece in place.
- Use the correct tool for the job. Using the correct tool is safer and faster.
- Make sure the power switch is in good working order. If the power switch no longer turns the tool "ON" or "OFF", discontinue use, and have the tool replaced or repaired.
- Remove the power cord from the power source before storage, changing accessories, or moving the tool.
- Keep out of reach of children, or any untrained person. Store tools in a safe and dry place.
- Keep tools clean, and cutting tools sharp. Maintaining tools with proper care will increase the life of the power tool, and reduce the risk of injury.
- Check to be sure all moving parts are free from binding and are properly aligned.
- Use only accessories that are recommended by the manufacturer for your tool model.
- Hold the tool by the insulated grip when using in an area where contact with a "live" wire is a possibility.

AWARNING

Safety glasses and ear protection must be worn during operation.

SERVICE

Tool service must be performed only by qualified repair personnel. Service or maintenance by unqualified personnel could result in a risk of injury.

When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of shock or injury.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

This manual contains important information regarding safety, operation, maintenance and storage of this product. Before use, read carefully and understand all warnings, cautions, instructions and labels. Failure to do so could result in serious personal injury, property damage or even death.

IMPORTANT SAFETY INSTRUCTIONS

▲ WARNING

Before using you need to become familiar with the operation of the tool. If you are unsure about the operation of the tool, or have any questions about the proper use of the tool, call the Customer Service Department at 1-888-287-6981.

Follow these instructions for safe handling of the tool:

- Always secure and support the work piece using clamps. Do not use your hands to hold the piece in place.
- Do not use solvents containing carbon tetrachloride, ammonia or acetone to clean the tool. Never use gasoline, paint thinner, or other caustic chemicals that can damage the plastic parts of the tool.
- Always use the appropriate safety gear when operating this tool. Including but not limited, to goggles, dust mask or respirator. Always work in a well-ventilated area to reduce your exposure to harmful chemicals and dust particles.

SPECIFIC SAFETY RULES AND/OR SYMBOLS

SYMBOLS

The following symbols may be used on your tool. Be familiar with and learn the symbols to operate the tool safely.

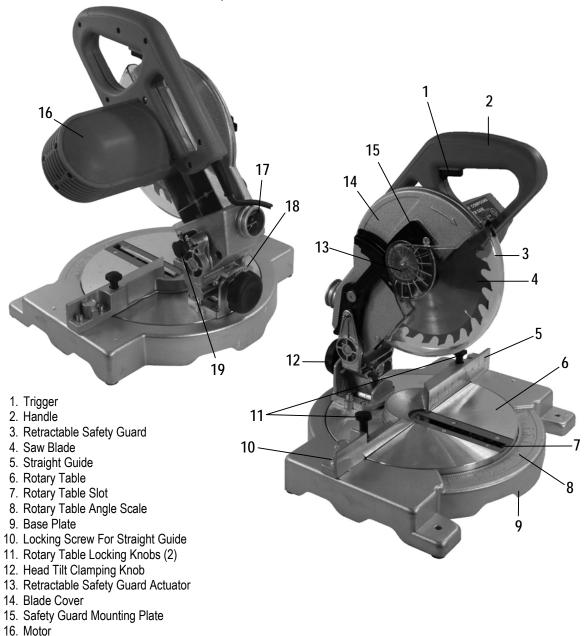
Symbol	Name	Description
V	Volts	Voltage (Potential)
Α	Amperes	Current
Hz	Hertz	Frequency (Cycles per Second)
W	Watt	Power
Kg	Kilograms	Weight
>	Alternating Current	Type of Current
	Direct Current	Type of Current
7	Alternating or Direct Current	Type of Current
(19)	Earthing Terminal	Grounding Terminal
	Class II Construction	Denotes Double Insulation
min	Minutes	Time
S	Seconds	Time
ф	Diameter	Size of Drill Bits, Grinding Wheel Bits, etc.
$n_{_{\scriptscriptstyle 0}}$	No Load Speed	No-load Rotational Speed
/min	Revolutions per Minute	Revolutions, Surface Speed, Strokes, etc per Minute
1,2,3	Ring Selector Settings	Speed, Torque or Position Settings

PACKAGE CONTENTS

- · Compound Miter Saw
- 8-1/4" Saw Blade

COMPONENTS

Observe the locations and functions of the various components and controls of this tool.



17. Dust Extraction Port18. Tilt Angle Scale19. Lock Pin

A WARNING

Unplug the power plug from the AC power source before assembly, adjustments, or adding/removing accessories.

A CAUTION

Some woods contain preservatives such as copper chromium arsenate (CCA) that can be toxic. Extra care should be taken to avoid inhalation of particles and dust. Minimize skin contact by wearing appropriate safety gear such as ANSI-approved dust mask, gloves and eye protection.

Make sure the saw blade is mounted properly before using this saw. Check to make sure the blade is tightly connected, balanced, and not bent or cracked.

Do not remove or alter the safety devices on this saw. Doing so is both dangerous and voids the warranty.

INSTALLING OR REPLACING THE BLADE

Disconnect the power from the power source. Remove the 2 screws from the guard mounting plate (A, Figure 1), and then remove the retractable safety guard (B). Press the blade-locking lever and undo the blade-retaining bolt.

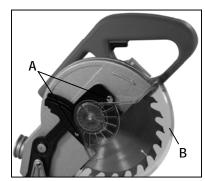


Figure 1

OPERATION

MAKING A STRAIGHT CUT

NOTE

Unpack product from package and review contents. Keep all packaging until product has been reviewed.

Connect the miter saw to the outlet and make sure the cable is clear of the saw blade and base plate.

Place the material (A, Figure 2) on the machine bed and place it tight against the straight guide, assuring that it doesn't move during the cut. If necessary, use clamps to hold it in place.

Press the trigger on the handle to start the motor, allowing the saw blade to run up to full speed before cutting.

Once the blade has reached full speed, move the saw blade down into the material, exerting only enough pressure to cut. Let the saw do the work. Excessive pressure may damage the saw and may lead to personal injury should the material or saw break.

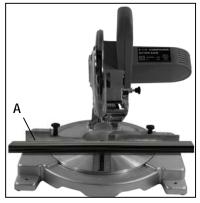


Figure 2

MAKING MITER CUTS, BEVEL CUTS, AND COMPOUND CUTS

To make miter cuts, loosen the two rotary table-locking knobs (A) and move the rotary table to the desired angle, then retighten the knobs. Figure 2 shows the rotary table at a 45° angle.

Bevel cuts are achieved by moving the saw from a normal 90° perpendicular position down to a 45° angle from the horizontal position.

Turn the Head Tilt Clamping Knob (A, Figure 3) and tilt the saw head to the desired angle and retighten the knob.

NOTE: Bevel cuts can only be made to the left only. (Figure 4)

Using the miter and bevel cutting feature simultaneously makes compound angle cuts possible.

Figure 5 shows the saw and rotary table set to a 45° angle.



Figure 2



Figure 3



Figure 4



Figure 5

MACHINE SETTINGS

The 0° settings on this saw are set at the factory but may need adjustment after prolonged use.

Before checking the angles, unplug the saw from its power source.

To confirm the 0° rotary table setting, set the rotary table at 0°. Check the angle between the straight guide and blade to ensure it is 90° by using a speed square (not included). If the angle requires adjustment, loosen the straight guide clamp screws (A, Figure 6) and align the straight guide against the speed square before retightening.

Check the angle of the blade to the face of the rotary table to confirm it is 90°. If necessary, adjust the angle by adjusting the setscrew (A, Figure 7). When the proper angle is achieved, tighten the locknut (B, Figure 7).

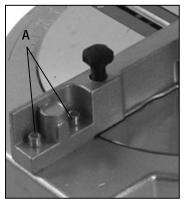


Figure 6

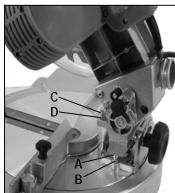


Figure 7

Use a 45°-miter gauge or set square to check the accuracy of the tilt angle. If necessary, loosen the setscrew (C, Figure 7), adjust to the correct angle, and then tighten the locknut (D, Figure 7).

TIPS TO AVOID KICKBACK

AWARNING

Be prepared for kickback when using the saw. Kickback may cause the saw to jump backwards, and cause serious injury to the user.

▲ WARNING

Using the saw to cut imperfect, wet or warped material may cause kickback.

Kickback can occur when the saw blade becomes misaligned, pinched or bound, which causes the saw to lift up and out of the work piece, and move toward the operator. Using the tool correctly can reduce the risk of kickback. Observe the following procedures to reduce the risk of kickback:

- When the saw blade becomes bound, or the cut begins to be interrupted, release the trigger & hold the saw in place until the saw blade stops moving.
- When restarting a cut in the work piece, center the saw blade in the cut, and make sure it is NOT touching the work piece.
- Do not begin the cut until the saw blade has reached its full speed.
- Always support large pieces of material with saw horses or clamps. Large pieces can sag under their own weight, and can cause the saw blade to bind while making the cut.
- Always use new saw blades. Old or damaged saw blades may cause excessive friction on the work piece, and increase the risk of kickback.
- Do not make saw blades adjustments during the cut. Check that the bevel and depth adjustments are set and secure before beginning.
- Cut depth should always be set for no more than 1/8" to 1/4" larger than the thickness of the material to be cut. Always expose as little of the saw blade as possible.

MAINTENANCE

AWARNING

Disconnect the power supply before cleaning. Wear safety eyewear before cleaning. Used compressed dry air to blow off dust and debris. Use a soft bristle brush if compressed air is not available.

CAUTION

Applying excessive force to the tool can overload the motor, decrease the life and increase the wear on the tool.

Some chemicals can damage the product. Do not use harsh chemicals such as gasoline, carbon tetrachloride, paint thinner, etc. to clean this product.

CAUTION

A qualified repair technician must perform any tool service or repair. Service or maintenance performed by unqualified personnel could result in injury. Use only identical replacement parts. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

▲ WARNING

Do not make contact with a grounded surface while using this power tool. Contact with surfaces like pipes, radiators or major appliances increases your risk of electric shock.

Keep the air vents unclogged to prevent overheating. Remove dust and debris from the machine on a regular basis. Lubricate all moving parts on a regular basis. Never use caustic agents to clean this machine.

ACCESSORIES

Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used on another tool.

If you must use an extension cord, be sure that the gauge is large enough to carry the amount of current necessary for your power tool. If not, your tool may experience a loss of power, excessive voltage drop or overheating. The smaller the gauge number, the heavier the cord.

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