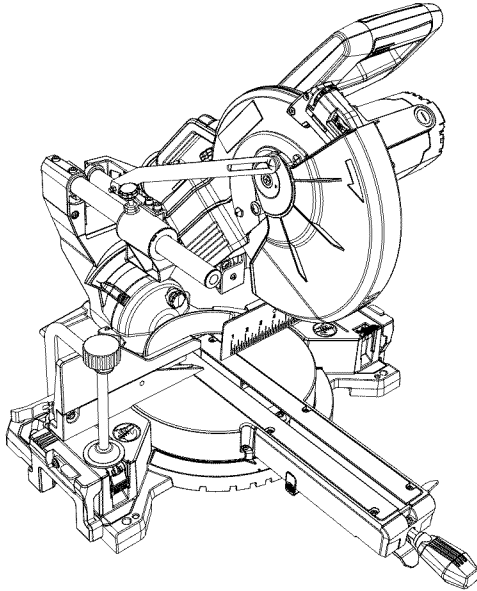


Operator's Manual

CRAFTSMAN

10 IN. COMPACT SLIDE MITER SAW Model No. 137.407530



C US

CAUTION:

Before using this Miter Saw, read this manual and follow all its Safety Rules and Operating Instructions

- Safety Instructions
- Assembly
- Operation
- Maintenance
- Parts List

**Customer Help Line
For Technical Support
1-800-843-1682**

**Sears Parts &
Repair Center
1-800-488-1222**

Sears Brands Management Corporation Hoffman Estates, IL 60179 USA
See the full line of Craftsman® products at craftsman.com
Click on the Craftsman Club® link and join today!
Part No. 137407530001

Printed in China

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WARRANTY

CRAFTSMAN ONE YEAR FULL WARRANTY

FOR ONE YEAR from the date of purchase, this product is warranted against defects in material or workmanship. A defective product will receive free repair or replacement if repair is unavailable. For warranty coverage details or to obtain free repair or replacement, visit the web page: www.craftsman.com/warranty

This warranty does not cover the blade, which is an expendable part that can wear out from normal use within the warranty period. This ONE YEAR warranty is void if this product is ever used while providing commercial services or if rented to another person. For 90 DAY commercial and rental use terms, see the Craftsman warranty web page. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Sears Brands Management Corporation, Hoffman Estates, IL 60179

CALIFORNIA PROPOSITION 65

WARNING

Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints,
- Crystalline silica from bricks, cement and other masonry products, and
- Arsenic and chromium from chemically treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. Avoid prolonged contact with dust from power sanding, sawing, grinding, drilling, and other construction activities. Wear protective clothing and wash exposed areas with soap and water. Allowing dust to get into your mouth, eyes, or lay on the skin may promote absorption of harmful chemicals.

PRODUCT SPECIFICATIONS

MOTOR:

Power Source	120V AC, 60 Hz, 15 Amp
Speed	4800 RPM (No load)
Electric Brake	Yes
Double Insulated	Yes
Arbor Shaft Size	5/8 in.

BLADE:

Diameter	10 in.
Arbor Hole	5/8 in.

MITER SAW:

Miter Detent Stops	0°, 15°, 22.5°, 31.6°, 45° Right & Left
Bevel Positive Stops	0°, 33.9°, 45° Left

CUTTING CAPACITY:

Crosscut (Maximum Height)	3-1/2 in. x 11-1/2 in.
Crosscut (Maximum Width)	2-1/2 in. x 12-1/2 in.
Miter 45° Right & Left	3-1/2 in. x 8 in.
Bevel 45° Left	1-3/4 in. x 11-1/2 in.
45° Miter and 45° Bevel Left	1-3/4 in. x 8 in.
Crown Molding Nested	5-3/4 in.
Base Molding Against Fence	3-1/2 in.

WARNING

To avoid electrical hazards, fire hazards or damage to the tool, use proper circuit protection. This tool is wired at the factory for 110-120 Volt operation. It must be connected to a 110-120 Volt / 15 Ampere 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. Before using your tool, it is critical that you read and understand these safety rules. Failure to follow these rules could result in serious injury to you or damage to the tool.

SYMBOLS

WARNING ICONS

Your power tool and its Operator's Manual may contain "WARNING ICONS" (a picture symbol intended to alert you to, and/or instruct you how to avoid, a potentially hazardous condition). Understanding and heeding these symbols will help you operate your tool better and safer. Shown below are some of the symbols you may see.



SAFETY ALERT: Precautions that involve your safety.



PROHIBITION



WEAR EYE PROTECTION: Always wear safety goggles or safety glasses with side shields.



WEAR RESPIRATORY AND HEARING PROTECTION: Always wear respiratory and hearing protection.



READ AND UNDERSTAND INSTRUCTION MANUAL: To reduce the risk of injury, user and all bystanders must read and understand instruction manual before using this product.



KEEP HANDS AWAY FROM BLADE: Failure to keep your hands away from the blade will result in serious personal injury.



SUPPORT AND CLAMP WORK



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.


POWER TOOL SAFETY




GENERAL SAFETY INSTRUCTIONS BEFORE USING THIS POWER TOOL

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

WARNING

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

-  **1. READ** and become familiar with the entire Operator's Manual. **LEARN** the tool's application, limitations and possible hazards.
- 2. KEEP GUARDS IN PLACE** and in working order.
- 3. 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.
- 5. DO NOT USE IN DANGEROUS ENVIRONMENTS.** Do not use power tools in damp locations, or expose them to rain or snow. Keep work area well lit.
- 6. KEEP CHILDREN AWAY.** All visitors and bystanders should be kept a safe distance from work area.
- 7. MAKE WORKSHOP CHILD PROOF** with padlocks, master switches or by removing starter keys.
- 8. DO NOT FORCE THE TOOL.** It will do the job better and safer at the rate for which it was designed.
- 9. USE THE RIGHT TOOL.** Do not force the tool or an attachment to do a job for which it was not designed.
- 10. USE PROPER EXTENSION CORDS.** Make sure your extension cord is in good condition. When using an extension cord, be sure to use the one heavy enough to carry the current that the product will draw. An undersized cord will result in a drop in line voltage and in loss of power which will cause the tool overheat. The table on page 11 shows the proper wire gauge size usage to each extension cord length and 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.  **ALWAYS WEAR EYE PROTECTION.** Any power tool can throw foreign objects into the eyes and 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 injure you when they break.
13.  **WEAR A FACE MASK OR DUST MASK.** Sawing operation produces dust.
14.  **SECURE WORK.** Use clamps or a vice to hold work when practical. It is safer than using your hand and it frees both hands to operate the tool.
15. **DISCONNECT TOOLS FROM POWER SOURCE** before servicing, and when changing accessories such as blades, bits and cutters.
16. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure switch is in the OFF position before plugging the tool in.
17. **USE RECOMMENDED ACCESSORIES.** Consult this Operator's Manual for recommended accessories. The use of improper accessories may cause risk of injury to yourself or others.
18. **NEVER STAND ON THE 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 THE TOOL RUNNING UNATTENDED. TURN THE POWER "OFF".** Do not walk away from a running tool until the blade comes to a complete stop and the tool is unplugged from the power source.
21. **DO NOT OVERREACH.** Keep proper footing and balance at all times. **NEVER** reach across the path of the cutting blade while tool is in operation.


22. **MAINTAIN TOOLS WITH CARE.**

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

23. **DO NOT** use power tool in presence of flammable liquids or gases.

24. **DO NOT** operate the tool if you are under the influence of any drugs, alcohol or medication that could affect your ability to use the tool properly.

25. **WARNING:** Dust generated from certain materials can be hazardous to your health. Always operate saw in well-ventilated area and provide for proper dust removal.

26.  **DANGER** People with electronic devices, such as pacemakers, should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.

27.  **WEAR HEARING PROTECTION** to reduce the risk of induced hearing loss.

COMPOUND MITER SAW SAFETY

SPECIFIC SAFETY INSTRUCTIONS FOR THIS COMPOUND MITER SAW

- DO NOT** operate the miter saw until it is completely assembled and installed according to these instructions.
- IF YOU ARE NOT** thoroughly familiar with the operation of miter saws, seek guidance from your supervisor, instructor or other qualified person.
- ALWAYS** hold the work firmly against the fence and table. **DO NOT** perform any operation free hand (use clamp wherever possible).
- KEEP HANDS** out of the path of the saw blade. If the workpiece you are cutting would cause your hands to be within 7.5 in. of the saw blade, the workpiece should be clamped in place before making the cut.
- BE SURE** the blade is sharp, runs freely and is free of vibration.
- ALLOW** the motor to come up to full speed before starting a cut.
- KEEP THE MOTOR AIR SLOTS CLEAN** and free of chips or dust.
- ALWAYS MAKE SURE** all handles are tight before cutting, even if the table is positioned in one of the positive stops.
- BE SURE** both the blade and the collar are clean and the arbor bolt is tightened securely.
- USE** only blade collars specified for your saw.
- NEVER** use blades larger in diameter than 10 inches.
- NEVER** apply lubricants to the blade when it is running.
- ALWAYS** check the blade for cracks or damage before operation. Replace a cracked or damaged blade immediately.
- NEVER** use blades recommended for operation at less than 4800 RPM.
- ALWAYS** keep the blade guards in place and use at all times.
- NEVER** reach around the saw blade.
- MAKE SURE** the blade is not contacting the workpiece before the switch is turned ON.
- IMPORTANT:** After completing the cut, release the trigger and wait for the blade to stop before returning the saw to the raised position.
- 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.
- NEVER** cut metals or masonry products with this tool. This miter saw is designed for use on wood and wood-like products.

21. **NEVER** cut small pieces. If the workpiece being cut would cause your hand or fingers to be within 7.5 in. of the saw blade the workpiece is too small.
22. **PROVIDE** adequate support to the sides of the saw table for long work pieces.
23. **NEVER** use the miter saw in an area with flammable liquids or gases.
24. **NEVER** use solvents to clean plastic parts. Solvents could possibly dissolve or otherwise damage the material.
25. **SHUT OFF** the power before servicing or adjusting the tool.
26. **DISCONNECT** the saw from the power source and clean the machine when finished using.
27. **MAKE SURE** the work area is clean before leaving the machine.
28. **SHOULD** any part of your miter saw be missing, damaged, or fail in any way, or any electrical component fail to perform properly, lock the switch and remove the plug from the power supply outlet. Replace missing, damaged, or failed parts before resuming operation.
29. Because of the downward cutting motion, your safety requires that you stay very alert to keeping hands and fingers away from the path that the blade travels.
30. Be sure all guards are in place and working. If a guard seems slow to return to its normal position or “hangs-up”, adjust or repair it immediately. Be alert at all times - especially during repetitive, monotonous operations. Don't be lulled into carelessness due to a false sense of security. Blades are extremely unforgiving. Clean the lower guard frequently to help visibility and movement. Unplug before adjustment or cleaning.
31. Abrasive cut-off wheels should not be used on miter saws. Miter saw guards are not appropriate for abrasive cut-off wheels.
32. To avoid loss of control or placing hands in the path of the blade, hold or clamp all material securely against the fence when cutting. Do not perform operations freehand.
33. Support long material at the same height as the saw table.
34. After completing a cut, release the trigger switch and allow the blade to come to a complete stop, then raise the saw blade from the workpiece.
35. Lock the miter saw head in the down position during transport or when not in use.
36. **DRY RUN** - It is important to know where the blade will intersect with the workpiece during cutting operations. Always perform a simulated cutting sequence with the power tool switched OFF to gain an understanding of the projected path of the saw blade. At some extreme angles, the right or left side fence might have to be removed to ensure proper clearance prior to making a cut.

ELECTRICAL REQUIREMENTS AND SAFETY

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 3.

⚠ WARNING

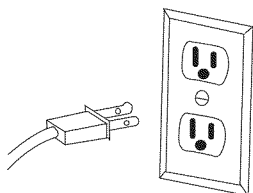
To avoid electrical hazards, fire hazards, or damage to the tool, use proper circuit protection. Your saw is wired at the factory for 120 V operation. Connect to a 120 V, 15 A circuit and use a 15 A time delay fuse or circuit breaker. To avoid shock or fire, if power cord is worn or cut, or damaged in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

ELECTRICAL REQUIREMENTS – DOUBLE INSULATED

The power tool is double insulated to provide a double thickness of insulation between you and 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.

⚠ WARNING

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

To avoid electrocution:

1. Use only identical replacement parts when servicing a tool with double insulation. Servicing should be performed by a qualified technician.
2. Do not use power tools in wet or damp locations or expose them to rain or snow.

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 120 V, 15 A circuit with a 15 A 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 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 GUIDE.**

3. If the tool suddenly stalls while cutting wood, release the trigger switch, unplug the tool, and free the blade from the wood. The saw may now be started 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, the voltage at motor terminals must equal the voltage specified on the nameplate.
 - c. **IMPROPER** or dull saw blades are used.
5. 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 supply circuit if the motor doesn’t run well. Check minimum gauge for the length of cord you are using on the chart below.

GUIDELINES FOR EXTENSION CORDS

Use a 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 a #12 wire with a 20 A time-lag fuse or a #14 wire with a 15 A time-lag fuse. **NOTE:** When using an extension cord on a circuit with a # 14 wire, the extension cord must not exceed 25 feet in length. Before connecting the tool 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.

MINIMUM GAUGE FOR EXTENSION CORDS (AWG)				
(When usng 120 volts only)				
Ampere Rating		Total length of Cord		
More Than	Not More Than	25ft.	50ft.	100ft. 150ft.
0	6	18	16	16 14
6	10	18	16	14 12
10	12	16	16	14 12
12	16	14	12	Not Recommended

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.

ACCESSORIES AND ATTACHMENTS

RECOMMENDED ACCESSORIES

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 in. 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.
- 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.

ACCESSORIES

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

WARNING

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

BLADE INFORMATION

- Always use a crosscut blade that is designed for cutting across the wood grain. NEVER use Rip, Combination, Plywood, Dado or Abrasive type saw blades at any time
- Always use a 10 in. diameter blade with either a 5/8" arbor hole, speed rating must be at least 4800 RPM.
- Read and understand all instructions provided with each blade before using on this miter saw.

There are two main materials used for saw blades; high-speed steel (HSS) and carbide tipped (TCT). While the HSS blades are generally less expensive than carbide tipped, TCT blades will stay sharper longer than HSS. As a general rule the more teeth per inch (TPI) the smoother the cut. Please read the information provided on the blade for more details for their use.

General Purpose Wood Cutting: 24 - 40 TPI

Fine Woodworking Cutting: 60 - 80 TPI

Non-ferrous Metal Cutting:

Use only special blades designed for cutting this type of material.

Plastic Cutting:

Use only special blades designed for cutting plastic.

NOTE: When cutting non-ferrous or plastic, be sure to clean up completely after each use. Take special care with metal shavings after each cut, these can cause damage to the table top. ALWAYS WEAR EYE PROTECTION.

TOOLS NEEDED FOR ASSEMBLY

Supplied



Blade Wrench

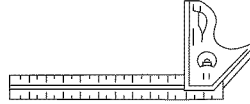
Not supplied



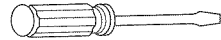
Adjustable Wrench



Phillips Screwdriver



Combination Square



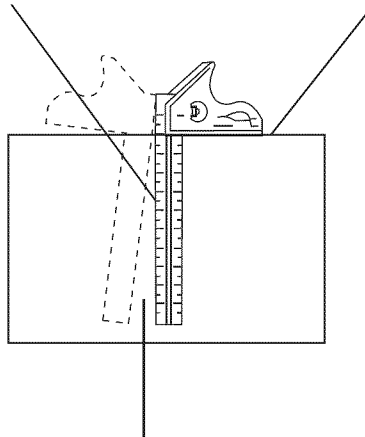
Slotted Screwdriver

COMBINATION SQUARE MUST BE TRUE

Should not gap or overlap when square is flipped over (see dotted figure).

Draw light line on board along this edge.

Straight edge or a 3/4 in. board, this edge must be perfectly straight.



Should not gap or overlap when square is flipped over (see dotted figure).

CARTON CONTENTS

UNPACKING YOUR MITER SAW

WARNING

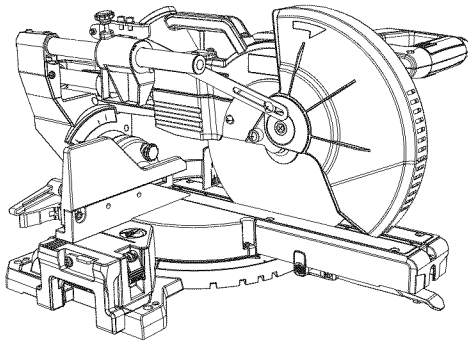
To avoid injury from unexpected starting or electrical shock, do not plug the power cord into a source of power during unpacking and assembly. This cord must remain unplugged whenever you are working on the saw.

1. Remove the miter saw from the carton.
IMPORTANT: Do not lift miter saw by the trigger switch handle. It may cause misalignment. Lift machine by the built-in carry handle.

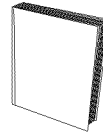
2. Place the saw on a secure stationary work surface.
3. Separate all parts from the packing material. Check each one with the illustration to make certain all items are accounted for before discarding any packing material.

WARNING

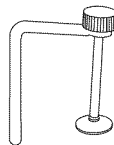
If any part is missing or damaged, do not attempt to assemble the miter saw, or plug in the power cord until the missing or damaged part is correctly replaced. To avoid electric shock, use only identical replacement parts when servicing double insulated tools. Call 1-800-4-MY-HOME® for replacement parts.



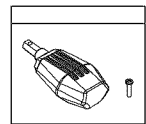
Miter Saw



Operator's Manual



Hold-Down Clamp



Miter Handle
Hardware Bag

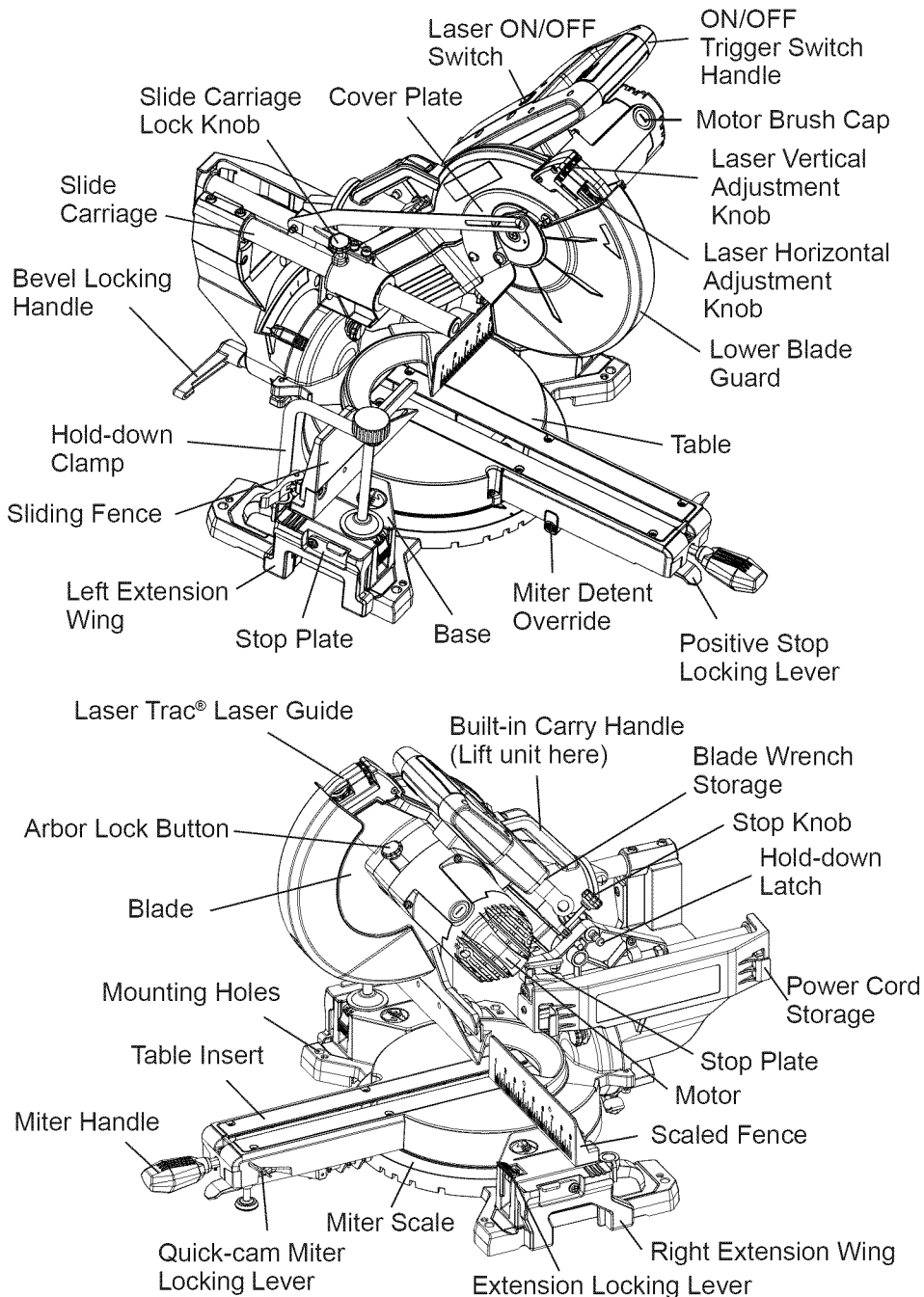


Dust Bag



Blade Wrench

KNOW YOUR SLIDING COMPOUND MITER SAW



GLOSSARY OF TERMS

AMPERAGE (AMPS) – A measure of the flow of electric current. Higher ratings generally means the tool is suited for heavier use.

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

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

BEVEL LOCKING 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.

CARBIDE TIPPED – Extremely hard steel pieces with sharp cutting edges fastened to cutting tools such as saw blades.

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

EXTENSION CORD – An electric cord used between power tools and outlets to extend the range of the tools. The more amperage your tool uses, the longer the distance, the larger the size of the wire needed in your extension cord.

EYE PROTECTION – Googles or spectacles intended to protect your eyes. Eye protection should meet the requirements of ANSI Z.87.1 (USA) or CSA Z94.3-M88 (Canada).

FACE SHIELD – An impact resistant shield that helps to protect your face from chips, sparks, small debris. Should only be used in conjunction with additional eye protection.

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

GUARD – Protective device that forms a barrier between a hazardous object such as a blade, wheel or cutter and the operator.

HOLD-DOWN LATCH – Locks the miter saw in the lowered position for compact storage and transportation.

INSTRUCTION OR OPERATOR'S MANUAL – Booklet accompanying your power tool that describes the hazards and safe operation procedures, outlines basic tool operation, care and maintenance.

MITER HANDLE – Used to rotate the table, and to rotate the saw to a right or left cutting position.

MITER SCALE – Measures the miter angle of the saw blade. Positive stop index points have been provided at 0°, 15°, 22.5°, 31.6° and 45° right and left.

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

ON/OFF TRIGGER SWITCH – To start the tool, squeeze the trigger. Release the trigger to turn off the miter saw.

POSITIVE STOP LOCKING LEVER – Locks the miter saw at a preset positive stop for the desired miter angle.

SWITCH HANDLE – The switch handle contains the trigger switch and the laser on/off 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 LABELS – Read and understand for your own safety. Make sure all labels are present on machine and legible.

BLADE WRENCH STORAGE – Convenient storage to prevent displacing 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 – An angled cut to both the edge and face of a board, most common use is with crown molding.

CROSS CUT – A cut which runs across the board perpendicular to the grain.

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.

HEEL – Misalignment of the blade.

KERF – The width of a saw cut, determined by the thickness and set of the blade.

KICKBACK – sudden and unintended movement of the tool or workpiece. It is typically caused by binding or pinching of the workpiece.

MITER CUT – A miter is a type of joint where the two parts to be joined are cut at an angle, and typically the finished joint forms a 90-degree angle. Also commonly spelled “mitre”.

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.

THIN-KERF BLADE – Thinner than normal blades, remove less material, smaller kerfs (between 0.065 in. and 0.070 in.). Blade thinness also may increase the heat generated while cutting.

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

ASSEMBLY

▲ WARNING

To avoid injury, do not connect this miter saw to the power source until it is completely assembled and adjusted and you have read and understood this Operator's Manual.

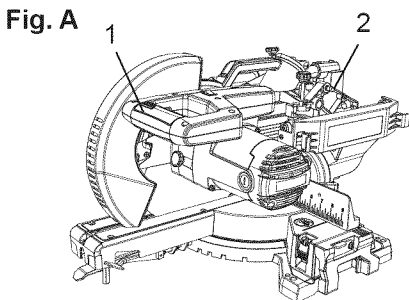
RELEASING CUTTING HEAD (FIG. A) Raising

1. Push down slightly on the trigger switch handle (1).
2. Pull out the hold-down latch (2).
3. Raise the cutting head to the uppermost position.

NOTE: This cutting head is spring loaded.

▲ WARNING

To avoid injury and damage to the saw, transport and 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

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

1. Push the cutting head down.
2. Press the hold-down latch (2) in to lock.

IMPORTANT: To avoid damage, never carry the miter saw by the trigger switch handle or the cutting arm.

INSTALLING THE DUST BAG (FIG. B)

1. Install the dust bag assembly (1) onto the exhaust port (2) on the miter saw. Fit the connecting tube of dust bag assembly and the exhaust port together.

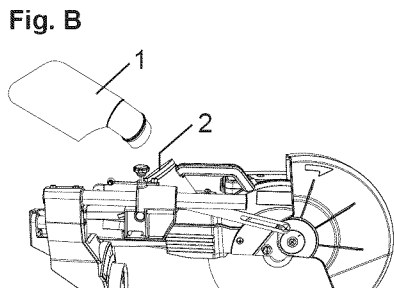
NOTE:

- The dust bag assembly should be angled toward the right side of the saw for best results. This will also avoid any interference during the saw operation.
- To empty the dust bag, pull out the dust bag assembly from exhaust port. Open zipper on underside of bag and empty into waste container.

IMPORTANT: Check frequently and empty bag before it gets full.

▲ WARNING

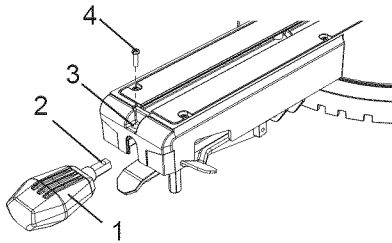
Do not use this saw to cut and/or sand metals. The hot chips or sparks may ignite sawdust from the bag material.



INSTALLING THE MITER HANDLE (FIG. C)

1. Insert the miter handle (1) into the hole in front of the miter saw and align the hole (2) on the miter handle (1) with the hole (3) in the front of the table.
2. Thread the screw (4) through the hole (3) in the table into the hole (2) on the miter handle (1).
3. Tighten the screw (4) with a screwdriver.

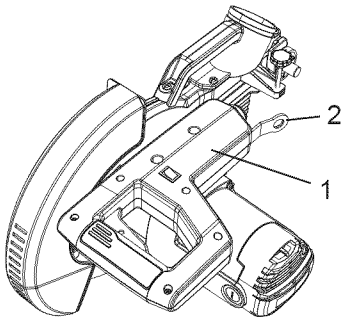
Fig. C



SAW BLADE WRENCH STORAGE (FIG. D)

For convenient storage and prevention of loss, there is a slot in the side of the trigger switch handle (1) for storing the blade wrench (2) when not in use.

Fig. D



INSTALLING THE HOLD-DOWN CLAMP ASSEMBLY (FIG. E, F)

Place the hold-down clamp assembly (1) in one of the mounting holes (2) located behind the fence.

Fig. E

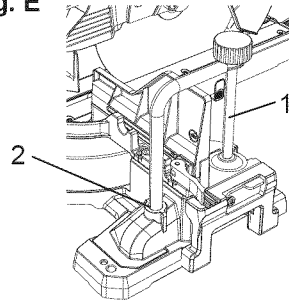
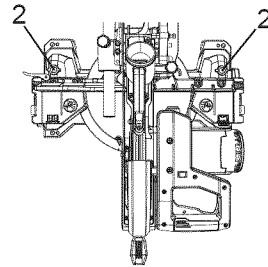


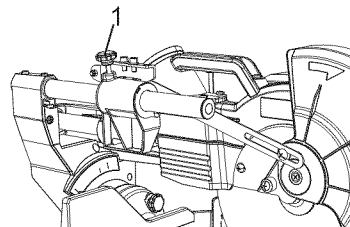
Fig. F



UNLOCKING THE SLIDE CARRIAGE (FIG. G)

After removing the saw from the carton, loosen the slide carriage lock knob (1), located on the left side of the slide carriage. When transporting or storing the miter saw, the slide carriage should always be locked in position.

Fig. G



REMOVING AND INSTALLING THE BLADE

WARNING

- Do not use a blade larger than 10 in. in diameter. 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.

NOTE: The miter saw comes with the saw blade already installed.

- Make sure the blade is installed correctly and is tight before operating saw.

Removing the Blade (Fig. H, H-1, I, J)

1. Unplug the saw from the outlet.
2. Raise the cutting head to the upright position.
3. Remove the cover plate screw (2) with a Phillips screwdriver (Fig. H)
4. Raise the lower blade guard (1) to the uppermost position. (Fig. H-1)
5. Rotate the cover plate (3) back to expose the arbor bolt (4). (Fig. H-1)
6. Place the provided blade wrench over the arbor bolt (4).

Fig. H

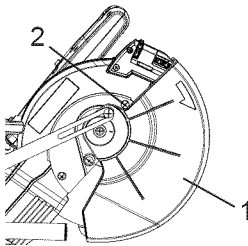
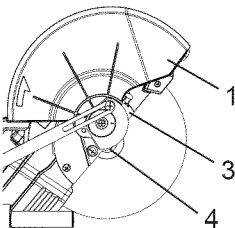
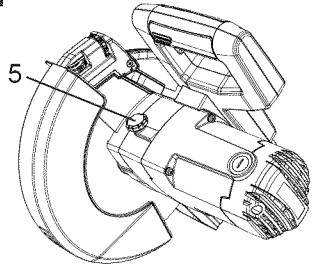


Fig. H-1



7. Locate the arbor lock button (5) below the trigger switch handle. (Fig. I)
8. Press the arbor lock button (5), holding it in firmly while turning the blade wrench clockwise. This will engage the arbor lock allowing the arbor bolt to be loosened with the blade wrench. Continue to hold the arbor lock button (5), while turning the wrench clockwise to loosen the arbor bolt.

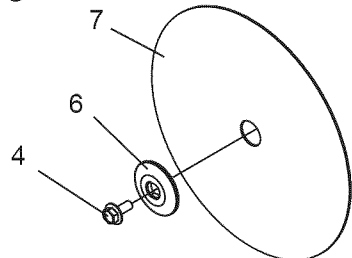
Fig. I



9. Remove the arbor bolt (4), the outer blade collar (6), and the blade (7). Do not remove the inner blade collar. (Fig. J)
10. Raise the lower blade guard (1) to the upright position to remove the blade. (Fig. H-1)

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

Fig. J



Installing the Blade (Fig. H, H-1, I, J)

1. Install a 10 in. blade with a 5/8 in. arbor hole making sure the rotation arrow on the blade matches the clockwise rotation arrow on the upper guard, and the blade teeth are pointing downward at the front of the saw.
2. Place the outer blade collar (6) against the blade and on the arbor. Thread the arbor bolt (4) onto the arbor in a anti-clockwise direction. (Fig. J)
IMPORTANT: The flat side of the blade collar must be placed against the blade. Do not install the collar with the curved side against the blade.
3. Place the blade wrench on the arbor bolt (4).
4. Press the arbor lock button (5), holding it in firmly while turning the blade wrench anti-clockwise. Continue to press it in while tightening the arbor bolt securely. (Fig. I)
5. Rotate the cover plate (3) and lower blade guard (1) back to its original position. (Fig. H-1)
6. Lower the blade guard and replace the cover plate screw (2) and tighten with a Phillips screwdriver. (Fig H)
7. Pull the main handle down and up several times to confirm the lower blade guard operates without binding.
8. Be sure the arbor lock button (5) is released so the blade turns freely.

WARNING

- To avoid injury, never use the saw without the cover plate secure in place. It keeps the arbor bolt from falling out if it accidentally loosens, and helps prevent the spinning blade from coming off the saw.
- Make sure the collars are clean and properly arranged. Lower the blade into the table and check for any contact with the metal base or the saw table.

REMOVING AND INSTALLING THE TABLE INSERT (FIG. K)

WARNING

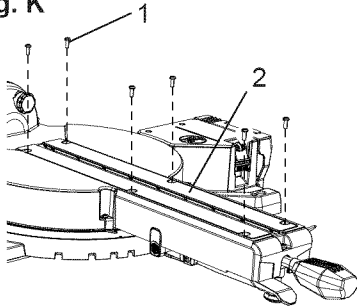
To avoid injury:

- Always unplug the saw to avoid accidental starting. Remove all small pieces of material from the table cavity before performing any cuts. The table insert may be removed for this purpose, but always reattach the table insert prior to performing a cutting operation.
- Do not start the sliding compound miter saw without checking for interference between the blade and table insert. Damage could result to the blade, table insert or turntable if blade strike occurs during the cutting operation.

1. To remove, loosen and remove the six screws (1) on the table insert (2) with a Phillips screwdriver and remove the insert.

2. To install, reposition the table insert, install the six screws and tighten.
3. Check for blade clearance by moving the slide carriage through the full motion of the blade in the table slot.

Fig. K



MOUNTING THE MITER SAW (FIG. L, M)

▲ WARNING

To avoid injury from unexpected saw movement:

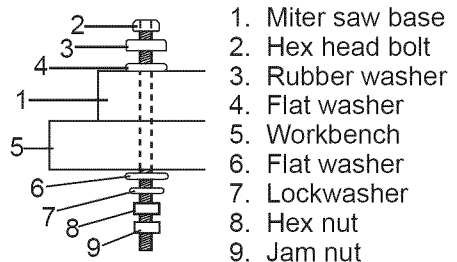
- Before moving the saw, disconnect the power cord from the outlet, and lock the cutting arm in the lower position using the head hold-down latch. **NOTE:** The head hold-down latch is for carrying or storing the tool. It is not to be used for holding the saw while cutting. Lower blade and press in head hold-down latch to secure saw for transport or storage.
- Never carry the miter saw by the power cord or by the trigger switch handle. Carrying the tool by the power cord could cause damage to the insulation or 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 workbench 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.

Mounting instructions:

1. For stationary use, place the saw in the desired location, directly on a workbench where there is room for handling and proper support of the workpiece. The base of the saw has eight mounting holes, four 1/4 in. holes and four 3/8 in. holes. Select the proper mounting holes based on the size of bolts used. Bolt the base of the miter saw (1) to the work surface (5), using the fastening method as shown in Fig L.

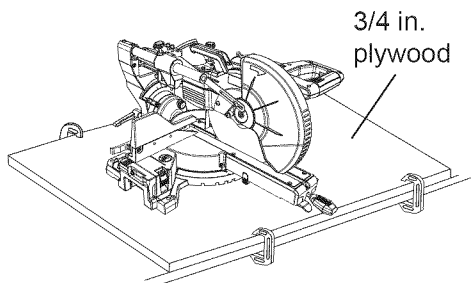
Fig. L



NOTE: Mounting hardware is not included with this tool. Bolts, nuts, washers, and screws must be purchased separately.

2. **For portable use**, place the saw on a 3/4 in. thick piece of plywood. Bolt the base of the miter saw securely to the plywood using the mounting holes on the base. Use C-clamps to clamp this mounting board to a stable work surface at the worksite. (Fig. M)

Fig. M

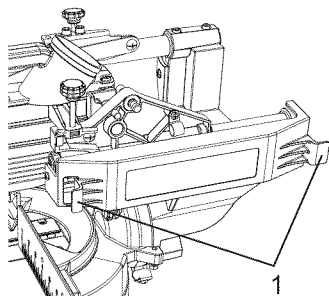


NOTE: If a miter saw stand is used, please follow all instructions shown in that product's instructions for proper mounting.

THE POWER CORD STORAGE (FIG. N)

For convenience and to prevent damage to the power cord when the miter saw is not in use or is in transportation, the slide carriage has two brackets (1) on the side for cord storage.

Fig. N



ADJUSTMENTS

BEVEL STOP ADJUSTMENT



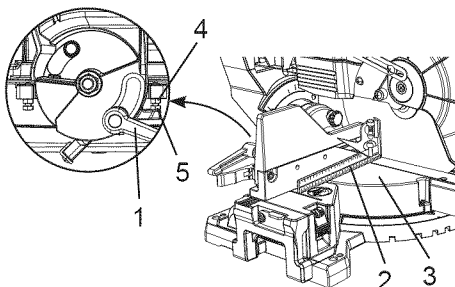
WARNING

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.

90° (0°) Bevel Adjustment (Fig. O)

1. Loosen bevel locking handle (1) and tilt the cutting arm completely to the right. Tighten the bevel locking handle (1).
2. Place a combination square (2) on the miter table (3) with the ruler against the table and heel of the square against the saw blade.
3. If the blade is not 90° square with the miter table, loosen the bevel locking handle (1), tilt the cutting head to the left, loosen the jamb nut (4) and turn the bevel angle adjustment bolt (5) in or out with a 10 mm wrench until the blade is square with the table. Once alignment is achieved, tighten the lock nut (4) to secure the bolt (5).
4. Tighten the bevel locking handle (1) after alignment is achieved.

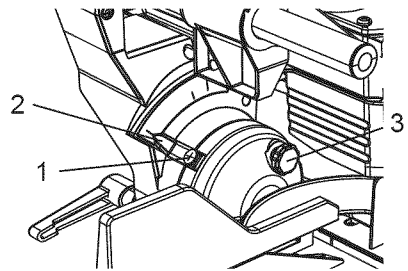
Fig. O



90° Bevel Pointer Adjustment (Fig. P)

1. When the blade is exactly 90° (0°) to the table, loosen the bevel indicator screw (1) using a Phillips screwdriver.
2. Adjust bevel indicator (2) to the "0" mark on the bevel scale and retighten the screw.

Fig. P

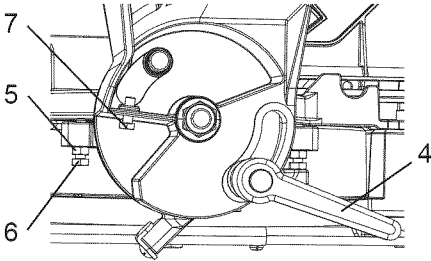


45° Bevel Stop Adjustment (Fig. P, Q)

1. Set the miter angle to zero degrees. Fully extend the sliding fence completely to the left then pull the bevel detent pin (3) toward the front of the machine. (Fig. P)
NOTE: When retracting the bevel detent pin, it may be required to shift the miter saw upper arm assembly to the left.
2. Loosen the bevel locking handle (4) and tilt the cutting arm completely to the left. (Fig. Q)
3. Using a combination square, check to see if the blade is 45° to the table.
4. If the blade is not at 45° to the miter table, tilt the cutting arm to zero degree, loosen the lock nut (5) and turn the bolt (6) in or out accordingly.

5. Tilt the cutting arm back to the left and recheck alignment.
6. Repeat above steps until the blade is 45° to the table. Once alignment is achieved, tighten the lock nut (5) to secure the bolt (6).

Fig. Q



View from rear of machine

33.9° Bevel Adjustment (Fig. P, Q)

1. Set the miter angle to zero degree. Fully extend the left sliding fence.
2. Loosen the bevel locking handle (4 - Fig. Q) and tilt cutting arm to the 33.9° left bevel positive stop by pushing in on the bevel detent pin (3 - Fig. P) toward the rear of the machine.
3. Using a combination square, check to see if the blade is 33.9° to the table.
4. To adjust, turn the screw (7) in or out with a wrench until the blade is 33.9° to the table.

MITER SCALE (FIG. R)

The sliding compound miter saw scale can be easily read, showing miter angles from 0° to 50° to the left, and 0° to 50° to the right. The miter saw table has positive stops at most common angle settings at 0°, 15°, 22.5°, 31.6°, and 45°. These positive stops position

the blade at the desired angle quickly and accurately. Follow the process below for quickest and most accurate adjustments.

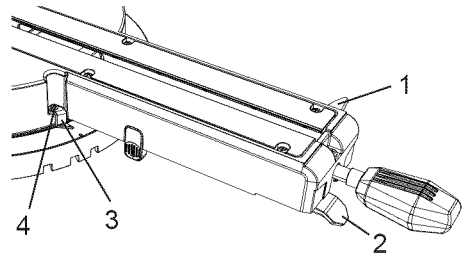
Adjusting Miter Angles:

1. Lift up on the quick-cam miter locking lever (1) to unlock the table.
2. Move the turntable while lifting up on the positive miter stop locking lever (2) to align the indicator (3) to the desired degree measurement.
3. Lock the table into position by pressing down on the quick-cam miter locking lever (1).

Miter Angle Pointer Adjustment:

1. Move the table to the 0° positive stop.
2. Loosen the screw (4) that holds the indicator with a Phillips screwdriver.
3. Adjust the indicator (3) to the 0° mark and retighten the screw.

Fig. R

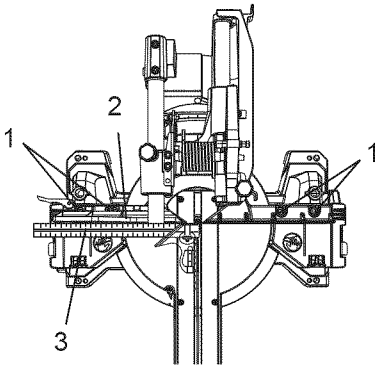


ADJUSTING FENCE SQUARENESS (FIG. S)

1. Loosen the four fence locking bolts (1).
2. Lower the cutting arm and lock in position.
3. Using a square (3), lay the heel of the square against the blade and the ruler against the fence (2) as shown.

- Adjust the fence 90° to the blade and tighten the four fence locking bolts (1).
NOTE: If the saw has not been used recently, recheck blade squareness to the fence and readjust if needed.
- After fence has been aligned, using a scrap piece of wood, make a cut at 90° then check squareness on the piece. Readjust if necessary.

Fig. S



ADJUSTING CUTTING DEPTH (FIG. T, T-1)

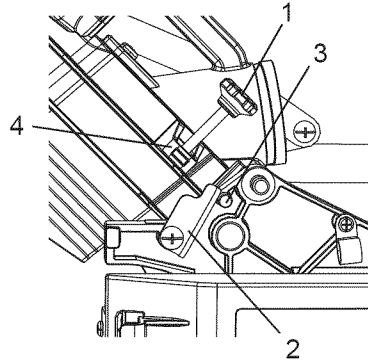
The maximum depth travel of the cutting head was set at the factory.

Setting the maximum width travel of the cutting head, follow the below steps (Fig. T):

- Turn the stop knob (1) anti-clockwise until the stop knob is not protruded out of the stop block (4) bottom while moving the cutting head upward.
- Rotate the stop plate (2) clockwise to touch the stop rod (3).

- Recheck the blade depth by moving the cutting head front to back through the full motion of a typical cut along the control arm.

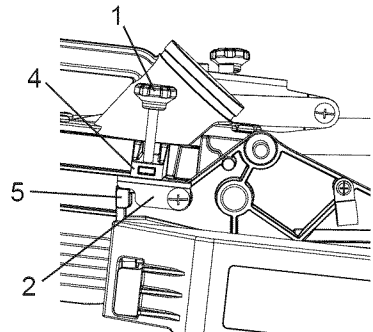
Fig. T



Setting the maximum height travel of the cutting head, follow the below steps (Fig. T-1):

- Turn the stop knob (1) anti-clockwise until the stop knob is not protruded out of the stop block (4) bottom while moving the cutting head upward.
- Rotate the stop plate (2) anti-clockwise to touch the stop seat (5).
- Make sure the stop block (4) touches the stop plate (2) completely.

Fig. T-1



Setting the cutting depth (Fig. T-1):

The depth of cut can be preset for even and repetitive shallow cuts.

1. Adjust the cutting head down until the teeth of the blade are at the desired depth.
2. While holding the upper arm in that position, turn the stop knob (1) until it touches the stop plate (2).
3. Recheck the blade depth by moving the cutting head front to back through the full motion of a typical cut along the control arm.

QUICK-CAM MITER TABLE LOCK ADJUSTMENT (FIG. U)

1. Press down and lock the quick-cam miter table lock (1).
2. If the table moves with the quick-cam miter table lock in the down position, turn the stop nut (2) to the left as shown using a 13 mm wrench to extend the locking arm against the base of the miter saw.
3. Test the quick cam miter lock to verify it locks the table into position securely.
4. Turn the lock nut (3) to the right as shown to lock the miter locking mechanism into place.

Fig. U

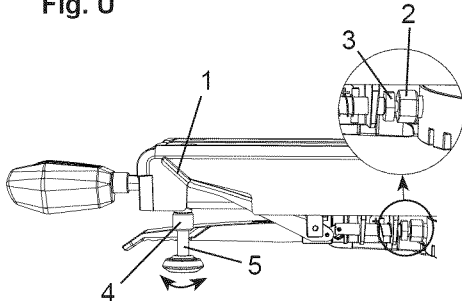


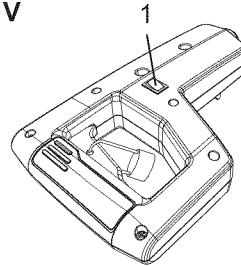
TABLE SUPPORT ROD ADJUSTMENT (FIG. U)

1. Put the miter saw on a flat surface.
2. Check the miter saw whether the miter saw is level with the flat surface.
3. If not, loosen the nut (4) and turn the table support rod (5) clockwise or anti-clockwise to adjust the height of the table support rod (5) until the miter saw is level with the flat surface.
4. Tighten the nut (4).

TURNING LASER GUIDE ON (FIG. V)

1. To turn laser on, press on/off rocker switch (1) to "ON" position.
2. To turn laser off, press on/off rocker switch to "OFF" position.

Fig. V



ALIGNING THE LASER GUIDE

The laser beam must always be correctly aligned with the blade to ensure straight, even cutting. Your tool is equipped with the Laser Guide cutting guide using Class IIIa laser beam. The laser beam will enable you to preview the saw blade path on the stock to be cut before starting the miter saw. This laser guide is powered by the transformed alternating current supply directly through the power lead. **The saw must be connected to the power source and the laser on/off switch must be turned on for the laser line to show.**

▲ WARNING

Do not remove the lock from the ON/OFF switch during any laser adjustments.

AVOID DIRECT EYE CONTACT (FIG. W)

▲ WARNING

- Laser radiated when laser guide is turned on. Avoid direct eye contact.
- Laser Warning Label:
Max. Output < 5 mW Wavelength: 630-660nm, Complies with 21 CFR 1040.10 and 1040.11. Class IIIa Laser Product. (FIG. W)



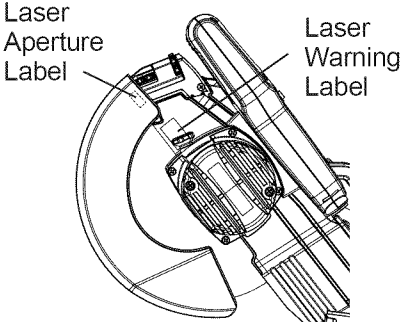
- Laser Aperture Label: **AVOID EXPOSURE:** Laser radiation is emitted from this aperture. (Fig. W)



- NOTE: All the adjustments for the operation of this machine have been completed at the factory. Due to normal wear and use, some occasional readjustments may be necessary.
- CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

- CAUTION: The use of optical instruments with this product will increase eye hazard.
- WARNING: Do not attempt to repair or disassemble the laser. If unqualified persons attempt to repair this laser product, serious injury may result. Any repair required on this laser product should be performed by an authorized service center personnel.

Fig. W



LASER GUIDE ADJUSTMENT (FIG. X, Y, Z)

NOTE: All the adjustments for the operation of this machine have been completed at the factory. Due to normal wear and use, some occasional readjustments may be necessary.

A. Checking Laser Beam Alignment

1. Set the saw to a 0° miter and 0° bevel setting.
2. Take a board and, using a straight edge (not included), mark a 90° line on the top and front of the board. This line will serve as a "pattern line" for all laser beam alignments. Place the board on the saw table.

3. Carefully lower the saw head down to align the saw blade with the pattern line. Position the saw blade to the left, center or right side of the “pattern line” depending on your preference for the laser beam location.
4. With the saw plugged in, turn on the laser guide. Your saw has been preset with the laser beam to the left side of the blade.
5. Looking at the front of the board, if the laser beam is not parallel to the “pattern line” please follow the instructions listed below under Procedure A.
6. Looking at the top of the board, if the laser beam is not parallel to the “pattern line” please follow the instructions listed below under Procedure B.

B. Adjusting the Position of the Laser Beam (Fig. X, Y, Z)

Procedure A (Fig. X, Y)

1. Slightly turn the laser vertical adjustment knob (1) to adjust the vertical angle of laser beam on the front of the board. When laser beam angled from left to right, turn the laser vertical adjustment knob (1) clockwise; if the laser beam angles right to left, turn laser vertical adjustment knob (1) anti-clockwise until the laser beam is parallel with the vertical “pattern line”.

Procedure B (Fig. X, Z)

2. Slightly turn the laser horizontal adjustment knob (2) to adjust the horizontal angle of laser beam on the top of the board. If the laser beam is out of parallel from left to right, turn the laser horizontal adjustment knob (2) clockwise; if the laser beam is out of parallel from right to left, turn the laser horizontal adjustment knob (2) anti-clockwise until the laser beam is parallel with the horizontal “pattern line”.
3. Recheck the laser beam alignment.

NOTE:

- Laser beam is calibrated and set up to project to the left of the blade.
- If you have any problem or question on the laser guide, please call the Sears Service Center.

Fig. X

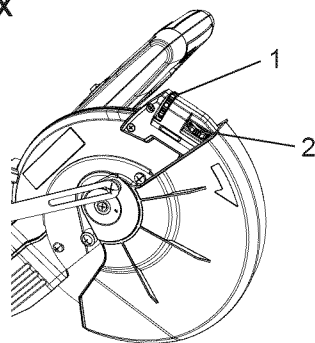


Fig. Y

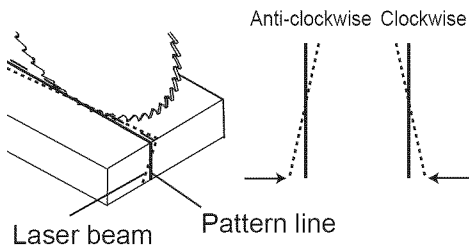
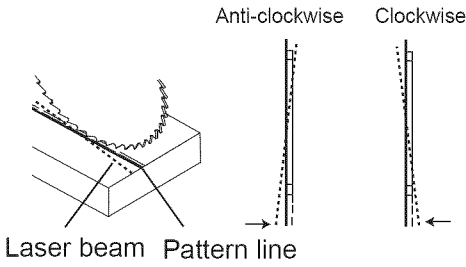


Fig. Z



EXTENSION WING USE AND ADJUSTMENT (FIG. AA)

The left and right side extension wings can offer extra support for long workpieces.

1. Lift up on the locking lever (1) and pull out the left extension wing to the desired support length. Push down on the locking lever (1) to tighten the extension wing. Repeat for the right side extension wing if needed.
2. If the locking lever (1) will not tighten, adjust the nut (2), located under the base, 1/4 turn clockwise using a 10 mm wrench until tight.

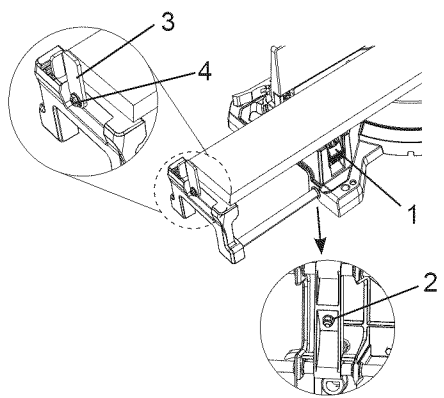
REPETITIVE CUTTING USING THE STOP PLATE (FIG. AA)

The stop plate is designed for making repetitive cuts of the same length.

NOTE: Use only one stop plate at a time, NEVER use both stop plates.

1. Rotate the stop plate (3) to vertical position.
2. If stop plate will not rotate, loosen the locking screw (4) 1/4 turn using a screwdriver and 8 mm wrench.

Fig. AA



OPERATION

SAFETY INSTRUCTIONS FOR BASIC SAW OPERATION

BEFORE USING THE MITER SAW

WARNING

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

- Completely assemble and adjust the saw, following the instructions. **(ASSEMBLY & ADJUSTMENTS)**
- Learn the use and function of the ON/OFF trigger switch, on/off switch for laser, upper and lower blade guards, head hold-down latch, bevel lock handle, and cover plate screw.
- Review and understand all safety instructions and operating procedures in this Operator's Manual. **(SAFETY & OPERATION)**
- Review the **MAINTENANCE** and **TROUBLESHOOTING GUIDE** for your miter saw.
- To avoid injury or possible death from electrical shock:
Make sure your fingers do not touch the plug's metal prongs when plugging or unplugging your miter saw. **(ELECTRICAL REQUIREMENTS AND SAFETY)**

BEFORE EACH USE INSPECT YOUR SAW.

- **Disconnect the miter 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 bolt.**
- **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 GUIDE** for adjustment if necessary.
- 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 bent, 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. Do not put lubricants on the blade while it is spinning.
- Remove adjusting wrench from the tool before turning it on.

- To avoid injury from jams, slips, or thrown pieces, use only recommended accessories.
- Check the dust bag before you work. Empty the bag if it is more than half-full.

RECOMMENDED ACCESSORIES

- Consult the ACCESSORIES and ATTACHMENTS section of this Operator'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 correct 10 in. 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. Manually spin the blade and check for clearance. Tilt the power-head to a 45° bevel and repeat the test.
- 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.



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 and ears.
- Know your miter saw. Read and understand this Operator's Manual and labels affixed to this 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, do not do layout, assembly, or setup work on the miter saw while any parts are moving.
- Avoid accidental starting, make sure the trigger switch is disengaged 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.



This machine is not designed for cutting masonry, masonry products, ferrous metals (steel, iron, and iron-based metals.) Use this miter saw to cut only wood, wood-like products, or non-ferrous metals. 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. Remove dust bag when cutting non-ferrous metals.

DRESS FOR SAFETY



Any power tool can throw foreign objects into the eyes.

This can result in permanent eye damage. Everyday eyeglasses have only impact resistant lenses and are not safety glasses. Glasses or goggles not in compliance with ANSI Z87.1 could seriously injure 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 small pieces that may bind or are too small to clamp and hold securely.
- Plan the way you will grasp the workpiece from start to finish. Avoid awkward operations and hand positions. A sudden slip could cause your fingers or hand to move into the blade.

DO NOT OVER-REACH

Keep good footing and balance. Keep your face and body to one side, out of the line of a possible kickback. NEVER stand in the line of the blade.

Never cut freehand:

- Brace your workpiece firmly against the fence and table stop 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 off. 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 vice to help hold the work when it's practical.

USE EXTRA CAUTION WITH LARGE OR ODD SHAPED WORKPIECES.

- Use extra supports (tables, sawhorses, blocks, etc.) for workpieces large enough to tip.
- 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 small pieces. If the workpiece being cut would cause your hand or fingers to be within 7.5 inches of the saw blade the workpiece is too small. 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”.

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 under the supervision of an experienced person and the dust bag has been removed from the saw.

WHEN SAW IS RUNNING

WARNING

Do not allow familiarity 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.

MAKING A BASIC CUT

WARNING

Body and Hand Position (Fig. BB)



Never place hands near the cutting area. Proper positioning of your body and hands when operating the miter saw will make cutting easier and safer. Keep children away. Keep all visitors at a safe distance from the miter saw. Make sure bystanders are clear of the saw and workpiece. Don't force the saw. It will do the job better and safer at its designed rate.

Starting a cut:

- Place hands at least 7.5 in. away from the path of the blade – out of the “no-hands zone” (see (1) in Fig. BB on next page).
- Hold workpiece firmly against the fence to prevent movement toward the blade.
- Turn the laser guide on for pre-alignment of your cut.
- With the power switch OFF, bring the saw blade down to the workpiece to see the cutting path of the blade.
- Squeeze trigger switch to start saw.
- Lower blade into workpiece with a firm downward motion.

Finishing a cut:

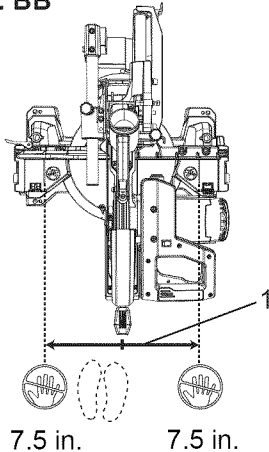
- Hold the cutting arm in the down position.
- Release trigger switch and wait for all moving parts to stop before moving your hands and raising the cutting arm.

- If the blade doesn't stop within 6 seconds, unplug the saw and follow the instructions in TROUBLESHOOTING GUIDE section.

Before freeing jammed material:

- Release trigger switch.
- Wait for all moving parts to stop.
- Unplug the miter saw.

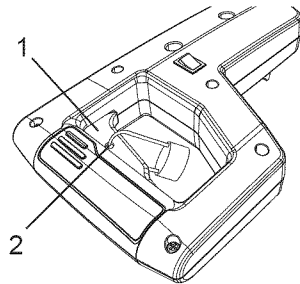
Fig. BB



NOTE: To make the ON/OFF switch childproof. Insert a padlock (not provided), or chain with padlock, through the hole (2) in the trigger switch, locking the tool's switch, preventing children and other unqualified users from turning the machine on.

NOTE: The miter saw is equipped with an electric blade brake. When the trigger switch is released, the blade brake will stop the blade within approximately 6 seconds.

Fig. CC



BASIC SAW OPERATIONS

▲ WARNING

For your convenience, 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 doesn't stop within approximately 6 seconds, wait for the blade to stop, unplug the saw and contact Sears or another qualified service dealer.

TURNING THE SAW ON (FIG. CC)

This miter saw is equipped with an ON/OFF trigger switch (1). When the trigger switch is squeezed, the miter saw will be turned on.

SLIDING FENCE (FIG. DD)

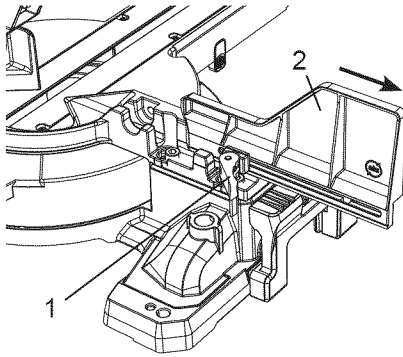
▲ WARNING

The sliding fence must be extended when making any bevel cut. Failure to extend the sliding fence will not allow enough space for the blade to pass through which could result in serious injury. At extreme miter or bevel angles the saw blade may also contact the fence.

1. Unlock the fence cam locking lever (1) by pushing it toward the rear of the machine.
2. Extend the fence (2) by sliding it out. Lock the fence cam locking lever (1) by pulling it in toward the fence.

NOTE: When transporting the saw, always secure the sliding fence in the collapsed position and locking it.

Fig. DD



REMOVING OR INSTALLING THE SLIDING FENCE (FIG. EE)

⚠ WARNING

DRY RUN - It is important to know where the blade will intersect with the workpiece during cutting operations. Always perform a simulated cutting sequence with the power tool switched OFF to gain an understanding of the projected path of the saw blade. At some extreme angles, the left side fence might have to be removed to ensure proper clearance prior to making the cut.

⚠ CAUTION

The left side sliding fence must be removed when making any left bevel angle cuts greater than 33.9° in combination with any right or left miter angle. This fence must also be removed whenever a 45° bevel angle is desired with a miter angle greater than 31.6°.

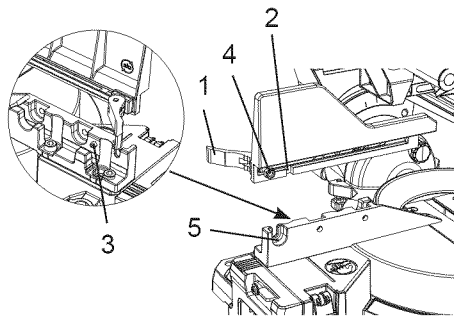
Removing

1. Unlock the fence cam locking lever (1) by pushing it out toward the rear of the machine.
2. Align the slot (2) with the bolt (3) in the rear of the fence, and then lift up the sliding fence to remove it from the saw.

Installing

1. Align the slot (2) with the bolt (3) in the rear of the fence to place the sliding fence onto the miter saw fence.
2. Slide the nut (4) to align the nut (4) with the slot (5).
3. To lock the sliding fence, push the cam locking lever (1) in toward the front of the machine.

Fig. EE



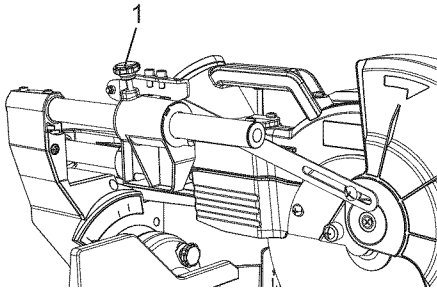
SLIDING CARRIAGE SYSTEM (FIG. FF)

⚠ WARNING

To reduce the risk of injury, return carriage to the full rear position after each crosscut operation.

1. For chop cutting operations on small workpieces, slide the cutting head assembly completely toward the rear of the unit and tighten the sliding carriage lock knob (1).
2. To cut wide boards up to 12-1/2 in., the sliding carriage lock knob (1) must be loosened to allow the cutting head to slide freely.

Fig. FF



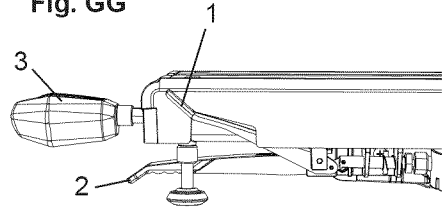
QUICK-CAM MITER TABLE LOCK OPERATION (FIG. GG)

If miter angles required are NOT one of the nine positive stops, the miter table can be locked at any angle between these positive stops by using the quick-cam miter table lock.

1. Unlock the miter table by lifting up on the quick-cam miter table lock (1).
2. While holding the positive stop locking lever (2) up, grasp the miter handle (3) and move the miter table left or right to the desired angle.
3. Release the positive stop locking lever (2).
4. Press down on the quick-cam miter table lock (1) until it locks the miter table in place.

NOTE: The quick-cam miter table lock should lock the table and prevent it from moving. If adjustment is needed, see the section of **“QUICK-CAM MITER TABLE LOCK ADJUSTMENT”**.

Fig. GG



MITER DETENT OVERRIDE (FIG. HH)

The miter detent override allows for the table to be micro adjusted, disengaging the positive detent stops feature. When a required miter angle is close to a positive detent stop, this override prevents the wedge on the miter arm from slipping into that detent slot on the base.

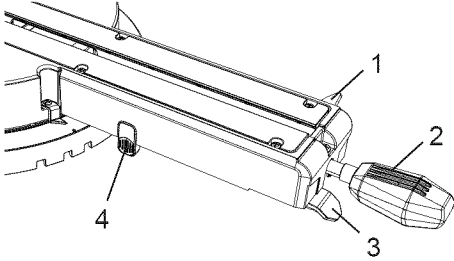
1. Unlock the miter table by pulling up on the quick-cam miter locking lever (1).

NOTE: The miter handle (2) does not lock or unlock the table.

2. While holding the miter handle (2), pull upward the positive miter stop locking lever (3) and press the override lock (4) IN, then release the positive stop locking lever (3) while holding the override lock (4) in. The detent override is now engaged.
3. Turn the table to the desired angle, secure the table at the desired angle by pressing the quick-cam miter locking lever (1).

4. To disengage the detent override, pull the quick-cam miter locking lever (1), pull the positive stop locking lever (3) up. This will release the override lock and the table will now stop at the positive detent angles.

Fig. HH



BEFORE LEAVING THE SAW

- Never leave tool running unattended. Turn power OFF. Wait for all moving parts to stop.
- Make workshop childproof. Lock the shop. Disconnect master switches. Store tool away from children and other unqualified users.

⚠ WARNING

To avoid injury from materials being thrown, always unplug the saw to avoid accidental starting, and remove small pieces of material from the table cavity. The table insert may be removed for this purpose, but always reattach the table insert prior to performing a cutting operation.

MITER CUT (FIG. II)

The sliding compound miter saw is equipped with nine positive miter stops (1) on the saw base. The locations are at 0, 15, 22.5, 31.6 and 45 degrees

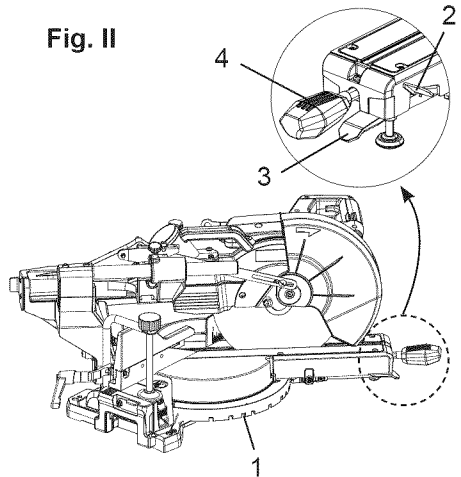
left and right. These locations represent the most common angles for cutting operation. To make a miter cut:

1. Unlock the miter table by lifting up on the quick-cam miter locking lever (2).
2. While raising the positive stop locking lever (3) up, grasp the miter handle (4) and rotate the miter table left or right to the desired angle.
3. Release the positive stop locking lever and set the miter at the desired angle making sure the lever snaps into place.

NOTE: The lever will only lock into place at one of the nine positive stops.

4. Once the desired miter angle is achieved, press down on the quick-cam miter table lock (2) to secure the table into position.
5. If the miter angle desired is NOT one of the nine positive stops noted above, simply lock the table at the desired angle by pressing down on the quick-cam miter locking lever (2).
6. Turn the laser guide on and position the workpiece on the table for pre-alignment of your cut.

Fig. II



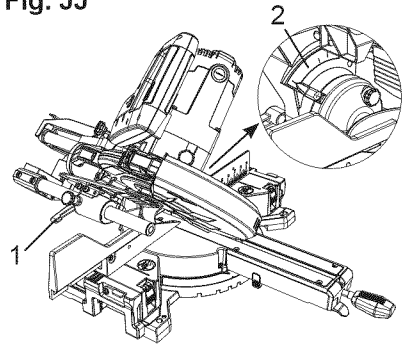
BEVEL CUT (FIG. JJ)

WARNING

- The sliding fence must be extended to the left when making bevel cuts. The sliding fences note three bevel angles where the user must adjust the fences to match the degree of the bevel cut. Failure to extend the sliding fence will not allow enough space for the blade to pass through which could result in serious injury. At extreme miter or bevel angles the saw blade may also contact the fence.
- The right side sliding fence must be removed when making any right bevel angle cuts greater than 35° in combination with any right hand miter angle. This fence must also be removed whenever a 45° bevel angle is desired with a miter angle greater than 22.5°.

1. When a bevel cut is required, loosen the bevel locking handle (1) by turning it clockwise.
2. Tilt the cutting head to the desired angle, as shown on the bevel scale (2).
3. The blade can be positioned at any angle, from a 90° straight cut (0° on the scale) to a 45° left bevel. Tighten the bevel locking handle (1) to lock the cutting head in position. Positive stops are provided at 0°, 33.9° and 45°.
NOTE: The saw comes with a 33.9° bevel detent pin for setting up crown molding cuts when the angle of the walls equals 90°.
4. Turn the laser guide on and position the workpiece on the table for pre-alignment of your cut.

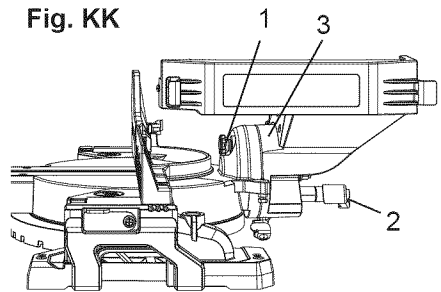
Fig. JJ



33.9° BEVEL DETENT PIN FOR CROWN MOLDINGS (FIG. KK)

1. Push the bevel detent pin (1) in toward the rear of the machine.
2. Loosen the bevel locking handle (2).
3. Rotate the cutting head until the bevel detent pin (1) stops the bevel angle at 33.9° on the bevel scale (3).
4. Tighten the bevel locking handle (2) before you make your cut.

Fig. KK



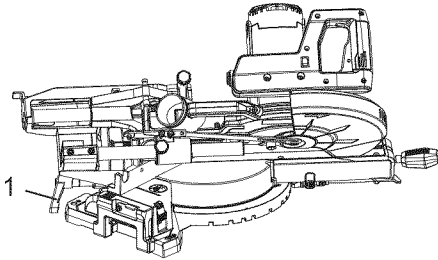
COMPOUND CUT (FIG. LL)

A compound cut is the combination of a miter and a bevel cut simultaneously.

1. Extending the fence by sliding it out to the required location or remove the left sliding fence if necessary. See **“SLIDING FENCE”** or **“REMOVING OR INSTALLING THE SLIDING FENCE.”**

2. Set the desired bevel angle using the bevel locking handle (1).
3. Set the desired miter angle and lock into position. See “MITER CUT.”

Fig. LL



SLIDE CUTTING WIDE BOARDS UP TO 12-1/2 IN. WIDE (FIG. MM)

▲ WARNING

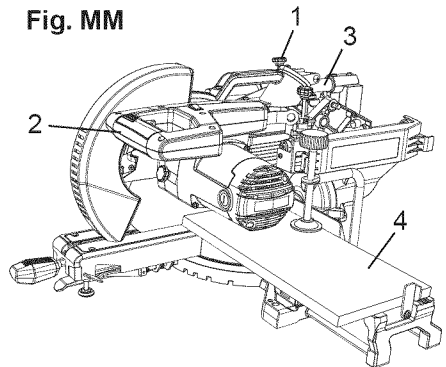
To avoid injury:

- Never pull the cutting head assembly and spinning blade toward you during the cut. The blade may try to climb up on the top of the workpiece, causing the cutting assembly and spinning blade to kick back, forcefully. The cutting head assembly should be drawn back completely then pushed forward when sawing.
- Let the blade reach full speed before cutting. This will help reduce the risk of a thrown workpiece.

To Slide Cut Wide Boards (Fig. MM)

1. Unlock the sliding carriage lock knob (1) and allow the cutting head assembly to move freely.
2. Set both the desired bevel angle and/or the miter angle and lock into position.
3. Use a hold-down clamp to secure the workpiece.
4. Turn the laser guide on and position the workpiece on the table for pre-alignment of your cut.
5. Grasp the trigger switch handle (2) and pull the carriage (3) forward until the center of the saw blade is over the front of the workpiece (4).
6. Engage the trigger to turn the saw on.
7. When the saw reaches full speed, slowly push the saw handle down, cutting through the leading edge of the workpiece.
8. Slowly move the trigger switch handle back toward the fence, completing the cut.
9. Release the trigger and allow the blade to stop spinning before raising the cutting head and removing the workpiece.

Fig. MM



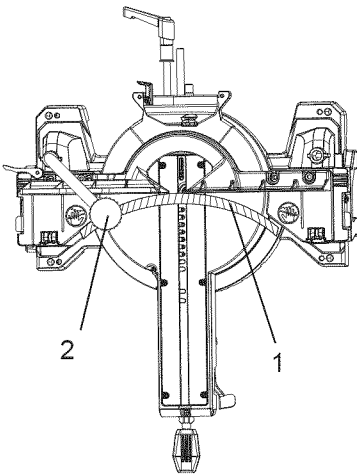
CUTTING BOWED MATERIAL (FIG. NN)

▲ WARNING

To avoid injury from materials being thrown, always unplug the saw to avoid accidental starting and remove small pieces of material from the table cavity underlying the table insert.

The table insert may be removed for this purpose, but always reattach table insert prior to performing a cutting operation. A bowed workpiece (1) must be positioned against the fence and secured with a hold-down clamp (2) as shown before cutting. 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. NN



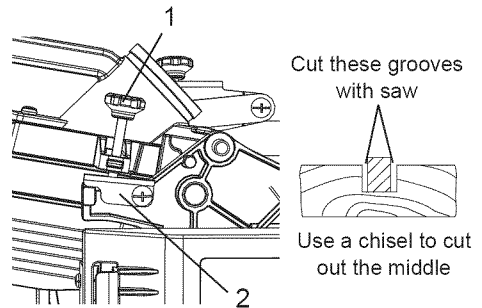
CUTTING GROOVES (FIG. OO)

▲ WARNING

DO NOT USE A DADO BLADE, use only the standard 10 in. diameter saw blade for this operation.

1. Mark lines identifying the width and depth of the desired cut on the workpiece and position on the table so the outside tip of the blade is positioned on the inside edge of the line. Use a clamp to secure the workpiece beside the blade.
2. Lower the cutting head to the depth marked on the workpiece, holding the upper arm, and adjust the stop knob (1) until it touches the stop plate (2). (SEE “**Setting the cutting depth**” on page 27).
3. Cut two parallel grooves as shown.

Fig. OO



AUXILIARY WOOD FENCE (FIG. PP)

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.

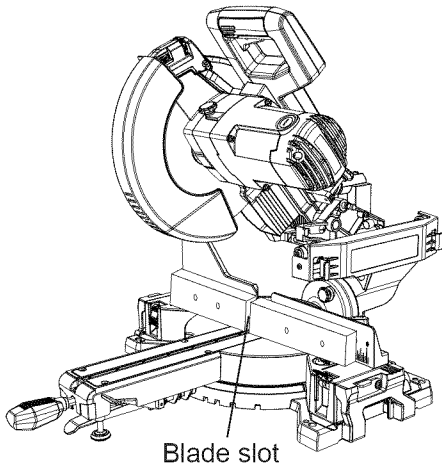
Holes are provided in the saw fence to attach an auxiliary wood fence. This fence is to be constructed of straight wood approximately 3/4 in. thick by 2-1/2 in. high by 22 in. long.

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.

Fig. PP

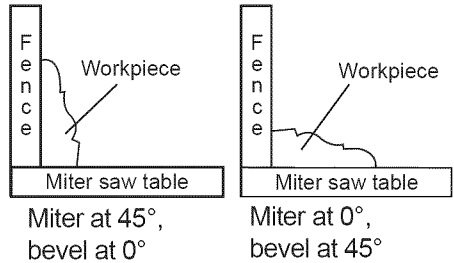


CUTTING BASE MOLDING (FIG. QQ)

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, crown molding vice 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 the cut. Mark the cut line directly on the tape.
3. Splintering typically happens due to an incorrect blade application and thinness of the material.

Fig. QQ



CUTTING CROWN MOLDING

(FIG. RR, SS)

Your compound miter saw is suited for 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° and a bottom rear angle (the section that fits flat against the wall) of 38°.

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.

Fig. RR

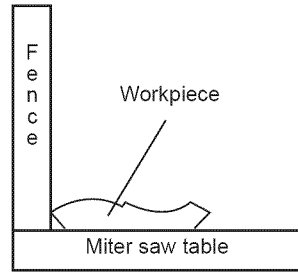
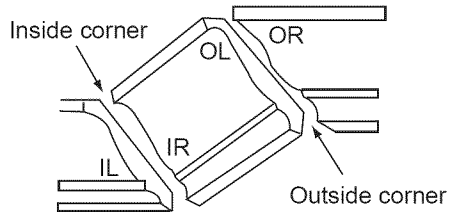


Fig. SS

Bevel/Miter Settings

Settings for standard crown molding lying flat on compound miter saw table



Compound cut crown moldings

NOTE: The chart below references a compound cut for crown molding ONLY WHEN THE ANGLE BETWEEN THE WALLS EQUALS EXACTLY 90°.

KEY	BEVEL SETTING	MITER SETTING	TYPE OF CUT
Inside corner - Left side			
IL	33.9°	31.6° Right	1. Position top of molding against fence. 2. Miter table set at RIGHT 31.6°. 3. LEFT side is finished piece.
Inside corner - Right side			
IR	33.9°	31.6° Left	1. Position bottom of molding against fence. 2. Miter table set at LEFT 31.6°. 3. LEFT side is finished piece.
Outside corner - Left side			
OL	33.9°	31.6° Left	1. Position bottom of molding against fence. 2. Miter table set at LEFT 31.6°. 3. RIGHT side is finished piece.
Outside corner - Right side			
OR	33.9°	31.6° Right	1. Position top of molding against fence. 2. Miter table set at RIGHT 31.6°. 3. RIGHT side is finished piece.

CROWN MOLDING CHART

Compound Miter saw Miter and Bevel Angle Settings Wall to Crown Molding Angle

Angle Between Walls	52/38° Crown Molding		45/45° Crown Molding	
	Miter Setting	Bevel Setting	Miter Setting	Bevel Setting
67	42.93	41.08	46.89	36.13
68	42.39	40.79	46.35	35.89
69	41.85	40.50	45.81	35.64
70	41.32	40.20	45.28	35.40
71	40.79	39.90	44.75	35.15
72	40.28	39.61	44.22	34.89
73	39.76	39.30	43.70	34.64
74	39.25	39.00	43.18	35.38
75	38.74	38.69	42.66	34.12
76	38.24	38.39	42.15	33.86
77	37.74	38.08	41.64	33.60
78	37.24	37.76	41.13	33.33
79	36.75	37.45	40.62	33.07
80	36.27	37.13	40.12	32.80
81	35.79	36.81	39.62	32.53
82	35.31	36.49	39.13	32.25
83	34.83	36.17	38.63	31.98
84	34.36	35.85	38.14	31.70
85	33.90	35.52	37.66	31.42
86	33.43	35.19	37.17	31.14
87	32.97	34.86	36.69	30.86
88	32.52	34.53	36.21	30.57
89	32.07	34.20	35.74	30.29
90	31.62	33.86	35.26	30.00
91	31.17	33.53	34.79	29.71
92	30.73	33.19	34.33	29.42
93	30.30	32.86	33.86	29.13
94	29.86	32.51	33.40	28.83
95	29.43	32.17	32.94	28.54
96	29.00	31.82	32.48	28.24
97	28.58	31.48	32.02	27.94
98	28.16	31.13	31.58	27.64
99	27.74	30.78	31.13	27.34
100	27.32	30.43	30.68	27.03
101	26.91	30.08	30.24	26.73
102	26.50	29.73	29.80	26.42
103	26.09	29.38	29.36	26.12
104	25.69	29.02	28.92	25.81
105	25.29	28.67	28.48	25.50
106	24.89	28.31	28.05	25.19
107	24.49	27.96	27.62	24.87
108	24.10	27.59	27.19	24.56
109	23.71	27.23	26.77	24.24
110	23.32	26.87	26.34	23.93
111	22.93	26.51	25.92	23.61
112	22.55	26.15	25.50	23.29
113	22.17	25.78	25.08	22.97
114	21.79	25.42	24.66	22.66
115	21.42	25.05	24.25	22.33
116	21.04	24.68	23.84	22.01
117	20.67	24.31	23.43	21.68
118	20.30	23.94	23.02	21.36
119	19.93	23.57	22.61	21.03
120	19.57	23.20	22.21	20.70
121	19.20	22.83	21.80	20.38
122	18.84	22.46	21.40	20.05
123	18.48	22.09	21.00	19.72

Angle Between Walls	52/38° Crown Molding		45/45° Crown Molding	
	Miter Setting	Bevel Setting	Miter Setting	Bevel Setting
124	18.13	21.71	20.61	19.39
125	17.77	21.34	20.21	19.06
126	17.42	20.96	19.81	18.72
127	17.06	20.59	19.42	18.39
128	16.71	20.21	19.03	18.06
129	16.37	19.83	18.64	17.72
130	16.02	19.45	18.25	17.39
131	15.67	19.07	17.86	17.05
132	15.33	18.69	17.48	16.71
133	14.99	18.31	17.09	16.38
134	14.66	17.93	16.71	16.04
135	14.30	17.55	16.32	15.70
136	13.97	17.17	15.94	15.36
137	13.63	16.79	15.56	15.02
138	13.30	16.40	15.19	14.62
139	12.96	16.02	14.81	14.34
140	12.63	15.64	14.43	14.00
141	12.30	15.25	14.06	13.65
142	11.97	14.87	13.68	13.31
143	11.64	14.48	13.31	12.97
144	11.31	14.09	12.94	12.62
145	10.99	13.71	12.57	12.29
146	10.66	13.32	12.20	11.93
147	10.34	12.93	11.83	11.59
148	10.01	12.54	11.46	11.24
149	9.69	12.16	11.09	10.89
150	9.37	11.77	10.73	10.55
151	9.05	11.38	10.36	10.20
152	8.73	10.99	10.00	9.85
153	8.41	10.60	9.63	9.50
154	8.09	10.21	9.27	9.15
155	7.77	9.82	8.91	8.80
156	7.46	9.43	8.55	8.45
157	7.14	9.04	8.19	8.10
158	6.82	8.65	7.83	7.75
159	6.51	8.26	7.47	7.40
160	6.20	7.86	7.11	7.05
161	5.88	7.47	6.75	6.70
162	5.57	7.08	6.39	6.35
163	5.26	6.69	6.03	6.00
164	4.95	6.30	5.68	5.65
165	4.63	5.90	5.32	5.30
166	4.32	5.51	4.96	4.94
167	4.01	5.12	4.61	4.59
168	3.70	4.72	4.25	4.24
169	3.39	4.33	3.90	3.89
170	3.08	3.94	3.54	3.53
171	2.77	3.54	3.19	3.10
172	2.47	3.15	2.83	2.83
173	2.15	2.75	2.48	2.47
174	1.85	2.36	2.12	2.12
175	1.54	1.97	1.77	1.77
176	1.23	1.58	1.41	1.41
177	0.92	1.18	1.06	1.06
178	0.62	0.79	0.71	0.71
179	0.31	0.39	0.35	0.35

MAINTENANCE

MAINTENANCE

⚠ DANGER

To avoid injury, never put lubricants on the blade while it is spinning.

⚠ WARNING

- To avoid fire or toxic reaction, never use gasoline, naphtha acetone, lacquer thinner or similar highly volatile solvents to clean the miter saw.
- To avoid injury from unexpected starting or electrical shock, unplug the power cord before working on the saw.
- 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.

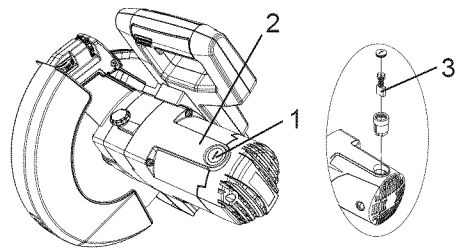
REPLACING CARBON BRUSHES (FIG. TT)

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 in. 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 carbon brush (3) and replace. 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. Repeat for the carbon brush located on the other side of motor.

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.

Fig. TT



LOWERING 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. Regularly check to make sure the lower guard is working properly. Also check before each use that all bolt/screws are tight. Clean the lower guard of any dust or buildup with a damp cloth.

⚠ WARNING

- When cleaning the lower guard, unplug the saw from the power source receptacle to avoid unexpected start-up.
- Do not use solvents on the guard. They could make the plastic “cloudy” and brittle.

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.

If need to remove small pieces of material from the table cavity, see the section on Removing and Installing the Table Insert on page 21.

To empty the dust bag, remove the sawdust bag from the dust port. Open the zipper on the sawdust bag and empty out the sawdust inside. Close the zipper and reinstall the dust bag on the dust port as described on page 18.

WARNING

Wear proper eye protection to keep debris from entering eyes when removing sawdust from unit.

LUBRICATION (FIG. UU)

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.

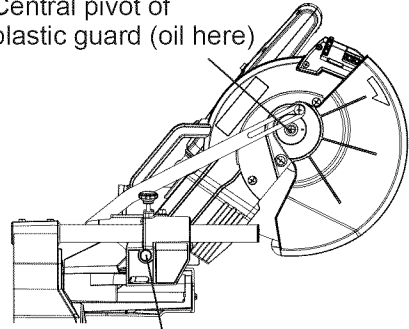
Lubricate the following as necessary:

Chop pivot: Apply light machine oil to points indicated in illustration.

Central pivot 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.

Fig. UU

Central pivot of plastic guard (oil here)



Chop Pivot (oil here and on opposite side)

TROUBLESHOOTING GUIDE

WARNING

To avoid injury from accidental starting, always turn switch OFF and unplug the tool before moving, replacing the blade or making adjustments.

TROUBLESHOOTING GUIDE - MOTOR

PROBLEM	PROBLEM CAUSE	SUGGESTED CORRECTIVE ACTION
Brake does not stop blade within 6 seconds.	<ol style="list-style-type: none">1. Motor brushes not sealed or lightly sticking.2. Motor brake overheated from use of defective or wrong size blade or rapid ON/OFF cycling.3. Arbor bolt loose.4. Brushes cracked, damaged, etc.5. Other.	<ol style="list-style-type: none">1. Inspect/clean/replace brushes. See MAINTENANCE section.2. Use a recommended blade. Let cool down. See REMOVING OR INSTALLING THE BLADE section.3. Retighten. See REMOVING OR INSTALLING THE BLADE section.4. Replace brushes.5. Contact Sears Service Center.
Motor does not start.	<ol style="list-style-type: none">1. Limit switch failure.2. Brush worn.3. Fuse blown or circuit breaker tripped on home panel.	<ol style="list-style-type: none">1. Replace limit switch.2. Replace brushes. See MAINTENANCE section.3. Verify there is electrical power at the outlet.
Brush spark when switch released.	<ol style="list-style-type: none">1. Brush worn.2. Other.	<ol style="list-style-type: none">1. Replace brushes. See MAINTENANCE section.2. Contact Sears Service Center.

TROUBLESHOOTING GUIDE - SAW OPERATION

PROBLEM	PROBLEM CAUSE	SUGGESTED CORRECTIVE ACTION
Blade hits table.	1. Misalignment.	1. See ADJUSTMENT- CUTTING ARM TRAVEL section.
Angle of cut not accurate. Can not adjust miter.	1. Miter table unlocked. 2. Sawdust under table.	1. See OPERATION - MITER ANGLE ADJUSTMENT section. 2. Vacuum or blow out dust. WEAR EYE PROTECTION.
Cutting arm wobbles.	1. Loose pivot points.	1. Contact Sears Service Center.
Cutting arm will not fully raise, or blade guard won't fully close.	1. Pivot spring not replaced properly after service. 2. Sawdust build-up.	1. Clean and lubricate moving parts. 2. Contact Sears Service Center.
Blade binds, jams, burns wood.	1. Improper operation. 2. Dull or warped blade. 3. Improper blade size. 4. Wood is moving during cut.	1. See BASIC SAW OPERATION section. 2. Replace or sharpen blade. 3. Replace with 10 in. diameter blade. 4. Use clamp to secure workpiece to fenceunit and table.
Saw vibrates or shakes.	1. Saw blade not round / damaged / loose. 2. Arbor bolt loose.	1. Replace blade. 2. Tighten arbor bolt.

PARTS LIST

10 IN. COMPACT SLIDE MITER SAW

MODEL NO. 137.407530



WARNING

When servicing use only CRAFTSMAN 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.

PARTS LIST FOR MITER SAW (A)

I.D.	Description	Size	Q'ty	I.D.	Description	Size	Q'ty
082J	CUSHION		1	0K74	CR. RE. TRUSS HD. SCREW	M6*1.0-8	1
082L	BOLT		1	0K7X	CR. RE. TRUSS HD. ROUND NECK SCREW	M6*1.0-10	1
082P	SCREW STOP		1	0K7Z	CR. RE. TRUSS HD. ROUND NECK SCREW	M6*1.0-14	1
082Q	LOCK NUT		1	0KA0	CR. RE. PAN HD. TAPPING SCREW	M5*12-20	2
083S	TRIGGER	23#	1	0KA1	CR. RE. PAN HD. TAPPING SCREW	M3*24-6	1
083Z	CORD CLAMP		1	0KB7	CR. RE. PAN HD. TAPPING SCREW	M4*18-16	3
0CES	COMPRESSION SPRING		1	0KB8	CR. RE. PAN HD. TAPPING SCREW	M4*18-20	5
0CKS	SPRING WIRE		1	0KBD	CR. RE. PAN HD. TAPPING SCREW	M4*18-25	1
0CPD	CENTER BOLT		1	0KD3	CR. RE. PAN HD. SCREW	M6*1.0-50	2
0D9A	ANCHOR BLOCK		1	0KD5	CR. RE. PAN HD. SCREW	M4*0.7-6	2
0DVJ	BLADE WRENCH		1	0KD6	CR. RE. PAN HD. SCREW	M4*0.7-8	1
0J4C	FLAT WASHER	φ4*8-1	2	0KD7	CR. RE. PAN HD. SCREW	M4*0.7-10	6
0J4D	FLAT WASHER	φ5*10-1	3	0KD8	CR. RE. PAN HD. SCREW	M4*0.7-12	1
0J4E	FLAT WASHER	φ6*13-1	4	0KDG	CR. RE. PAN HD. SCREW	M5*0.8-6	3
0J4F	FLAT WASHER	φ8*16-2.5	1	0KDH	CR. RE. PAN HD. SCREW	M5*0.8-8	2
0J4M	FLAT WASHER	φ12*21-1	1	0KDJ	CR. RE. PAN HD. SCREW	M5*0.8-12	4
0J6P	FLAT WASHER	φ6*16-2	1	0KDM	CR. RE. PAN HD. SCREW	M5*0.8-20	1
0JAZ	WAVE WASHER	WW-6	1	0KDV	CR. RE. PAN HD. SCREW	M6*1.0-16	4
0JB0	WAVE WASHER	WW-8	4	0KL1	CR. RE. PAN HD. ROUND NECK SCREW	M6*1.0-12	1
0JBG	DISC SPRING WASHER	φ12	1	0KMS	HEX. NUT	M6*1.0 T=5	2
0JC8	SPRING PIN		1	0KQW	LOCK NUT	M5*0.8 T=5	1
0JCT	SPRING PIN		2	0KQX	NUT	M6*1.0 T=6	5
0JE7	C-RING		1	0KQY	LOCK NUT	M8*1.25 T=8	1
0JMN	O-RING		1	0KRO	NUT	M12*1.75 T=12	1
0JMP	O-RING		1	0KR2	LUCK NUT	M5*0.8 T=5	2
0JNR	O-RING ROD		2	0KR3	LOCK NUT	M6*1.0 T=6	1
0JPF	HEX. HD. BOLT	M6*1.0-25	2	0KTP	CABLE CLAMP		1
0JUJ	HEX. SOC. HD. CAP BOLT	M6*1.0-12	1	0KUW	TERMINAL		2
0JX9	HEX. SOC. SET SCREW	M6*1.0-10	1	0LU2	LIMIT SWITCH		1
0JXB	HEX. SOC. SET SCREW	M6*1.0-16	1	0LYH	DUST GUARD		1
0JZF	HEX. SOC. SET SCREW	M6*1.0-10	2	0S1S	COLLAR		1
0JZN	ARBOR BOLT	M8*1.25-20	1	0U6V	FLAT WASHER		1
0K29	HEX. SOC. HD. CAP SCREW	M6*1.0-12	2	20PL	CLAMP HANDLE	6#	1
0K2N	HEX. SOC. HD. CAP SCREW	M8*1.25-25	4	21GM	FLAT WASHER	φ4*10-1	1
0K30	HEX. SOC. TRUSS HEAD & WASHER ASSEMBLED	M6*1.0-16	2	224U	ROLL PIN		1
0K51	CR. RE. COUNT HD. SCREW	M4*0.7-8	4	22QE	CR. RE. ROUND WASHER HD. SCREW	M5*0.8-16	2
0K55	CR. RE. COUNT HD. SCREW	M5*0.8-8	4	23NF	ARBOR COLLAR		2
0K5D	CR. RE. COUNT HD. SCREW	M6*1.0-20	1	23NX	CORD GUARD		1
0K71	CR. RE. TRUSS HD. SCREW	M5*0.8-8	3	250Z	HEX. SOC. HD. CAP SCREW	M5*0.8-35	3

10 IN. COMPACT SLIDE MITER SAW PARTS LIST FOR MITER SAW (B)

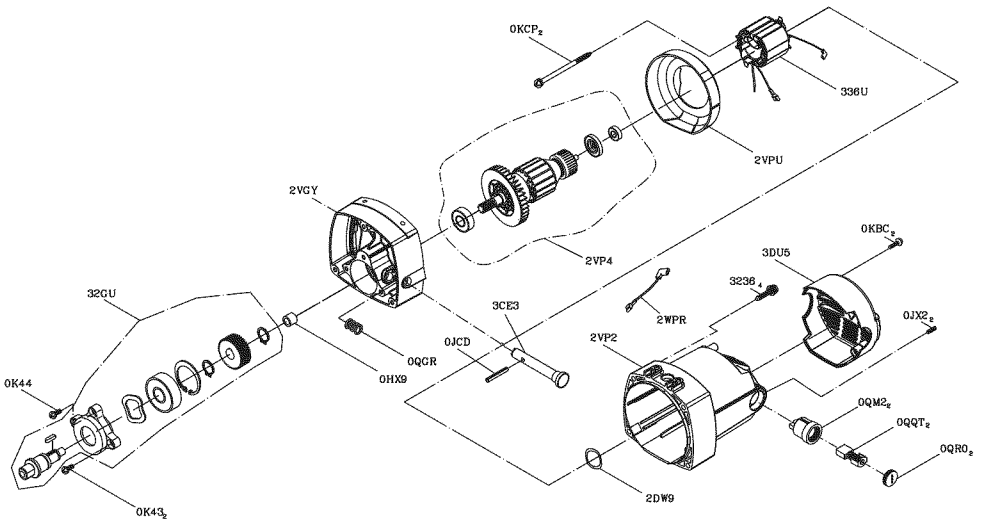
MODEL NO. 137.407530

I.D.	Description	Size	Q'ty	I.D.	Description	Size	Q'ty
262V	ANCHOR PLATE		1	3DJS	ARM MITER COVER	6#	1
26LU	WARNING LABEL		1	3DJT	CABLE SHIELD	6#	1
27PQ	ROLL PIN		1	3DK9	BOLT		1
2840	COMPRESSION SPRING		1	3DKA	BOLT		1
290M	CAUTION LABEL		1	3DKC	SEGMENT HANDLE	6#	1
2B7H	HEX. SOC. SET SCREW	M6*1.0-12	1	3DKD	LEVER		1
2BLQ	HEX. SOC. HD. CAP SCREW	M5*0.8-40	3	3DKE	LEVER BRACKET		1
2BQA	PLATE		1	3DKF	PIVOT SHAFT		1
2D7E	COMPRESSION SPRING		1	3DKJ	TORSION SPRING		1
2D92	CONTROLLER ASS'Y		1	3DKM	LOCKING HANDLE ASS'Y	23#	1
2DWP	NEEDLE POINTER	23#	1	3DL1	NEEDLE POINTER	23#	1
2F39	CLEVIS PIN		1	3DL4	FENCE	6#	1
2JAF	BLADE		1	3DL5	KNOB	6# + 23#	1
2K96	WARNING LABEL		1	3DLE	MOTOR HANDLE (UP)	6#	1
2MC3	ROLL PIN		2	3DLF	MOTOR HANDLE (DOWN)	6#	1
2MMC	CR. RE. TRUSS HD. SCREW	M5*0.8-6	3	3DLG	TABLE	6#	1
2N7W	BRACING PLATE	6#	1	3DLH	FOLLOWER PLATE	6#	1
2NAH	CR. RE. TRUSS HD. SCREW	M4*0.7-8	1	3DLJ	FOLLOWER PLATE (LEFT)	6#	1
2QM7	FLAT WASHER	φ6*10-1	3	3DLK	PLUNGER HANDLE	23#	1
2S45	CR. RE. COUNT HD. SCREW	M3*0.5-6	2	3DLL	ARM	AW#	1
2T9B	ROCK SWITCH ASS'Y		1	3DLM	BASE	6#	1
2VEP	SHAFT		1	3DLZ	CLAMP HANDLE	23#	2
2VH6	LINEAR MOTION BEARING		2	3DMM	BEARING COVER		3
2VN7	BLANKET WASHER		4	3DRT	CLAMP BOLT	23#	1
2V50	LEAD WIRE ASS'Y		1	3DTM	SHAFT SLEEVE		1
2VZ1	RUBBER INSERT		8	3DTQ	POWER CORD CLAMP	6#	1
2WPX	POWER CABLE		1	3DTZ	RUBBER PAD		1
2WUT	TRADEMARK LABEL		1	3DWQ	PLATE		1
2YR6	SPRING GUARD		1	3DWT	INSERT		1
31VX	CR. RE. TRUSS HD. ROUND NECK SCREW	M6*1.0-14	1	3DWU	BUTTON	23#	2
31XE	SLIDE PLATE		3	3DWW	PIN		2
349F	PLATE (RIGHT)	23#	1	3DWW	LASER SET		1
349G	PLATE (LEFT)	23#	1	3DWW	PIVOT-SUPPORT	6#	1
34BN	COMPRESSION SPRING		1	3DWZ	LASER PLUNGER HOUSING		1
34DK	LOCK NUT	M6*1.0 T=9	1	3DXM	LINEAR MOTION BEARING		1
34HH	LEAD WIRE ASS'Y		1	3DXN	WISE ASS'Y		1
34NJ	UPPER TUBE		2	3DY0	ASSIST-FENCE	6#	1
34NK	UPPER TUBE		2	3E72	SPECIAL BOLT		1
35CH	HEX. SOC. SET SCREW	M6*1.0-16	1	3EVA	OPERATOR'S MANUAL		1
35QJ	LEVER		1	3EVM	DUST BAG ASS'Y		1
3BKA	EXTENSION WING	6#	1	3F4X	SHAFT		1
3BKB	RIGHT EXTENSION WING	6#	1	3F8Q	PLUNGER HOUSING		1
3BKC	MITER ARM	6#	1	3FKJ	CR. RE. TRUSS HD. ROUND NECK SCREW	M5*0.8-12	1
3BKD	SLIDE-BAR SEAT (FRONT)	6#	1	3FM3	SPECIAL BOLT		1
3BMZ	TABLE INSERT (LEFT)	23#	1	3FSY	WARNING LABEL		1
3BN0	TABLE INSERT (RIGHT)	23#	1	3FSZ	LABEL		1
3CBQ	PC-GUARD		1	3FT0	TRADEMARK LABEL		1
3CBR	CUTTER SHAFT GUARD	6#	1	3FT1	CAUTION LABEL		1
3CD5	CLAMP BOLT	23#	1	3FT3	CAUTION STICKER		1
3CD6	HANDLE KNOB	23#	1	3FT4	WARNING LABEL		1
3DHP	MOTOR ASS'Y		1	3FT5	LASER STICKER		1
3DJ8	LOCATING BAR		1	3FT6	CAUTION LABEL		1
3DJ9	FRAME ENDCAP		1	3FT7	SCALE		1
3DJA	WASHER BEARING		1	3FT8	TILTING SCALE		1
3DJG	SPACER		2	3FVK	LASER COVER	6#	1
3DJH	PLUNGER HANDLE	23#	1	3FVL	COVERLASER COVER	6#	1
3DJL	SET PLATE		1	3FVM	LEVELING PAD	6#	1
3DJP	MITER BAR ASS'Y		1	3FVQ	ADJUSTABLE NUT		1
3DJR	MITER BAR ASS'Y		1	Y3XN	CLAMP HANDLE		1

**10 IN. COMPACT SLIDE MITER SAW
PARTS LIST FOR MOTOR**

MODEL NO. 137.407530

I.D.	Description	Size	Q'ty
0HX9	NEEDLE BEARING		1
0JCD	SPRING PIN		1
0JX2	HEX. SOC. SET SCREW	M5*0.8-6	2
0K43	CR. RE. PAN HD. SCREW & WASHER	M5*0.8-16	2
0K44	CR. RE. PAN HD. SCREW & WASHER	M5*0.8-12	1
0KBC	CR. RE. PAN HD. TAPPING SCREW	M5*16-25	2
0KCP	CR. RE. PAN HEAD TAPPING & WASHER SCREW	M5*12-60	2
0QGR	COMPRESSION SPRING		1
0QM2	BRUSH HOLDER ASSEMBLY		2
0QQT	BRUSH ASSEMBLY		2
0QRO	BRUSH COVER		2
2DW9	WAVE WASHER		1
2VGY	GEAR BOX	AW#	1
2VP2	MOTOR COVER	6#	1
2VP4	ARMATURE ASSEMBLY		1
2VPU	FLOW GUIDE		1
2WPR	LEAD WIRE ASSEMBLY		1
3236	CR. RE. PAN HD. SCREW & WASHER	M6*1.0-55	4
32GU	CUTTER SHAFT ASSEMBLY		1
336U	FIELD ASSEMBLY		1
3CE3	BRACKET STOP ASSEMBLY		1
3DU5	MOTOR COVER	6#	1



REPAIR PROTECTION AGREEMENTS

Congratulations on making a smart purchase. Your new Craftsman® product is designed and manufactured for years of dependable operation. But like all products, it may require repair from time to time. That's when having a Repair Protection Agreement can save you money and aggravation.

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- ☑ **Fast help by phone** – we call it Rapid Resolution – phone support from a Sears representative. Think of us as a “talking owner's manual.”

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NOTES