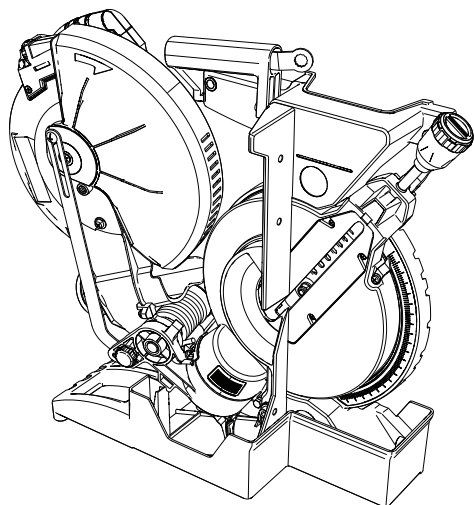


# CRAFTSMAN®

INSTRUCTION MANUAL | MANUAL DE INSTRUCCIONES

## 10 in. (254 mm) Folding Compound Miter Saw Sierra de inglete compuesta plegadiza de 254 mm (10 pulgadas)



**CMXEMAR120**



IF YOU HAVE QUESTIONS OR COMMENTS, CONTACT US.  
SI TIENE DUDAS O COMENTARIOS, CONTÁCTENOS.

**1-888-398-7737**

**WWW.CRAFTSMAN.COM**

---

English (**original instructions**)

1

---

Español (*traducido de las instrucciones originales*)

33

---

## Definitions: Safety Alert Symbols and Words

This instruction manual uses the following safety alert symbols and words to alert you to hazardous situations and your risk of personal injury or property damage.



**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**.



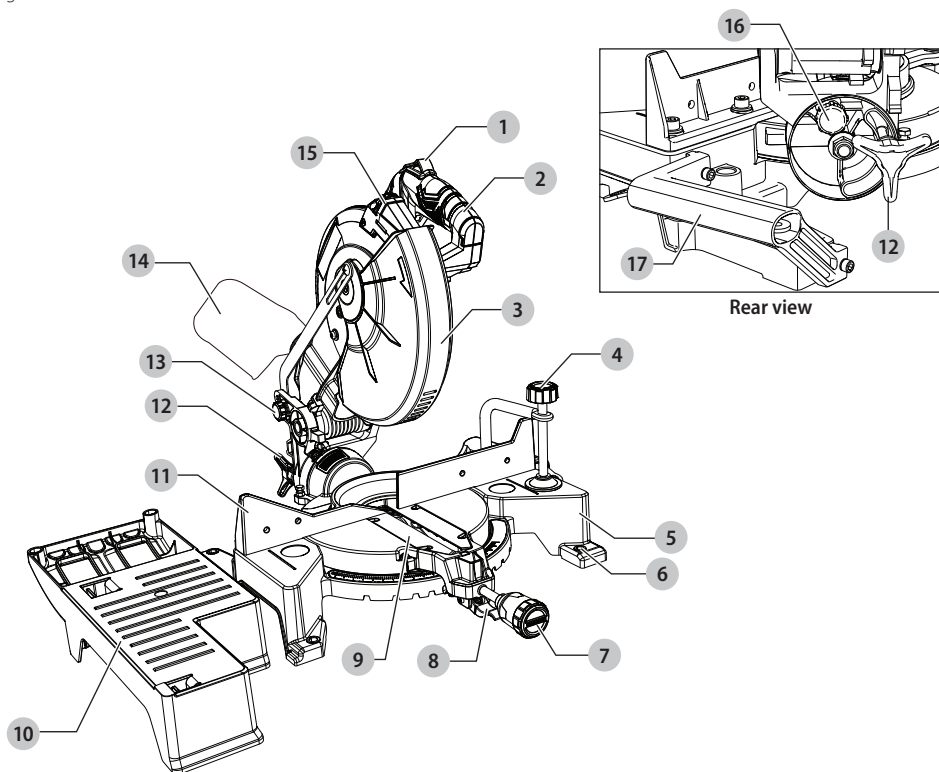
**CAUTION:** Indicates a potentially hazardous situation which, if not avoided, **may** result in **minor or moderate injury**.



(Used without word) Indicates a safety related message.

**NOTICE:** Indicates a practice **not related to personal injury** which, if not avoided, **may** result in **property damage**.

Fig. A



### COMPONENTS

- |                                |                    |
|--------------------------------|--------------------|
| 1 Safety lock                  | 10 Support base    |
| 2 ON/OFF trigger switch handle | 11 Fence           |
| 3 Lower blade guard            | 12 Bevel lock knob |
| 4 Hold-down clamp              | 13 Hold-down latch |
| 5 Base                         | 14 Dust bag        |
| 6 Mounting hole                | 15 Laser guide     |
| 7 Miter handle                 | 16 Safety lock pin |
| 8 Positive stop locking lever  | 17 Carrying handle |
| 9 Table insert                 |                    |



**WARNING:** Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.



**WARNING:** Never modify the product or any part of it. Damage or personal injury could result.



**WARNING:** To reduce the risk of injury, read the instruction manual.

If you have any questions or comments about this product, call CRAFTSMAN toll free at: 1-888-398-7737.

## 10 in. (254 mm) Folding Compound Miter Saw CMXEMAR120

### GENERAL POWER TOOL SAFETY WARNINGS



**WARNING:** Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

#### SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

#### 1) Work Area Safety

- a) **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

#### 2) Electrical Safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) **If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply.** Use of a GFCI reduces the risk of electric shock.

#### 3) Personal Safety

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- b) **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) **Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- d) **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f) **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewelry or long hair can be caught in moving parts.
- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
- h) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

#### 4) Power Tool Use and Care

- a) **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- b) **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) **Disconnect the plug from the power source and/or remove the battery, pack if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.

- d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- e) **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- f) **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) **Use the power tool, accessories and tool bits, etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
- h) **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.


## 5) Service

- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.**


## SAFETY INSTRUCTIONS FOR MITER SAWS

- **Miter saws are intended to cut wood or wood-like products, they cannot be used with abrasive cut-off wheels for cutting ferrous material such as bars, rods, studs, etc.** Abrasive dust causes moving parts such as the lower guard to jam. Sparks from abrasive cutting will burn the lower guard, the kerf insert and other plastic parts.
  - **Use clamps to support the workpiece whenever possible. If supporting the workpiece by hand, you must always keep your hand at least 100 mm from either side of the saw blade. Do not use this saw to cut pieces that are too small to be securely clamped or held by hand.** If your hand is placed too close to the saw blade, there is an increased risk of injury from blade contact.
  - **The workpiece must be stationary and clamped or held against both the fence and the table. Do not feed the workpiece into the blade or cut "freehand" in any way.** Unrestrained or moving workpieces could be thrown at high speeds, causing injury.
  - **Push the saw through the workpiece. Do not pull the saw through the workpiece. To make a cut, raise the saw head and pull it out over the workpiece without cutting, start the motor, press the saw head down and push the saw through the workpiece.**
- Cutting on the pull stroke is likely to cause the saw blade to climb on top of the workpiece and violently throw the blade assembly towards the operator.
- **Never cross your hand over the intended line of cutting either in front or behind the saw blade.** Supporting the workpiece "cross handed" i.e. holding the workpiece to the right of the saw blade with your left hand or vice versa is very dangerous.
  - **Do not reach behind the fence with either hand closer than 100 mm from either side of the saw blade, to remove wood scraps, or for any other reason while the blade is spinning.** The proximity of the spinning saw blade to your hand may not be obvious and you may be seriously injured.
  - **Inspect your workpiece before cutting. If the workpiece is bowed or warped, clamp it with the outside bowed face toward the fence. Always make certain that there is no gap between the workpiece, fence and table along the line of the cut.** Bent or warped workpieces can twist or shift and may cause binding on the spinning saw blade while cutting. There should be no nails or foreign objects in the workpiece.
  - **Do not use the saw until the table is clear of all tools, wood scraps, etc., except for the workpiece.** Small debris or loose pieces of wood or other objects that contact the revolving blade can be thrown with high speed.
  - **Cut only one workpiece at a time.** Stacked multiple workpieces cannot be adequately clamped or braced and may bind on the blade or shift during cutting.
  - **Ensure the miter saw is mounted or placed on a level, firm work surface before use.** A level and firm work surface reduces the risk of the miter saw becoming unstable.
  - **Plan your work. Every time you change the bevel or miter angle setting, make sure the adjustable fence is set correctly to support the workpiece and will not interfere with the blade or the guarding system.** Without turning the tool "ON" and with no workpiece on the table, move the saw blade through a complete simulated cut to assure there will be no interference or danger of cutting the fence.
  - **Provide adequate support such as table extensions, saw horses, etc. for a workpiece that is wider or longer than the table top.** Workpieces longer or wider than the miter saw table can tip if not securely supported. If the cut-off piece or workpiece tips, it can lift the lower guard or be thrown by the spinning blade.
  - **Do not use another person as a substitute for a table extension or as additional support.** Unstable support for the workpiece can cause the blade to bind or the workpiece to shift during the cutting operation pulling you and the helper into the spinning blade.
  - **The cut-off piece must not be jammed or pressed by any means against the spinning saw blade.** If confined, i.e. using length stops, the cut-off piece could get wedged against the blade and thrown violently.

- **Always use a clamp or a fixture designed to properly support round material such as rods or tubing.** Rods have a tendency to roll while being cut, causing the blade to "bite" and pull the work with your hand into the blade.
- **Let the blade reach full speed before contacting the workpiece.** This will reduce the risk of the workpiece being thrown.
- **If the workpiece or blade becomes jammed, turn the miter saw off. Wait for all moving parts to stop and disconnect the plug from the power source and/or remove the battery pack. Then work to free the jammed material.** Continued sawing with a jammed workpiece could cause loss of control or damage to the miter saw.
- **After finishing the cut, release the switch, hold the saw head down and wait for the blade to stop before removing the cut-off piece.** Reaching with your hand near the coasting blade is dangerous.
- **Hold the handle firmly when making an incomplete cut or when releasing the switch before the saw head is completely in the down position.** The braking action of the saw may cause the saw head to be suddenly pulled downward, causing a risk of injury.
- **Do not use** this saw to cut tree limbs or logs.
- **Never** use blades recommended for operation at less than 5000 RPM.
- **Do not store materials on top of saw** when in the folded or unfolded position. Doing so could cause damage to the lower guard.
- **Do not hang** this saw on a wall or other location.
- **Do not pick up or carry this saw by the lower blade guard.** Doing so could cause damage to the guard.
- **Do not use this saw to cut fiber cement board.** This saw is not intended to cut fiber cement board.
- Remove hold-down clamp from saw before folding and transporting.
- Do not transport the unit standing up in a vehicle.
- **Make sure power cord is wrapped up securely** before folding the saw for storage or transport.

 **WARNING: Additional warnings are listed throughout this manual. Please review all before operating this power tool.**

## PROPOSITION 65 WARNING

 **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 and 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.

Handling the power cord on this product may expose you to chemicals known to the state of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

For more information go to: [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



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

- **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.



**WARNING:** Use of this tool can generate and/or disperse dust, which may cause serious and permanent respiratory or other injury. Always use NIOSH/OSHA approved respiratory protection appropriate for the dust exposure. Direct particles away from face and body.



**WARNING: Always wear proper personal hearing protection that conforms to ANSI S12.6 (S3.19) during use.** Under some conditions and duration of use, noise from this product may contribute to hearing loss.



**CAUTION:** When not in use, place tool on its side on a stable surface where it will not cause a tripping or falling hazard. Some tools will stand upright but may be easily knocked over.

- **Air vents often cover moving parts and should be avoided.** Loose clothes, jewelry or long hair can be caught in moving parts.

## ELECTRICAL SPECIFICATIONS AND SAFETY

• **An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety.** The smaller the gauge number of the wire, the greater the capacity of the cable, that is, 16 gauge has more capacity than 18 gauge. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. When using more than one extension to make up the total length, be sure each individual extension contains at least the minimum wire size. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The lower the gauge number, the heavier the cord.

**Minimum Gauge for Cord Sets**

Volts	Total Length of Cord in Feet (meters)					
	120 V	25 (7.6)	50 (15.2)	100 (30.5)	150 (45.7)	
240 V	50 (15.2)	100 (30.5)	200 (61.0)	300 (91.4)		
Ampere Rating		American Wire Gauge				
More Than	Not More Than					
0	6	18	16	16	14	
6	10	18	16	14	12	
10	12	16	16	14	12	
12	16	14	12	Not Recommended		

**WARNING:** Be sure your extension cord is properly wired and in good condition. If it is not, replace it with another cord. Do not use a damaged extension cord. Protect your extension cords from sharp objects, excessive heat and damp or wet areas.

The label on your tool may include the following symbols. The symbols and their definitions are as follows:

- V ..... volts
- Hz ..... hertz
- min ..... minutes
- or DC ..... direct current
- Ⓢ ..... Class I Construction (grounded)
- .../min ..... per minute
- BPM ..... beats per minute
- IPM ..... impacts per minute
- RPM ..... revolutions per minute
- sfpm ..... surface feet per minute
- SPM ..... strokes per minute
- OPM ..... oscillations per minute
- A ..... amperes
- W ..... watts
- ~ or AC ..... alternating current
- ⤵ or AC/DC ..... alternating or direct current
- Ⓢ ..... Class II Construction (double insulated)
- n<sub>0</sub> ..... no load speed
- n ..... rated speed
- Ⓢ ..... earthing terminal
- ⚠ ..... safety alert symbol
- ⚠ ..... visible radiation
- ⚠ ..... avoid staring at light
- ☞ ..... wear respiratory protection
- ☞ ..... wear eye protection
- ☞ ..... wear hearing protection

**SAVE THESE INSTRUCTIONS FOR FUTURE USE**

**Motor**

Be sure your power supply agrees with the nameplate marking. Voltage decrease of more than 10% will cause loss of power and overheating. These tools are factory tested; if this tool does not operate, check power supply.

**Intended Use**

This miter saw is designed for wood cutting.

**DO NOT** use under wet conditions or in presence of flammable liquids or gases.

This miter saw is a professional power tool. **DO NOT** let children come into contact with the tool. Supervision is required when inexperienced operators use this tool.

**TOOLS NEEDED TO REMOVE OR INSTALL BLADE**

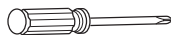
Supplied



Blade wrench

**TOOLS NEEDED FOR ADJUSTMENT**

Not supplied



Phillips Screwdriver



Adjustable Wrench



Slotted Screwdriver



Combination Square

**CARTON CONTENTS**

**Unpacking And Checking Contents**

Carefully unpack the miter saw and all its parts, and compare against the list below and the illustration on the next page. With the help of an assistant place the saw on a secure surface and examine it carefully.

**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. The cord must remain unplugged whenever you are adjusting/assembling the miter saw.

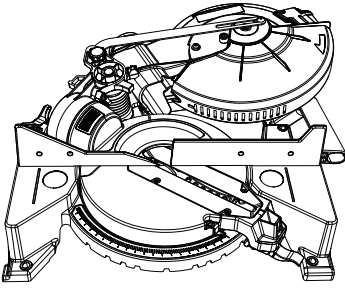
**WARNING:** The miter saw is heavy and should be lifted with care. If needed, get the assistance of someone to lift and move the miter saw.

**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.

**Table of Loose Parts**

ITEM	DESCRIPTION	Q'TY
A.	Miter saw	1
B.	Instruction manual	1
C.	Blade wrench	1
D.	Hold-down clamp	1
E.	Miter handle	1
F.	Dust bag	1
G.	Support base	1

## UNPACKING YOUR FOLDING MITER SAW



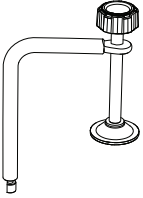
A



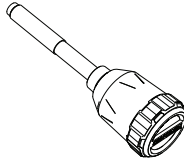
B



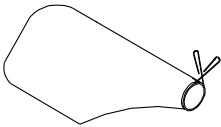
C



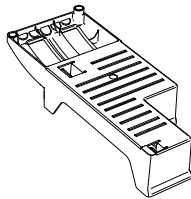
D



E



F



G

## ASSEMBLY AND ADJUSTMENTS

**!** **WARNING:** To reduce the risk of serious personal injury, turn unit off and disconnect it from power source before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

## Assembly Instructions To Raise The Cutter Head (Fig. B, C, D)

**!** **WARNING:** To avoid injury, make sure all parts are assembled and adjusted properly before plugging the miter saw into a power outlet and turning it ON.

1. Remove saw from the support base. Place saw with blade and fence side facing up on a flat, stable surface.
2. Thread the miter handle **7** into the hole located at the front of the table as shown in Fig. B.
3. Loosen the bevel lock knob **12** located behind the base as shown in Fig. C.
4. Pull out the safety lock pin **16** located next to the bevel lock knob.
5. Grasp the cutting head by the switch handle **2** and raise the cutting head up to the vertical position just past the 0° bevel setting.
6. Tilt the cutting head back to 0° and then tighten the bevel lock knob **12**. The pin will automatically insert into the slot, locking the head in position.
7. Loosen the miter handle **7**, grasp it and lift up the positive stop locking lever **8** located under the miter handle, to turn the table to 0° as shown on the miter scale. Retighten the miter handle **7**.
8. Slightly push down the cutting head using the switch handle **2** and pull out the hold-down latch **13** located near the back on the left side of saw. This releases the cutting head from its locked position to swing upward into operation position.

Fig. B

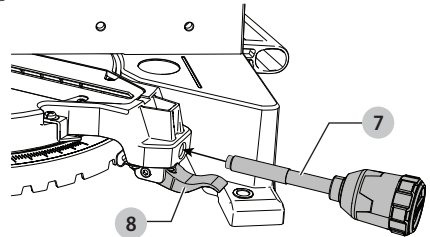




Fig. C

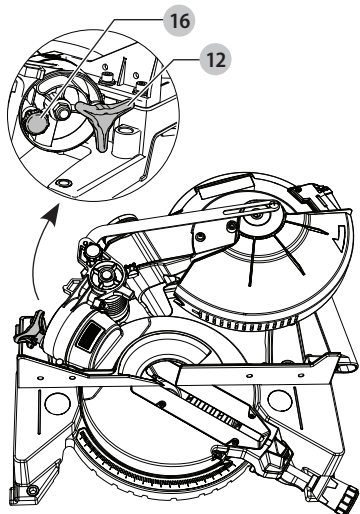
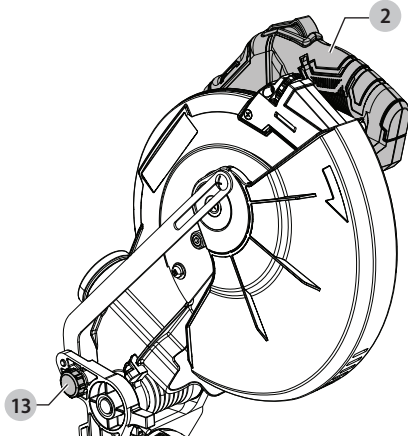


Fig. D



## Locking The Cutting Head (Fig. B, C, D)

When not in use, the miter saw cutting head should always be locked in the down position.

**NOTE:** Make sure the power cord is wrapped up securely before folding the saw for storage or transport.

1. Pull down the switch handle **2** to place the cutting head in its lowest position.
2. Push the hold-down latch **13** in.

**IMPORTANT:** To avoid damage, never carry the miter saw by the lower blade guard, the switch handle, the cutting head or the miter handle. **ALWAYS** use the designated carrying handle.

**!** **WARNING:** To reduce the risk of injury, you must unplug the saw from power source before folding for transportation or storage.

**!** **WARNING:** To reduce the risk of injury, turn unit off and disconnect it from power source before installing and removing accessories, before adjusting or when making repairs. An accidental start-up can cause injury.

**!** **WARNING:** Make sure blade has stopped rotating before folding the saw.

## Folding The Cutting Head For Transportation And Storage (Fig. B, C, D)

**NOTE:** Remove the hold-down clamp assembly **4** (Fig. F) from saw before folding and transporting.

1. Keep the cutting head in the up position.
2. Slightly push down the switch handle **2** and push the hold-down latch **13** into the locking hole.
3. Loosen the miter handle **7**, grasp it and lift up the positive stop locking lever **8** to turn the turntable to the right 55° and then tighten the miter handle.
4. Loosen the bevel lock knob **12**, pull out the safety lock pin **16** and grasp the switch handle **2** to lower the cutting head towards the right and down until hearing a "click" sound.

**NOTE:** Make sure the cutting head is locked in position and could not be moved.

5. Tighten the bevel lock knob **12**.

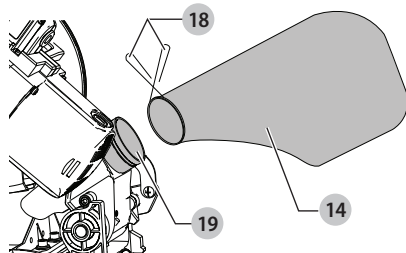
**!** **WARNING: DO NOT STORE MATERIALS ON TOP OF SAW** when in the folded or unfolded position.

## Installing The Dust Bag (Fig. E)

1. Squeeze the metal collar wings **18** of the dust bag **14**.
2. Place the dust bag neck opening around the dust port **19**, and release the metal collar wings **18**.

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

Fig. E

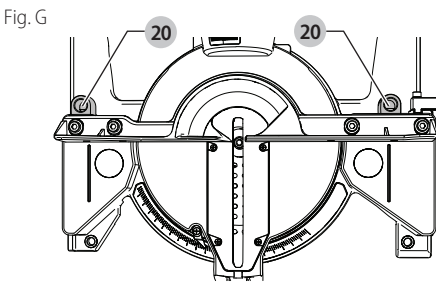
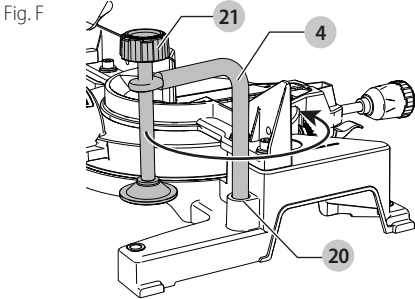


## Installing The Hold-Down Clamp Assembly (Fig. F, G)

**!** **WARNING: CUTTING SMALL OR ROUND MATERIAL,** it should be cut just like wood and **CLAMPED OR HELD FIRMLY TO THE FENCE TO KEEP IT FROM ROLLING.** This is extremely important when making angle cuts.

1. Place the hold-down clamp assembly **4** into the mounting hole **20** located behind the fence. The clamp should be facing toward the back of the miter saw as shown in Fig. F.
2. The groove on the clamp rod should be fully inserted into the mounting hole of the base without being visible. If the groove is visible, the clamp will not be secure.
3. Rotate the hold-down clamp assembly **4** 180 degrees toward the front of the miter saw.
4. Loosen the knob **21** to adjust the clamp up or down to firmly clamp the workpiece.
5. The hold-down clamp assembly **4** can be inserted in one of the two mounting holes **20** located behind the fence on the other side of the base.

**NOTE:** Place the clamp on the opposite side of the base when bevelling. **ALWAYS MAKE DRY RUNS (UNPOWERED) BEFORE FINISH CUTS TO CHECK THE PATH OF THE BLADE. ENSURE THE CLAMP DOES NOT INTERFERE WITH THE ACTION OF THE SAW OR GUARDS.**



**Saw Blade**

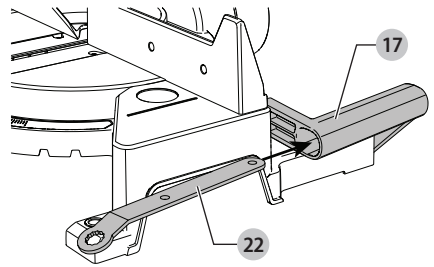
**NOTE:** The miter saw comes with the saw blade already installed.

**WARNING:** Make sure the blade is installed correctly and is tight before operating. See page 11 in adjustments to tighten or remove the saw blade if necessary.

**Saw Blade Wrench Storage (Fig. H)**

1. For convenient storage and prevention of loss, there is a slot in the carrying handle **17** for storing the blade wrench **22** when not in use.

Fig. H



**Mounting The Miter Saw (Fig. I, J)**

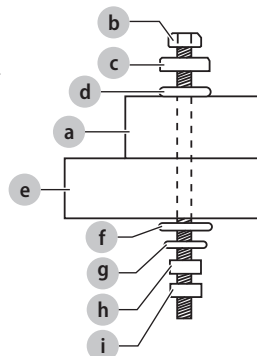
**WARNING:** To avoid injury from unexpected saw movement:

- Before moving the miter saw, disconnect the power cord from the outlet, and lock the cutting arm in the lower position using the hold-down latch.
- NOTE:** The hold-down latch is for carrying or storing the tool. It is not to be used for holding the saw while cutting. Lower the cutting head and press in hold-down latch to secure the cutting head.
- 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 and result 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 four 3/8 in. mounting holes. Select the proper mounting holes based on the size of bolts used. Bolt the base of the miter saw **a** to the workbench **b**, using the fastening method as shown in Fig. I.

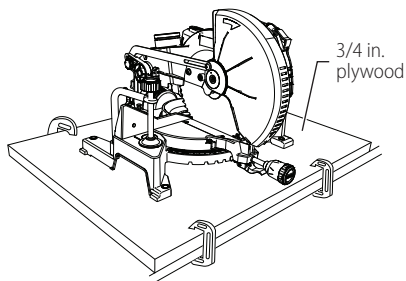
- Fig. I
- a** Miter saw base
  - b** Hex head bolt
  - c** Rubber washer
  - d** Flat washer
  - e** Workbench
  - f** Flat washer
  - g** Lockwasher
  - h** Hex nut
  - i** Jam nut



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

- 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. J)

Fig. J

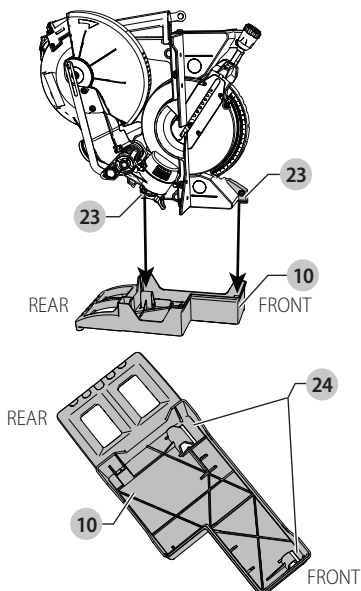


**NOTE:** If a miter saw stand is used, please follow all instructions shown in that product's instructions for proper mounting.

### Using The Support Base (Fig. K)

- Fold the miter saw. (See the section of "FOLDING THE CUTTING HEAD FOR TRANSPORTATION AND STORAGE" on page 9.)
- Place the support base **10** on a flat surface or ground as shown in Fig. K.
- Align the feet **23** of the base with the grooves **24** of the support base **10** and then insert the folded saw into the support base **10**, so that the miter saw could stand on the ground.

Fig. K



### Transporting The Saw (Fig. L)

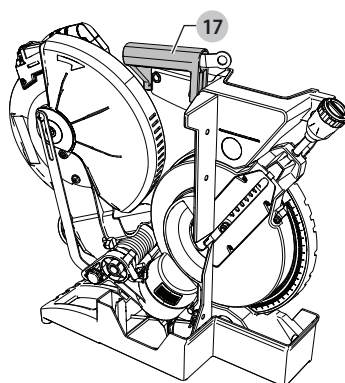
**WARNING:** To reduce the risk of serious personal injury, **ALWAYS** lock the miter lock handle, bevel lock knob, lock down pin before transporting saw.

**NOTE:** To avoid damage, never carry the miter saw by the switch handle. To reduce the risk of serious personal injury, **ALWAYS** secure all clamps, knobs, latches and locks before lifting the saw.

- Never carry the saw by the switch handle, miter clamp or cutting head. The carrying handle **17** is appropriate for when the saw is folded only. When saw is not folded, the hand holds should be used.
- ALWAYS** use the support base when storing the saw vertically.

**WARNING:** Do not transport the unit standing up in a vehicle.

Fig. L



### Removing And Installing The Blade

**WARNING:** Only use 10 inch diameter crosscut blades on this saw. Do not use blades with deep gullets. These can deflect and contact the guard, and can cause damage to the machine and/or serious injury. 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.

**WARNING:** Make sure the blade is installed correctly and is tight before operating.

### Removing the Blade (Fig. M, N, O)

- Unplug the saw from the outlet.
- Raise the cutting head to the upright position.
- Raise the lower blade guard **3** to the uppermost position. (Fig. M)
- Loosen the cover plate screw **25** with a Phillips screwdriver.
- Rotate the cover plate **26** back to expose the arbor bolt **27**.

6. Place the provided blade wrench over the arbor bolt **27**.
7. Locate the arbor lock button **28** below the trigger switch handle. (Fig. N)
8. Press the arbor lock button **28**, 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 **28** while turning the wrench clockwise to loosen the arbor bolt.
9. Remove the arbor bolt **27**, the outer blade collar **29**, and the blade **30**. (Fig. O)

**CAUTION:** Do not remove the inner blade collar **31**.

**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. M

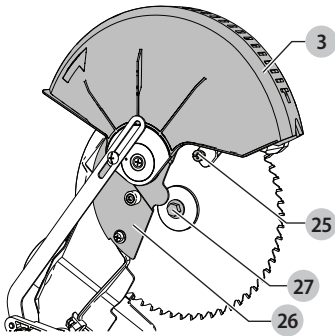


Fig. N

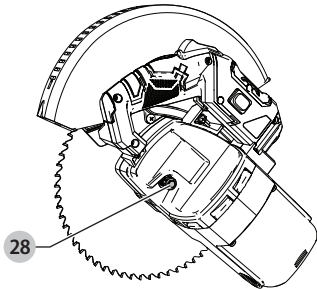
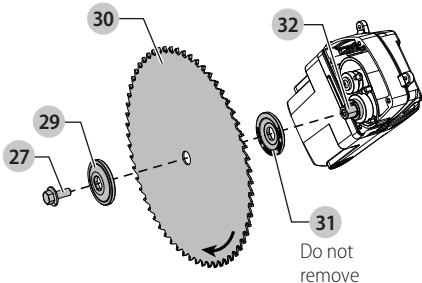


Fig. O



### Installing the Blade (Fig. M, N, O)

**WARNING:** Un-plug the miter saw before changing/ installing the blade.

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 blade **30** onto the arbor **32** and against the inner blade collar **31**. Then, place the outer blade collar **29** and thread the arbor bolt **27** counterclockwise onto the arbor. (Fig. O)
- IMPORTANT:** The flat side of the blade collars must be placed against the blade. Do not install the collars with the curved side against the blade.
3. Place the blade wrench on the arbor bolt **27**.
4. Press the arbor lock button **28**, holding it in firmly while turning the blade wrench counterclockwise. Continue to press it in while tightening the arbor bolt securely. (Fig. N)
5. Rotate the cover plate **26** back to its original position and tighten the cover plate screw **25** with a Phillips screwdriver. (Fig. M)
6. Lower the blade guard **3** back to its original position.
7. Pull the switch handle down and up several times to confirm the lower blade guard operates without binding.
8. Be sure the arbor lock button **28** is released so the blade turns freely. (Fig. N)

**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.

**WARNING:** If the cover plate is not secure in its proper place, the guard may contact the spinning saw blade, resulting in damage to the saw and severe personal injury.

**WARNING:** 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.

**WARNING: ALWAYS MAKE DRY RUNS (UNPOWERED) BEFORE FINISH CUTS SO THAT YOU CAN CHECK THE PATH OF THE BLADE AND THE OPERATION OF THE GUARDS. DO NOT CROSS HANDS.**

### Removing And Installing The Table Insert (Fig. P)

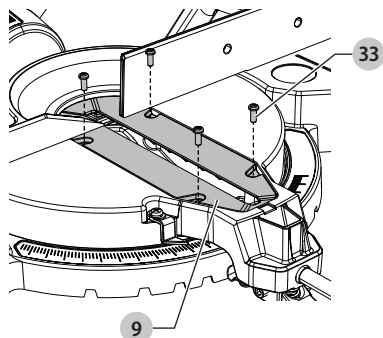
**WARNING:** To avoid injury:

- 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 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.

- To remove, loosen and remove the four screws **33** on the table insert **9** with a Phillips screwdriver and remove the table inserts.
- To install, reposition the table insert, install the four screws and tighten.

Fig. P



## 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. Q, R)

- Loosen bevel lock knob **12** and tilt the cutting arm completely to the right. Tighten the bevel lock knob.
- Place a combination square **34** on the miter table **35** with the ruler against the table and heel of the square against the saw blade.
- If the blade is not 90° square with the miter table, turn the set screw **36** in or out with a 2.5 mm hex wrench until the blade is square with the miter table.
- Tighten the bevel lock knob **12** after alignment is achieved.

Fig. Q

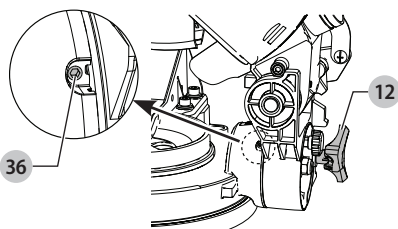
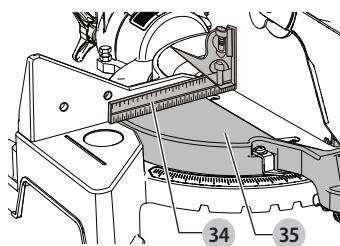


Fig. R

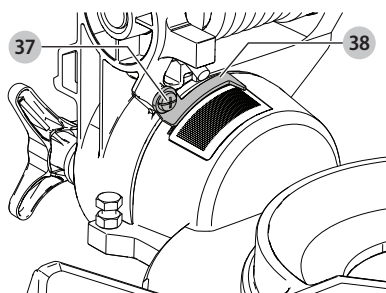


### 90° Bevel Pointer Adjustment (Fig. S)

- 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.

- When the blade is exactly 90° (0°) to the table, loosen the bevel pointer screw **37** using a Phillips screwdriver.
- Adjust bevel pointer **38** to the "0" mark on the bevel scale and retighten the screw **37**.

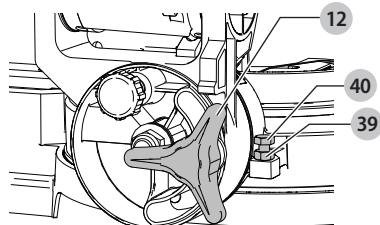
Fig. S



### 45° Bevel Stop Adjustment (Fig. T)

- Set the miter angle to zero degree.
- Loosen the bevel lock knob **12** and tilt the cutting arm completely to the left.
- Using a combination square, check to see if the blade is 45° to the table.
- If the blade is not at 45° to the miter table, tilt the cutting arm to zero degree, loosen the lock nut **39** and turn the bolt **40** in or out accordingly with an adjustable wrench.
- Tilt the cutting arm back to the left and recheck alignment.
- Repeat above steps until the blade is 45° to the table. Once alignment is achieved, tighten the lock nut **39** to secure the bolt **40**.

Fig. T



## Miter Scale (Fig. U)

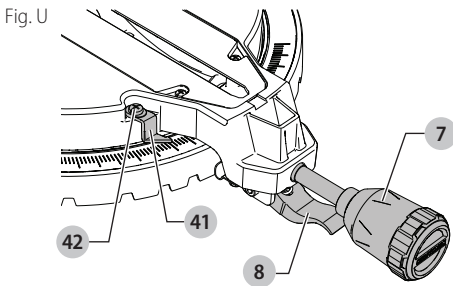
The miter saw scale can be easily read, showing miter angles from 0° to 48° to the left, and 0° to 55° to the right. The miter saw table has positive stops at most common angle settings at 0°, 15°, 22.5°, 31.6°, 45° right & left, and 55° right. These positive stops position the blade at the desired angle quickly and accurately. Follow the process below for quickest and most accurate adjustments.

### Miter Angles Adjustment

1. Unlock the table by turning the miter handle **7** counterclockwise.
2. Move the turntable while lifting up on the positive stop lock lever **8** to align the miter scale pointer **41** to the desired degree measurement.
3. If the desired angle is one of the ten positive stops, release the positive stop lock lever **8**, making sure the lever snaps into position, and then secure by tightening the miter handle **7**.
4. If the miter angle desired is not one of the ten positive stops, simply lock the miter table into desired angle position by turning the miter handle **7** in the clockwise direction.

### Miter Angle Pointer Adjustment

1. Move the table to the 0° positive stop.
2. Loosen the screw **42** that holds the pointer **41** with a Phillips screwdriver.
3. Adjust the pointer **41** to the 0° mark and retighten the screw.

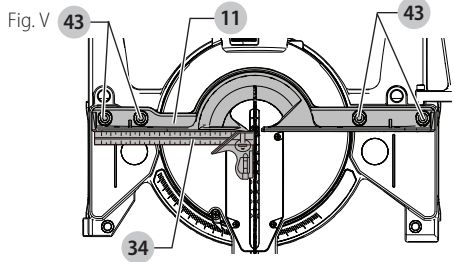


### Adjusting Fence Squareness (Fig. V)

1. Loosen the four fence locking bolts **43**.
2. Lower the cutting arm and lock in position.
3. Using a square **34**, lay the heel of the square against the blade and the ruler against the fence **11** as shown.
4. Adjust the fence 90° to the blade and tighten the four fence locking bolts **43**.

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

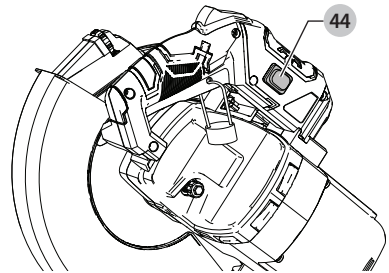
5. After fence has been aligned, using a scrap piece of wood, make a cut at 90° then check squareness on the piece. Readjust if necessary.



### Turning Laser Guide On (Fig. W)

1. To turn laser on, press on/off rocker switch **44** to "ON" position.
2. To turn laser off, press on/off rocker switch to "OFF" position.

Fig. W



### Aligning The Laser Guide

The laser line must always be correctly aligned with the blade to ensure straight, even cutting. The laser line 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:** To prevent serious injury, insert a padlock (not provided) or chain with padlock through the hole in the On/Off Trigger Switch prior to making any laser adjustment.

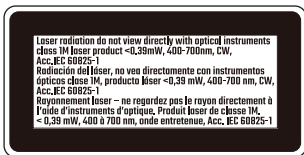
**⚠ WARNING:** Do not remove the lock from the On/Off Trigger Switch during any laser adjustment.

### Avoid Direct Eye Contact With Laser (Fig. X)

**⚠ WARNING:** A laser line radiates from the laser aperture when the laser guide is turned on. Avoid direct eye contact.

**⚠ WARNING:**

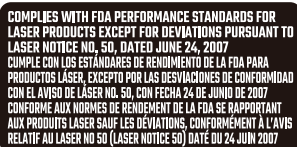
- **Laser Warning Label 45 :** Laser radiation do not view directly with optical instruments class 1M laser product < 0.39 mW, 400-700 nm, CW, Acc.IEC 60825-1.



• **Laser Aperture Label 46**

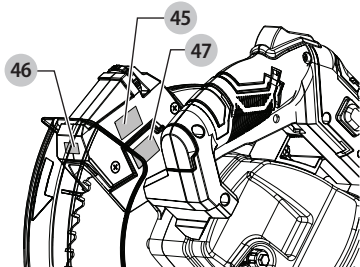


• **Laser Notice Label 47** : COMPLIES WITH FDA PERFORMANCE STANDARDS FOR LASER PRODUCTS EXCEPT FOR DEVIATIONS PURSUANT TO LASER NOTICE NO. 50, DATED JUNE 24, 2007



- **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 a qualified service dealer.

Fig. X



**NOTE:** If laser labels are missing, damaged or not clear, contact with the Customer Care Center for replacement.

## Laser Guide Adjustment (Fig. Y, Z, AA)

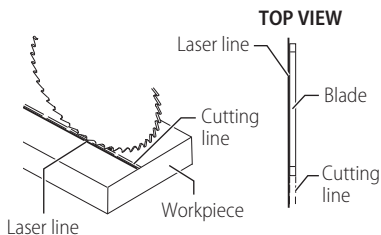
**NOTE:** All the adjustments for the operation of this machine have been completed at the factory. Due to normal wear and use, some occasional readjustments may be necessary.

**WARNING:** To prevent serious injury, insert a padlock (not provided) or chain with padlock through the hole in the ON/OFF Trigger Switch prior to making any laser adjustment. DO NOT remove the lock from the ON/OFF Trigger Switch during any laser adjustment.

### A. Checking Laser Line Alignment (Fig. Y)

1. Set the saw to a 0° miter and 0° bevel setting.
  2. Use a combination square to mark a 90° angle running across the top and down the front of a board. This line will serve as the pattern line to adjust the laser. 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 line location. Lock board in place with hold-down clamp.
  4. With the saw plugged in, turn on the laser guide. Your saw has been preset with the laser line to the left side of the blade.
- WARNING:** When making laser line adjustments, keep fingers away from the ON/OFF trigger switch to prevent accidental starting and possible serious injury.
5. Looking at the front of the board, if the laser line is not parallel to the “pattern line” please follow the instructions listed below under “Front Line” paragraph.

Fig. Y



### B. Adjusting the Position of the Laser Line (Fig. Z, AA)

#### Front Line

If the laser line is angled from left to right, turn the laser vertical adjustment knob 48 counterclockwise to align the laser line parallel with pattern line. If the laser line is angled from right to left, turn the knob clockwise to align the laser line parallel with pattern line.

After performing the above adjustments, visually check that both the front laser lines are parallel with pattern line.

**NOTE:**

- Laser line is calibrated and set up at the factory to project to the left of the blade.
- If you have any problem or questions concerning the laser guide, call the Customer Care Center at 1-888-398-7737.

Fig. Z

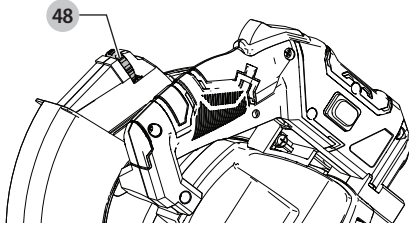
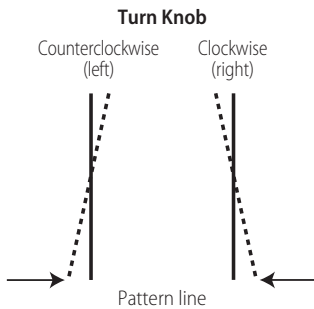


Fig. AA



**OPERATION**

- WARNING:** To reduce the risk of injury, turn unit off and disconnect it from power source before installing and removing accessories, before adjusting or when making repairs. An accidental start-up can cause injury.
- WARNING:** To ensure the blade path is clear of obstructions, always make a dry run of the cut without power before making any cuts on the workpiece.

**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
- Broken/cracked castings: base, table, motor, upper arm
- 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. All repairs should be done by a certified and licensed technician.
- 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**

- 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.



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

- Plan ahead to protect your eyes, hands, face and ears.
- Know your miter saw. Read and understand this Instruction 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.



**CAUTION:** 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. Do not use this saw to cut tree limbs or logs. 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.
- Always wear a face mask or 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.

## 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 7-5/16 in. 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.

- 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

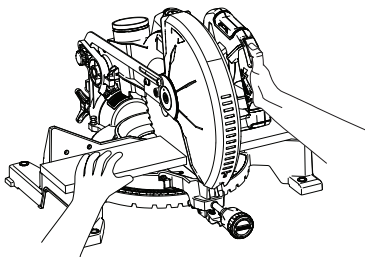
- WARNING:** Do not allow familiarity from frequent use of your miter saw to result in a careless mistake. A careless fraction of a second is enough to cause a severe injury.

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 (Fig. BB)

- WARNING:** To ensure the blade path is clear of obstructions, always make a dry run of the cut without power before making any cuts on the workpiece.

Fig. BB



### Body and Hand Position (Fig. CC)

- 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.

#### Starting a cut:

- Place hands at least 7-5/16 in. away from the path of the blade – out of the “no-hands zone” 49 shown in Fig. CC on the next page.
- Always use the clamp to firmly hold the workpiece against the fence and table 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. Raise the saw blade back up before turning the saw on.
- Squeeze trigger switch to start saw.
- Lower blade into workpiece with a firm downward motion.

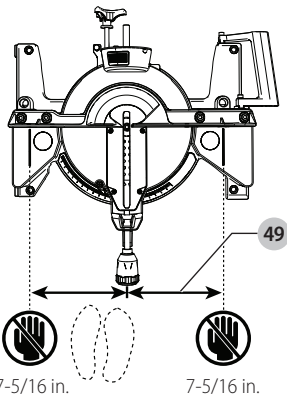
#### Finishing a cut:

- 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 10 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. 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 10 seconds, wait for the blade to stop, unplug the saw and contact the qualified service dealer.

### Turning The Saw On (Fig. DD)

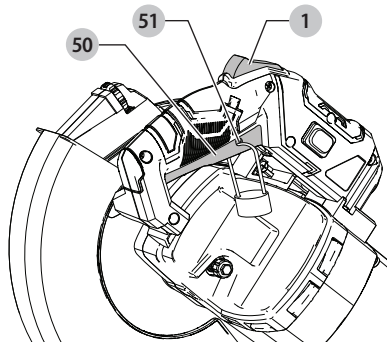
This miter saw is equipped with an ON/OFF trigger switch 50. With the safety lock 1 pressed, squeeze the trigger switch to turn the miter saw ON.

#### NOTE:

- To make the ON/OFF switch childproof. Insert a padlock (not provided), or chain with padlock, through the hole 51 in the trigger switch. Locking the tool's switch, preventing children and other unqualified users from turning the machine on.

- 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 10 seconds.

Fig. DD



## 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.**

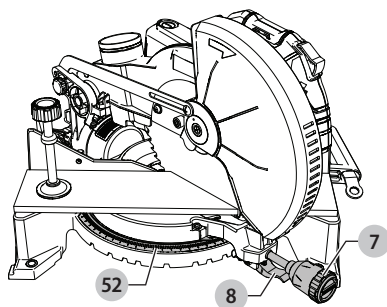
## Miter Cut (Fig. EE)

- When a miter cut is required, unlock the miter table by turning the miter handle **7** counterclockwise.
- While holding the miter handle, lift up on the positive stop locking lever **8**.
- Rotate the miter table to the right or left with the miter handle.
- When the table is in the desired position, as shown on the miter scale **52**, release the positive stop locking lever and tighten the miter handle. The table is now locked at the desired angle. Positive stops are provided at 0°, 15°, 22.5°, 31.6°, 45° right & left, and 55° right.

**IMPORTANT:** Always tighten the miter handle **7** before performing every cutting operation.

- Turn the laser guide on and position the workpiece on the table for pre-alignment of your cut.

Fig. EE

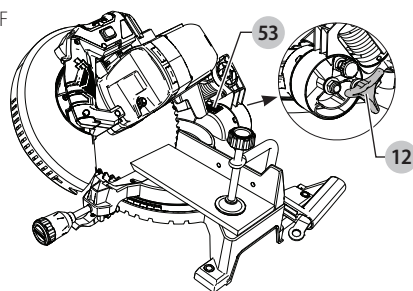


## Bevel Cut (Fig. FF)

**!** **WARNING: NEVER BEVEL to the right, this saw is designed to only be used for cutting left bevel cuts.**

- When a bevel cut is required, loosen the bevel lock knob **12** by turning it clockwise.
- Tilt the cutting head to the desired angle, as shown on the bevel scale **53**.
- The blade can be positioned at any angle, from a 90° straight cut (0° on the scale) to a 47° left bevel. Tighten the bevel lock knob **12** to lock the cutting head in position.
- Turn the laser guide on and position the workpiece on the table for pre-alignment of your cut.

Fig. FF



## Compound Cut (Fig. GG)

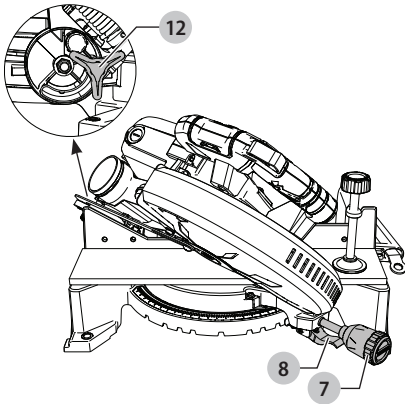
**!** **WARNING: NEVER BEVEL to the right, this saw is designed to only be used for cutting left bevel cuts.**

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

- Loosen the miter handle **7**. Lift up the positive stop locking lever **8** and position the table at the desired angle. Release the positive stop locking lever **8** and lock the miter handle **7**.
- Loosen the bevel lock knob **12** and position the cutting head at the desired bevel position. Lock the bevel lock knob **12**.
- Turn the laser guide on and position the workpiece on the table for pre-alignment of your cut.

**⚠ WARNING:** As the right miter angle is greater than 48°, do not combine with any bevel angle to prevent interference with the fence.

Fig. GG



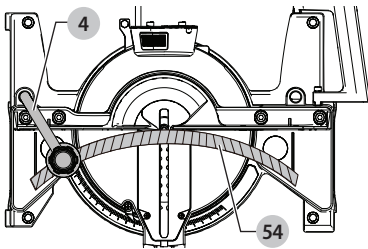
### Cutting Bowed Material (Fig. HH)

**⚠ 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 **54** must be positioned against the fence and secured with a hold-down clamp **4** 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. HH

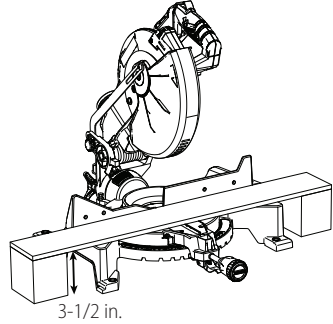


### Workpiece Support (Fig. II)

Long pieces need extra support. The support should be placed under the workpiece. Keep your hand holding the workpiece positioned 7-5/16 inches or more away from the blade. The support must let the workpiece lay flat on the work table during the cutting operation.

**NOTE:** When mounted on a flat surface, the saw table is 3-1/2 inches high.

Fig. II

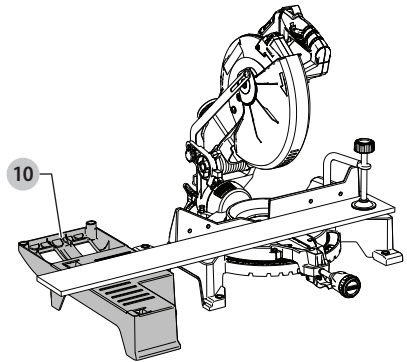


### Support Base As Extension Table (Fig. JJ)

**⚠ WARNING:** Before using, make sure the height of the saw table matches the height of the support base.

1. Place the miter saw and support base **10** on a flat, stable surface with the support base on the side of the miter saw where the support is needed.
2. Adjust the position of the support base according to the length of the workpiece to provide extra support.

Fig. JJ



### Auxiliary Wood Fence (Fig. KK)

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.

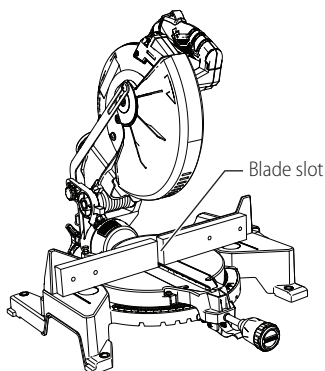
Holes are provided in the saw fence to attach an auxiliary wood fence. This fence is to be constructed of straight wood approximately 3/4 in. thick by 2-1/2 in. high by 22 in. long.

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. KK

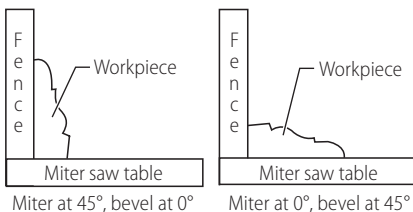


## Cutting Base Molding (Fig. LL)

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. LL



## Cutting Crown Molding (Fig. MM, NN)

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.

Fig. MM

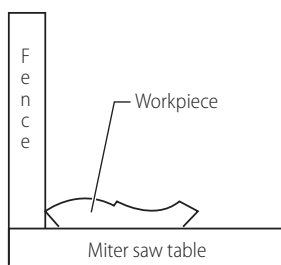
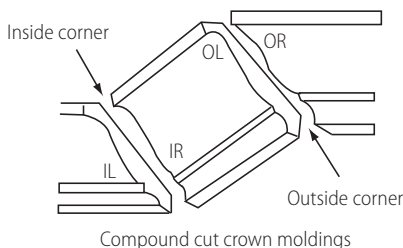


Fig. NN

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



## Bevel/Miter Settings

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

KEY	BEVEL ANGLE SETTING	MITER ANGLE SETTING	TYPE OF CUT
			<b>Inside Corner - Left Side</b>
IL	33.9°	31.6° Right	1. Position top of molding against fence. 2. LEFT side is finished piece.
			<b>Inside Corner - Right Side</b>
IR	33.9°	31.6° Left	1. Position bottom of molding against fence. 2. LEFT side is finished piece.
			<b>Outside Corner-Left Side</b>
OL	33.9°	31.6° Left	1. Position bottom of molding against fence. 2. RIGHT side is finished piece.
			<b>Outside Corner - Right Side</b>
OR	33.9°	31.6° Right	1. Position top of molding against fence. 2. 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	31.34
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

**WARNING:** To reduce the risk of injury, turn unit off and disconnect it from power source before installing and removing accessories, before adjusting or when making repairs. An accidental start-up can cause injury.

**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.

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

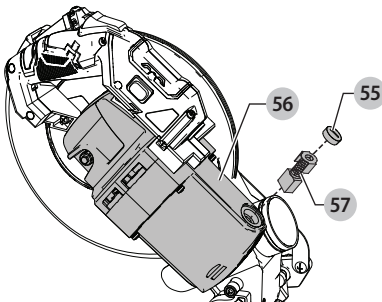
**WARNING:** To avoid electrical shock, fire or injury, use only parts identical to those identified in the parts list. Reassemble exactly as the original assembly to avoid electrical shock.

## Replacing Carbon Brushes (Fig. 00)

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 **55** on the side of the motor **56**. Remove the cap cautiously, because it is springloaded. Then pull out the carbon brush **57** 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. 00



## Lower Blade Guard

Do not use the saw without the lower blade guard. The lower blade guard is attached to the saw for your protection. Should the lower guard become damaged, do not use the saw until the damaged guard has been replaced. Regularly check to make sure the lower guard is working properly. Also check before each use that all bolts/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.

**WARNING:** 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.

Remove small pieces of material from the table cavity if needed. (See the section on **Removing and Installing the Table Insert** on page 12.)

To empty the dust bag, remove the sawdust bag from the dust collection elbow. Open the zipper on the sawdust bag and empty out the sawdust inside. Close the zipper and reinstall the dust bag as described on page 9.

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

## Lubrication (Fig. PP)

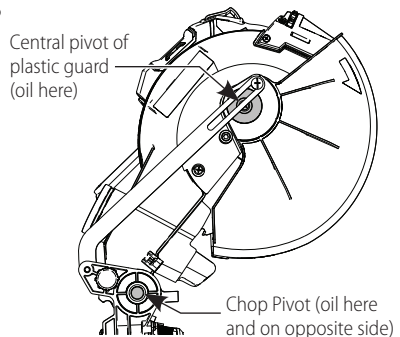
All the motor bearings in this tool are lubricated with a sufficient amount of high grade lubricant for the life of the unit under normal operating conditions; therefore, no further lubrication is required.

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. PP






# Free Warning Label Replacement

If your warning labels become illegible or are missing, call 1-888-398-7737 for a free replacement.

### CMXEMAR120

10 IN. (254 mm) FOLDING COMPOUND MITER SAW / SIERRA DE INGLETE COMPUESTA PLEGADIZA DE 254 mm (10 PULGADAS) / SCIE REPLIABLE À ONGLE COMBINÉ DE 254 mm (10 PO)

15A, 4,500min<sup>-1</sup> (RPM) [NO LOAD] 120V a.c. 60Hz

 DOUBLE INSULATED- WHEN SERVICING, USE ONLY IDENTICAL REPLACEMENT PARTS / AISLAMIENTO DOBLE- AL REPARAR, UTILICE SÓLO PIEZAS DE REPUESTO IDÉNTICAS / DOUBLE ISOLATION - DURANT L'ENTRETIEN, N'UTILISEZ QUE DES PIÈCES DE REMPLACEMENT IDENTIQUES



### WARNING/ADVERTENCIA/AVERTISSEMENT

TO REDUCE THE RISK OF INJURY, USER MUST READ INSTRUCTION MANUAL. PARA REDUCIR EL RIESGO DE LESIONES, EL USUARIO DEBE LEER EL MANUAL DE INSTRUCCIONES. AFIN DE RÉDUIRE LE RISQUE DE BLESSURES, L'UTILISATEUR DOIT LIRE LE MODE D'EMPLOI.

SERIAL NO. / SERIE NO. / N° DE SERIE: \_\_\_\_\_

MFG. DATE / FECHA DE FABRICACIÓN / DATE OF FABRICATION: \_\_\_\_\_

DISTRIBUTED BY / DISTRIBUIDO POR / DISTRIBUÉ PAR: CRAFTSMAN, TOWSON, MD 21286 U.S.A. WWW.CRAFTSMAN.COM • 1-888-331-4569

REXON INDUSTRIAL CORP., LTD. 261, JEN HWA ROAD, TALL, TAICHUNG, TAIWAN

PATENT PENDING / PATENTE EN TRÁMITE / BREVET EN ATTENTE

MADE IN CHINA / HECHO EN CHINA / FABRIQUÉ EN CHINE

### WARNING

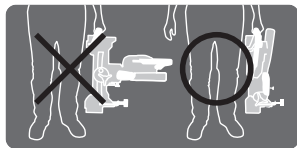
TO REDUCE THE RISK OF INJURY, USER MUST READ INSTRUCTION MANUAL. DO NOT EXPOSE TO RAIN OR USE IN DAMP LOCATIONS. USE PROPER EYE AND RESPIRATORY PROTECTION.

### ADVERTENCIA

PARA REDUCIR EL RIESGO DE HERIDA, EL USUARIO DEBE LEER EL MANUAL DE INSTRUCCIONES. NO LA EXPONGA A LA LLUVIA NI LA USE EN LUGARES HÚMEDOS. USE PROTECCIÓN PROPIA DE OJOS Y RESPIRATORIA.

### AVERTISSEMENT

L'UTILISATEUR DOIT LIRE LE MANUEL D'INSTRUCTIONS POUR RÉDUIRE LE RISQUE DE BLESSURE. N'EXPOSEZ PAS CET OUTIL À LA PLUIE ET NE L'UTILISEZ PAS DANS DES ENDROITS HUMIDES. UTILISER DES PROTECTIONS OCULAIRES ET RESPIRATOIRE APPROPRIÉES.



### WARNING

TO REDUCE THE RISK OF INJURY, YOU MUST UNPLUG THE SAW FROM POWER SOURCE BEFORE FOLDING FOR TRANSPORTATION AND STORAGE.

### ADVERTENCIA

PARA REDUCIR EL RIESGO DE HERIDA, DEBE DESCONECTAR LA SIERRA DESDE LA FUENTE ANTES DE HABER PLEGADO PARA TRANSPORTAR Y ALMACENAR.

### AVERTISSEMENT

RÉDUIRE LE RISQUE DE BLESSURE EN DÉBRANCHANT LA SCIE DE L'ALIMENTATION AVANT DE LA PLEGER POUR LA TRANSPORTER OU L'ENTRÉPOSER.

### ADVERTENCIA

PARA REDUCIR EL RIESGO DE LESIONES, EL USUARIO DEBE LEER EL MANUAL DE INSTRUCCIONES. L'UNIQUE PROTECTION POUR LES OJOS, LA MAIN ET LE CORPS ALÉJADOS DEL CAMPO DE TRAYECTORIA QUE RECIBE LA HOJA DE LA SIERRA, EL CONTACTO CON LA HOJA PODRÁ PROVOCAR LESIONES GRAVES. SI HUBIERA UN PROBLEMA DE PROTECCIÓN PARA ASESORARSE DE QUE FUNCIONA CORRECTAMENTE, NO REALICE NINGUNA OPERACIÓN SIN UNIR LAS MANOS. SI NUNCA INTENTE TOCAR EL ÁREA ALDEORADO DE LA HOJA DE LA SIERRA, LA PUNTA DE LA HERRAMIENTA Y ESPECIALLY LA HOJA DE LA SIERRA SE DETIENE ANTES DE MOVER LAS PIEZAS DE TRABAJO O DE CAMBIAR LA CONFIGURACIÓN. UTILICE PROTECCIÓN PARA LOS OJOS Y LAS VÍAS RESPIRATORIAS. SI DESCONECTE LA FUENTE DE ALIMENTACIÓN ANTES DE LA LIMPIEZA O DEL MANTENIMIENTO, SI UTILICE BLADES DE SÓLO TRES/4 CM DE DIÁMETRO Y QUE TIENDAN UNA VELOCIDAD MÁXIMA POR UN CARGO (CARGA EN ESTE SIERRA DE A 5000 RPM), NO REALICE ESTA HERRAMIENTA EN LA LLUVIA NI EN LUGARES HÚMEDOS. SI PIERDE EL CONTROL DEL HERRAJE O LAS HERRAMIENTAS ANTES DE USAR LA SIERRA, LA SEGURIDAD DE LA HERRAMIENTA ADECUADAMENTE PARA EVITAR UN MOVIMIENTO ESPERADO, QUE NO CUMPLA CON ESTAS ADVERTENCIAS PODRÁ OCASIONAR LESIONES PERSONALES GRAVES.

### WARNING

TO REDUCE THE RISK OF INJURY, USER MUST READ INSTRUCTION MANUAL. 1. WEAR EYE PROTECTION. 2. KEEP HANDS AND BODY OUT OF THE PATH OF THE SAW BLADE. CONTACT WITH BLADE WILL RESULT IN SERIOUS INJURY. 3. CHECK GUARDING SYSTEM TO MAKE SURE IT IS FUNCTIONING CORRECTLY. 4. DO NOT PERFORM ANY OPERATING FREERHAND. 5. NEVER REACH AROUND SAW BLADE. 6. TURN OFF TOOL AND WAIT FOR SAW BLADE TO STOP BEFORE MOVING WORKPIECE OR CHANGING SETTINGS. 7. WEAR RESPIRATORY AND HEARING PROTECTION. 8. DISCONNECT POWER BEFORE CHANGING BLADE OR SERVICING. 9. USE ONLY BLADES THAT ARE THE SAME DIAMETER AND HAVE A MAXIMUM RPM SPEED GREATER THAN 4,500RPM (NO LOAD) IN THIS SAW & 4,500RPM (RPM). 10. DO NOT EXPOSE TO RAIN OR USE IN DAMP LOCATIONS. 11. UNPLUG AND/OR UNCLAMP BEFORE FOLDING. 12. SECURE TOOL PROPERLY TO PREVENT UNEXPECTED MOVEMENT. 13. FAILURE TO COMPLY WITH THESE WARNINGS MAY RESULT IN SERIOUS PERSONAL INJURY.

### AVERTISSEMENT

AFIN DE RÉDUIRE LE RISQUE DE BLESSURES, L'UTILISATEUR DOIT LIRE LE MANUEL D'INSTRUCTIONS. 1. PORTER DES LUNETTES DE SÉCURITÉ. 2. GARDIR VOS MAINS ET VOS AUTRES PARTIES DE VOTRE CORPS HORS DE LA TRAJECTOIRE DE LA LAME. TOUT CONTACT AVEC LA LAME PEUT CAUSER DES BLESSURES GRAVES. 3. VÉRIFIER LE SYSTÈME DE PROTECTION-JAMME POUR VOUS ASSURER QU'IL FONCTIONNE CORRECTEMENT. 4. VÉRIFIER QUE AUCUNE COUPE À MAIN LIBRE. 5. S'APPROCHER JAMAIS VOS DOIGTS DE LA LAME. 6. ARRÊTER LA SCIE ET ATTENDRE QUE SA LAME CÈSSE DE TOURNER AVANT DE CHANGER LA LAME OU D'EFFECUER L'ENTRETIEN DE LA SCIE. 7. PORTER UN ÉCARTIC ET UN CASQUE. 8. DÉBRANCHER LE POUVOIR AVANT DE CHANGER LA LAME OU D'ENTRETIEN. 9. UTILISER SEULEMENT DES LAMES QUI SONT LE MÊME DIAMÈTRE ET QUI ONT UN VITESSE D'APPLICATION EST SUPÉRIEURE À 4 500 TR/MIN (AUCUNE LAME SA CESTE SCIE NE DEVIEND AVANT UNE VITESSE DE 4 500 TR/MIN). 10. N'EXPOSEZ PAS LA SCIE À LA PLUIE ET NE L'UTILISEZ PAS DANS DES ENDROITS HUMIDES. 11. DÉBRANCHER LA SCIE ET LES PINCES AVANT DE DÉPÔSER LA SCIE. 12. TENIR L'OUTIL EN PLACE CORRECTEMENT POUR ÉVITER DES MOUVEMENTS INATTENDUS. 13. LE NON-RESPECT DE CES AVERTISSEMENTS PEUT CAUSER DES BLESSURES GRAVES.

### WARNING/ADVERTENCIA/AVERTISSEMENT

1. LEAD TO SERIOUS INJURY OR DEATH IF SWAM IN THE FOLDING OR UNFOLDING POSITION. ALWAYS BE CAREFUL WHEN UNFOLDING THE LONGER BLADE. 2. DO NOT STAND THE SAW ON THE GROUND OR ON ANY OTHER SURFACE. ALWAYS HOLD THE SAW WITH BOTH HANDS AND TRANSPORT IT WITH BOTH HANDS. 3. NEVER REACH AROUND SAW BLADE. 4. TURN OFF TOOL AND WAIT FOR SAW BLADE TO STOP BEFORE MOVING WORKPIECE OR CHANGING SETTINGS. 5. WEAR RESPIRATORY AND HEARING PROTECTION. 6. DISCONNECT POWER BEFORE CHANGING BLADE OR SERVICING. 7. USE ONLY BLADES THAT ARE THE SAME DIAMETER AND HAVE A MAXIMUM RPM SPEED GREATER THAN 4,500RPM (NO LOAD) IN THIS SAW & 4,500RPM (RPM). 8. DO NOT EXPOSE TO RAIN OR USE IN DAMP LOCATIONS. 9. UNPLUG AND/OR UNCLAMP BEFORE FOLDING. 10. SECURE TOOL PROPERLY TO PREVENT UNEXPECTED MOVEMENT. 11. FAILURE TO COMPLY WITH THESE WARNINGS MAY RESULT IN SERIOUS PERSONAL INJURY.

## TROUBLESHOOTING GUIDE

### BE SURE TO FOLLOW SAFETY RULES AND INSTRUCTIONS

For assistance with your product, visit our website at [www.craftsman.com](http://www.craftsman.com) for a list of service centers, or call CRAFTSMAN at 1-888-398-7737.

#### MOTOR

PROBLEM	CAUSE	CORRECTION
Brake does not stop the blade within 10 seconds.	<ol style="list-style-type: none"> <li>Motor brushes not sealed or lightly sticking.</li> <li>Motor brake overheated from use of defective or wrong size blade or rapid ON/OFF cycling.</li> <li>Arbor bolt loose.</li> <li>Brushes cracked, damaged, etc.</li> <li>Other.</li> </ol>	<ol style="list-style-type: none"> <li>Inspect/clean/replace brushes. See MAINTENANCE section.</li> <li>Use a recommended blade. Let cool down. See REMOVING OR INSTALLING THE BLADE section.</li> <li>Retighten. See REMOVING OR INSTALLING THE BLADE section.</li> <li>Replace brushes.</li> <li>Contact Service Center or Authorized Service Station.</li> </ol>
Motor does not start.	<ol style="list-style-type: none"> <li>Limit switch failure</li> <li>Brush worn.</li> <li>Fuse blown or circuit breaker tripped on home panel.</li> </ol>	<ol style="list-style-type: none"> <li>Replace limit switch.</li> <li>Replace brushes. See MAINTENANCE section.</li> <li>Verify there is electrical power at the outlet.</li> </ol>
Brush spark when switch released.	<ol style="list-style-type: none"> <li>Brush worn.</li> <li>Other.</li> </ol>	<ol style="list-style-type: none"> <li>Replace Brushes. See MAINTENANCE section.</li> <li>Contact Service Center or Authorized Service Station.</li> </ol>

#### SAW OPERATION

PROBLEM	CAUSE	CORRECTION
Blade hits table.	<ol style="list-style-type: none"> <li>Misalignment.</li> </ol>	<ol style="list-style-type: none"> <li>Contact Service Center or Authorized Service Station.</li> </ol>
Angle of cut not accurate. Can not adjust miter.	<ol style="list-style-type: none"> <li>Miter table unlocked.</li> <li>Sawdust under table.</li> </ol>	<ol style="list-style-type: none"> <li>See OPERATION - Miter Angle Adjustment section.</li> <li>Vacuum or blow out dust. WEAR EYE PROTECTION.</li> </ol>
Cutting arm wobbles.	<ol style="list-style-type: none"> <li>Loose pivot points.</li> </ol>	<ol style="list-style-type: none"> <li>Contact Service Center or Authorized Service Station.</li> </ol>
Cutting arm will not fully raise, or blade guard won't fully close.	<ol style="list-style-type: none"> <li>Pivot spring not replaced properly after service.</li> <li>Sawdust build-up.</li> </ol>	<ol style="list-style-type: none"> <li>Contact Service Center or Authorized Service Station.</li> <li>Clean and lubricate moving parts.</li> </ol>
Blade binds, jams, burns wood.	<ol style="list-style-type: none"> <li>Improper operation.</li> <li>Dull or warped blade.</li> <li>Improper blade size.</li> <li>Wood is moving during cut.</li> </ol>	<ol style="list-style-type: none"> <li>See BASIC SAW OPERATION section.</li> <li>Replace or sharpen blade.</li> <li>Replace with 10 in. (254 mm) diameter blade.</li> <li>Use hold-down clamp to secure workpiece to table.</li> </ol>
Saw vibrates or shakes.	<ol style="list-style-type: none"> <li>Saw blade not round / damaged / loose.</li> <li>Arbor bolt loose.</li> </ol>	<ol style="list-style-type: none"> <li>Replace blade.</li> <li>Tighten arbor bolt.</li> </ol>

## Register Online

Thank you for your purchase. Register your product now for:

- **WARRANTY SERVICE:** Registering your product will help you obtain more efficient warranty service in case there is a problem with your product.
- **CONFIRMATION OF OWNERSHIP:** In case of an insurance loss, such as fire, flood or theft, your registration of ownership will serve as your proof of purchase.
- **FOR YOUR SAFETY:** Registering your product will allow us to contact you in the unlikely event a safety notification is required under the Federal Consumer Safety Act.

Register online at [www.craftsman.com/registration](http://www.craftsman.com/registration)

## Three Year Limited Warranty

CRAFTSMAN will repair or replace, without charge, any defects due to faulty materials or workmanship for one year from the date of purchase. This warranty does not cover part failure due to normal wear or tool abuse. For further detail of warranty coverage and warranty repair information, visit [www.craftsman.com](http://www.craftsman.com) or call **1-888-398-7737**. This warranty does not apply to accessories or damage caused where repairs have been made or attempted by others. THIS LIMITED WARRANTY IS GIVEN IN LIEU OF ALL OTHERS, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND EXCLUDES ALL INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so these limitations may not apply to you. This warranty gives you specific legal rights and you may have other rights which vary in certain states or provinces.

### 90 DAY MONEY BACK GUARANTEE

If you are not completely satisfied with the performance of your CRAFTSMAN Power Tool, Laser, or Nailer for any reason, you can return it within 90 days from the date of purchase with a receipt for a full refund – no questions asked.

**LATINAMERICA:** This warranty does not apply to products sold in Latin America. For products sold in Latin America, see country specific warranty information contained either in the packaging, call the local company or see website for warranty information.

## PARTS LIST

## 10 in. (254 mm) Folding Compound Miter Saw

## Parts list for folding compound miter saw - A

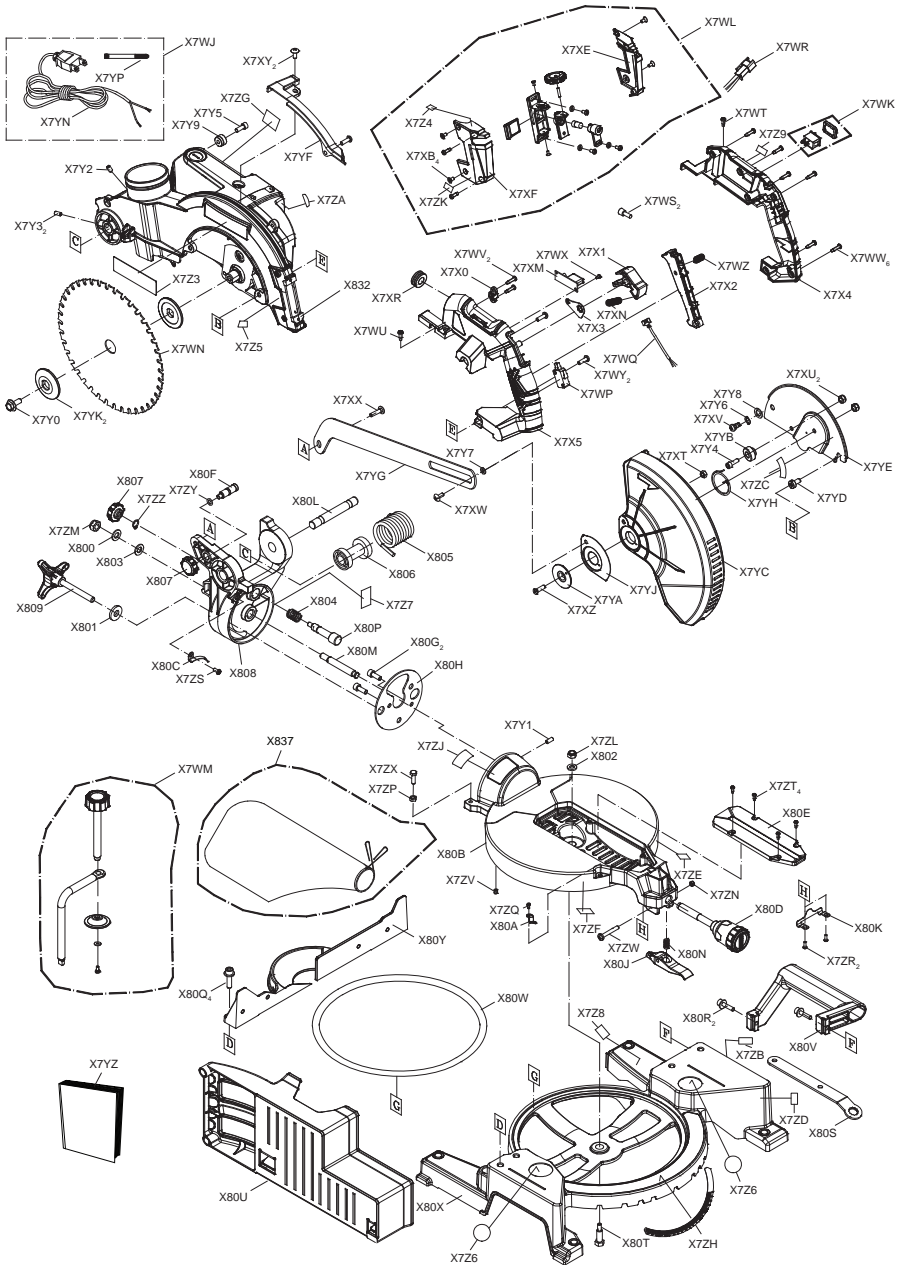
I.D. No.	Description	Size	Q'ty	I.D. No.	Description	Size	Q'ty
X7WJ	POWER CABLE ASS'Y		1	X7XW	CR. RE. TRUSS HD. ROUND NECK SCREW	M6*14	1
X7WK	ROCKER SWITCH ASS'Y		1	X7XX	CR. RE. TRUSS HD. ROUND NECK SCREW	M6*14	1
X7WL	LASER ASS'Y		1	X7XY	CR. RE. TRUSS HD. SCREW	M5*12	2
X7WM	HOLD-DOWM CLAMP ASS'Y		1	X7XZ	CR. RE. COUNT HD. SCREW	M6*20	1
X7WN	BLADE		1	X7Y0	ARBOR BOLT	M8*18	1
X7WP	LIMIT SWITCH		1	X7Y1	HEX. SOC. SET SCREW	M5*12	1
X7WQ	LEAD WIRE ASS'Y		1	X7Y2	HEX. SOC. SET SCREW	M6*10	1
X7WR	LEAD WIRE ASS'Y		1	X7Y3	HEX. SOC. SET SCREW	M6*10	2
X7WS	TERMINAL		2	X7Y4	HEX. SOC. HD. CAP BOLT	M6*16	1
X7WT	CR. RE. PAN HD. SCREW	M5*16	1	X7Y5	HEX. SOC. HD. CAP BOLT	M6*12	1
X7WU	CR. RE. PAN HD. SCREW	M5*8	1	X7Y6	WAVE WASHER	φ8	1
X7WV	CR. RE. PAN HD. TAPPING SCREW	M4*16	2	X7Y7	FLAT WASHER	φ6*φ13*1	1
X7WW	CR. RE. PAN HD. TAPPING SCREW	M4*16	6	X7Y8	FLAT WASHER	φ8*φ15*1	1
X7WX	CR. RE. PAN HD. TAPPING SCREW	M3*8	1	X7Y9	ANCHOR BLOCK		1
X7WY	CR. RE. TRUSS HD. SCREW	M5*20	2	X7YA	COLLAR		1
X7WZ	COMPRESSION SPRING		1	X7YB	ANCHOR BLOCK		1
X7X0	CORD CLAMP		1	X7YC	LOWER BLADE GUARD		1
X7X1	BUTTON SWITCH		1	X7YD	SPECIAL BOLT		1
X7X2	TRIGGER		1	X7YE	CUTTER SHAFT GUARD		1
X7X3	FOLLOWER PLATE		1	X7YF	CABLE SHIELD		1
X7X4	MOTOR HANDLE (RIGHT)		1	X7YG	LEVER		1
X7X5	MOTOR HANDLE (LEFT)		1	X7YH	SPRING GUARD		1
X7XB	CR. RE. COUNT HD. SCREW	M4*8	4	X7YJ	BRACING PLATE		1
X7XE	LASER COVER (RIGHT)		1	X7YK	ARBOR COLLAR		2
X7XF	LASER COVER (LEFT)		1	X7YN	POWER CABLE		1
X7XM	CONTROLLER ASS'Y		1	X7YP	MAGIC TAPE		1
X7XN	COMPRESSION SPRING		1	X7YZ	INSTRUCTION MANUAL		1
X7XR	CORD GUARD		1	X7Z3	TRADEMARK LABEL		1
X7XT	LOCK NUT	M6	1	X7Z4	WARNING LABEL		1
X7XU	NUT	M6	2	X7Z5	LASER STICKER		1
X7XV	CR. RE. PAN HD. ROUND NECK SCREW	M6*9	1	X7Z6	WARNING LABEL		2

**10 in. (254 mm) Folding Compound Miter Saw**  
**Parts list for folding compound miter saw - B**

<b>I.D. No.</b>	<b>Description</b>	<b>Size</b>	<b>Q'ty</b>	<b>I.D. No.</b>	<b>Description</b>	<b>Size</b>	<b>Q'ty</b>
X7Z7	WARNING LABEL		1	X805	TORSION SPRING		1
X7Z8	CAUTION LABEL		1	X806	SHAFT SLEEVE		1
X7Z9	WARNING LABEL		1	X807	CLAMP BOLT		2
X7ZA	WARNING LABEL		1	X808	ANGLE PEGULATOR		1
X7ZB	WARNING LABEL		1	X809	BEVEL LOCK KNOB		1
X7ZC	WARNING LABEL		1	X80A	NEEDLE POINTER		1
X7ZD	CAUTION LABEL		1	X80B	TABLE		1
X7ZE	WARNING LABEL		1	X80C	NEEDLE POINTER		1
X7ZF	WARNING LABEL		1	X80D	MITER HANDLE		1
X7ZG	LABEL		1	X80E	TABLE INSERT		1
X7ZH	SCALE		1	X80F	LOCATION PIN		1
X7ZJ	TILTING SCALE		1	X80G	INNER HEX. BOLT	M6*16	2
X7ZK	LASER WARNING LABEL		1	X80H	ANCHOR PLATE		1
X7ZL	LOCK NUT		1	X80J	PLUNGER HANDLE		1
X7ZM	NUT		1	X80K	TENSION PLATE		1
X7ZN	LOCK NUT		1	X80L	SHAFT		1
X7ZP	HEX. NUT		1	X80M	PIVOT SHAFT		1
X7ZQ	CR. RE. PAN HD. SCREW	M5*8	1	X80N	COMPRESSION SPRING		1
X7ZR	CR. RE. PAN HD. SCREW	M5*8	2	X80P	CLEVIS PIN		1
X7ZS	CR. RE. PAN HD. SCREW	M5*8	1	X80Q	HEX. SOC. HD. CAP SCREW	M8*30	4
X7ZT	CR. RE. PAN HD. SCREW	M4*10	4	X80R	HEX. SOC. HD. CAP SCREW	M6*30	2
X7ZV	HEX. SOC. SET SCREW	M6*8	1	X80S	BLADE WRENCH		1
X7ZW	HEX. SOC. HD. CAP BOLT	M5*35	1	X80T	CENTER BOLT		1
X7ZX	HEX. HD. BOLT	M6*20	1	X80U	SUPPORT BASE		1
X7ZY	O-RING		1	X80V	CARRYING HANDLE		1
X7ZZ	C-RING		1	X80W	SLIDE PLATE		1
X800	DISC SPRING WASHER	φ12	1	X80X	BASE		1
X801	FLAT WASHER	5/16*7/8-5/64	1	X80Y	FENCE		1
X802	FLAT WASHER	φ8*φ16*2.5	1	X832	ARM		1
X803	FLAT WASHER	φ12*φ25*1.5	1	X837	DUST BAG ASS'Y		1
X804	COMPRESSION SPRING		1				

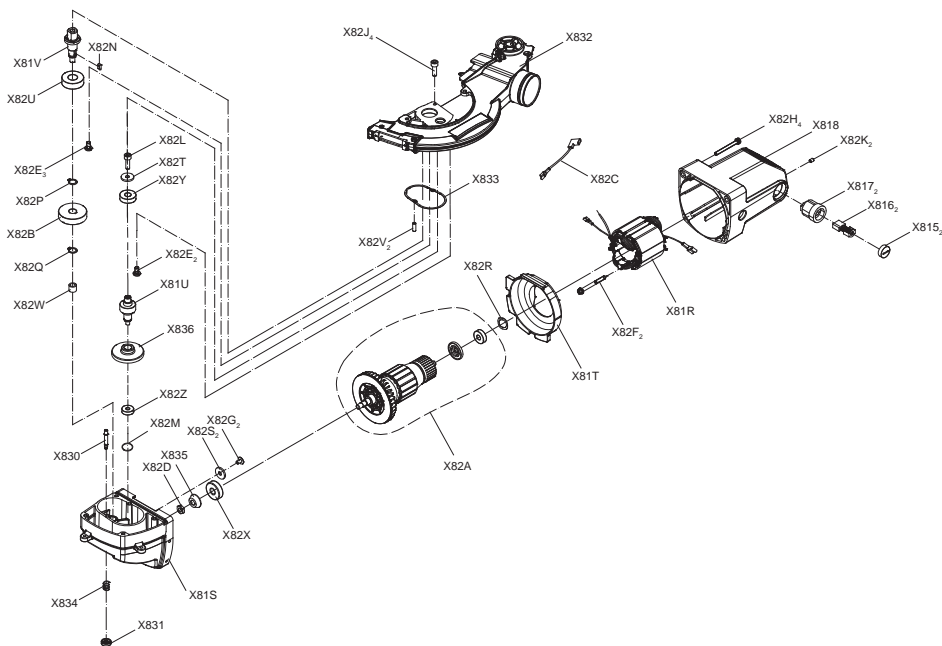
# 10 in. (254 mm) Folding Compound Miter Saw

## Schematic for folding compound miter saw



**10 in. (254 mm) Folding Compound Miter Saw**  
**Parts list & schematic for motor**

I.D. No.	Description	Size	Q'ty	I.D. No.	Description	Size	Q'ty
X815	BRUSH COVER		2	X82M	O-RING ROD		1
X816	BRUSH ASS'Y		2	X82N	PARALLEL KEY		1
X817	BRUSH HOLDER ASS'Y		2	X82P	C-RING		1
X818	MOTOR COVER		1	X82Q	C-RING		1
X81R	FIELD ASS'Y		1	X82R	WAVE WASHER	φ22	1
X81S	GEAR BOX		1	X82S	FLAT WASHER	1/4*3/4-1/16	2
X81T	FLOW GUIDE		1	X82T	FLAT WASHER	φ5*φ16*2	1
X81U	GEAR SHAFT		1	X82U	BALL BEARING		1
X81V	CUTTER SHAFT		1	X82V	NEEDLE ROLLER		2
X82A	ARMATURE ASS'Y		1	X82W	NEEDLE ROLLER BEARING		1
X82B	HELIX GEAR		1	X82X	BALL BEARING		1
X82C	LEAD WIRE ASS'Y		1	X82Y	BALL BEARING		1
X82D	HEX. NUT	M8	1	X82Z	BALL BEARING		1
X82E	CR. RE. PAN HD. SCREW	M5*6	5	X830	CLEVIS PIN		1
X82F	CR. RE. PAN HD. TAPPING SCREW & WASHER	ST4.8*50	2	X831	LOCK KNOB		1
X82G	CR. RE. PAN HD. TAPPING SCREW	M5*8	2	X832	ARM		1
X82H	CR. RE. PAN HD. SCREW & WASHER	M5*50	4	X833	OIL PAPER		1
X82J	HEX. SOC. HD. CAP SCREW	M5*25	4	X834	COMPRESSION SPRING		1
X82K	HEX. SOC. SET SCREW	M5*6	2	X835	STRAIGHT BEVEL GEAR		1
X82L	HEX. SOC. HD. CAP BOLT	M5*10	1	X836	STRAIGHT BEVEL GEAR		1



## NOTES