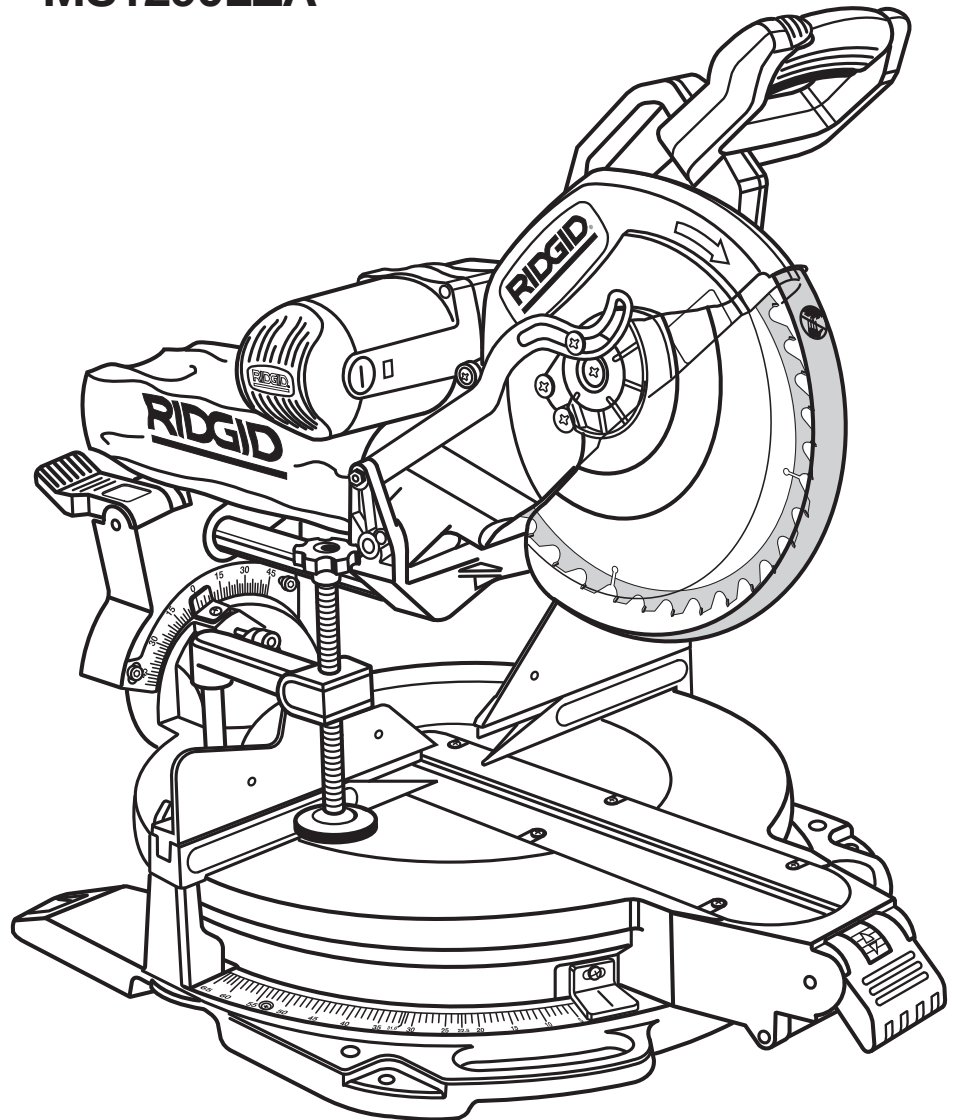


# OPERATOR'S MANUAL

## 12 in. SLIDING COMPOUND MITER SAW WITH LASER

Double Insulated  
MS1290LZA



Your miter saw has been engineered and manufactured to our high standard for dependability, ease of operation, and operator safety. When properly cared for, it will give you years of rugged, trouble-free performance.

**⚠ WARNING:**

To reduce the risk of injury, the user must read and understand the operator's manual before using this product.

Thank you for buying a RIDGID® product.

**SAVE THIS MANUAL FOR FUTURE REFERENCE**

# TABLE OF CONTENTS

---

■ Introduction.....	2
■ General Safety Rules .....	3-4
■ Specific Safety Rules.....	4-5
■ Symbols.....	6-7
■ Electrical .....	8
■ Glossary of Terms .....	9
■ Features .....	10-12
■ Tools Needed .....	13
■ Loose Parts.....	14
■ Assembly .....	15-24
■ Operation .....	25-35
■ Adjustments.....	35
■ Maintenance .....	36-37
■ Accessories .....	38
■ Warranty .....	39
■ Parts Ordering/Service .....	40

## INTRODUCTION

---

This tool has many features for making its use more pleasant and enjoyable. Safety, performance, and dependability have been given top priority in the design of this product making it easy to maintain and operate.

# GENERAL SAFETY RULES

---

## **WARNING:**

**Read and understand all instructions.** Failure to follow all instructions listed below, could result in electric shock, fire and/or serious personal injury.

---

## **READ ALL INSTRUCTIONS**

- **KNOW YOUR POWER TOOL.** Read the operator's manual carefully. Learn the applications and limitations as well as the specific potential hazards related to this tool.
- **GUARD AGAINST ELECTRICAL SHOCK BY PREVENTING BODY CONTACT WITH GROUNDED SURFACES.** For example: pipes, radiators, ranges, refrigerator enclosures.
- **KEEP GUARDS IN PLACE** and in good working order.
- **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents. **DO NOT** leave tools or pieces of wood on the tool while it is in operation.
- **DO NOT USE IN DANGEROUS ENVIRONMENTS.** Do not use power tools in damp or wet locations or expose to rain. Keep the work area well lit.
- **KEEP CHILDREN AND VISITORS AWAY.** All visitors should wear safety glasses and be kept a safe distance from work area. Do not let visitors contact tool or extension cord while operating.
- **MAKE WORKSHOP CHILDPROOF** with padlocks, master switches, or by removing starter keys.
- **DON'T FORCE THE TOOL.** It will do the job better and safer at the feed rate for which it was designed.
- **USE THE RIGHT TOOL.** Do not force the tool or attachment to do a job for which it was not designed.
- **USE THE PROPER EXTENSION CORD.** Make sure your extension cord is in good condition. Use only a cord heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. A wire gauge size (A.W.G.) of at least **14** is recommended for an extension cord 25 feet or less in length. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.
- **DRESS PROPERLY.** Do not wear loose clothing, neckties, or jewelry that can get caught and draw you into moving parts. Rubber gloves and nonskid footwear are recommended when working outdoors. Also wear protective hair covering to contain long hair.
- **ALWAYS WEAR SAFETY GLASSES WITH SIDE SHIELDS.** Everyday eyeglasses have only impact-resistant lenses, they are **NOT** safety glasses.
- **SECURE WORK.** Use clamps or a vise to hold work when practical, it is safer than using your hand and frees both hands to operate the tool.
- **DO NOT OVERREACH.** Keep proper footing and balance at all times.
- **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories.
- **DISCONNECT TOOLS.** When not in use, before servicing, or when changing attachments, blades, bits, cutters, etc., all tools should be disconnected from power source.
- **AVOID ACCIDENTAL STARTING.** Be sure switch is off when plugging in any tool.
- **USE RECOMMENDED ACCESSORIES.** Consult the operator's manual for recommended accessories. The use of improper accessories may result in injury.
- **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped.
- **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged must be properly repaired or replaced by an authorized service center to avoid risk of personal injury.
- **USE THE RIGHT DIRECTION OF FEED.** Feed work into a blade, cutter, or sanding spindle against the direction or rotation of the blade, cutter, or sanding spindle only.
- **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN THE POWER OFF.** Don't leave tool until it comes to a complete stop.
- **PROTECT YOUR LUNGS.** Wear a face or dust mask if the cutting operation is dusty.
- **PROTECT YOUR HEARING.** Wear hearing protection during extended periods of operation.
- **DO NOT ABUSE CORD.** Never carry tool by the cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
- **USE OUTDOOR EXTENSION CORDS.** When tool is used outdoors, use only extension cords with approved ground connection that are intended for use outdoors and so marked.
- **KEEP BLADES CLEAN, SHARP, AND WITH SUFFICIENT SET.** Sharp blades minimize stalling and kickback.
- **BLADE COASTS AFTER BEING TURNED OFF.**

# GENERAL SAFETY RULES

---

- **NEVER USE IN AN EXPLOSIVE ATMOSPHERE.** Normal sparking of the motor could ignite fumes.
- **INSPECT TOOL CORDS PERIODICALLY.** If damaged, have repaired by a qualified service technician at an authorized service facility. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal. Repair or replace a damaged or worn cord immediately. Stay constantly aware of cord location and keep it well away from the rotating blade.
- **INSPECT EXTENSION CORDS PERIODICALLY** and replace if damaged.
- **POLARIZED PLUGS.** To reduce the risk of electric shock, this tool has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.
- **KEEP TOOL DRY, CLEAN, AND FREE FROM OIL AND GREASE.** Always use a clean cloth when cleaning. Never use brake fluids, gasoline, petroleum-based products, or any solvents to clean tool.
- **STAY ALERT AND EXERCISE CONTROL.** Watch what you are doing and use common sense. Do not operate tool when you are tired. Do not rush.
- **DO NOT USE TOOL IF SWITCH DOES NOT TURN IT ON AND OFF.** Have defective switches replaced by an authorized service center.
- **USE ONLY CORRECT BLADES.** Do not use blades with incorrect size holes. Never use blade washers or blade bolts that are defective or incorrect. The maximum blade capacity of the saw is 12 in.
- **BEFORE MAKING A CUT, BE SURE ALL ADJUSTMENTS ARE SECURE.**
- **BE SURE BLADE PATH IS FREE OF NAILS.** Inspect for and remove all nails from lumber before cutting.
- **NEVER TOUCH BLADE** or other moving parts during use.
- **NEVER START A TOOL WHEN ANY ROTATING COMPONENT IS IN CONTACT WITH THE WORKPIECE.**
- **DO NOT OPERATE A TOOL WHILE UNDER THE INFLUENCE OF DRUGS, ALCOHOL, OR ANY MEDICATION.**
- **WHEN SERVICING** use only identical replacement parts. Use of any other parts may create a hazard or cause product damage.
- **USE ONLY RECOMMENDED ACCESSORIES** listed in this manual or addendums. Use of accessories that are not listed may cause the risk of personal injury. Instructions for safe use of accessories are included with the accessory.
- **DOUBLE CHECK ALL SETUPS.** Make sure blade is tight and not making contact with saw or workpiece before connecting to power supply.

# SPECIFIC SAFETY RULES

---

- **FIRMLY CLAMP OR BOLT** the tool to a workbench or table at approximately hip height.
- **KEEP HANDS AWAY FROM CUTTING AREA.** Do not reach underneath work or in blade cutting path with your hands and fingers for any reason. Always turn the power off.
- **ALWAYS SUPPORT LONG WORKPIECES** while cutting to minimize risk of blade pinching and kickback. Saw may slip, walk, or slide while cutting long or heavy boards.
- **ALWAYS USE A CLAMP** to secure the workpiece when possible.
- **BE SURE THE BLADE CLEARS THE WORKPIECE.** Never start the saw with the blade touching the workpiece. Allow motor to come up to full speed before starting cut.
- **MAKE SURE THE MITER TABLE AND SAW ARM BEVEL FUNCTION) ARE LOCKED IN POSITION BEFORE OPERATING YOUR SAW.** Lock the miter table by securely tightening the miter lock lever. Lock the saw arm (bevel function) by securely tightening the bevel lock lever.
- **USE THIS SAW TO CUT WOOD, WOOD PRODUCTS, AND SOME PLASTICS ONLY. DO NOT CUT METALS, CERAMICS OR MASONRY PRODUCTS.**
- **BEFORE MOVING THE SAW,** unplug the saw then lock the miter, bevel, slide, and power head positions.
- **NEVER USE A LENGTH STOP ON THE FREE SCRAP END OF A CLAMPED WORKPIECE. NEVER** hold onto or bind the free scrap end of the workpiece in any operation. If a work clamp and length stop are used together, they must both be installed on the same side of the saw table to prevent the saw from catching the loose end and kicking up.
- **NEVER** cut more than one piece at a time. **DO NOT STACK** more than one workpiece on the saw table at a time.
- **NEVER PERFORM ANY OPERATION FREEHAND.** Always place the workpiece to be cut on the miter table and position it firmly against the fence as a backstop. Always use the fence.

# SPECIFIC SAFETY RULES

---

- **NEVER** hand hold a workpiece that is too small to be clamped. Keep hands clear of the cutting area.
- **NEVER** reach behind, under, or within three inches of the blade and its cutting path with your hands and fingers for any reason.
- **NEVER** reach to pick up a workpiece, a piece of scrap, or anything else that is in or near the cutting path of the blade.
- **AVOID AWKWARD OPERATIONS AND HAND POSITIONS** where a sudden slip could cause your hand to move into the blade. **ALWAYS** make sure you have good balance. **NEVER** operate the miter saw on the floor or in a crouched position.
- **NEVER** stand or have any part of your body in line with the path of the saw blade.
- **ALWAYS** release the power switch and allow the saw blade to stop rotating before raising it out of the workpiece.
- **DO NOT TURN THE MOTOR SWITCH ON AND OFF RAPIDLY.** This could cause the saw blade to loosen and could create a hazard. Should this ever occur, stand clear and allow the saw blade to come to a complete stop. Disconnect the saw from the power supply and securely retighten the blade bolt.
- **IF ANY PART OF THIS MITER SAW IS MISSING** or should break, bend, or fail in any way, or should any electrical component fail to perform properly, shut off the power switch, remove the miter saw plug from the power source and have damaged, missing, or failed parts replaced before resuming operation.
- **IF THE POWER SUPPLY CORD IS DAMAGED,** it must be replaced only by the manufacturer or by an authorized service center to avoid risk.
- **ALWAYS STAY ALERT!** Do not allow familiarity (gained from frequent use of your saw) to cause a careless mistake. **ALWAYS REMEMBER** that a careless fraction of a second is sufficient to inflict severe injury.
- **MAKE SURE WORK AREA HAS AMPLE LIGHTING** to see the work and that no obstructions will interfere with safe operation **BEFORE** performing any work using your saw.
- **ALWAYS TURN OFF THE SAW** before disconnecting it to avoid accidental starting when reconnecting to power supply. **NEVER** leave the saw unattended while connected to a power source.
- **THIS TOOL** has the following markings:
  - a) Wear eye protection.
  - b) Keep hands out of path of saw blade
  - c) Do not operate saw without guards in place.
  - d) Do not perform any operation freehand.
  - e) Never reach around saw blade.
  - f) Turn off tool and wait for saw blade to stop before moving workpiece or changing settings.
  - g) Disconnect power (or unplug tool as applicable) before changing blade or servicing.
  - h) No load speed.
- **ALWAYS MAKE SURE THE SAW BLADE HAS CLEARANCE OF ALL OBSTRUCTIONS BEFORE TURNING THE SAW ON.**
- **MAKE SLIDING CUTS** by pushing the saw blade down on top of the workpiece then sliding it back toward the rear of the saw. **DO NOT** pull the saw toward you while making a cut.
- **ALWAYS** carry the tool only by the carrying handles.
- **AVOID** direct eye exposure when using the laser guide.
- **THIS SAW CAN TIP OVER** if the saw head is released suddenly and the saw is not secured to a work surface. **ALWAYS** secure this saw to a stable work surface before any use to avoid serious personal injury.
- **SAVE THESE INSTRUCTIONS.** Refer to them frequently and use to instruct other users. If you loan someone this tool, loan them these instructions also.

---

## **WARNING:**

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known 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.

---

# SYMBOLS




Some of the following symbols may be used on this tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

SYMBOL	NAME	DESIGNATION/EXPLANATION
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
min	Minutes	Time
~	Alternating Current	Type of current
==	Direct Current	Type or a characteristic of current
$n_0$	No Load Speed	Rotational speed, at no load
	Class II Construction	Double-insulated construction
.../min	Per Minute	Revolutions, strokes, surface speed, orbits etc., per minute
	Wet Conditions Alert	Do not expose to rain or use in damp locations.
	Read The Operator's Manual	To reduce the risk of injury, user must read and understand operator's manual before using this product.
	Eye Protection	Always wear safety goggles or safety glasses with side shields and, as necessary, a full face shield when operating this product.
	Safety Alert	Precautions that involve your safety.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	Hot Surface	To reduce the risk of injury or damage, avoid contact with any hot surface.



# SYMBOLS

The following signal words and meanings are intended to explain the levels of risk associated with this product.

SYMBOL	SIGNAL	MEANING
	<b>DANGER:</b>	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
	<b>WARNING:</b>	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
	<b>CAUTION:</b>	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.
	<b>CAUTION:</b>	(Without Safety Alert Symbol) Indicates a situation that may result in property damage.

## SERVICE

Servicing requires extreme care and knowledge and should be performed only by a qualified service technician. For service we suggest you return the product to your nearest **AUTHORIZED SERVICE CENTER** for repair. When servicing, use only identical replacement parts.

### **WARNING:**

To avoid serious personal injury, do not attempt to use this product until you read thoroughly and understand completely the operator's manual. If you do not understand the warnings and instructions in the operator's manual, do not use this product. Call RIDGID® customer service for assistance.

### **WARNING:**



The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and, when needed, a full face shield. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always use eye protection which is marked to comply with ANSI Z87.1.

## SAVE THESE INSTRUCTIONS

# ELECTRICAL

---

## DOUBLE INSULATION

Double insulation is a concept in safety in electric power tools, which eliminates the need for the usual three-wire grounded power cord. All exposed metal parts are isolated from the internal metal motor components with protecting insulation. Double insulated tools do not need to be grounded.

---

### **WARNING:**

The double insulated system is intended to protect the user from shock resulting from a break in the tool's internal wiring. Observe all normal safety precautions to avoid electrical shock.

---

**NOTE:** Servicing of a product with double insulation requires extreme care and knowledge of the system and should be performed only by a qualified service technician. For service, we suggest you return the tool to your nearest authorized service center for repair. Always use original factory replacement parts when servicing.

## ELECTRICAL CONNECTION

This tool has a precision-built electric motor. It should be connected to a **power supply that is 120 volts, 60 Hz, AC only (normal household current)**. Do not operate this tool on direct current (DC). A substantial voltage drop will cause a loss of power and the motor will overheat. If the tool does not operate when plugged into an outlet, double-check the power supply.

## EXTENSION CORDS

When using a power tool at a considerable distance from a power source, be sure to use an extension cord that has the capacity to handle the current the product will draw. An undersized cord will cause a drop in line voltage, resulting in overheating and loss of power. Use the chart to determine the minimum wire size required in an extension cord. Only round jacketed cords listed by Underwriter's Laboratories (UL) should be used.

When working outdoors with a product, use an extension cord that is designed for outside use. This type of cord is designated with "WA" on the cord's jacket.

Before using any extension cord, inspect it for loose or exposed wires and cut or worn insulation.

---

\*\*Ampere rating (on product data plate)

Cord Length	Wire Size (A.W.G.)					
	0-2.0	2.1-3.4	3.5-5.0	5.1-7.0	7.1-12.0	12.1-16.0
25'	16	16	16	16	14	14
50'	16	16	16	14	14	12
100'	16	16	14	12	10	—

\*\*Used on 12 gauge - 20 amp circuit.

**NOTE:** AWG = American Wire Gauge

---

### **WARNING:**

Keep the extension cord clear of the working area. Position the cord so that it will not get caught on lumber, tools, or other obstructions while you are working with a power tool. Failure to do so can result in serious personal injury.

---

### **WARNING:**

Check extension cords before each use. If damaged replace immediately. Never use tool with a damaged cord since touching the damaged area could cause electrical shock resulting in serious injury.

---



# GLOSSARY OF TERMS

---

## **Anti-Kickback Pawls (radial arm and table saws)**

A device which, when properly installed and maintained, is designed to stop the workpiece from being kicked back toward the front of the saw during a ripping operation.

## **Arbor**

The shaft on which a blade or cutting tool is mounted.

## **Bevel Cut**

A cutting operation made with the blade at any angle other than 90° to the table surface.

## **Chamfer**

A cut removing a wedge from a block so the end (or part of the end) is angled rather than at 90°.

## **Compound Cut**

A cross cut made with both a miter and a bevel angle.

## **Cross Cut**

A cutting or shaping operation made across the grain or the width of the workpiece.

## **Cutter Head (planers and jointer planers)**

A rotating cutterhead with adjustable blades or knives. The blades or knives remove material from the workpiece.

## **Dado Cut**

A non-through cut which produces a square-sided notch or trough in the workpiece (requires a special blade).

## **Featherboard**

A device used to help control the workpiece by guiding it securely against the table or fence during any ripping operation.

## **FPM or SPM**

Feet per minute (or strokes per minute), used in reference to blade movement.

## **Freehand**

Performing a cut without the workpiece being guided by a fence, miter gauge, or other aids.

## **Gum**

A sticky, sap-based residue from wood products.

## **Heel**

Alignment of the blade to the fence.

## **Kerf**

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

## **Kickback**

A hazard that can occur when the blade binds or stalls, throwing the workpiece back toward operator.

## **Leading End**

The end of the workpiece pushed into the tool first.

## **Miter Cut**

A cutting operation made with the workpiece at any angle to the blade other than 90°.

## **Non-Through Cuts**

Any cutting operation where the blade does not extend completely through the thickness of the workpiece.

## **Push Blocks (for jointer planers)**

Device used to feed the workpiece over the jointer planer cutterhead during any operation. This aid helps keep the operator's hands well away from the cutterhead.

## **Push Blocks and Push Sticks (for table saws)**

Devices used to feed the workpiece through the saw blade during cutting operations. A push stick (not a push block) should be used for narrow ripping operations. These aids help keep the operator's hands well away from the blade.

## **Pilot Hole (drill presses)**

A small hole drilled in a workpiece that serves as a guide for drilling large holes accurately.

## **Resaw**

A cutting operation to reduce the thickness of the workpiece to make thinner pieces.

## **Resin**

A sticky, sap-based substance that has hardened.

## **Revolutions Per Minute (RPM)**

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

## **Ripping or Rip Cut**

A cutting operation along the length of the workpiece.

## **Riving Knife/Spreader/Splitter (table saws)**

A metal piece, slightly thinner than the blade, which helps keep the kerf open and also helps to prevent kickback.

## **Saw Blade Path**

The area over, under, behind, or in front of the blade. As it applies to the workpiece, that area which will be or has been cut by the blade.

## **Set**

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

## **Snipe (planers)**

Depression made at either end of a workpiece by cutter blades when the workpiece is not properly supported.

## **Through Sawing**

Any cutting operation where the blade extends completely through the thickness of the workpiece.

## **Throw-Back**

The throwing back of a workpiece usually caused by the workpiece being dropped into the blade or being placed inadvertently in contact with the blade.

## **Workpiece or Material**

The item on which the operation is being done.

## **Worktable**

Surface where the workpiece rests while performing a cutting, drilling, planing, or sanding operation.

# FEATURES

## PRODUCT SPECIFICATIONS

Blade Diameter..... 12 in.  
 Arbor Hole ..... 1 in.  
 No Load Speed .....4,000 r/min. (RPM)  
 Input ..... 120 V, 60 Hz, AC Only, 15 Amps  
 Net Weight..... 70 lbs.

Cutting Capacity with Miter at 0°/Bevel 0°:  
 Maximum nominal lumber sizes: ..... 2 x 12, 4 x 4  
 Cutting Capacity with Miter at 45°/Bevel 0°:  
 Maximum nominal lumber sizes: ..... 2 x 10  
 Cutting Capacity with Miter at 0°/Bevel 45°:  
 Maximum nominal lumber sizes: ..... 2 x 12

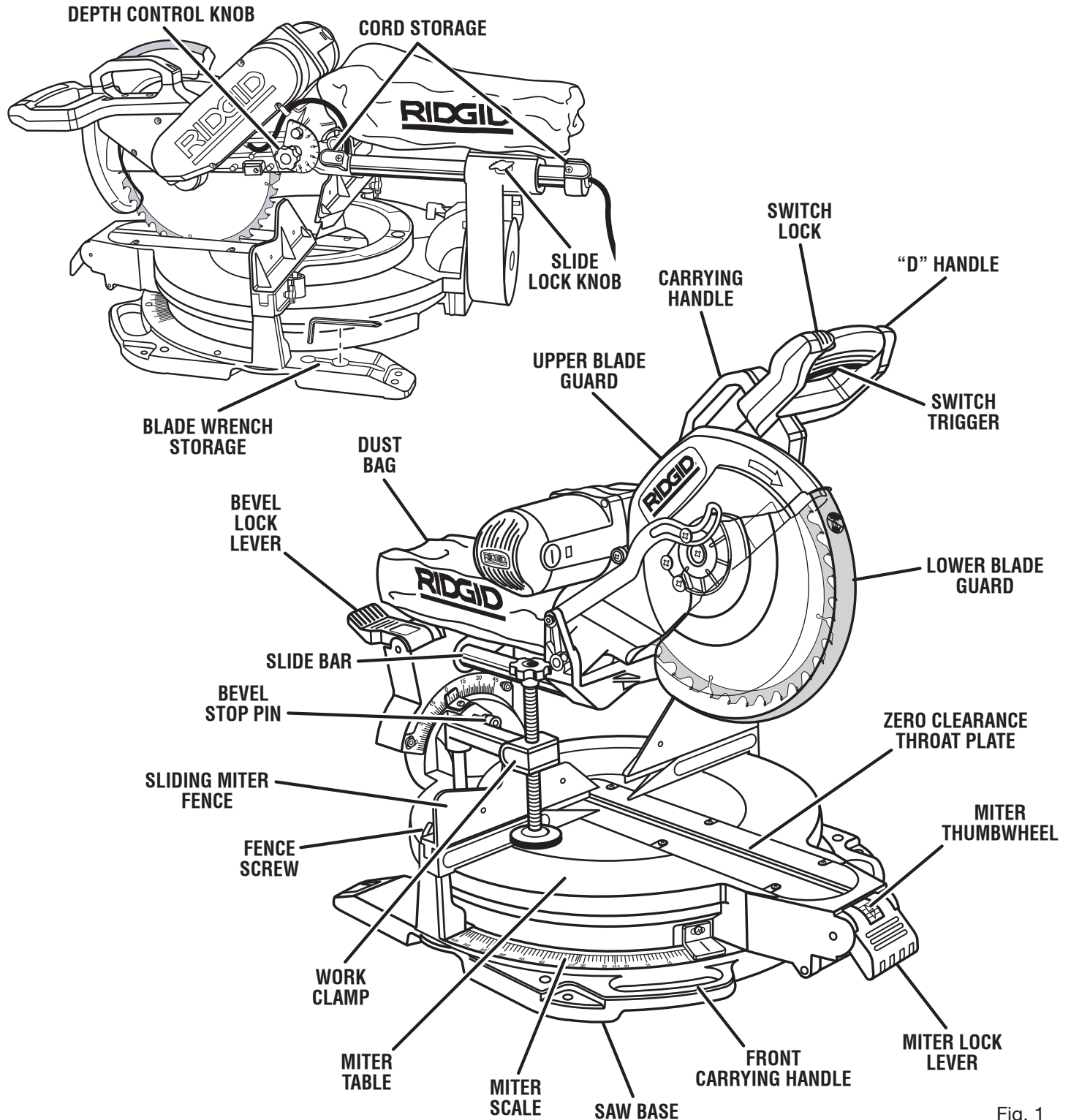


Fig. 1

# FEATURES

## KNOW YOUR COMPOUND MITER SAW

See Figure 1.

The safe use of this product requires an understanding of the information on the tool and in this operator's manual as well as a knowledge of the project you are attempting. Before use of this product, familiarize yourself with all operating features and safety rules.

### 12 IN. BLADE

A 12 in. blade is included with your compound miter saw. It will cut materials up to 13-1/2 in. wide, depending upon the angle at which the cut is being made.

### 15 AMP MOTOR

This saw has a powerful 15 amp motor with sufficient power to handle tough cutting jobs. It is made with all ball bearings, and has externally accessible brushes for ease of servicing.

### BEVEL LOCK LEVER

The bevel lock lever securely locks your compound miter saw at desired bevel angles. Pulling the lever forward will release the saw allowing the blade to be tilted either left or right for bevel cuts. Pushing the lever back will lock the saw in place.

### BEVEL STOP PIN

The bevel stop pin has two positions:

1. Override (pin pulled completely out)
2. The 0° - 48° position for crown molding (pin pushed in)

### CARRYING HANDLES

See Figure 2.

Carrying handles are located on the top of the saw arm and on the front of the saw base.

To transport: turn off and unplug the saw; lower saw arm and lock it in the down position; lock bevel and miter lock levers; lock slide lock knob.

### DEPTH CONTROL KNOB

When loosened, the depth control knob allows the user to adjust the depth guide then holds the guide securely in place when the knob is retightened.

**NOTE:** It is not necessary to loosen the knob when locking or unlocking the saw arm.

### DEPTH GUIDE

See Figure 2.

The depth guide is used for locking the saw arm in the down position or as a guide for limiting downward movement of the saw arm.

**NOTE:** Controlling depth of cut is necessary when rough cutting a dado.

### ELECTRIC BRAKE

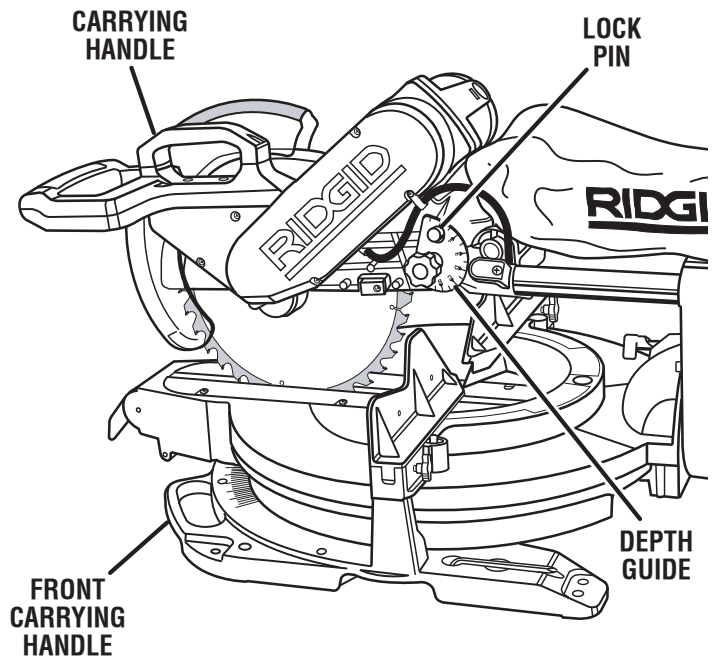
An electric brake quickly stops blade rotation after the switch trigger is released.

## LASER GUIDE

For more accurate cuts, a laser guide is included with your miter saw. When used properly, the laser guide makes accurate, precision cutting simple and easy.

## MITER LOCK LEVER

The miter lock lever securely locks the saw at the desired miter angle.



SAW ARM LOCKED IN DOWN POSITION

Fig. 2

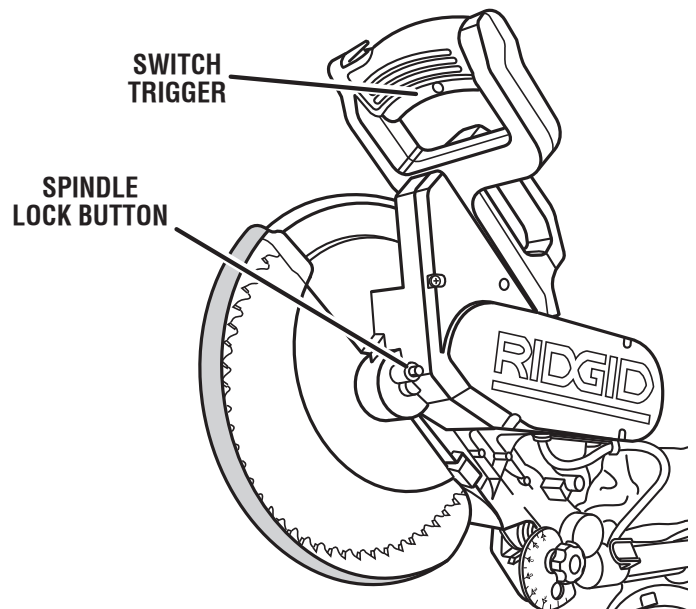


Fig. 3

# FEATURES

## MITER SCALE

The miter scale has index points provided at 0°, 15°, 22.5°, 31.6°, 45°, and 60°.

## MITER THUMBWHEEL

The miter thumbwheel, when used with the miter lock lever lifted (unlocked), can release the miter table from pre-set index points. With the thumbwheel spun down (and released), the miter table moves freely to any desired angle. With thumb on thumbwheel, push down and hold to override (bypass) index points; release thumbwheel when close to desired point and move the lock lever into place with a click. With the thumbwheel spun up, the miter table will stop at each index point on the miter scale.

## REPEAT-A-CUT™

See Figure 5.

The Repeat-A-Cut™ feature on both the left and right side miter fences can be used when making repetitive cuts. Simply mark the fence with a pencil, make the desired number of cut(s), then wipe the mark off with a soft cloth.

## SELF-RETRACTING LOWER BLADE GUARD

The lower blade guard is made of shock-resistant, see-through plastic that provides protection from each side of the blade. It retracts over the upper blade guard as the saw is lowered into the workpiece.

## SLIDE BAR

When unlocked, the saw arm will glide forward and backward the length of the slide bar for cutting various workpiece widths.

## SLIDE LOCK KNOB

The slide lock knob locks and unlocks the sliding feature of this tool.

## SLIDING MITER FENCES

The sliding miter fences provided with this saw help hold the workpiece securely when making most cuts. The sliding feature allows for clearance of the saw blade when making bevel or compound cuts. Some cuts may require that the sliding fence be removed completely to avoid interference between the fence and the blade.

Loosen the fence screw before attempting to slide the fences or lift them for removal. Once the desired position of the fence is determined, retighten the fence screw securely.

## SPINDLE LOCK BUTTON

See Figure 3.

A spindle lock button has been provided for locking the spindle (keeping the saw blade from turning). Depress and hold the lock button only while installing, changing, or removing the saw blade.

## SWITCH TRIGGER

See Figure 4.

The saw will not start until you depress the switch lock with your thumb then squeeze the switch trigger. To prevent unauthorized use of the compound miter saw, disconnect it from the power supply and lock the switch in the **OFF** position. To lock the switch, install a padlock (not included) through the hole in the switch trigger. A lock with a long shackle up to 9/32 in. diameter may be used. When the lock is installed and locked, the switch is inoperable. Store the padlock key in another location.

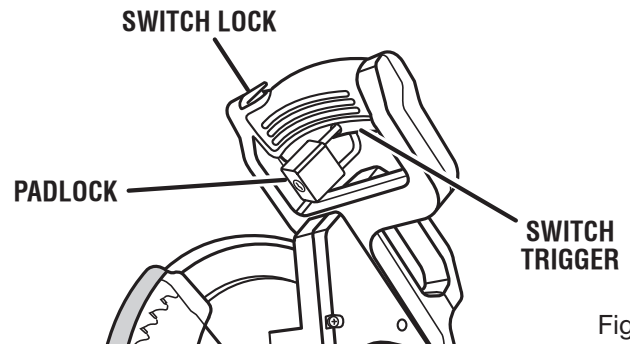


Fig. 4

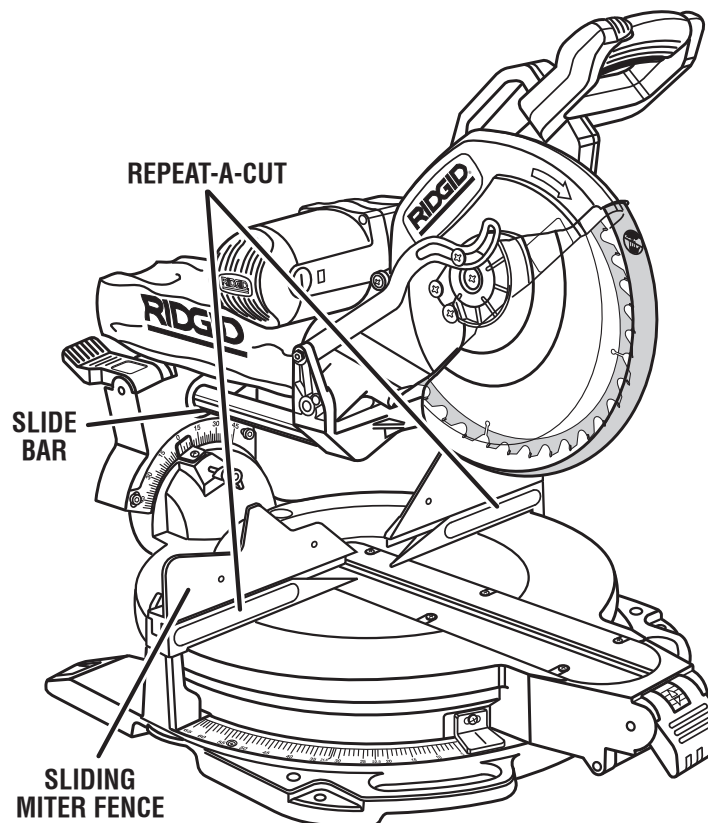
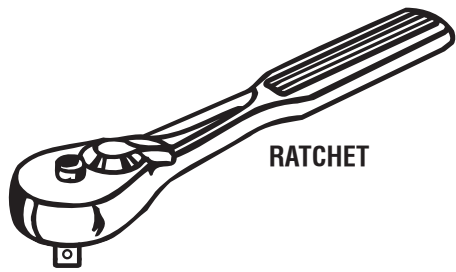


Fig. 5

# TOOLS NEEDED

---

The following tools (not included) are needed for making adjustments or installing the blade:



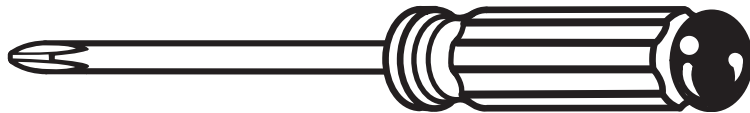
RATCHET



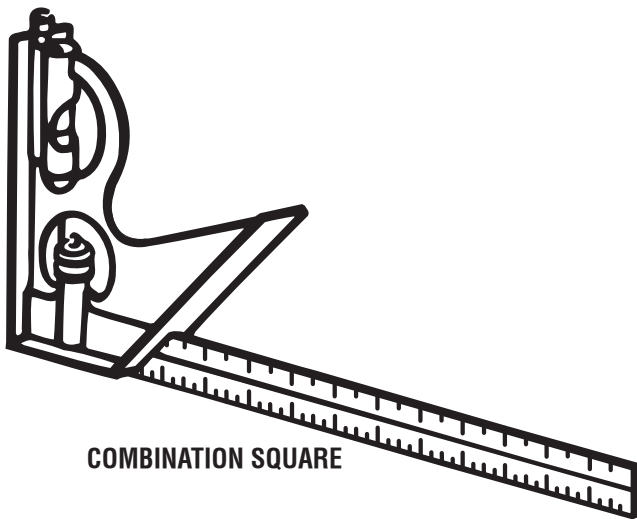
COMBINATION WRENCH, 12 mm



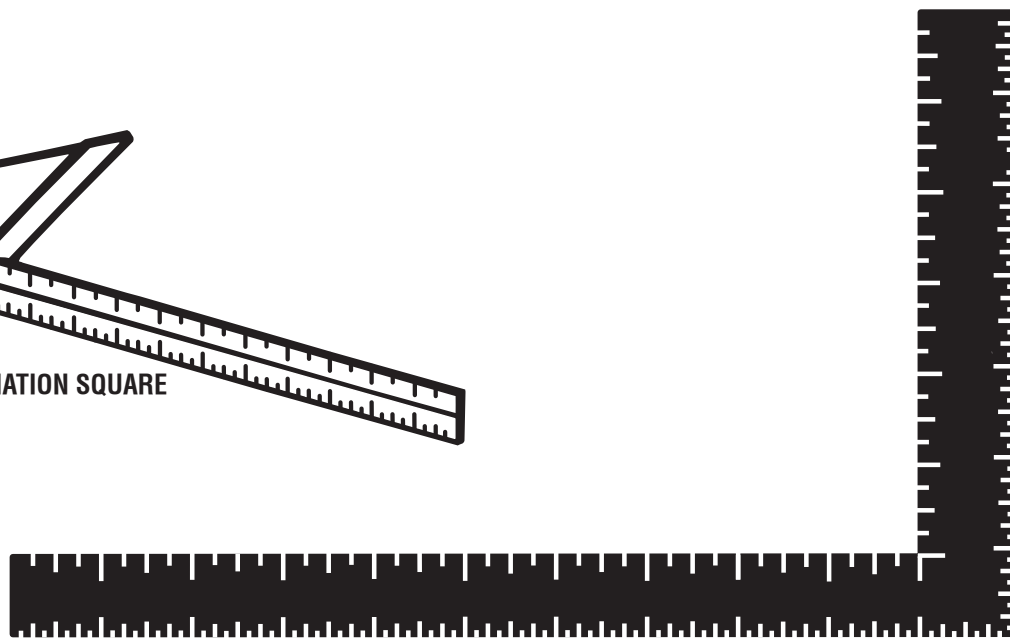
SOCKET, 19 mm



PHILLIPS SCREWDRIVER



COMBINATION SQUARE



FRAMING SQUARE

Fig. 6

# LOOSE PARTS

The following items are included with your miter saw:

- Dust Bag
- Dust Bag Frame
- Dust Guide
- Work Clamp
- Blade Wrench
- Hex Key, 1/16 in.
- Operator's Manual (not shown)

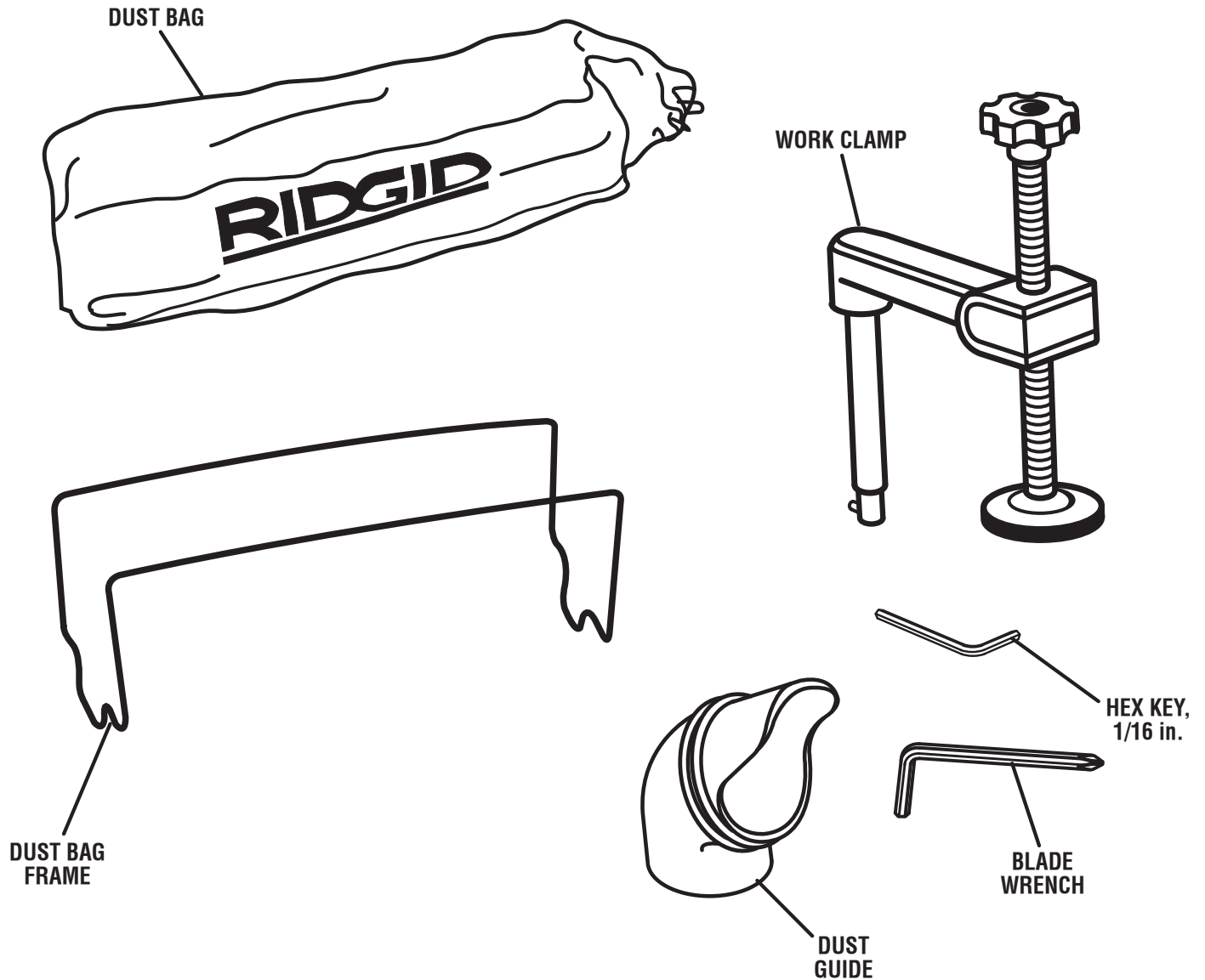


Fig. 7

**⚠ WARNING:**

The use of attachments or accessories not listed in this manual might be hazardous and could cause serious personal injury.



# ASSEMBLY

## UNPACKING

This product requires assembly.

- Carefully lift saw from the carton by the carrying handle and the saw base, and place it on a level work surface.  
**NOTE:** This tool is heavy. To avoid back injury, lift with your legs, not your back, and get help when needed.
- This saw has been shipped with the saw arm secured in the down position. To release the saw arm, push down on the top of the saw arm, cut the tie-wrap, and pull out on the depth guide.
- Lift the saw arm by the handle. Hand pressure should remain on the saw arm to prevent sudden rise upon release of the tie wrap and/or depth guide.
- Inspect the tool carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.
- The saw is factory set for accurate cutting. After assembling it, check for accuracy. If shipping has influenced the settings, refer to specific procedures explained in this manual.
- If any parts are damaged or missing, please call 1-866-539-1710 for assistance.

### **WARNING:**

If any parts are damaged or missing, do not operate this tool until the missing parts are replaced. Failure to heed this warning could result in serious personal injury.

### **WARNING:**

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

### **WARNING:**

Do not connect to power supply until assembly is complete. Failure to comply could result in accidental starting and possible serious personal injury.

### **WARNING:**

Do not start the miter saw without checking for interference between the saw blade and the sliding miter fences. Damage could result to the blade if it strikes the miter fence during operation of the saw.

### **WARNING:**

Always make sure the compound miter saw is securely mounted to a workbench or an approved workstand. Failure to heed this warning can result in serious personal injury.

## MOUNTING HOLES

See Figure 8.

The compound miter saw should be mounted to a firm supporting surface such as a workbench, mounting board, or leg stand. The saw base has eight mounting holes: four large bolt holes (B) and four small screw holes (A). If using bolts, they should be of sufficient length to accommodate the saw base, lock washers, hex nuts, and the thickness of the workbench or other mounting surface. Tighten all four bolts or screws securely. Do not use screws if mounting to a leg stand.

The hole pattern for mounting to a workbench is shown in figure 8. Carefully check the workbench after mounting to make sure that no movement can occur during use. If any tipping, sliding, or walking is noted, secure the workbench to the floor before operating.

TRACE HOLES AT THESE  
LOCATIONS FOR HOLE PATTERN  
(A - SCREWS AND B - BOLTS)

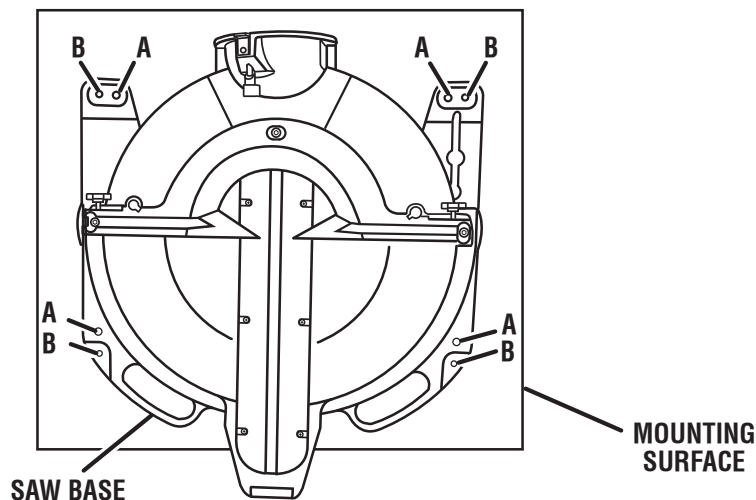


Fig. 8

# ASSEMBLY

**NOTE:** Many of the illustrations in this manual show only portions of the compound miter saw. This is intentional so that we can clearly show points being made in the illustrations. **Never operate the saw without all guards securely in place and in good operating condition.**

## LOCKING / UNLOCKING THE SAW ARM

See Figure 9.

When locking and unlocking the saw arm, it is not necessary to loosen the depth control knob.

### To unlock and raise the saw arm:

- Firmly grasp the “D” handle and apply downward pressure while at the same time pulling the depth guide out and away from the saw housing.
- Turn the guide to the right until the flat of the guide is facing up.
- Release the guide and slowly raise the saw arm.

### To relock the saw arm:

- Firmly grasp the “D” handle and apply downward pressure while at the same time pulling the depth guide out and away from the saw housing.
- Turn the guide to the left until the hole in the guide is positioned over the lock pin.
- Release the guide allowing the lock pin to align with the hole in the guide.
- Check that the slide lock knob is locked in place by turning the knob clockwise.

## USING THE DEPTH GUIDE

See Figure 10.

When used, the depth guide limits the downward travel of the blade when cutting dados and other non-through cuts.

Make a mark on the lock pin with a pencil for use with the scale on the guide. “A” on the guide represents the saw blade teeth being level with the miter table. Each mark on the depth guide is approximately 1/4 in. Always make a practice cut on scrap wood. With the flat side of the guide facing up, the saw can be used without any interference from the guide.

To use the depth guide:

- If the saw is in storage or transport position, unlock the saw arm.
- Position the depth guide by turning until it engages the internal locking mechanism.
- Loosen the depth control knob (turn knob counter-clockwise).
- Determine the desired depth of cut, set the guide to that mark, and retighten the depth control knob (turn knob clockwise).

**NOTE:** To override the depth setting, pull the depth gauge out and away from the saw housing and turn the guide until the flat of the guide is facing up.

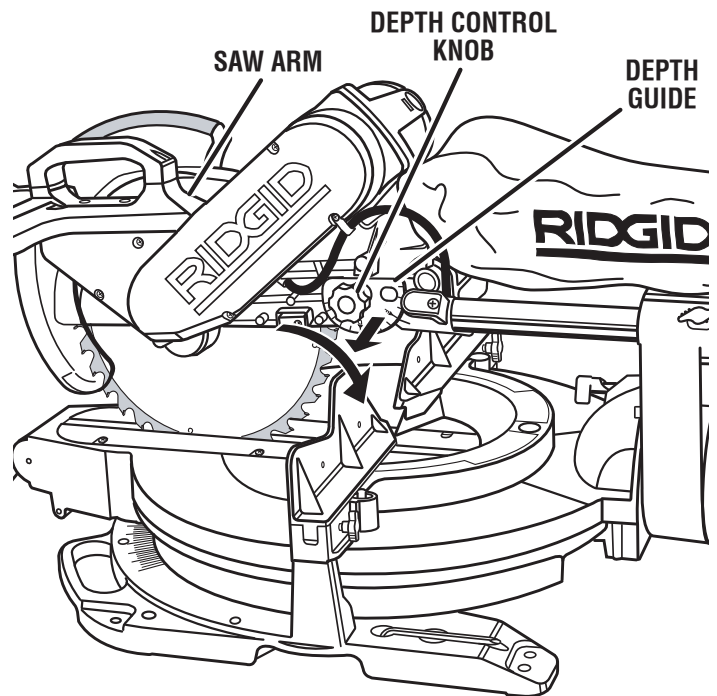


Fig. 9

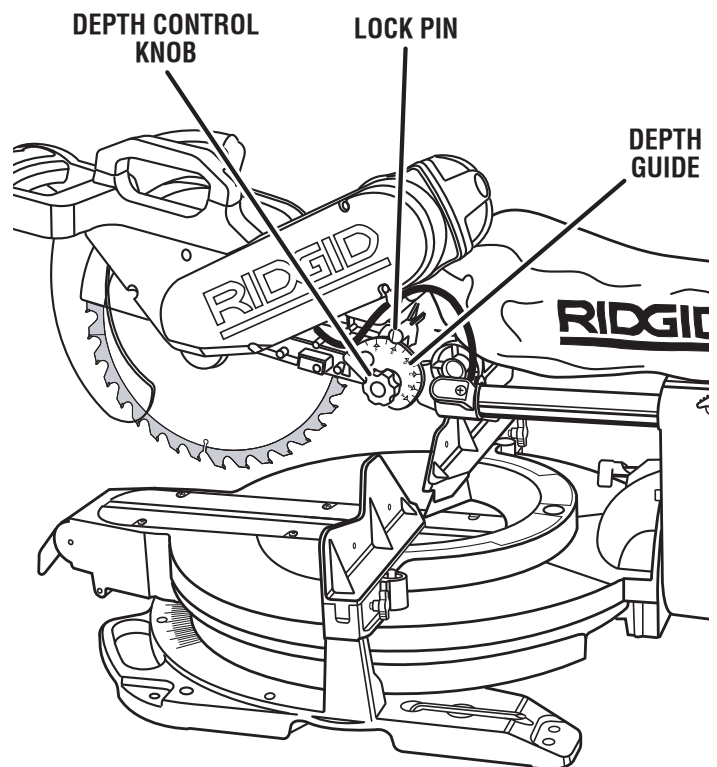


Fig. 10

# ASSEMBLY

## INSTALLING THE DUST BAG

See Figure 11.

- Squeeze the metal clips on the dust bag, then slide the metal ring over the end of the dust guide. Position the metal ring so it is between the two molded rings on the dust guide. Release the dust bag clips.
- Snap the frame onto the slide bar by squeezing the dust bag frame, then pushing it down over the slide bar.
- Insert the dust guide inside the exhaust port in the upper blade guard.
- Slip the dust bag over the frame with the zipper facing down.

**NOTE:** For efficient operation, empty the dust bag before it is half full. This will permit better air flow through the bag.

## INSTALLING THE WORK CLAMP

See Figure 12.

### **WARNING:**

In some operations, the work clamp assembly may interfere with the operation of the blade guard assembly. Always make sure there is no interference with the blade guard prior to beginning any cutting operation to reduce the risk of serious personal injury.

The work clamp provides greater control by clamping the workpiece to the miter table. It also helps to prevent the workpiece from creeping toward the saw blade. This is very helpful when cutting compound miters. Depending on the cutting operation and the size of the workpiece, it may be necessary to use a C-clamp instead of the work clamp to secure the workpiece prior to making the cut. The work clamp can be installed and used on either side of the blade.

### To install the work clamp:

- Place the work clamp shaft in one of the holes located behind the sliding miter fence.

**NOTE:** Align the pin on the work clamp shaft with the slot in the hole.

- Rotate the knob on the work clamp to move it up or down as needed.

**NOTE:** The work clamp has a quick release lever that makes positioning of the work clamp effortless. Push the button on the side of the work clamp to quickly release the workpiece.

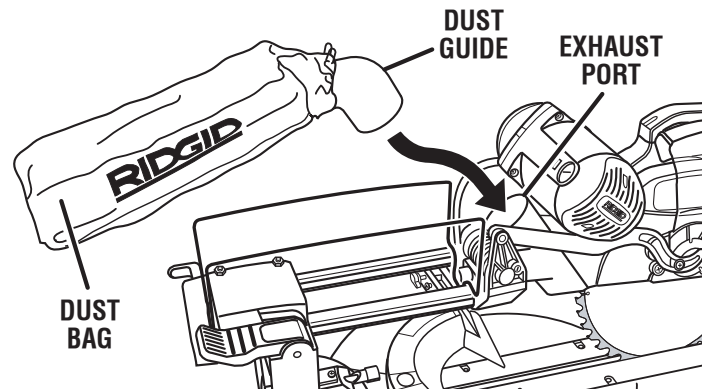
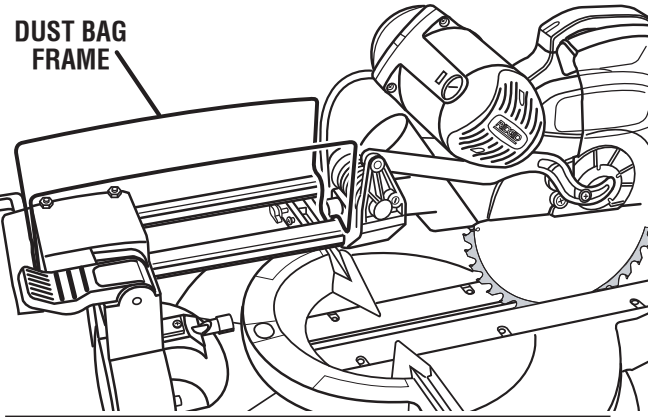
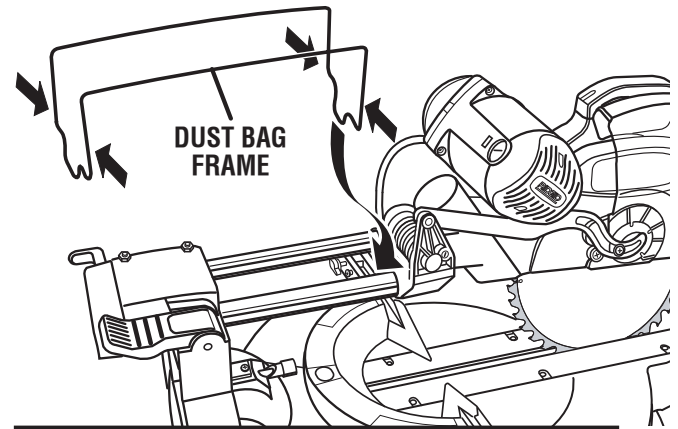


Fig. 11

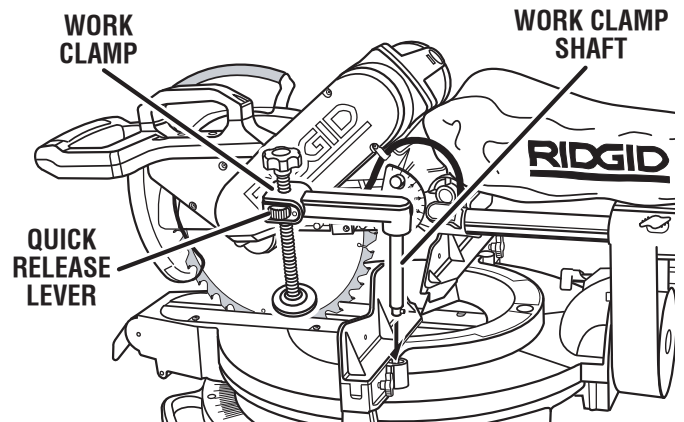


Fig. 12

# ASSEMBLY

## **WARNING:**

Make sure the spindle lock button is not engaged before reconnecting saw to power source. Never engage spindle lock button when blade is rotating.

## INSTALLING / REPLACING THE BLADE

See Figure 13.

## **WARNING:**

A 12 in. blade is the maximum blade capacity of the saw. Never use a blade that is too thick to allow outer blade washer to engage with the flats on the spindle. Larger blades will come in contact with the blade guards, while thicker blades will prevent the hex bolt from securing the blade on the spindle. Either of these situations could result in a serious accident and can cause serious personal injury.

- Unplug the saw.
- Raise saw arm.
- Rotate lower blade guard up and loosen screw. Rotate blade bolt cover up and back to expose the hex bolt.
- Depress the spindle lock button and rotate the hex bolt until the spindle locks.
- Using the wrench provided, loosen and remove the hex bolt.

**NOTE:** The hex bolt has left hand threads. Turn hex bolt clockwise to loosen.

- Remove laser guide and the blade. **Do not** remove the inner blade washer.
- Wipe a drop of oil onto the inner blade washer and the outer blade washer (or laser guide) where they contact the blade.

## **WARNING:**

If inner blade washer has been removed, replace it before placing blade on spindle. Failure to do so could cause an accident since blade will not tighten properly.

- Fit saw blade inside lower blade guard and onto spindle. The blade teeth point downward at the front of saw as shown in figure 13.

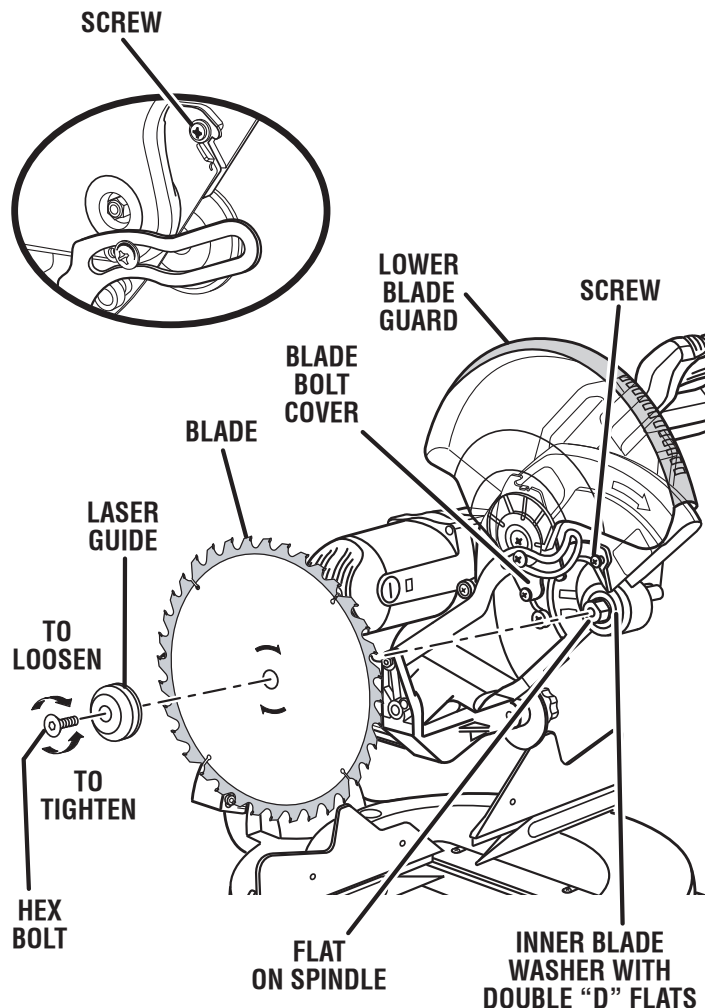


Fig. 13

## **CAUTION:**

Always install the blade with the blade teeth and the arrow printed on the side of the blade pointing down at the front of the saw. The direction of blade rotation is also stamped with an arrow on the upper blade guard.

- Replace the laser guide. The double "D" flats on the laser aligns with the flats on the spindle.
- Depress spindle lock button and replace hex bolt.  
**NOTE:** The hex bolt has left hand threads. Turn blade bolt counterclockwise to tighten.
- Tighten hex bolt securely.
- Replace the lower blade guard and blade bolt cover.
- Retighten the screw securely.



# ASSEMBLY

## **⚠ DANGER:**

Laser radiation. Avoid direct eye contact with light source.

## **ALIGNING THE LASER GUIDE LINE**

See Figure 14.

The laser guide will generate a laser line on the work surface when the saw blade is spinning. The laser line will appear as a broken line on the workpiece when the blade assembly is in the uppermost position and the motor switch is activated. This broken line will let you see your mark and your laser guide line at the same time, and will assist you in lining up your mark for more accurate cutting of the workpiece.

Align the laser line and your mark with the blade at the uppermost position. Once both lines are in alignment, do not move the workpiece until after you have finished cutting.

As the blade assembly is lowered toward the workpiece, the broken line will become solid.

Follow the directions below for using the laser guide:

### **Removing the Mark:**

Position the laser line on the left edge of your mark on the work surface in order to remove the mark.

### **To Cut the Mark:**

Position the laser line near or over your mark on the work surface in order to cut the mark.

### **To Leave the Mark:**

Position the laser line near the right edge of your mark on the work surface in order to leave the mark.

After you have become familiar with using the laser guide, you will be able to remove, cut, or leave your mark on the work surface. Practice will teach you the correct position for aligning the laser line with your mark. To adjust the position of the laser line, see the *Adjustments* section of this manual.

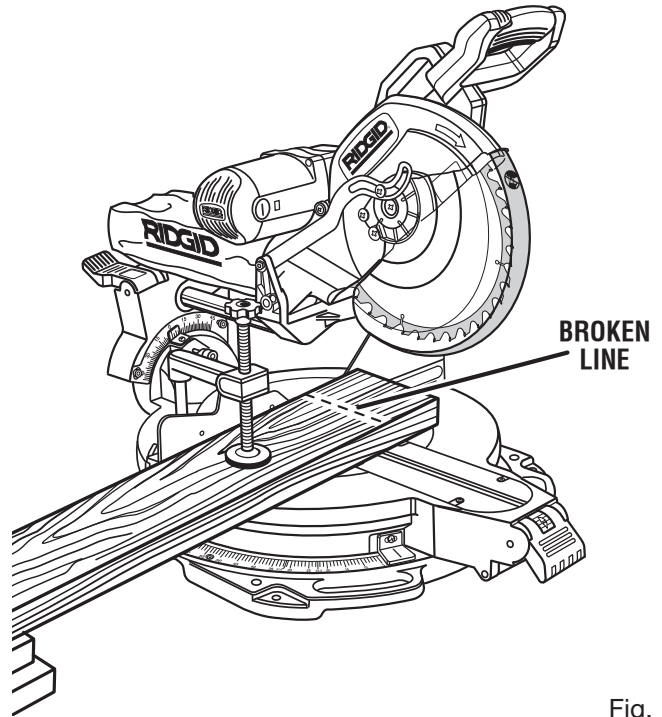


Fig. 14

# ASSEMBLY

## REMOVING / REPLACING THE ZERO CLEARANCE THROAT PLATE

See Figure 15.

When squaring the saw blade, it may be necessary to move the throat plate away from the blade. Once the saw's alignment has been confirmed, return the throat plate to its original position. Never operate the saw without a throat plate installed.

- Unplug the saw.
- Using the blade wrench provided, loosen the screws securing the right side of the zero clearance throat plate.
- Slide the throat plate away from the blade as far as possible.
- Retighten the screws, being careful not to overtighten which can cause the throat plate to bow or bend.
- Repeat the above steps for the left side of the throat plate.

## CENTERING THE SAW BLADE BETWEEN THE SLIDE BARS

See Figure 16.

The saw blade should be centered (approximately) between the two pieces of the zero clearance throat plate and there should be no play between the right slide bar and the pivot assembly. Standing in front of the saw, make a visual inspection. If adjustment is required:

- Unplug the saw.
- With the miter at 0° and the bevel at 0°, lock the saw into the transport position.
- Loosen the jam nuts on the two top and two bottom gib screws as shown.
- Loosen the two top gib screws.
- Tighten or loosen the lower gib screws as required to center the blade between the two pieces of the throat plate.
- Once centered, tighten the lower two jam nuts.

**NOTE:** To minimize play in the slide bars, gradually tighten the two top gib screws while sliding the saw back and forth over the slide bars. Tighten the top jam nuts.

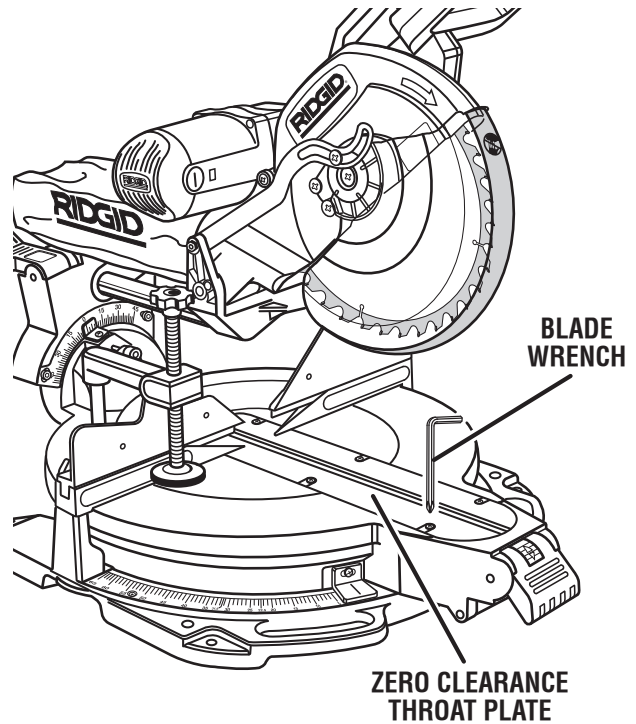


Fig. 15

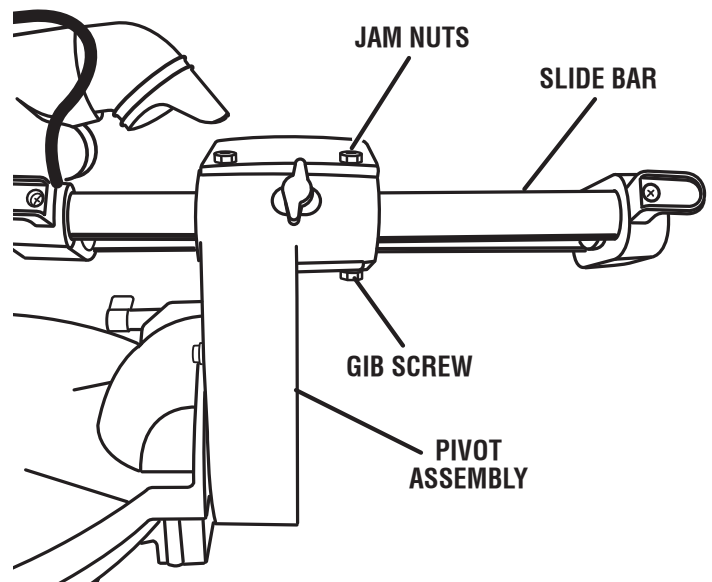


Fig. 16



# ASSEMBLY

## ADJUSTING THE MITER LOCK LEVER

See Figures 17 - 18.

Prior to squaring the saw blade to the fence, check and align the miter lock lever. The blade must be set at an “unindexed” miter position other than 0°, 15°, 22.5°, 31.6°, 45°, and 60° to test. In the “locked” position, the action of pushing the miter lock lever down should feel tight and secure. Considerable effort should be required to move the miter table. If the table moves easily when in the “locked” position, an adjustment of the miter lock lever is required.

### To adjust:

- Unplug the saw.
- Lift the miter lock lever to unlock.
- Locate the set screw under the miter lock lever.
- Using a hex key, adjust the set screw until the proper amount of tension in the lock lever is attained.
- Once all adjustments have been made, push the miter lock lever down to relock the miter table.

## SQUARING THE SAW BLADE TO THE FENCE

See Figures 19 - 23.

- Unplug the saw.
- Loosen the screws holding the throat plate and move the throat plate as far away from the saw blade as possible.
- Pull the saw arm all the way down and lock in transport position.
- Lift the miter lock lever.

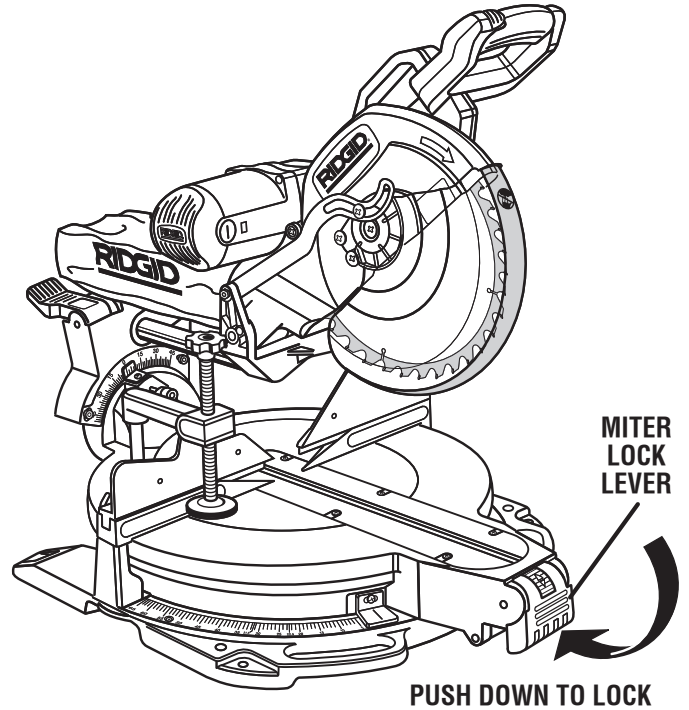


Fig. 18

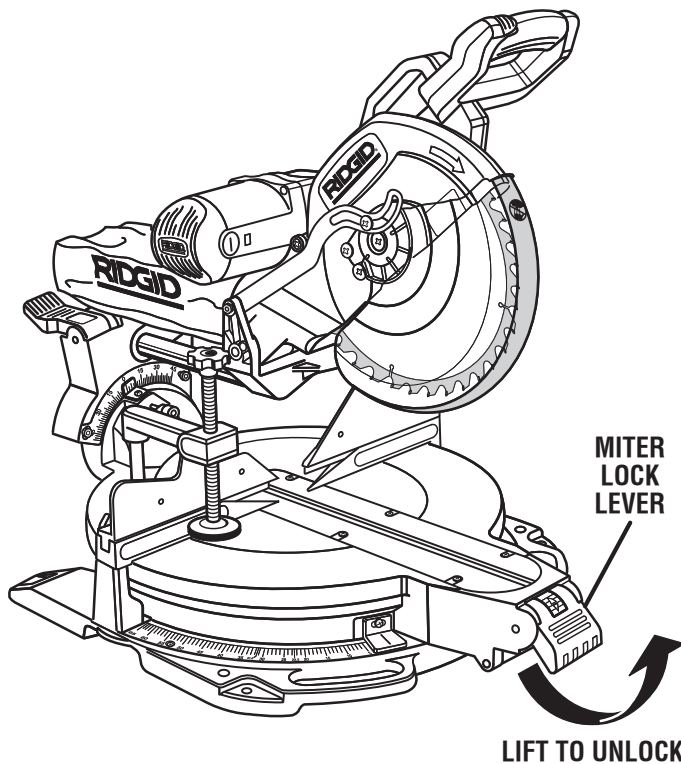


Fig. 17

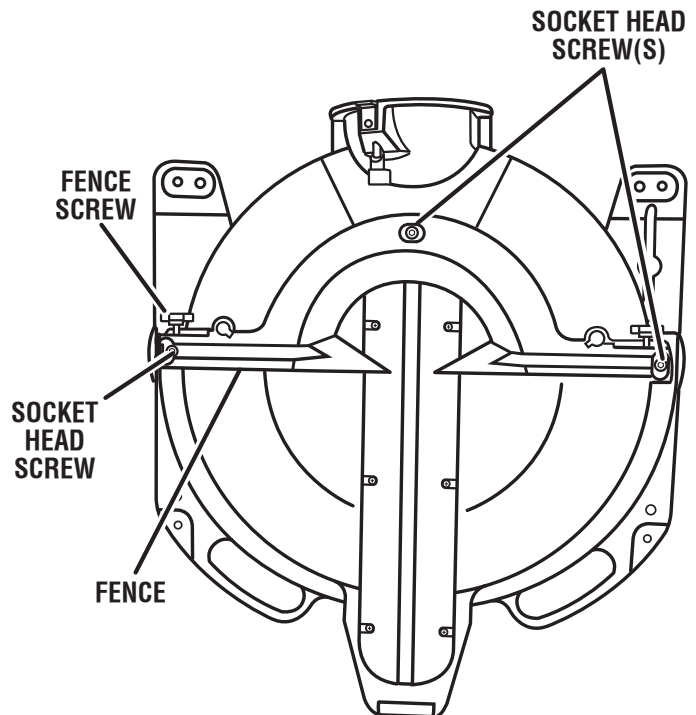


Fig. 19

# ASSEMBLY

- Rotate the miter table until the pointer on the miter scale is positioned at 0°.
- Lock the miter lock lever by pushing it down.
- Remove the sliding miter fence by loosening the fence screw and lifting the sliding miter fence off the saw.
- Lay a framing square flat on the miter table. Place one leg of the square against the fence. Slide the other leg of the square against the flat part of saw blade.

**NOTE:** Make sure that the square contacts the flat part of the saw blade, not the blade teeth.

- The edge of the square and the saw blade should be parallel as shown in figure 20.
- If the front or back edge of the saw blade angles away from the square as shown in figures 21 and 22, adjustments are needed.
- Loosen the socket head screws that secure the fence to the miter table. See Figure 19.
- Rotate the fence left or right until the saw blade is parallel with the square.
- Retighten the socket head screws securely and recheck the blade-to-fence alignment.

Your saw has several scale indicators. After squaring adjustments have been made, it may be necessary to loosen the indicator screws and reset them to zero. See Figure 23.

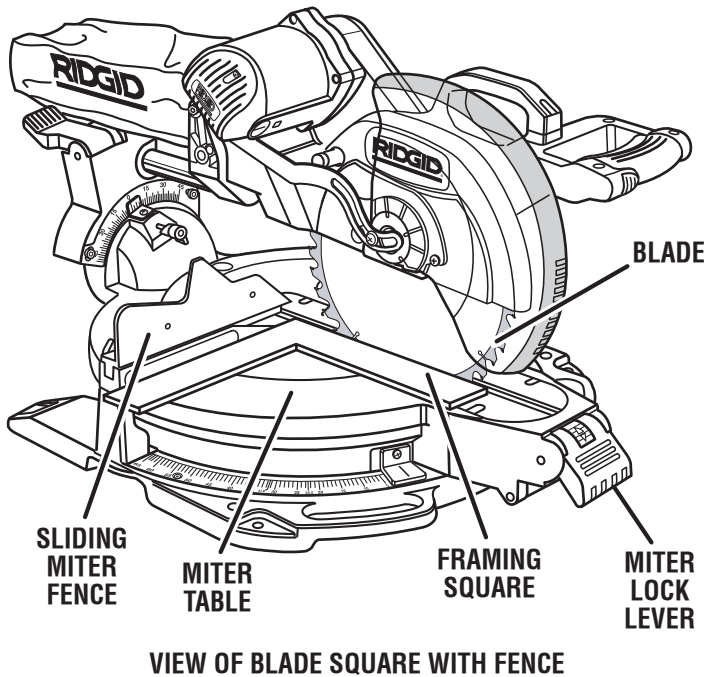
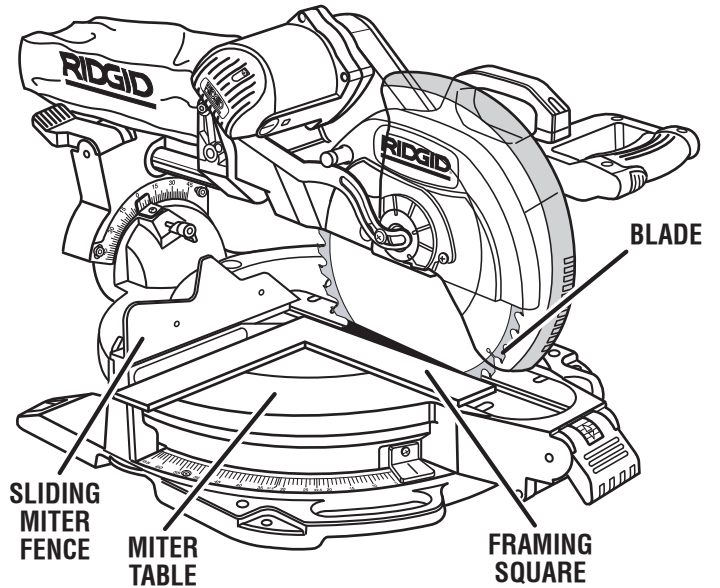
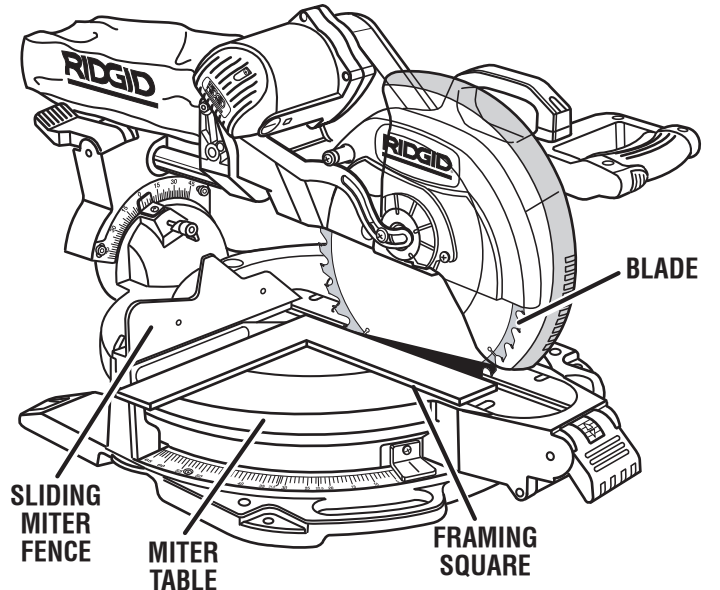


Fig. 20



VIEW OF BLADE NOT SQUARE WITH FENCE, ADJUSTMENTS ARE REQUIRED

Fig. 21



VIEW OF BLADE NOT SQUARE WITH FENCE, ADJUSTMENTS ARE REQUIRED

Fig. 22

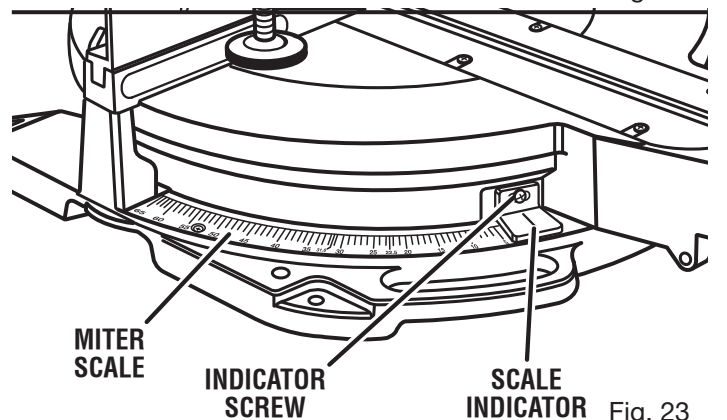


Fig. 23

# ASSEMBLY

## ADJUSTING THE BEVEL LOCK LEVER

See Figures 24 - 25.

Prior to squaring the saw blade to the miter table, check and align the bevel lock lever. The blade must be set at an “unindexed” bevel position other than 0°, 22.5°, 33.9°, and 45° to test. In the “locked” position, the action of pushing the bevel lock lever down should feel tight and secure.

Considerable effort should be required to bevel the blade. If the saw arm moves easily when in the “locked” position, an adjustment of the bevel lock lever is required.

### To adjust:

- Unplug the saw.
- Lift the bevel lock lever up to unlock.
- Locate the two locking jam nuts behind the bevel lock lever.
- Loosen the top jam nut. Turn the bottom jam nut clockwise to tighten and counterclockwise to loosen.
- Once all adjustments have been made, push the bevel lock lever down to relock the bevel.

## ADJUSTING THE BEVEL PIVOT

See Figure 26.

The saw should freely pivot when the bevel lock lever is “unlocked” and the saw is beveled. A “grating” sound indicates that the bevel needs to be loosened slightly. If the movement is tight or there is play in the pivot, an adjustment is required.

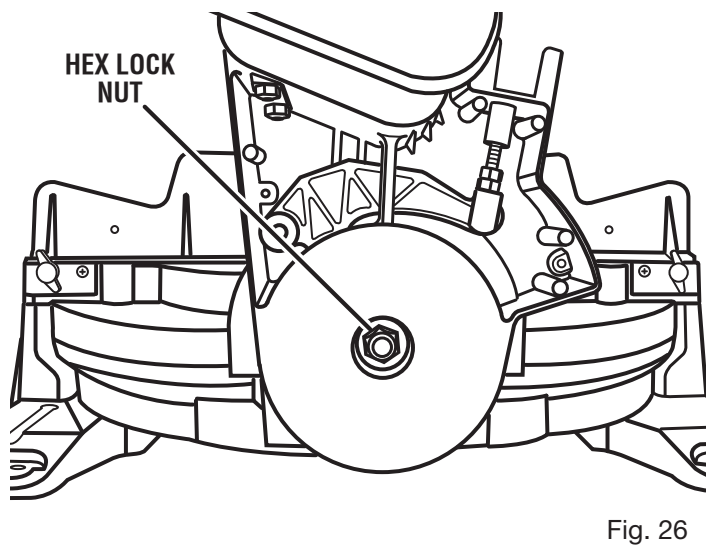
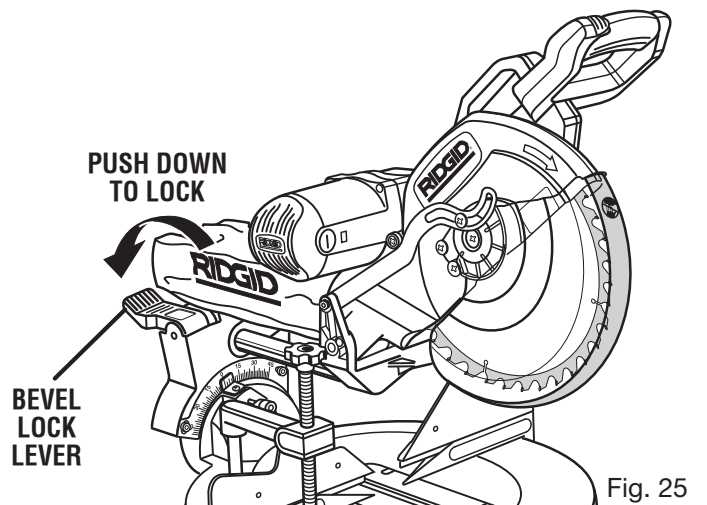
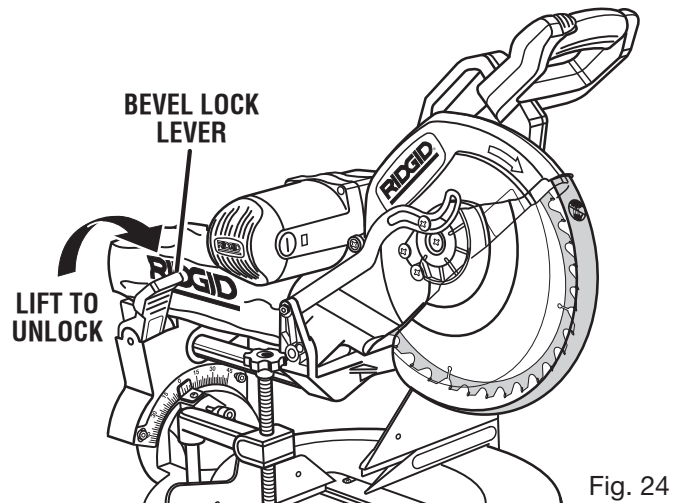
**NOTE:** At least one thread of the pivot bolt should stick out past the hex lock nut.

### To adjust:

- Unplug the saw.
- Lift the bevel lock lever up to unlock.
- Turn the hex lock nut with 3/4 in. or 19 mm socket.
- Once all adjustments have been made, push the bevel lock lever down to relock the bevel.

## TRAVEL PIVOT ADJUSTMENT

- The saw arm should rise completely to the up position by itself.
- If the saw arm does not raise by itself or if there is play in the pivot joints, have saw repaired at the nearest authorized service center.





# ASSEMBLY

## SQUARING THE BLADE TO THE MITER TABLE

See Figures 27 - 30.

- Unplug the saw.
- Pull the saw arm all the way down and lock in transport position.
- Lift the miter lock lever.
- Rotate the miter table until the pointer on the miter scale is positioned at 0°.
- Lock the miter lock lever by pushing it down.
- Lift the bevel lock lever to loosen and set the saw at 0° bevel (blade set 90° to miter table). Retighten the bevel lock lever by pushing it down.
- Place a combination square against the miter table and the flat part of saw blade.

**NOTE:** Make sure that the square contacts the flat part of the saw blade, not the blade teeth.

- Rotate the blade by hand and check the blade-to-table alignment at several points.
- The edge of the square and the saw blade should be parallel as shown in figure 28.
- If the top or bottom of the saw blade angles away from the square as shown in figures 29 and 30, adjustments are needed.
- Lift the bevel lock lever.
- Using the blade wrench, loosen the two socket head screws securing the bevel scale and slide the pivot assembly left or right as needed to bring the saw blade into alignment with the square. Retighten the socket head screws.
- Retighten the bevel lock lever by pushing it down. Recheck blade-to-table alignment.

**NOTE:** The above procedure can be used to check blade squareness of the saw blade to the miter table at both 0° and 45° angles.

Your saw has several scale indicators. After squaring adjustments have been made, it may be necessary to loosen the indicator screws and reset them to zero. See Figure 27.

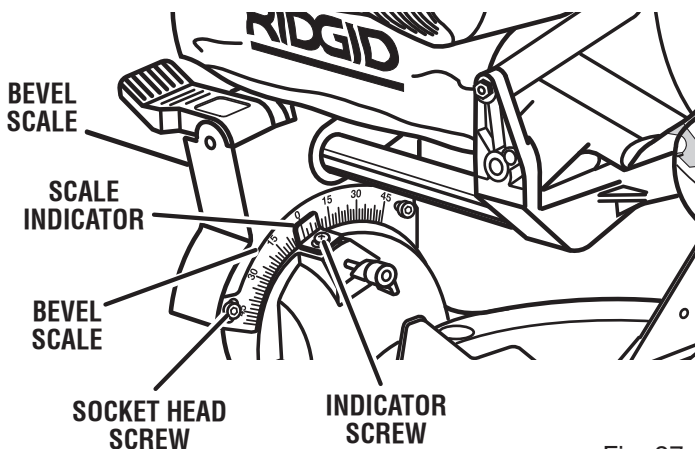
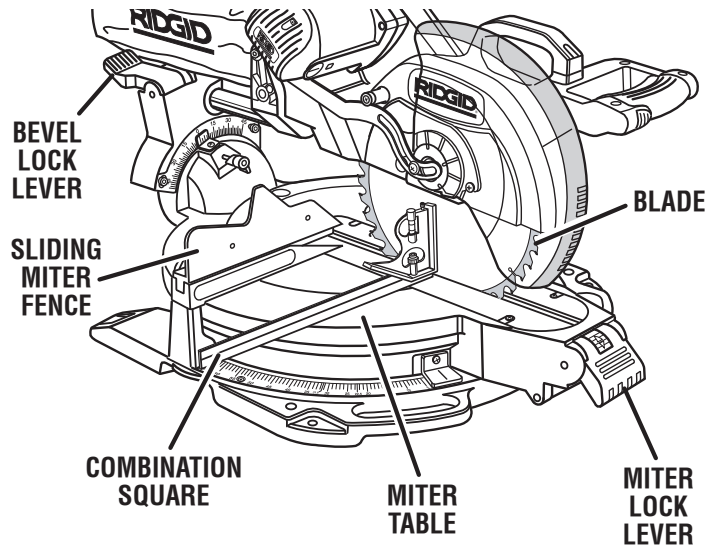
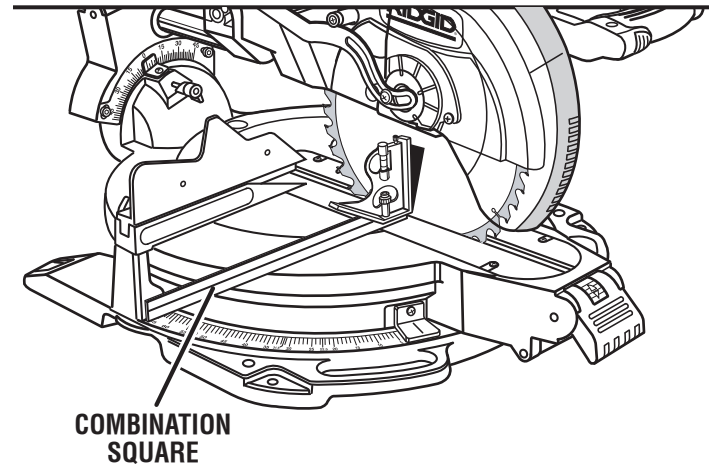


Fig. 27



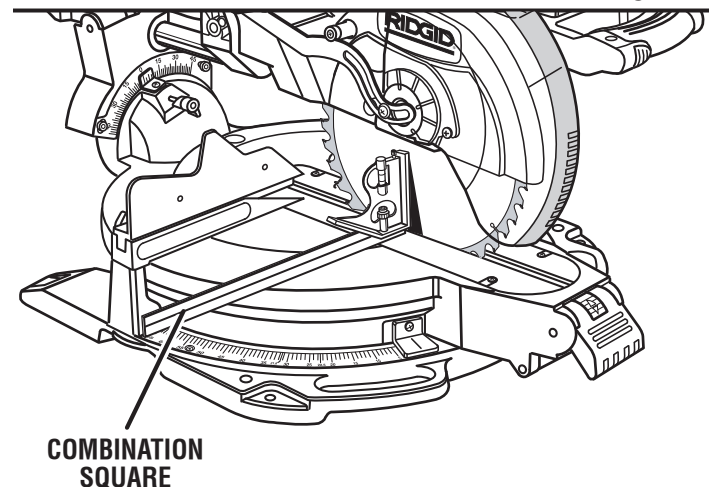
CORRECT VIEW OF BLADE SQUARE WITH MITER TABLE

Fig. 28



VIEW OF BLADE NOT SQUARE WITH MITER TABLE, ADJUSTMENTS ARE REQUIRED

Fig. 29



VIEW OF BLADE NOT SQUARE WITH MITER TABLE, ADJUSTMENTS ARE REQUIRED

Fig. 30

# OPERATION

---

---

## WARNING:

Do not allow familiarity with tools to make you careless. Remember that a careless fraction of a second is sufficient to inflict severe injury.

---

---

## WARNING:

Always wear safety goggles or safety glasses with side shields when operating tools. Failure to do so could result in objects being thrown into your eyes resulting in possible serious injury.

---

---

## WARNING:

Do not use any attachments or accessories not recommended by the manufacturer of this tool. The use of attachments or accessories not recommended can result in serious personal injury.

---

## APPLICATIONS

You may use this tool to cut only wood or plastic as listed below:

- Cross cutting miters, joints, etc. for picture frames, moldings, door casings, and fine joinery.
- Bevel and compound cutting
- Cross cutting wide workpieces.

**NOTE:** The blade provided is fine for most wood cutting operations, but for fine joinery cuts or cutting plastic, use one of the accessory blades available from the RIDGID dealer.

---

---

## WARNING:

Before starting any cutting operation, clamp or bolt the miter saw to a workbench. Never operate the miter saw on the floor or in a crouched position. Failure to heed this warning can result in serious personal injury.

---

---

## WARNING:

To avoid serious personal injury, keep your hands outside the no hands zone, at least 3 in. from blade. Never perform any cutting operation freehand (without holding workpiece against the fence). The blade could grab the workpiece if it slips or twists.

---

---

## WARNING:

Do not start the compound miter saw without checking for interference between the blade and the miter fence. Damage could result to the blade if it strikes the miter fence during operation of the saw.

---

---

## CUTTING WITH YOUR SLIDING COMPOUND MITER SAW

---

---

## WARNING:

When using a work clamp or C-clamp to secure the workpiece, clamp workpiece on one side of the blade only. The workpiece must remain free on one side of the blade to prevent the blade from binding in workpiece. The workpiece binding the blade will cause motor stalling and kickback. This situation could cause an accident resulting in possible serious personal injury.

---

---

## WARNING:

To avoid serious personal injury, always tighten the miter lock lever and the bevel lock lever securely before making a cut. Failure to do so could result in movement of the control arm or miter table while making a cut.

---

---

## WARNING:

Do not try to cut narrow pieces using the sliding feature. Failure to heed this warning could result in serious personal injury.

---

# OPERATION

## **⚠ WARNING:**

Never make a cut by pulling the saw toward you as the blade can climb on top of the workpiece and come toward you. Failure to heed this warning could result in serious personal injury.

## **TO SLIDE CUT**

See Figures 31 - 32.

The sliding feature will cut workpieces 13-1/2 in. wide by 3-1/2 in. thick. With the saw off, pull the saw arm forward. Turn the saw on (let blade reach maximum speed), then push the blade down on top of the workpiece then back toward the rear of the saw to make a cut. Cuts are made by: (1) pushing the saw blade away from you and toward the bevel scale at the back of the saw stopping when the full rear position has been reached after each cut. When the saw is running (turned on), **NEVER** pull the saw blade toward you or toward the front of the saw.

- Raise saw arm to its full height.
- Place the workpiece flat on the miter table with one edge securely against the fence. If the board is warped, place the convex side against the fence. If the concave edge of a board is placed against the fence, the board could collapse on the blade at the end of the cut, jamming the blade. See Figures 47 - 48.
- When cutting long pieces of lumber or molding, support the opposite end of the stock with a roller stand or with a work surface level with the saw table. See Figure 40.
- Align the cutting line on the workpiece with the edge of saw blade.
- Loosen the slide lock knob by turning the knob counter-clockwise.
- Grasp the stock firmly with one hand and secure it against the fence. Use the work clamp or a C-clamp to secure the workpiece when possible.
- Before turning on the saw, perform a dry run of the cutting operation to make sure that no problems will occur when the cut is made.
- With the saw off, grasp the saw handle firmly then pull the saw forward until the blade arbor (center of the saw blade) is over the front of the workpiece.
- Depress the switch lock with thumb then squeeze the switch trigger. Allow several seconds for the blade to reach maximum speed.
- Slowly lower the blade into and through the front edge of the workpiece.
- Push the saw handle away from you and toward the bevel scale at the back of the saw.

## **SLIDE CUT**

**SLIDE SAW ARM FORWARD THEN PUSH DOWN**

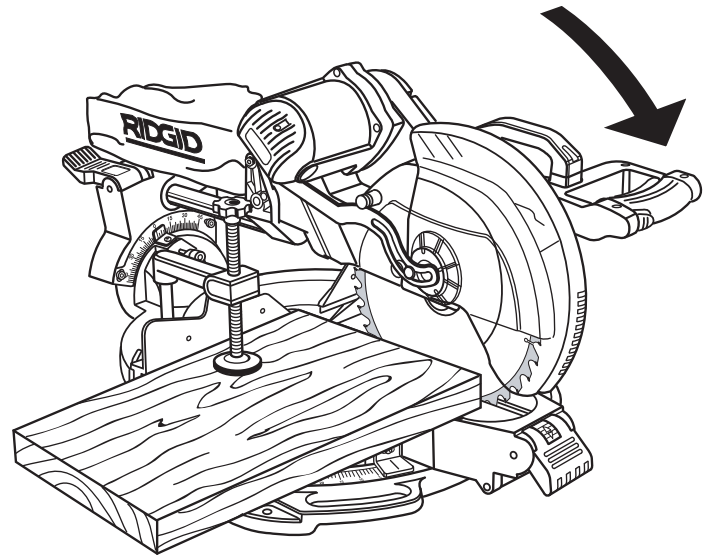


Fig. 31

**PUSH BACK**

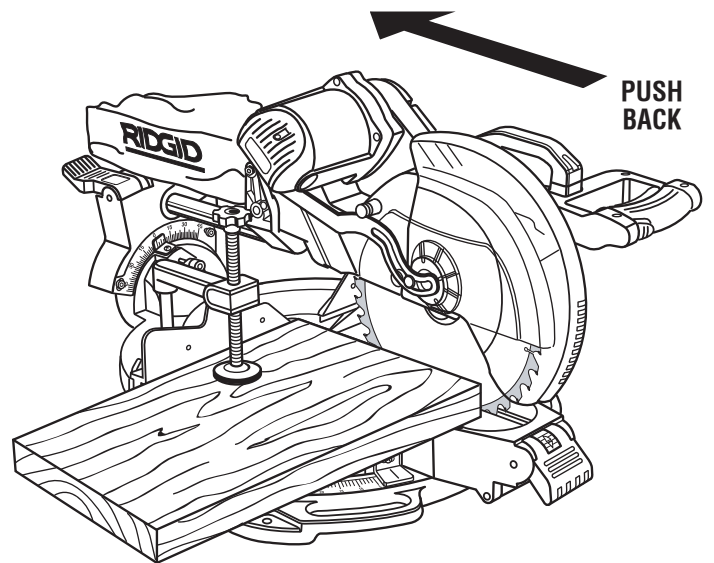


Fig. 32

- Release the switch trigger and allow the saw blade to stop rotating before raising the blade out of workpiece and removing the workpiece from miter table.

**NOTE:** A cross cut is made by cutting across the grain of the workpiece. A straight cross cut is made with the miter table set at the 0° position. Miter cross cuts are made with the miter table set at some angle other than 0°.



# OPERATION

## TO MAKE NON-SLIDING CUTS

### WARNING:

Securely tighten the slide lock knob when making any non-sliding cuts. Failure to tighten the knob could result in the saw head moving during the cutting operation.

## TO MITER CUT / CROSS CUT

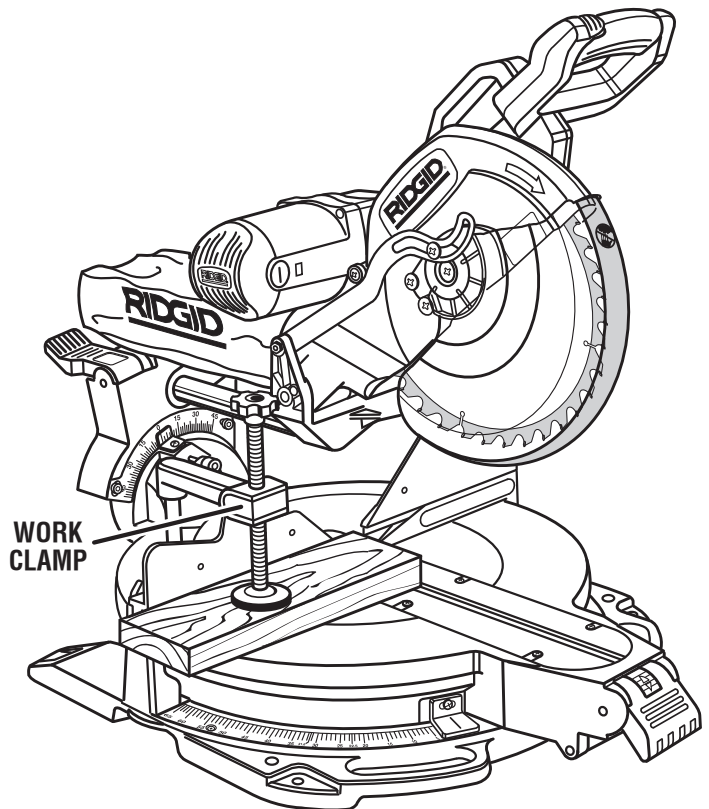
See Figures 33 - 34.

A cross cut is made by cutting across the grain of the workpiece. A straight cross cut is made with the miter table set at the 0° position. Miter cross cuts are made with the miter table set at some angle other than 0°.

- Make sure the slide lock knob is tightened securely.
- Raise saw arm to its full height.
- Lift the miter lock lever to unlock. Rotate the miter table until the pointer aligns with the desired angle on the miter scale.

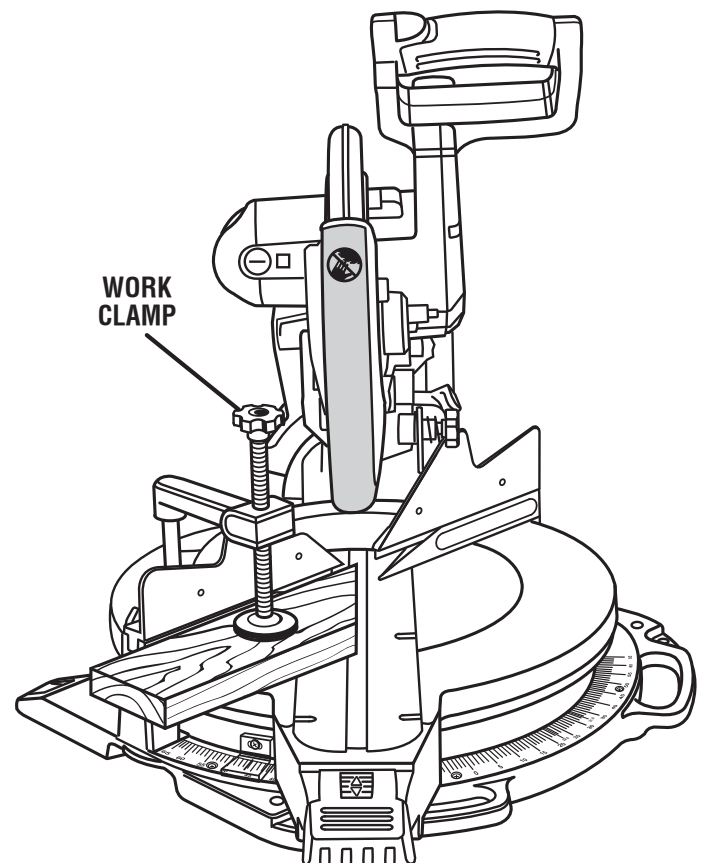
**NOTE:** You can quickly locate 0°, 15°, 22.5°, 31.6°, 45°, and 60° left or right by spinning the miter thumbwheel up. The lock plate will seat itself in one of the positive stop notches, located in the miter table base.

- Push the miter lock lever down to lock the miter table.
- Place the workpiece flat on the miter table with one edge securely against the fence. If the board is warped, place the convex side against the fence. If the concave edge of a board is placed against the fence, the board could collapse on the blade at the end of the cut, jamming the blade. See Figures 47 - 48.
- When cutting long pieces of lumber or molding, support the opposite end of the stock with a roller stand or with a work surface level with the saw table. See Figure 40.
- Align cutting line on the workpiece with the edge of saw blade.
- Grasp the stock firmly with one hand and secure it against the fence. Use the work clamp or a C-clamp to secure the workpiece when possible.
- Before turning on the saw, perform a dry run of the cutting operation to make sure that no problems will occur when the cut is made.
- Grasp the saw handle firmly. Depress the switch lock with thumb then squeeze the switch trigger. Allow several seconds for the blade to reach maximum speed.
- Slowly lower the blade into and through the workpiece.
- Release the switch trigger and allow the saw blade to stop rotating before raising the blade out of workpiece and removing the workpiece from the miter table.



CROSS CUT

Fig. 33



MITER CUT

Fig. 34

# OPERATION

## TO BEVEL CUT

See Figures 35 - 37.

A bevel cut is made by cutting across the grain of the workpiece with the blade angled to the workpiece. A straight bevel cut is made with the miter table set at the zero degree position and the blade set at an angle.

**NOTE:** It may be necessary to adjust or remove the sliding miter fence to insure proper clearance prior to making the cut.

- Make sure the slide lock knob is tightened securely.
- Raise saw arm to its full height.
- Lift the miter lock lever to unlock. Rotate the miter table until the pointer aligns with zero on the miter scale.
- Push the miter lock lever down to lock the miter table.
- Lift the bevel lock lever and move the saw arm to the left or right to the desired bevel angle.
- Once the saw arm has been set at the desired angle, push the bevel lock lever down to lock.
- Place the workpiece flat on the miter table with one edge securely against the fence. If the board is warped, place the convex side against the fence. If the concave edge of a board is placed against the fence, the board could collapse on the blade at the end of the cut, jamming the blade. See Figures 47 - 48.
- When cutting long pieces of lumber or molding, support the opposite end of the stock with a roller stand or with a work surface level with the saw table. See Figure 40.
- Align the cutting line on the workpiece with the edge of saw blade.
- Grasp the stock firmly with one hand and secure it against the fence. Use the work clamp or a C-clamp to secure the workpiece when possible.
- Before turning on the saw, perform a dry run of the cutting operation to make sure that no problems will occur when the cut is made.
- Grasp the saw handle firmly. Depress the switch lock with thumb then squeeze the switch trigger. Allow several seconds for the blade to reach maximum speed.
- Slowly lower the blade into and through the workpiece.
- Release the switch trigger and allow the saw blade to stop rotating before raising the blade out of workpiece and removing the workpiece from the miter table.

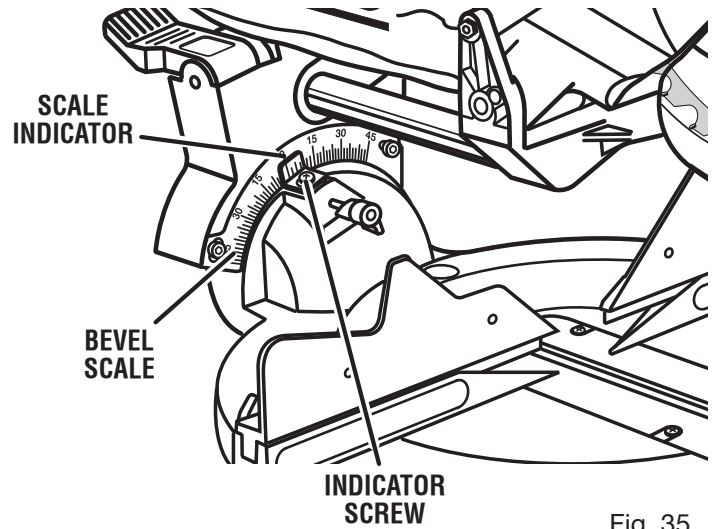


Fig. 35

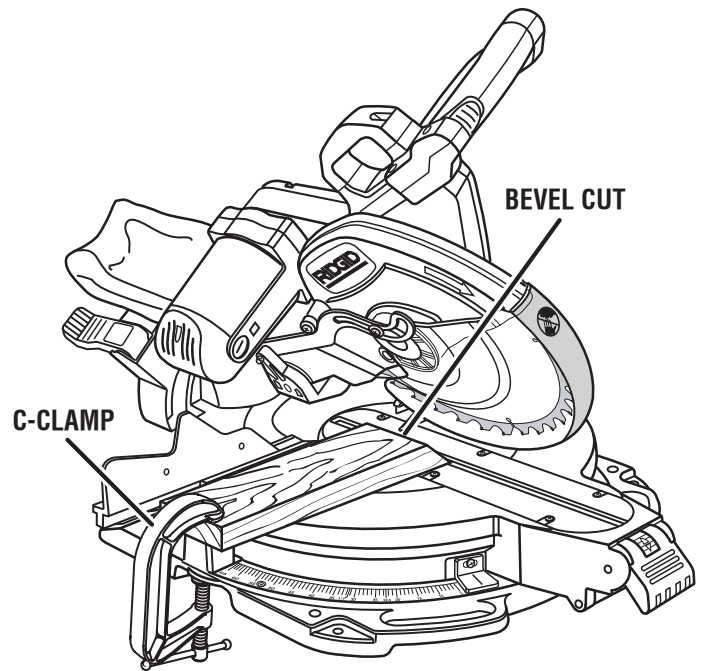


Fig. 36

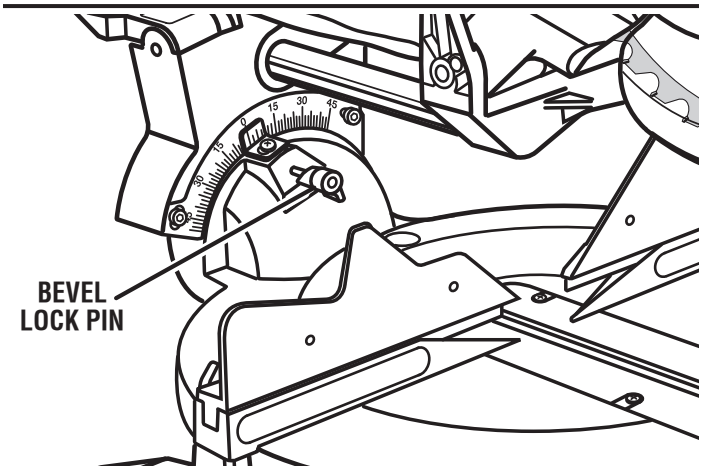


Fig. 37

# OPERATION

## TO COMPOUND MITER CUT

See Figure 38.

A compound miter cut is a cut made using a miter angle and a bevel angle at the same time. This type of cut is used to make picture frames, cut molding, make boxes with sloping sides, and for certain roof framing cuts.

To make this type of cut the control arm on the miter table must be rotated to the correct angle and the saw arm must be tilted to the correct bevel angle. Care should always be taken when making compound miter setups due to the interaction of the two angle settings.

Adjustments of miter and bevel settings are interdependent with one another. Each time you adjust the miter setting you change the effect of the bevel setting. Also, each time you adjust the bevel setting you change the effect of the miter setting.

It may take several settings to obtain the desired cut. The first angle setting should be checked after setting the second angle, since adjusting the second angle affects the first.

Once the two correct settings for a particular cut have been obtained, always make a test cut in scrap material before making a finish cut in good material.

**NOTE:** It may be necessary to adjust or remove the sliding miter fence to insure proper clearance prior to making the cut.

- Make sure the slide lock knob is tightened securely.
- Raise saw arm to its full height.
- Lift the miter lock lever to unlock. Rotate the miter table until the pointer aligns with the desired angle on the miter scale.  
**NOTE:** You can quickly locate 0°, 15°, 22.5°, 31.6°, 45°, and 60° left or right by spinning the miter thumbwheel up. The lock plate will seat itself in one of the positive stop notches, located in the miter table base.
- Push the miter lock lever down to lock the miter table.
- Lift the bevel lock lever and move the saw arm to the left or right to the desired bevel angle.
- Once the saw arm has been set at the desired angle, securely tighten the bevel lock lever.
- Place the workpiece flat on the miter table with one edge securely against the fence. If the board is warped, place the convex side against the fence. If the concave edge of a board is placed against the fence, the board could collapse on the blade at the end of the cut, jamming the blade. See Figures 47 - 48.

- When cutting long pieces of lumber or molding, support the opposite end of the stock with a roller stand or with a work surface level with the saw table. See Figure 40.
- Align the cutting line on the workpiece with the edge of saw blade.

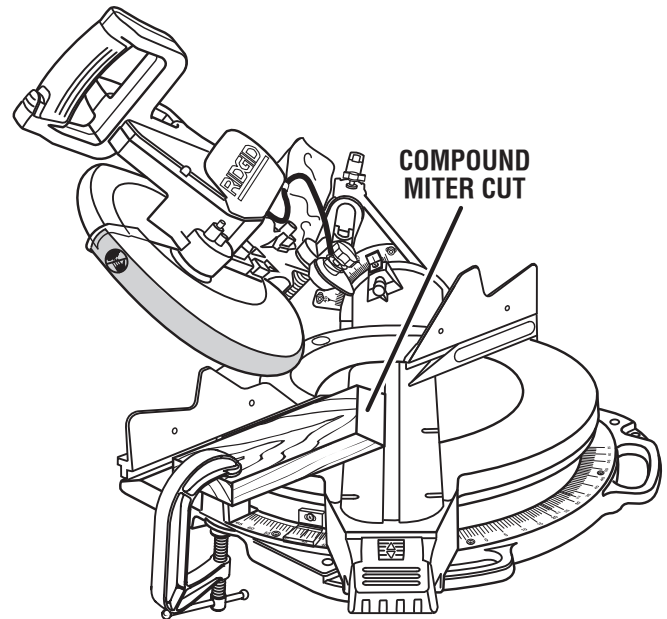


Fig. 38

- Grasp the stock firmly with one hand and secure it against the fence. Use the work clamp or a C-clamp to secure the workpiece when possible.
- Before turning on the saw, perform a dry run of the cutting operation to make sure that no problems will occur when the cut is made.
- Make a test cut in scrap material.
- Grasp the saw handle firmly. Depress the switch lock with thumb then squeeze the switch trigger. Allow several seconds for the blade to reach maximum speed.
- Slowly lower the blade into and through the workpiece.
- Release the switch trigger and allow the saw blade to stop rotating before raising the blade out of workpiece and removing the workpiece from the miter table.

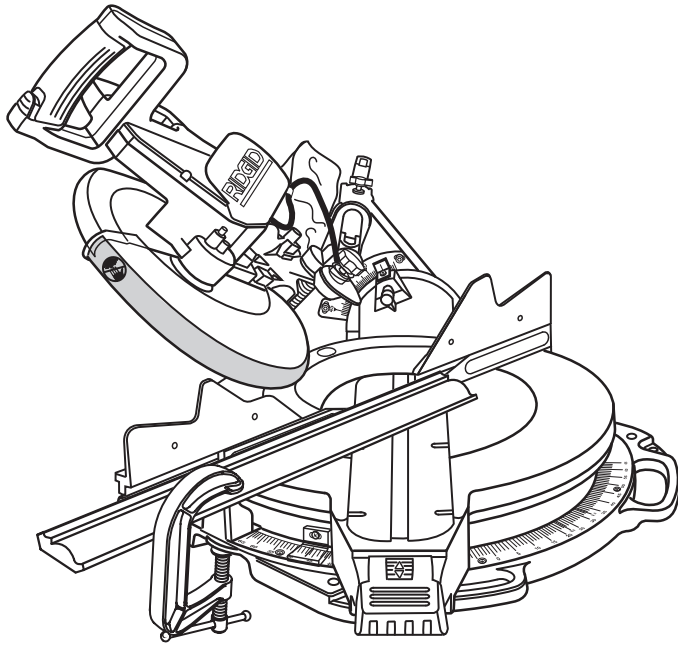
# OPERATION

## SUPPORTING LONG WORKPIECES

See Figures 39 - 40.

Long workpieces need extra supports. Supports should be placed along the workpiece so it does not sag. The support should let the workpiece lay flat on the base of the saw and miter table during the cutting operation. Use the work clamp or a C-clamp to secure the workpiece.

**NOTE:** When making a compound miter cut as shown in figure 39, it may be necessary to adjust or remove the sliding miter fence to insure proper clearance prior to making the cut.



45° x 45° COMPOUND MITER CUT

Fig. 39

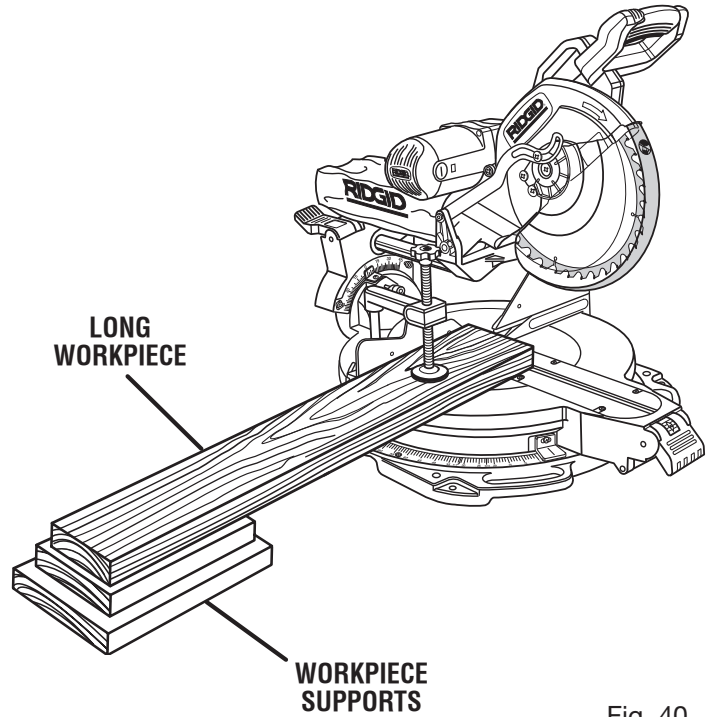


Fig. 40

## CLAMPING WIDE WORKPIECES

See Figure 42.

When cutting wide workpieces, such as 2 in. x 12 in., boards should be clamped with a C-clamp.

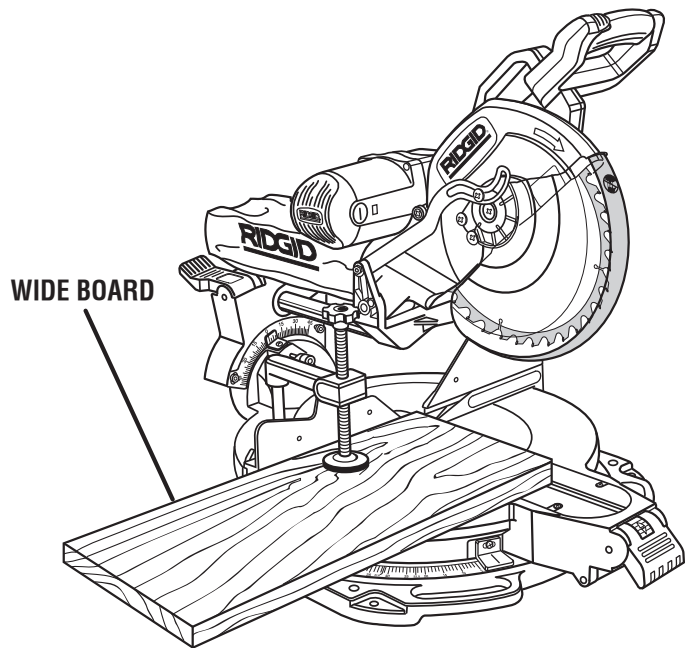


Fig. 41



# OPERATION

## ROUGH CUTTING A DADO

See Figures 42 - 43.

Using a wood chisel and the depth guide, it is possible to make a rough dado cut. The marks on the depth guide are to be used for reference only. Always make a practice cut on scrap wood.

### To make the cut:

- Unlock the slide lock knob.
- Raise the saw arm to its full height.
- Using the marks on the depth guide, set the blade to the correct cutting depth.
- With the saw off, pull the saw arm forward. Turn the saw on (let blade reach maximum speed), then push the blade down on top of the workpiece then back toward the rear of the saw to make a cut.
- Cut two outside grooves in the workpiece.
- Using a wood chisel, remove the material between the two outside grooves.

## USING AN AUXILIARY FENCE

See Figure 44.

Certain unusual cuts may benefit from a thicker miter fence (auxiliary fence) due to the size and position of the workpiece. The holes provided in the miter fence are there for just this purpose. The miter fence holes are used to secure the auxiliary fence which requires a piece of wood 1/2 in. thick, 4-1/4 in. high, and 23 in. long to make.

**NOTE:** The auxiliary fence can only be used when the bevel is set at 0°. When making a bevel cut, the auxiliary fence **MUST** be removed.

### To attach the auxiliary fence to the saw:

- Place the wood against the miter fence and mark the hole location from behind the fence using a pencil.
- Drill holes through the wood then countersink the holes on the front of the wood.
- Secure the wood to the miter fence using flat head screws.
- With the miter table set at 0°, make a complete cut through the auxiliary fence to create the blade slot.

**NOTE:** Check for interference between the auxiliary fence and the lower blade guard. Correct any interference before proceeding.

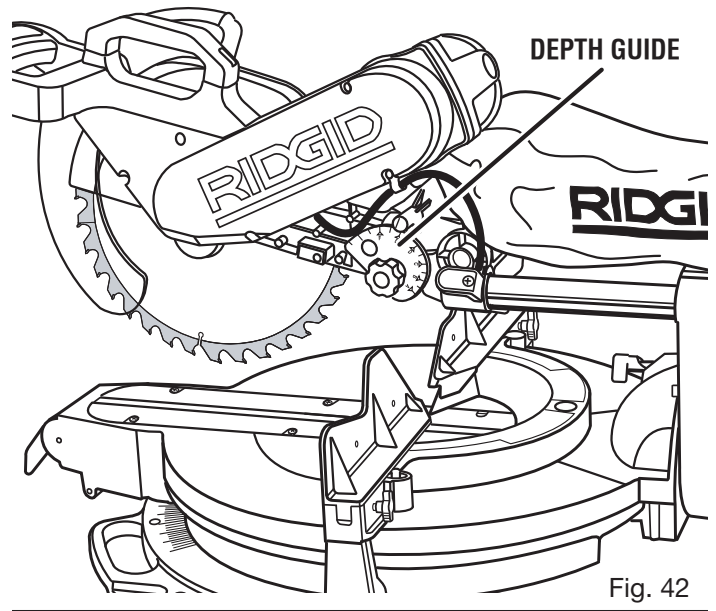


Fig. 42

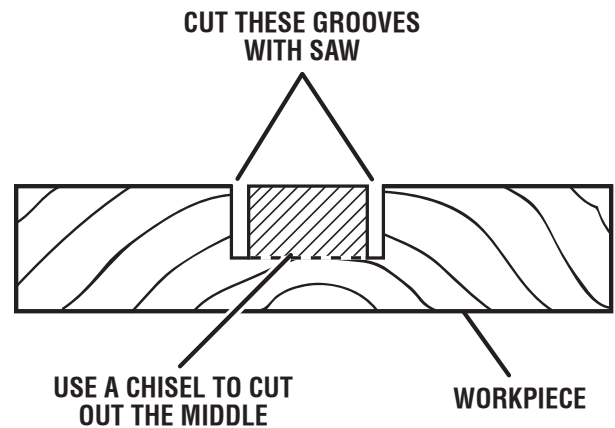


Fig. 43

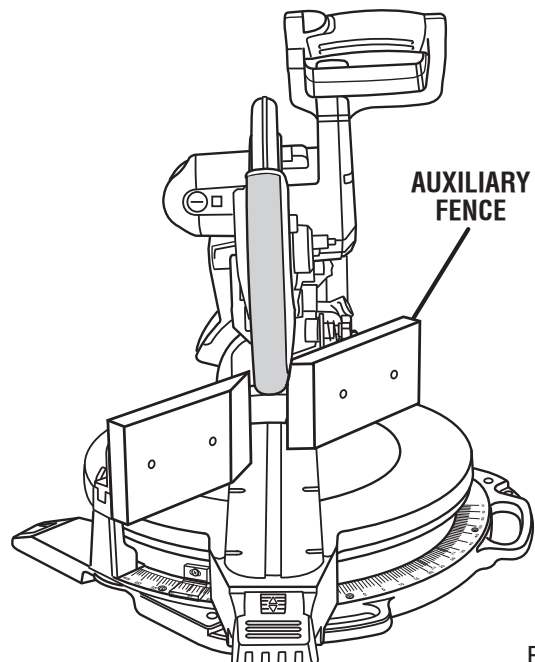


Fig. 44

# OPERATION

## CUTTING COMPOUND MITERS

To aid in making the correct settings, the compound angle setting chart below has been provided. Since compound cuts are the most difficult to accurately obtain, trial cuts should be made in scrap material, and much thought and planning made, prior to making your required cut.

PITCH OF SIDE	NUMBER OF SIDES						
	4	5	6	7	8	9	10
0°	M- 45.00° B- 0.00°	M- 36.00° B- 0.00°	M- 30.00° B- 0.00°	M- 25.71° B- 0.00°	M- 22.50° B- 0.00°	M- 20.00° B- 0.00°	M- 18.00° B- 0.00°
5°	M- 44.89° B- 3.53°	M- 35.90° B- 2.94°	M- 29.91° B- 2.50°	M- 25.63° B- 2.17°	M- 22.42° B- 1.91°	M- 19.93° B- 1.71°	M- 17.94° B- 1.54°
10°	M- 44.56° B- 7.05°	M- 35.58° B- 5.86°	M- 29.62° B- 4.98°	M- 25.37° B- 4.32°	M- 22.19° B- 3.81°	M- 19.72° B- 3.40°	M- 17.74° B- 3.08°
15°	M- 44.01° B- 10.55°	M- 35.06° B- 8.75°	M- 29.15° B- 7.44°	M- 24.95° B- 6.45°	M- 21.81° B- 5.68°	M- 19.37° B- 5.08°	M- 17.42° B- 4.59°
20°	M- 43.22° B- 14.00°	M- 34.32° B- 11.60°	M- 28.48° B- 9.85°	M- 24.35° B- 8.53°	M- 21.27° B- 7.52°	M- 18.88° B- 6.72°	M- 16.98° B- 6.07°
25°	M- 42.19° B- 17.39°	M- 33.36° B- 14.38°	M- 27.62° B- 12.20°	M- 23.56° B- 10.57°	M- 20.58° B- 9.31°	M- 18.26° B- 8.31°	M- 16.41° B- 7.50°
30°	M- 40.89° B- 20.70°	M- 32.18° B- 17.09°	M- 26.57° B- 14.48°	M- 22.64° B- 12.53°	M- 19.73° B- 11.03°	M- 17.50° B- 9.85°	M- 15.72° B- 8.89°
35°	M- 39.32° B- 23.93°	M- 30.76° B- 19.70°	M- 25.31° B- 16.67°	M- 21.53° B- 14.41°	M- 18.74° B- 12.68°	M- 16.60° B- 11.31°	M- 14.90° B- 10.21°
40°	M- 37.45° B- 27.03°	M- 29.10° B- 22.20°	M- 23.86° B- 18.75°	M- 20.25° B- 16.19°	M- 17.60° B- 14.24°	M- 15.58° B- 12.70°	M- 13.98° B- 11.46°
45°	M- 35.26° B- 30.00°	M- 27.19° B- 24.56°	M- 22.21° B- 20.70°	M- 18.80° B- 17.87°	M- 16.32° B- 15.70°	M- 14.43° B- 14.00°	M- 12.94° B- 12.62°
50°	M- 32.73° B- 32.80°	M- 25.03° B- 26.76°	M- 20.36° B- 22.52°	M- 17.20° B- 19.41°	M- 14.91° B- 17.05°	M- 13.17° B- 15.19°	M- 11.80° B- 13.69°
55°	M- 29.84° B- 35.40°	M- 22.62° B- 28.78°	M- 18.32° B- 24.18°	M- 15.44° B- 20.82°	M- 13.36° B- 18.27°	M- 11.79° B- 16.27°	M- 10.56° B- 14.66°
60°	M- 26.57° B- 37.76°	M- 19.96° B- 30.60°	M- 16.10° B- 25.66°	M- 13.54° B- 22.07°	M- 11.70° B- 19.35°	M- 10.31° B- 17.23°	M- 9.23° B- 15.52°
65°	M- 22.91° B- 39.86°	M- 17.07° B- 32.19°	M- 13.71° B- 26.95°	M- 11.50° B- 23.16°	M- 9.93° B- 20.29°	M- 8.74° B- 18.06°	M- 7.82° B- 16.26°
70°	M- 18.88° B- 41.64°	M- 13.95° B- 33.53°	M- 11.17° B- 28.02°	M- 9.35° B- 24.06°	M- 8.06° B- 21.08°	M- 7.10° B- 18.75°	M- 6.34° B- 16.88°
75°	M- 14.51° B- 43.08°	M- 10.65° B- 34.59°	M- 8.50° B- 28.88°	M- 7.10° B- 24.78°	M- 6.12° B- 21.69°	M- 5.38° B- 19.29°	M- 4.81° B- 17.37°
80°	M- 9.85° B- 44.14°	M- 7.19° B- 35.37°	M- 5.73° B- 29.50°	M- 4.78° B- 25.30°	M- 4.11° B- 22.14°	M- 3.62° B- 19.68°	M- 3.23° B- 17.72°
85°	M- 4.98° B- 44.78°	M- 3.62° B- 35.84°	M- 2.88° B- 29.87°	M- 2.40° B- 25.61°	M- 2.07° B- 22.41°	M- 1.82° B- 19.92°	M- 1.62° B- 17.93°
90°	M- 0.00° B- 45.00°	M- 0.00° B- 36.00°	M- 0.00° B- 30.00°	M- 0.00° B- 25.71°	M- 0.00° B- 22.50°	M- 0.00° B- 20.00°	M- 0.00° B- 18.00°

Each B (Bevel) and M (Miter) Setting is Given to the Closest 0.005°.

### COMPOUND-ANGLE SETTINGS FOR POPULAR STRUCTURES



# OPERATION

## CUTTING CROWN MOLDING

The compound miter saw does an excellent job of cutting crown molding. In general, compound miter saws do a better job of cutting crown molding than any other tool made.

In order to fit properly, crown molding must be compound mitered with extreme accuracy.

The two contact surfaces on a piece of crown molding that fit flat against the ceiling and the wall of a room 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°.

## LAYING MOLDING FLAT ON THE MITER TABLE

See Figure 45.

To use this method for accurately cutting crown molding for a 90° inside or outside corner, lay the molding with its broad back surface flat on the miter table and against the fence.

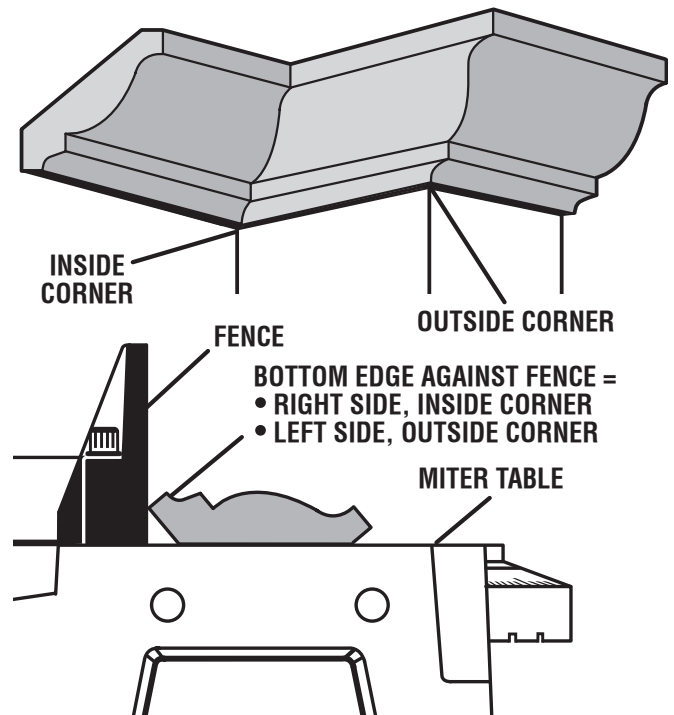
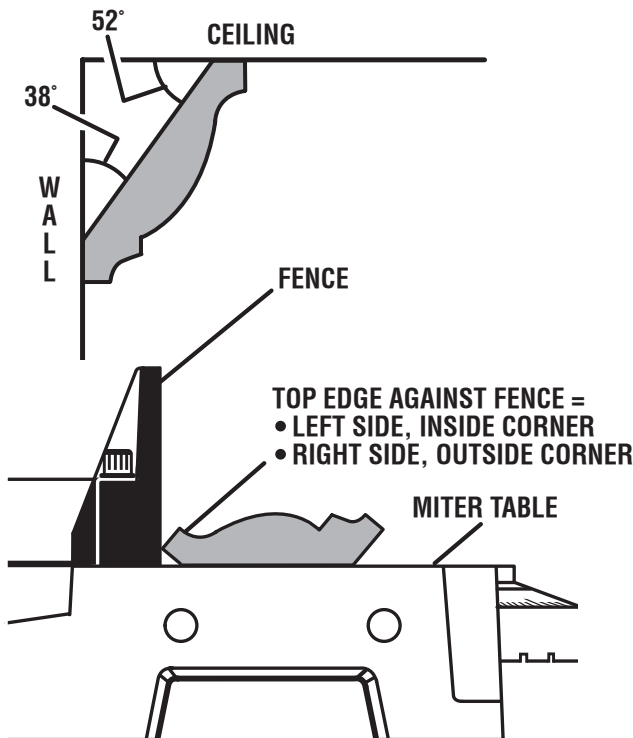
When setting the bevel and miter angles for compound miters, remember that the settings are interdependent; changing one angle changes the other angle as well.

Keep in mind that the angles for crown molding are very precise and difficult to set. Since it is very easy for these angles to shift, all settings should first be tested on scrap molding. Also most walls do not have angles of exactly 90°; therefore, you will need to fine tune your settings.

When cutting crown molding by this method, the bevel angle should be set at 33.85°. The miter angle should be set at 31.6° either right or left, depending on the desired cut for the application. See the chart below for correct angle settings and correct positioning of crown molding on miter table.

The settings in the chart below can be used for cutting All Standard (U.S.) crown molding with 52° and 38° angles. The crown molding is placed flat on the miter table using the compound features of your miter saw.

Bevel Angle Setting	Type of Cut
33.85°	Left side, inside corner 1. Top edge of molding against fence 2. Miter table set right 31.62° 3. Save left end of cut
33.85°	Right side, inside corner 1. Bottom edge of molding against fence 2. Miter table set left 31.62° 3. Save left end of cut
33.85°	Left side, outside corner 1. Bottom edge of molding against fence 2. Miter table set left 31.62° 3. Save right end of cut
33.85°	Right side, outside corner 1. Top edge of molding against fence 2. Miter table set right 31.62° 3. Save right end of cut



CROWN MOLDING FLAT ON MITER TABLE

Fig. 45

# OPERATION

Bevel Angle Setting	Type of Cut
0°	Left side, inside corner 1. Top edge of molding against fence 2. Miter table set right 45° 3. Save left end of cut
0°	Right side, inside corner 1. Bottom edge of molding against fence 2. Miter table set left 45° 3. Save left end of cut
0°	Left side, outside corner 1. Bottom edge of molding against fence 2. Miter table set left 45° 3. Save right end of cut
0°	Right side, outside corner 1. Top edge of molding against fence 2. Miter table set right 45° 3. Save right end of cut

## MAKING A CROWN MOLDING SUPPORT JIG

See Figure 46.

A crown molding support jig will need to be made when cutting crown molding with no required bevel setting. The support jig holds the crown molding in place during the cutting operation. When using this method, the saw can be quickly adjusted for corners that are not 90° square.

**NOTE:** A separate support jig must be made for different widths.

### To make a support jig:

- Using a piece of wood 1/2 in. thick, 4-1/4 in. high, and 23 in. long, place the wood on the miter table against the miter fence.
- From the back side of the saw, use a pencil to mark the wood through the holes in the miter fences.
- Drill holes through the wood then countersink the holes to accept flat head screws.
- Attach the wood to the fence using the flat head screws.
- Place a piece of crown molding firmly against the miter table and the wood. Mark the height of the molding with a pencil.
- Remove the screws and the wood from the miter fence then cut the wood to this width.
- Using small nails and glue, attach a piece of wood (1/2 in. thick x 1-1/2 in. wide x 23-1/2 or 28 in. long) to the top of the wood.

**NOTE:** Keep nails away from the area around the blade cutting path.

- Securely reattach the support jig to the miter fence.
- Make a full 45° left miter cut and a 45° right miter cut through the completed support jig.

## USING A CROWN MOLDING SUPPORT JIG

- Place the crown molding upside down on the miter table with the bottom of the molding against the wood fence.
- Use the chart on this and the previous page to select the proper miter angle.
- Lift the miter lock lever and position the miter table to the desired setting. Push the miter lock lever down to securely tighten the miter table.
- Make sure the slide lock knob is tightened securely.
- Slowly lower the blade into and through the molding.
- Release the switch trigger and allow the saw blade to stop rotating before raising the blade out of workpiece and removing the workpiece from the miter table.

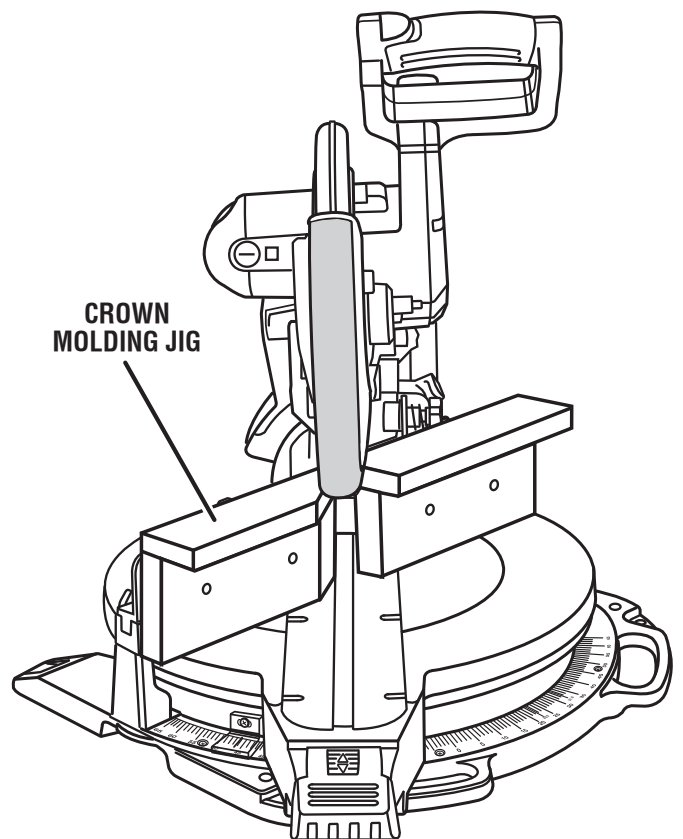


Fig. 46

# OPERATION

## CUTTING WARPED MATERIAL

See Figures 47 - 48.

When cutting warped material, always make sure it is positioned on the miter table with the convex side against the fence as shown in figure 47.

If the warped material is positioned the wrong way as shown in figure 48, it will pinch the blade near the completion of the cut.

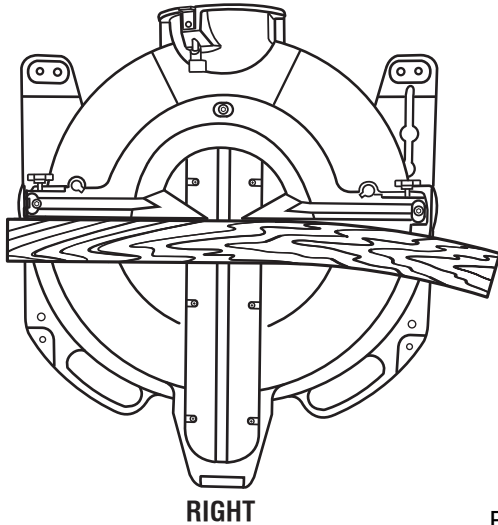
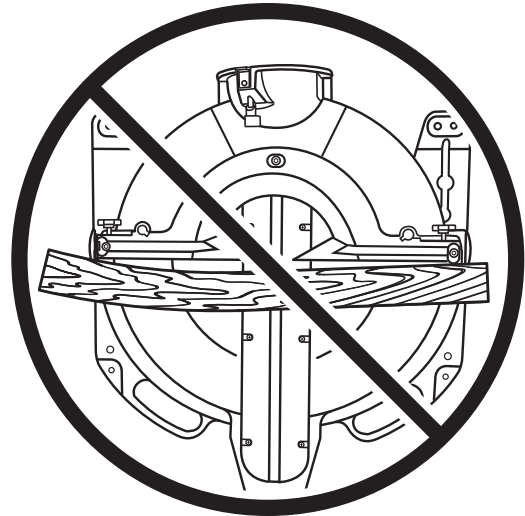


Fig. 47



WRONG

Fig. 48

### **! WARNING:**

To avoid kickback and serious personal injury, never position the concave edge of bowed or warped material against the fence.

## ADJUSTMENTS

### **! WARNING:**

Before performing any adjustment, make sure the tool is unplugged from the power supply. Failure to heed this warning could result in serious personal injury.

### TO ADJUST THE LASER GUIDE

See Figure 49.

**NOTE:** Avoid direct eye exposure when using the laser guide.

- Set both the bevel angle and the miter table at 0°.
- Use the work clamp or a C-clamp to secure a piece of scrap wood.
- Plug the saw into the power source and make a slight cut to score the wood.
- Raise the saw arm and unplug the saw.
- Lift and hold the lower blade guard.
- Rotate the blade by hand until you can push and hold the laser button and the laser is near the center of the workpiece as shown in figure 49.
- To adjust the laser, turn the adjustment screw counter-clockwise or clockwise using the hex key (1/16 in.) provided.

**NOTE:** When properly aligned, the laser should be on the left edge of the kerf.

- Once aligned, remove and store the hex key (1/16 in.), and lower the blade guard.

**NOTE:** Always make practice cuts on scrap wood before cutting through your workpiece.

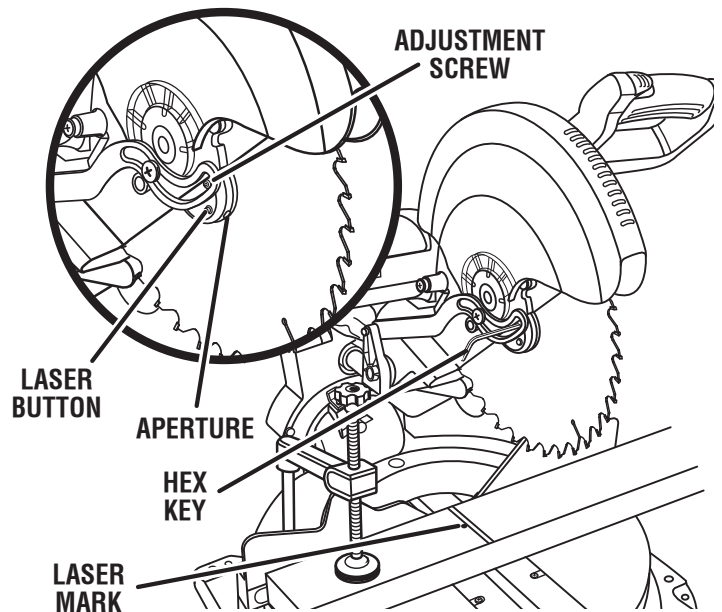


Fig. 49

# MAINTENANCE

## ⚠ WARNING:

When servicing, use only identical replacement parts. Use of any other part may create a hazard or cause product damage.

## ⚠ WARNING:

Always wear safety goggles or safety glasses with side shields during power tool operation or when blowing dust. If operation is dusty, also wear a dust mask.

## GENERAL MAINTENANCE

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, carbon dust, etc.

## ⚠ WARNING:

Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc., come in contact with plastic parts. They contain chemicals that can damage, weaken or destroy plastic.

## LUBRICATION

All of the 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.

## ⚠ WARNING:

To ensure safety and reliability, all repairs should be performed by a qualified service technician at an authorized service center to avoid risk of personal injury.

Some areas will require infrequent lubrications. You will need to apply:

- Automotive oil directly to the slide bars.
- Light oil or a pressurized light spray oil to the arm pivot shaft.
- Light oil or a pressurized light spray oil to the torsion spring.

## BRUSH REPLACEMENT

See Figure 50.

The saw has externally accessible brush assemblies that should be periodically checked for wear.

**Proceed as follows when replacement is required:**

- Unplug the saw.

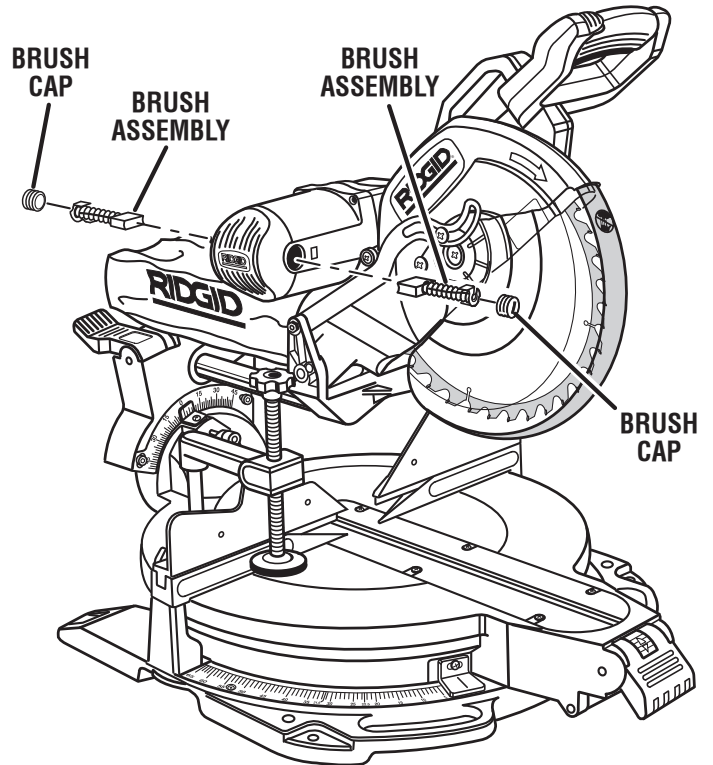


Fig. 50

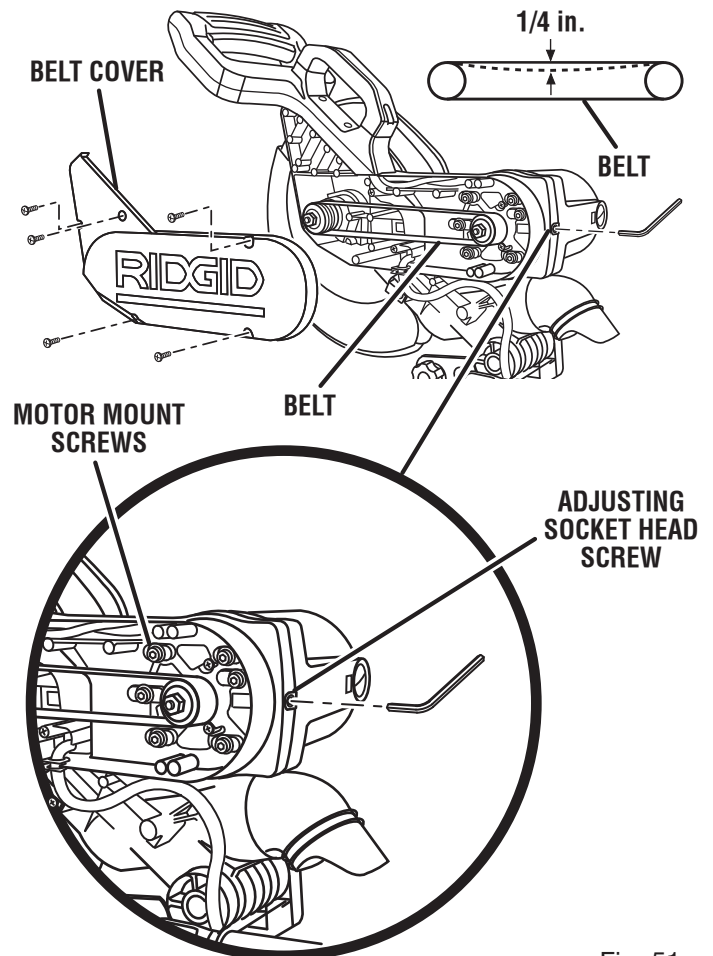


Fig. 51



# MAINTENANCE

## **⚠ WARNING:**

Failure to unplug the saw could result in accidental starting causing serious injury.

- Remove brush cap with a screwdriver. Brush assembly is spring loaded and will pop out when you remove brush cap.
- Remove brush assembly.
- Check for wear. Replace both brushes when either has less than 1/4 in. length of carbon remaining. **Do not** replace one side without replacing the other.
- Reassemble using new brush assemblies. Make sure curvature of brush matches curvature of motor and that brush moves freely in brush tube.
- Make sure brush cap is oriented correctly (straight) and replace.
- Tighten brush cap securely. **Do not** overtighten.

## **MOTOR BELT TENSION**

See Figure 51.

The motor belt tension was adjusted at the factory but should still be checked periodically.

### **To check belt tension:**

- Using a phillips screwdriver, remove the screws holding the belt cover. Lift off the cover.
- Check belt tension by squeezing the belt. Using light pressure, the belt should deflect approximately 1/4 in.

### **To adjust belt tension:**

- Loosen, but don't remove, the six motor mount screws.
- Increase the belt tension by turning the adjusting socket head set screw clockwise. Decrease the belt tension by turning the set screw counterclockwise.

**NOTE:** Excessive belt tension will cause the motor to fail prematurely.

- Securely tighten the six motor mount screws.
- Replace the belt cover and tighten securely using screws.

## **CHANGING THE BATTERIES**

See Figure 52.

- Unplug the saw.
- Rotate and hold lower blade guard up.
- Using the hex key (1/16 in.) provided, loosen and remove the screw from the battery cover then separate the cover from the laser guide.
- Lower the blade guard.
- Remove the three button cell batteries.

**NOTE:** Replace the batteries with button cell batteries that have a rating of 1.5 volt and 100 mAh (milliampere hour) minimum (number 76 series or equivalent).

When replacing the batteries, the laser guide should be thoroughly cleaned. Use a soft paintbrush, or similar device, to remove all sawdust and debris.

- After cleaning the laser guide and replacing batteries, secure battery cover to laser guide using the screw. Tighten screw securely.

## **⚠ CAUTION:**

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

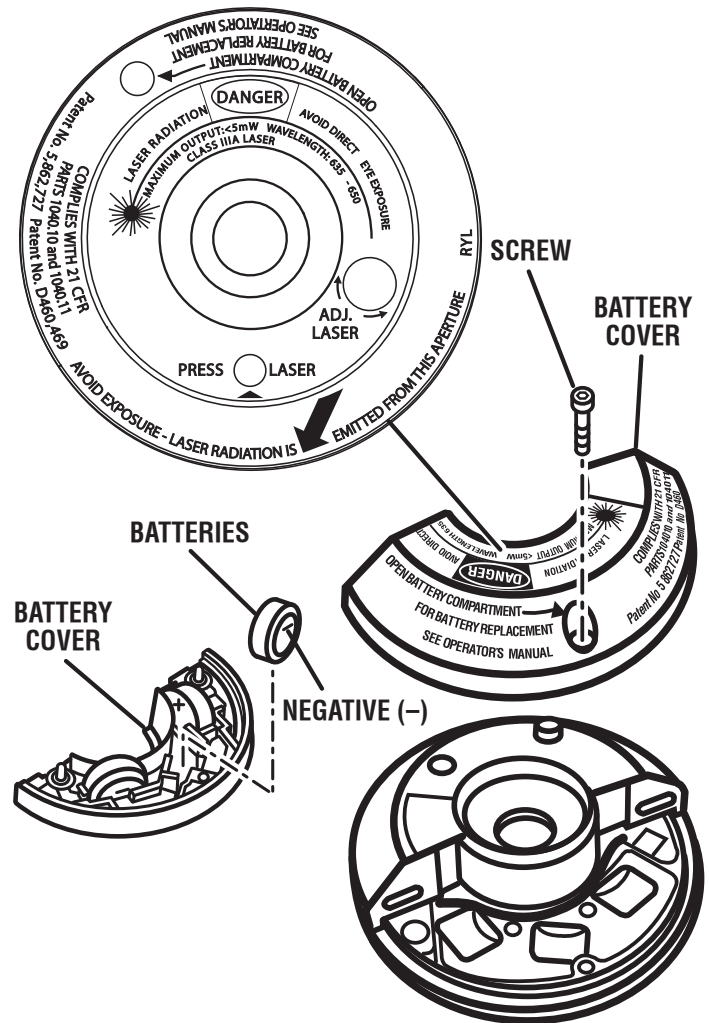


Fig. 52





# WARRANTY

---

## RIDGID® HAND HELD AND STATIONARY POWER TOOL 3 YEAR LIMITED SERVICE WARRANTY

Proof of purchase must be presented when requesting warranty service.

Limited to RIDGID® hand held and stationary power tools purchased 2/1/04 and after. This product is manufactured by One World Technologies, Inc. The trademark is licensed from RIDGID®, Inc. All warranty communications should be directed to One World Technologies, Inc., attn: RIDGID® Hand Held and Stationary Power Tool Technical Service at (toll free) 1-866-539-1710.

### 90-DAY SATISFACTION GUARANTEE POLICY

During the first 90 days after the date of purchase, if you are dissatisfied with the performance of this RIDGID® Hand Held and Stationary Power Tool for any reason you may return the tool to the dealer from which it was purchased for a full refund or exchange. To receive a replacement tool you must present proof of purchase and return all original equipment packaged with the original product. The replacement tool will be covered by the limited warranty for the balance of the 3 YEAR service warranty period.

### WHAT IS COVERED UNDER THE 3 YEAR LIMITED SERVICE WARRANTY

This warranty on RIDGID® Hand Held and Stationary Power Tools covers all defects in workmanship or materials and normal wear items such as brushes, chucks, motors, switches, cords, gears and even cordless batteries in this RIDGID® tool for three years following the purchase date of the tool. Warranties for other RIDGID® products may vary.

### HOW TO OBTAIN SERVICE

To obtain service for this RIDGID® tool you must return it; freight prepaid, or take it in to an authorized service center for RIDGID® branded hand held and stationary power tools. You may obtain the location of the authorized service center nearest you by calling (toll free) 1-866-539-1710 or by logging on to the RIDGID® website at [www.ridgid.com](http://www.ridgid.com). When requesting warranty service, you must present the original dated sales receipt. The authorized service center will repair any faulty workmanship, and either repair or replace any part covered under the warranty, at our option, at no charge to you.

### WHAT IS NOT COVERED

This warranty applies only to the original purchaser at retail and may not be transferred. This warranty only covers defects arising under normal usage and does not cover any malfunction, failure or defect resulting from misuse, abuse, neglect, alteration, modification or repair by other than an authorized service center for RIDGID® branded hand held and stationary power tools. Consumable accessories provided with the tool such as, but not limited to, blades, bits and sand paper are not covered.

**RIDGID®, INC. AND ONE WORLD TECHNOLOGIES, INC. MAKE NO WARRANTIES, REPRESENTATIONS OR PROMISES AS TO THE QUALITY OR PERFORMANCE OF ITS POWER TOOLS OTHER THAN THOSE SPECIFICALLY STATED IN THIS WARRANTY.**

### ADDITIONAL LIMITATIONS

To the extent permitted by applicable law, all implied warranties, including warranties of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, are disclaimed. Any implied warranties, including warranties of merchantability or fitness for a particular purpose, that cannot be disclaimed under state law are limited to three years from the date of purchase. One World Technologies, Inc. and RIDGID®, Inc. are not responsible for direct, indirect, incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

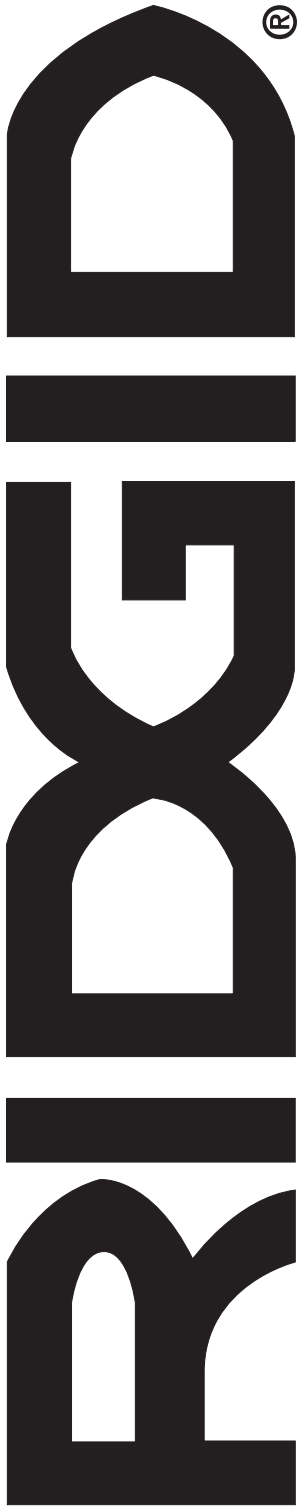
---

**One World Technologies, Inc.**

P.O. Box 35, Hwy. 8

Pickens, SC 29671

---



# OPERATOR'S MANUAL

## 12 in. SLIDING COMPOUND MITER SAW WITH LASER

Double Insulated  
MS1290LZA

### CUSTOMER SERVICE INFORMATION

For parts or service, contact your nearest RIDGID authorized service center. Be sure to provide all relevant information when you call or visit. For the location of the authorized service center nearest you, please call 1-866-539-1710 or visit us online at [www.ridgid.com](http://www.ridgid.com).

The model number of this tool is found on a plate attached to the motor housing. Please record the serial number in the space provided below. When ordering repair parts, always give the following information:

Model No. MS1290LZA

Serial No. \_\_\_\_\_