

# Slide Compound Miter Saw



Machine: Slide Compound Miter Saw  
Make/Model: Makita XSL08  
Revised: 10 / 17 / 2024  
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Location: Machine Shop  
Department: Mechanical Engineering

**DO NOT use this machine unless you have been trained in its safe use and operation!**

## Personal Protective Equipment



Safety Glasses Required



Protective Clothing



Contain Long Hair



Inhalation Hazard



Caution Cut Hazard



Entanglement Hazard

## Potential Hazards

- Eye injury from flying debris
  - Wear eye protection and protective clothing
- Cuts from contact with cutting tool or splinters
  - Use caution and keep body parts away from blade
  - Handle with care
- Kickback due to sudden pinched or snagged
  - Properly secure work piece
  - Do not start saw with blade engaged with work piece
  - After cut, wait for blade to stop spinning before lifting
- Entanglement in rotation machine parts
  - Wear proper attire
  - Keep loose articles and hair tied back
- Sawdust inhalation
  - Wear appropriate dust mask or respirator (note, respirator usage requires EH&S fitting)

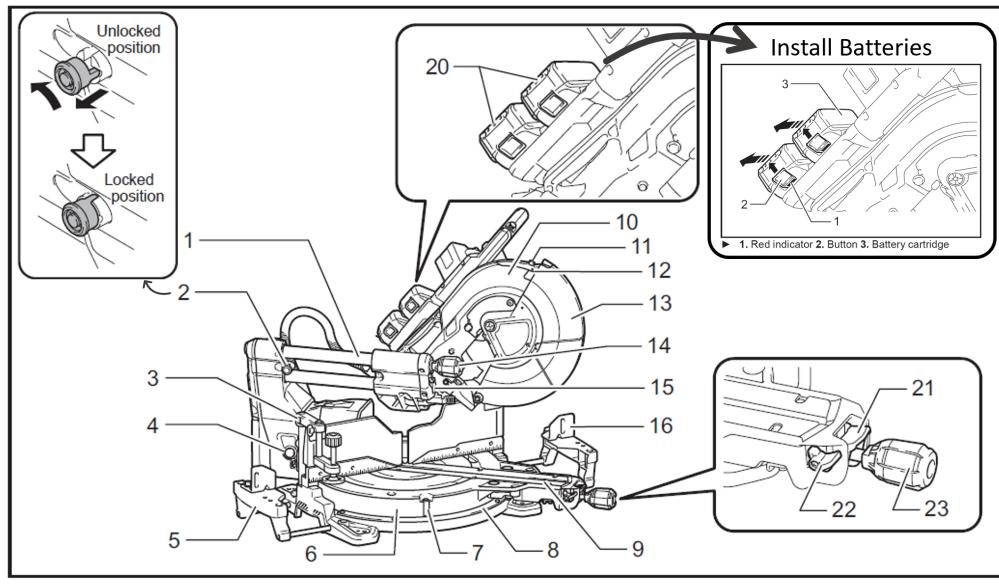
## Typical Operations

- Miter cuts
- Bevel cuts
- Compound cuts

## Select Specifications

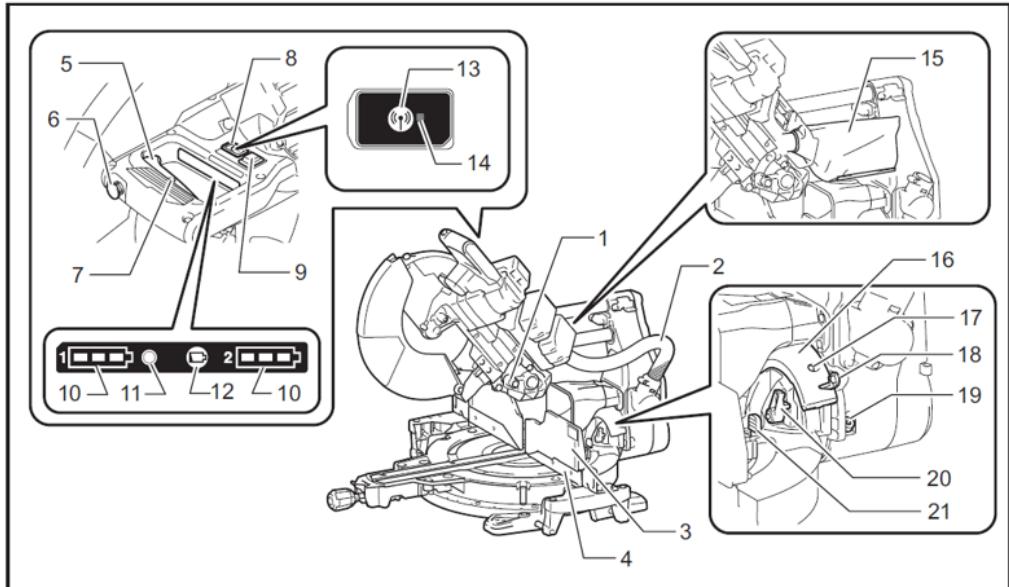
Blade Size	12" (305 mm)
Cutting Capacity Max.	6.75" × 15" (170 mm × 380 mm) [vertical x crosscut]
Max. Angle Angle	Miter: 60°; Bevel 48°
No Load Speed	4400 rpm

## Procedure Checklist



1	Slide pole	2	Stopper pin (for carriage sliding)	3	Vertical vise	4	Releasing button (for right side bevel angle)
5	Sub base	6	Turn base	7	Pointer (for miter angle)	8	Miter angle scale
9	Kerf board	10	Blade case	11	Adjusting screw (for laser line)	12	Range adjustment screw (for laser line)
13	Blade guard	14	Knob (for bevel angle)	15	Hex wrench	16	Sub fence
21	Lock lever (for turn base)	22	Releasing lever (for turn base)	23	Grip (for turn base)	20	Battery cartridge

Figure 1: Select parts of tool (1 of 2)



1	Stopper pin (for carriage elevation)	2	Hose (for dust extraction)	3	Guide fence (upper fence)	4	Guide fence (lower fence)
5	Switch trigger	6	Lock-off button	7	Hole for padlock	8	Lid (for wireless unit) (For XSL08 only)
9	Switch (for laser line)	10	Battery indicator	11	Mode indicator	12	Check button
13	Wireless activation button	14	Wireless activation lamp	15	Dust bag	16	Bevel angle scale
17	0° adjusting bolt (for bevel angle)	18	Pointer (for bevel angle)	19	45° adjusting bolt (for bevel angle)	20	Latch lever (for bevel angle)
21	Releasing lever (for 48° bevel angle)	-	-	-	-	-	-

Figure 2: Select parts of tool (2 of 2)

### This tool is intended to cut wood products only!

Do not cut anything other than wood with this saw.

#### PRE-Operation:

- See [Figure 1](#) and [Figure 2](#) to become familiar with parts of the tool.
- Optional: mount and lock saw on to portable work stand ([Figure 4](#)).
- Optional: connect dust collection unit ([Figure 3](#)).
- Inspect tool for damage and ensure blade guard ([Figure 1](#) #13) is functional.
- Set the miter angle
  - ◊ Rotate the grip ([Figure 1](#) #23) counterclockwise to unlock the turn base.
  - ◊ Turn the base using the grip while holding down the lock lever ([Figure 1](#) #21) to move the turn base.
  - ◊ Align the pointer with your desired angle on the scale and tighten the grip.
- Set the bevel angle
  - ◊ Raise the handle fully and ensure the upper guide fences ([Figure 2](#) #3) and vertical vise ([Figure 1](#) #3)) are out of the way of the blade.
  - ◊ Rotate the bevel knob ([Figure 1](#) #14) counterclockwise then pull the turn the latch lever ([Figure 2](#) #20) to vertical.
  - ◊ Move the carriage to the desired angle then return the latch lever to horizontal.
  - ◊ Using care when tighten the knob, over tightening may cause malfunction of the locking mechanism of the bevel angle.

- ◊ After setting the bevel angle, ensure that the carriage and saw blade will have free travel throughout the entire range of the intended cut before operating the tool.
- Properly secure workpiece.
  - ◊ If workpiece is longer than the support base of the saw, the material should be supported the entire length beyond the support base and at the same height to keep the material level.
  - ◊ Use vertical vise ([Figure 1 #3](#)). Note, the vertical vise can be installed on either the left or right side of the base.
  - ◊ Properly set guide fences and sub base ([Figure 2 #3](#) & [Figure 1 #5](#)).
- If not already performed, don PPE.
- Install battery cartridge by aligning the tongue on the battery cartridge with the groove in the housing and slip it into place ([Figure 1 #20](#)). Insert it all the way until it locks in place with a little click. If you can see the red indicator on the upper side of the button, it is not locked completely.

### **Operation:**

- If using dust collection unit, turn it on.
- While making a bevel cut, keep hands out of the path of the saw blade.

#### **Press Cutting**

1. The carriage should be full back to the guide fence and locked in place ([Figure 1 #2](#)) for press cutting.
2. Ensure blade is not in contact with the work piece.
3. Switch on the tool ([Figure 2 #5](#)) and wait until the blade attains full speed before lowering.
4. Gently lower the handle to the fully lowered position to cut the work piece.
5. When the cut is completed, switch off the tool and wait until the saw blade has come to a complete stop before returning the blade to its fully elevated position.

#### **Slide Cutting**

1. The carriage should be unlock so that it can slide freely ([Figure 1 #2](#)).
2. Pull the carriage all the way toward you.
3. Ensure blade is not in contact with the work piece.
4. Switch on the tool ([Figure 2 #5](#)) and wait until the blade attains full speed before lowering.
5. Press the handle down, then push the carriage toward the guide fence and through the work piece.
6. When the cut is completed, switch off the tool and wait until the saw blade has come to a complete stop before returning the blade to its fully elevated position.

#### **Miter Cutting**

Follow instructions for either *Press Cutting* or *Slide Cutting*.

## Bevel Cutting

1. Remove the upper fence on the side that you are going to tilt the carriage.
2. The carriage should be unlock so that it can slide freely ([Figure 1 #2](#)).
3. Pull the carriage all the way toward you.
4. Ensure blade is not in contact with the work piece.
5. Switch on the tool ([Figure 2 #5](#)) and wait until the blade attains full speed before lowering.
6. Gently lower the handle to the fully lowered position while applying pressure in parallel with the blade and push the carriage toward the guide fence to cut the workpiece.
7. When the cut is completed, switch off the tool and wait until the blade has come to a complete stop before returning the blade to its fully elevated position.

## Compound Cutting

Refer to the section for *bevel cutting*.

### **POST-Operation:**

- Remove the battery cartridge by sliding it from the tool while sliding the button on the front of the cartridge. Follow [Battery Charging SOP](#), place the battery on an open charging port.
- Wipe tool down with a clean rag and inspect for damage.
- Return all tools to their proper storage place.
- Leave the work area in a safe, clean state.

### **Do's and Don'ts**

#### **Do's:**

- Read the user manual: [\[GitHub Link\]](#)
- Ask for help if the saw blade looks damaged.
- Properly secure the work piece.
- Gently press the handle to perform cut (avoid excessive pressure on handle).
- Make cuts in a smooth motion without stopping.

#### **Don'ts:**

- Do not use the saw without approval!
- Do not change the saw blade without approval.
- Do not perform any adjustments to the tool while the saw blade is rotating.
- Do not stare into laser beam (duh).
- Do not make adjustments to the sub fence.

## Optional Equipment Available

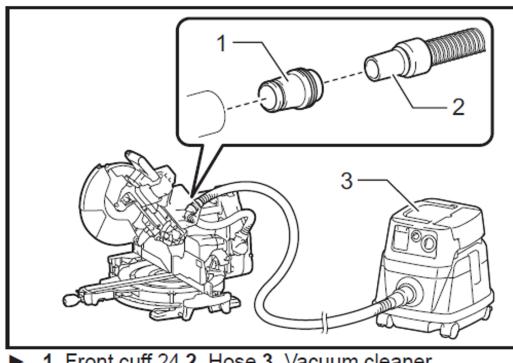


Figure 3: Makita (corded/cordless) vacuum

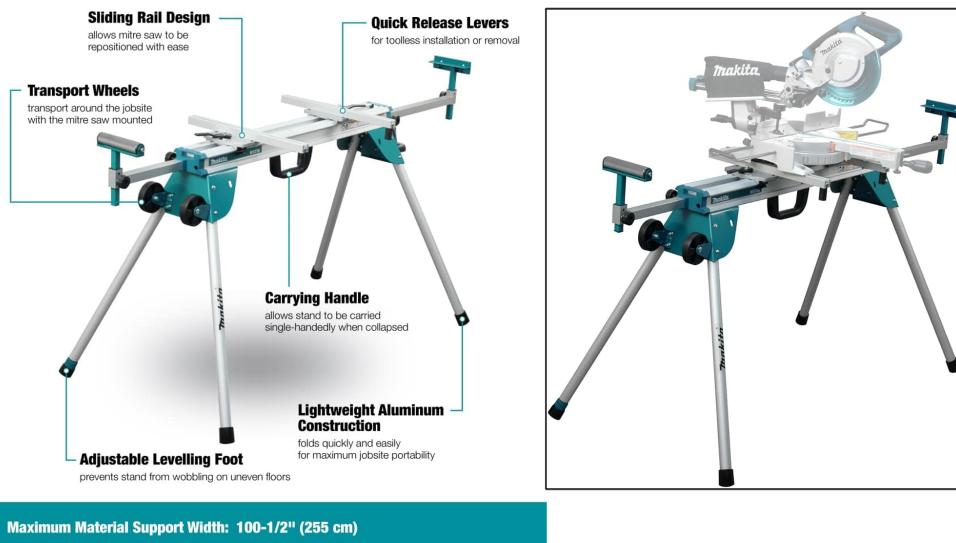


Figure 4: Makita Portable Miter Saw Table