


# Jig Saw

5/31/23 Haley

Jig Saw

<b>Tool Type:</b> Cutting tool
<b>Location:</b> Innovation Workshop
<b>Description:</b> Jig Saw
<b>Manufacturer:</b> Milwaukee

## About

Portable power tool that can effectively handle curved cuts and bevel cuts.

## Safety Concerns

- Always wear goggles, long pants, and close-toed shoes while operating. Do not wear loose clothing or jewelry and tie long hair back.
- Ensure switch is in the off position before connecting battery pack.
- Do not overreach. Keep proper footing and balance at all times.
- Be sure workpiece is properly secured
- Hands should be kept free and away from the blade at all times.
- Always remove the battery pack before changing blade and when storing the tool.
- Lock the trigger when tool is not in use and before performing maintenance or changing accessories.

## Operating Procedures

Starting and stopping the tool

- To start the tool, grasp the handle firmly and pull the trigger.
- To vary the speed, increase or decrease pressure on the trigger.
- To stop the tool, release the trigger. Allow the tool to come to a complete stop before removing the blade from a partial cut or laying the tool down.

### Locking the trigger

- To lock the trigger, push the trigger lock from the lock side of the tool. The trigger will not work while the switch is in the locked position.
- To unlock the trigger, push the trigger lock from the unlock side of the tool.

### Adjusting the orbital action

The amount of orbital action may be adjusted with the orbital action selector lever. In general, a large orbital action (4) should be used with soft materials and a no orbital action (0) should be used with hard materials.

Material	Orbital Action
Wood	0-4
Metal	0-1
Aluminum	0-1
Plastic	0-2
Smooth cut	0

### Adjusting the shoe

The shoe may be tilted up to 45° in either direction to set a tilt angle for bevel/angle cuts.

- Remove the battery pack.
- Loosen the shoe adjustment lever and pull the base forward slightly until the detents are not engaged.
- To set to 0°, 15°, 30°, or 45°:
  - Tilt the shoe to the required angle.
  - Push the shoe into the detent and tighten the shoe adjustment lever.
- To set an angle other than 0°, 15°, 30°, or 45°
  - Loosen the shoe adjustment lever
  - Pull the base forward slightly until the detents are not engaged.
  - Set the desired angle and tighten the shoe adjustment lever without engaging a detent.
  - Make a test cut to verify the angle.

### Making the Cut

- Set the orbital action according the material to be cut.
- Position the tool with the front part of the shoe on the workpiece and start the tool.
- Hold the shoe firmly against the workpiece and guide the tool along the desired cutting line. Do not feed into the work too hard, light pressure on the saw blade will achieve the optimum cutting speed.

### Special Cutting Techniques

- Straight cuts: To obtain a perfectly straight cut, clamp a strip of wood as a guide along the workpiece.

- Bevel cuts: Adjust the shoe to the correct angle
- Cutting Sheet Metal: Sheet metal may vibrate when being cut. To dampen, clamp the workpiece to a wood base.

### Plunge Cutting

Plunge cuts can be made into soft materials without a pre-drilled hole. Harder materials require a starter hole with a diameter slightly over the width of the blade.

- Set the orbital action selector lever to 0.
- Make sure nothing below the intended cut area will be damaged.
- Without turning the tool on, place the front edge of the shoe solidly on workpiece.
- Align the blade with the intended cut line, but keep it above the workpiece.
- Using the front edge of the shoe as a pivot, turn on the tool and gradually lower the blade into the workpiece.
- When the shoe is flat against the workpiece, you may begin your cut.

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## Detailed Specifications

- 18V lithium ion battery
- Cordless
- 1 inch stroke
- Brushless motor
- 4.59 lb

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## Reference Documentation

Operator's Manual

From:

<https://microfluidics.cnsi.ucsb.edu/wiki/> - **Innovation Workshop Wiki**

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