Jigsaw

The jigsaw is a powered saw that moves a narrow blade up and down rapidly. It cuts roughly but very powerfully, and the narrow blade means it can make sharp turns and fit through small spaces.

SAFETY

- **Shop Buddy:** You are not allowed to work alone while using the jigsaw. A buddy is there to ensure your safety and to call for help if needed. Your buddy does not have to be trained on the tool, but if untrained, they are not allowed to use the equipment.
- **Eye Protection:** The jigsaw can send sawdust, wood chips and other fragments flying – safety glasses protect your eyes from harmful material.
- **Close-Toed Shoes:** Tools, pieces of wood and other sharp objects can fall and close-toed shoes will protect your feet from cuts, bruises and even breaks.
- **Long Pants:** Long pants will protect your legs from cuts, bruises and splinters that might come from handling wood.
No Jewelry: Rings, bracelets, dangling necklaces, watches, headphones and sweatshirt strings can all get caught in the sawblade, which can drag you into the machine.

Long Hair Secured: Like jewelry, long hair can also get entangled in the tool, and potentially drag you towards the jigsaw.

No Food or Drink: Sawdust and woodchips, in addition to the glues and paints used on the wood, can get into your food or drink and be toxic. Residue from food or drink can also make the tools and machines messy.

No Metal: Using the jigsaw on metal will destroy the tool and produce sparks, which can ignite sawdust, resulting in a fire or explosion.

Safe Bystanders: If you are using these tools outside of the Woodshop, which likely means you are in the workspace, make sure everyone around you is safe. A good rule of thumb is that everyone within a 10’ radius needs to be wearing PPE and needs to be aware of what’s happening – as engaged as you would expect from someone in the Woodshop. Unless they are helping you, it is usually easiest to find a space farther from anyone else in the space.

For the Reciprocating Saw specifically...

Watch the Cord: Like many powered hand tools, the jigsaw has a power cord. Make sure you plug it in somewhere where it won’t get caught by the blade, and won’t limit your movement.

Watch your Fingers: The jigsaw can very easily cut your fingers. Be careful where you place them, and remember that the saw comes out the other side of the piece.

MACHINE ANATOMY

Handle: The only safe place to hold the saw during operation.

Trigger: When squeezed, activates blade's up-down motion.

Trigger Lock: Keeps the blade going without holding the trigger; dangerous.

Blade: Can be easily changed to replace a worn out blade.

Blade Release: Used to disconnect a blade from the machine.

Sawdust Blower: Pushes dust out of the way with air.

Oscillation Adjust: Controls the cutting motion and power of the blade.
OPERATING THE MACHINE

1. Lay your piece flat and secure it with clamps. When you clamp your piece, there are two things to consider. First, the saw will protrude through the area you cut. A good way to accommodate this is to pull two tables apart to make a gap and lay the wood such that you will cut along the gap. The other thing to consider is that once you cut the piece, it will be in two pieces. Lay the piece such that neither half will fall once you cut. By making the cutting gap between tables small – a few inches is usually good – the tables will each support one part of the wood.

2. Plug the tool in somewhere where the cord won’t be in the way. Check your reach to make sure you can do the whole cut without cutting yourself or the cord, and without losing control of the saw.

3. Place the saw at the start of the cut you want to make, so that the front of the foot is flat against the wood. Pressing gently down on the handle, to stabilize the tool, squeeze the trigger to start the blade. Let it get to speed before you start cutting, rather than starting the blade while it is engaged with the wood.

4. Move the blade forward. It is the force of the blade’s oscillation that cuts, not the force of your push, so you don’t need to push forward very hard. Most of your push should be downward, pressing the foot into the wood, to keep the whole tool stable and the cut straight.

5. Once you’ve made your cut, or if you need to stop, release the trigger and lift the blade out with the teeth disengaged. If you try to lift it out while the blade is running, the oscillations will cause the teeth to snare the wood and tear it.

Troubleshooting

1. The blade cuts as it moves up, which means it wants to pull the tool closer to the piece. On particularly tough wood, or if you hit a knot or screw, the jigsaw will feel like it’s fighting you and can be hard to control.

2. This is one of the best saws for making curved cuts, but there is still a limit to how sharp it can cut. If you feel resistance while turning, you are probably twisting the blade, and should stop.