



## Reciprocating Saw

The Reciprocating Saw is a type of powered saw in which the cutting action is achieved through a push-and-pull motion of the blade. Depending on which blade you have in the tool, a reciprocating saw can cut through just about everything short of a rock. It's the go-to tool for remodeling and demolition. With this saw you can cut through lumber even if it's embedded with nails.

## SAFETY

- **Shop Buddy:** You are not allowed to work alone while using the reciprocating saw. 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 reciprocating saw 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 reciprocating saw.

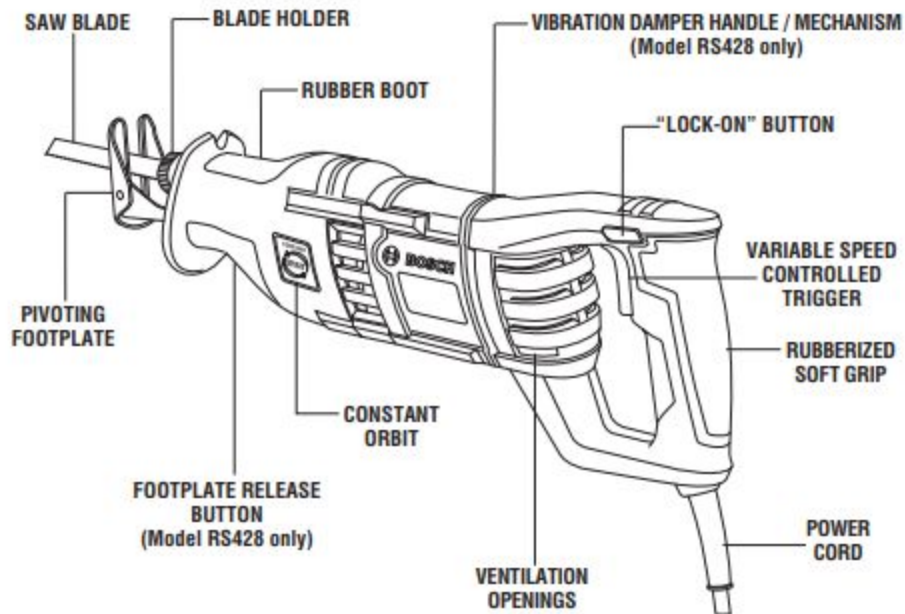
- **No Food or Drink:** Sawdust and woodchips, in addition to the glues and paints used on the wood, can get into your food or drink and be toxic. Residue from food or drink can also make the tools and machines messy.
- **No Metal:** Using the reciprocating saw on metal will destroy the tool and produce 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 reciprocating saw 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 reciprocating saw is a demolition tool that can cut through nearly anything, and it can very easily take fingers off. Careful not to hold the part your are cutting, including the far side of your piece.

## MACHINE ANATOMY

- **Saw Blade:** Can be easily changed to replace worn out blades.
- **Blade Holder:** Creates the rapid in-out motion for powerful cutting.
- **Pivoting Footplate:** Keeps the saw flat to the wood; adjustable.
- **Rubberized Grip:** The correct place to hold the tool during use.
- **Rubber Boot:** Can be held with a free hand for extra stability.
- **Controlled Trigger:** Pulling this more moves the blade faster.
- **Lock-On Button:** Keeps the blade moving without holding the trigger.
- **Ventilation Openings:** Intake and expel air to cool the motor.



## OPERATING THE MACHINE

1. Make sure your piece is secured. Unless the piece is stable under its own weight, you will need to clamp it heavily. This is not a smooth saw, and an unsecured piece will jerk around a lot.
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 footplate 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 motion that cuts, not the force of your push, so you don't need to push forward very hard. Most of your push should be for, pressing the footplate 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 motion will cause the teeth to snare the wood and tear it.

## **Troubleshooting**

1. The primary handle is far away from the blade, and doesn't offer much control. Place your other hand on the rubber boot for more control.
2. The blade can be inserted with the teeth facing either way. Make sure you know which way the teeth are facing before you cut.
3. The footplate keeps the tool mostly flat, but it doesn't lock in place. If you try to twist the