

Electric tools—Circular saws

Explain dangers

The circular saw is one of the most widely used portable power tools on construction sites. If not used correctly, it can cause serious injuries.

Kickback is the most common problem. It can happen to even the most careful users. You can minimize the chance of kickback by:

- Properly setting the blade depth
- Maintaining a sharp blade
- Standing in the right position
- Ensuring that the material is held securely.

Identify controls

- Always wear the proper clothing and gear when operating the saw. This includes
 - safety glasses
 - hearing protection
 - a dust mask
 - appropriate footwear.
- Avoid wearing loose clothing and jewelry. If your hair is shoulder length or longer, tie it back so it doesn't get caught in the saw.
- If you are cutting pressure-treated wood or cedar, you should use a NIOSH-approved N95 filtering face mask or a more protective respirator.
- Read all the safety materials included in the manufacturer's instructions before using your saw.
- Always unplug the saw when changing blades, cleaning the saw, or making adjustments.
- Never use the saw near water.
- Ensure the extension cord does not run across walkways where it can be a tripping hazard or get damaged.
- Ensure that the extension cord is in good condition, and that the plug has a ground pin.
- The blade should extend only 1/8 inch below the piece of material that you are cutting. The risk of kickback and injury increases as more blade is exposed below the material.

- Do not overextend your body when cutting. Position yourself so that you are in control of the saw and the material.
- Never use your knee or foot to support the material you're cutting.
- Never wedge, wire, or jam the guard to prevent it from working. This is a dangerous practice that could cause serious injury.
- Never fasten the trigger's safety lock in the "on" position. The purpose of this feature is to minimize accidental starts.
- Never pull the saw backward when cutting.
- Always use the proper blade for the type of material and the type of cut.
- Before setting the saw down, make sure the guard is in place. If you don't, the saw could run across your hand or foot.
- Never carry the saw by the cord or with your finger on the trigger.

Demonstrate

Have a sample saw available to demonstrate while you talk.

Inspect the saw. Identify all the parts and safety features of the saw and make sure they are working (see diagram below).

Demonstrate how to use the saw, as well as techniques for holding material, by making cuts in different positions and with different materials.

