

From Fire Engineering's Handbook for Firefighter I and Firefighter II (2019)

Safe power saw operation. Power saws can end a firefighter's career in a split second. One manufacturer stated that the limb will be gone before you feel the pain. To this end, the power saw and all power tool operations should be conducted with extreme caution. The following are some safety guidelines to observe when operating power saws:

- Respect the tool. The power saw will cut off a limb like it hates you.
- Full PPE must be worn when operating the saw
- Wear safety glasses or SCBA.
- Provide adequate lighting when working in the dark.
- Ensure all saws are started in a safe area, shut down, and then taken to the area of operation. For example, before going to the roof, start the saw on the ground.
- Always be aware of ignition sources when fueling.
- Be aware of the **circle of danger**—anyone you can reach and touch with the saw (or any tool) is in the circle of danger.
- Always plan the cut and inform others of that plan.
- Never pick up the saw to start it—always start it on the ground.
- Keep good balance, with your feet in a boxer's stance 18–24 in. (46–61 cm) apart.
- Never operate the saw with one hand.
- When operating a saw with a wood blade (carbide tip), rev the saw to its maximum rpm before sinking it into the work.
- When operating a saw with steel blade, set the saw in the place to be cut before revving the saw. Begin to rev the saw slowly, and when the saw has a bite in the material, then progressively increase the rpm and make the cut.
- Do not store composite blades with hydrocarbons, because this can cause catastrophic failure.
- Position your legs so the plume of sparks is not directly hitting your gear. Turnouts can burn.
- Never step on anything that has been cut.
- Use the **buddy system** when cutting. Always have a guide person behind the saw

operator. The guide person keeps an eye on the area, while the saw operator concentrates on the cut.

- Use the “contact-go/no-contact-stop system” when guiding the saw operator
As long as the guide person has a hand on the saw operator’s shoulder or back, the cutting continues. If the guide person breaks contact, the saw operator stops cutting
- Always control the saw.
- Always be prepared to stop the cut and the saw.
- Never let the saw operate more than 6 in. (150 mm) away from the cut. If possible, let the saw blade “ride the roof” to the next area to be cut
- Listen to the saw—it will clue you in when to add or take away pressure.
- When the cut is stopped, bury the blade in the roof to stop the blade from spinning.
- Make sure that when the job is finished the saw is cleaned, fueled, and checked for damage.