

8 Tips for Safely Operating Battery-Powered Tools

(Family Features) Battery-powered power tools make it convenient and efficient to tackle chores around the house and job site. While batteries eliminate the risks associated with electricity, they come with their own requirements for safe use and handling.



You can take additional steps to ensure your batteries are up to the task and operating safely with advice from the experts at the Power Tool Institute.

- Only use batteries and chargers designed for use with the original tool manufacturer's system. Each manufacturer uses unique control circuitry that allows the system to communicate properly. This system monitors and controls critical functions, such as cell balance, energy levels, flow of energy and temperatures.
- Inspect your battery regularly for signs of damage, such as crushing, cuts or punctures. Do not use a battery that has received a sharp blow, been dropped or is in poor condition.
- A battery pack will short circuit if a metal object makes a connection between the positive and negative contacts on the battery pack. Avoid storing or transporting batteries in a container with loose metal objects such as coins, keys or nails that may come in contact with the terminals.
- Do not immerse the battery or allow any fluids to flow inside. Conductive liquid ingress, such as water, can cause damage resulting in fire or explosion.
- Be mindful of abnormal battery behavior, such as a failure to fully charge or hold a charge, longer-than-usual charging times, a noticeable drop in performance, unusual LED activity when placed on a charger, liquid leakage from the battery or melted plastic anywhere on the pack. These are indications of an internal problem.
- Use and store your battery within the temperature limits stated by the manufacturer. Do not store in a closed location where sunlight may cause elevated temperatures, such as near a window or inside a vehicle.
- As a general practice, unplug battery chargers and remove battery packs when not in use. Do not store batteries on their chargers.
- If you suspect your battery may have a problem, do not use, ship or discard it as normal trash. Always dispose of your battery according to federal, state and local regulations. Contact the recycling agency in your area for recycling locations.

In addition, a battery that is visibly overheating with signs of smoke, smoldering or melting requires immediate action.

If the overheating battery is connected to a battery charger, always unplug the charger first. Pour water on the battery until it is cooled down and flames, if present, are extinguished. Then submerge it (along with the tool or charger if it is still attached to the battery) in a sturdy container filled with water. Keep the battery (and attached tool or charger) submerged, in an outdoor location at least 15 feet away from any combustible items, for at least 24 hours.

If water is not available, dirt, sand or a conventional ABC extinguisher may be used to smother and cool the battery until water is available.

When transferring the battery, avoid direct contact (use a long-handled shovel, for example). There is a risk that overheated batteries may vent, explode or emit a flame, so be sure to use appropriate personal protective equipment to protect your face, hands and body.

Find additional tips for safely operating your power tools at [PowerToolInstitute.com](https://www.powertoolinstitute.com).

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