



Power Tool Safety: Small Variables Can Cause High Risk *Power Tool Institute strongly discourages use of third-party batteries*

May 24, 2021—We tend to think of power tools as virtually indestructible extensions of ourselves. After all, the word *power* is right there in the name. While it's true that a properly cared-for power tool should provide years of trouble-free service, the key phrase is "properly cared for." Because, in truth, the internals of power tools contain delicately balanced systems that can quickly turn dangerous if caution is not given. The Power Tool Institute, the leading industry organization, warns that even the smallest variable, such as introduction of a third-party battery, can substantially increase the risk of tool failure, fire damage, and even personal injury.

At the heart of the power tool system is the relationship between the tool, its battery, and the battery charger. Each manufacturer has its own unique control circuitry that allows the system to communicate properly. This is what controls critical functions, such as cell balance, energy levels, flow of energy in/out, and temperatures.

It is most likely that a third-party battery will not be compatible with the energy demands of the system.

Introducing a third-party, knock-off, or counterfeit battery can choke off system communication. Without the system's ability to communicate during use, tool operators run the risk of lower performance and a shorter life from the tool. The third-party battery can also overheat, reducing its life or even causing complete failure. In the worst-case scenario, a knock-off battery can cause the tool's motor to burn up if it starves or pushes too much current through it. These batteries can catch fire on the charger (and have) when cell temperatures aren't being properly monitored and managed.

The original manufacturers' batteries use cells with proven designs, strict quality control, and longer-lasting capacity.

For more information from the Power Tool Institute on safe usage of power tool batteries, visit <https://www.powertoolinstitute.com/pti-pages/battery-safety.asp>.

About PTI

With the vision to unify and educate others about power tools, since its founding in 1968, the Power Tool Institute (PTI) has established itself as the leading organization for building global understanding of power tools and for maintaining high standards of safety in the industry. Its members, a list of whom can be found [here](#), represent market-leading brands in the areas of portable and stationary power tools. PTI's members are committed to improving the industry and to being the premier resource for power tool education. For more information, contact PTI 216-241-7333 or pti@powertoolinstitute.com. On the Web: www.PowerToolInstitute.com and www.TakeChargeOfYourBattery.com.