



Not All Lithium-Ion Batteries Are Created Equal *Power Tool Institute promotes awareness of tested, listed OEM batteries*

March 17, 2021—It's no secret that lithium-ion batteries are great for power tools. They can be recharged hundreds of times with greater energy output compared to other rechargeables. This is, in part, how they have earned their reputation for stability and efficiency. However, not all lithium-ion batteries are the same. [The Power Tool Institute \(PTI\)](#) always recommends using only a lithium-ion battery made for that specific tool, by the tool's manufacturer. There are simply too many unknowns about third-party batteries, some of which can create great danger.

Reputable original equipment manufacturers (OEMs) have their products listed with an independent certification lab such as UL or Canadian Standards Association (CSA) to evaluate products for compliance with internationally accepted safety standards. This listing process is mandatory for power tools used in work environments governed by OSHA. The introduction of a third-party battery to the tool system negates this effort to document performance and safety compliance because cordless power tools and their batteries are tested as complete systems.

This total testing protocol — comprising a dedicated combination of tools, battery, and charger — helps ensure each component part communicates properly with the other in order to monitor and control critical functions. Only the tool manufacturer is able to obtain this “system” certification. Each manufacturer uses its own, proprietary control circuitry, which is not available to third-party component suppliers.

Some knock-off batteries may be listed to a general battery safety standard, but many are not tested or listed to any safety standard at all. A lithium-ion battery that is not intentionally designed to work properly with a specific tool and charger system can result in poor performance and shorter life, damage to the tool and charger, or, even worse, a battery bursting that may cause a fire or explosion.

For these reasons, PTI and power tool manufacturers recommend that only OEM lithium-ion batteries be used.

For more information on safe use of lithium-ion 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.

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