



Advisory to Appalachian Trail Certified Sawyers on Chainsaw Operation Models

While corded electric chainsaws have been available for years, over the last decade, chainsaw construction design has evolved to include battery-powered cordless designs. As these quieter, lighter tools have become increasingly available, there is increasing likelihood that A.T. Certified Sawyers would prefer to apply these tools in lieu of gas-powered chainsaws in the course of their work to maintain the A.T.

This advisory aims to provide reasonable considerations to the benefits, drawbacks, and other considerations of these respective design models of saws, that all require adherence to accepted safety practices.

The functional design of chainsaws listed below remain the same. All types below require bar oil and a sharp chain, and sawyers operating any saw must:

- be appropriately trained and certified,
- follow saw policy*,
- carry appropriate companion certification, a first aid kit, a chainsaw repair kit, a spare chain, and knowledge of how to maintain the saw and sharpen the chain, as well as
- wear appropriate Personal Protective Equipment (PPE). PPE for all types of chainsaw use is the same, except that 9-layer chaps are recommended for battery operated saws.

ATC's Saw Working Group in 2018 issued caution related to electric chainsaws because of unknowns related to battery-operated saws. Specifically, there was concern that chaps might not immediately and reliably stop a battery-operated saw, yet we acknowledge that with intention one can cut through chaps with a gas-powered saw as well. The purpose of chaps for gas-powered or battery-powered saw operators is to give the sawyer enough time to respond. For operations of either type of saw, sawyers must be mindful not to hit their chaps.

Operational Model	Advantages	Disadvantages	Provisions and Considerations
Gas-Powered Chainsaw	<ul style="list-style-type: none"> • Likely sawyer familiarity • Addressing large blowdowns 	<ul style="list-style-type: none"> • 50:1 fuel mix must be packed or carried to work site • Fuel quality issues • Potential for spilled fuel • Emissions • Impact to wildlife and visitors due to sound 	<ul style="list-style-type: none"> • Proper certification required.

*Both NPS and USFS have indicated that use of battery-operated saws are in compliance with respective national saw policies. Sawyers, appropriately trained and certified working with any type of saw, are permitted within Volunteer in Parks and Volunteer in Forests Volunteer Service Agreements.

Battery-Powered Electric Chainsaw	<ul style="list-style-type: none"> • Quieter • Lighter • More convenient to carry over long distances to more remote locations • Less maintenance required: No air filter, fuel filter, or spark plug to maintain or replace. No carburetor to clean, adjust, or rebuild. 	<ul style="list-style-type: none"> • No delay in torque on start-up so that as soon as one uses the power button, the saw is in full torque under a flat torque curve • Requires 2 or more batteries for sustained operation • Newer operation model, more unknowns 	<ul style="list-style-type: none"> • Proper certification required. • Remove battery for transportation and carrying. • Insulate contacts with a non-conductive material such as electrical tape or wrap in cloth when carrying in a pack to protect battery • 9-layer Pro-grade chaps are recommended
Corded Electric Chainsaw	<ul style="list-style-type: none"> • Convenient only in front-country setting 	<ul style="list-style-type: none"> • No delay in torque on start-up so that as soon as one uses the power button, the saw is in full torque under a flat torque curve. 	<ul style="list-style-type: none"> • Proper certification required.

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