


# Electric Vehicle Runaway Reaction

Electric Vehicles (EVs) that have been involved in a collision pose certain risks such as thermal runaway. Thermal runaway occurs in compromised EVs – this is when a battery cell short circuits and triggers an uncontrollable increase in temperature resulting in fire.

Here are 5 steps to help keep you safe if you have a potentially compromised EV in your shop:


## 1 Isolate

Park the EV vehicle outside, away from other vehicles and/or flammables. Damaged lithium-Ion battery cells can chemically overheat slowly over time causing fire and/or an explosion.




## 2 DISABLE

Remove the key/fob from the vehicle and store the key/fob in a designated secure spot (such as a lockbox) as far from the vehicle as possible to help prevent accidental startup. Disconnect the vehicle's 12-volt battery.




## 3 CHECK

Check high voltage battery (HVB) compartment for leaks, smoke, increased temperature (non-contact thermometer), gurgling, or hissing before bringing EVs inside. If no threat, check HVB with CAT III or CAT IV multimeter and continually monitor the temperature and voltage. Thermal runaway can initiate at any time - if readings spike, thermal runaway has begun.



## 4 EVACUATE

Evacuate the building if an EV exhibits thermal runaway while inside the shop. Be aware of the potential for re-ignition of lithium-ion battery fires even after the fire is believed to be extinguished.



## 5 ACTION

Call 911 immediately if thermal runaway is detected or a fire occurs. DO NOT attempt to use a shop fire extinguisher or water as they will not extinguish thermal runaway. It can take 3,000 – 8,000 gallons of water applied directly to the battery to control thermal runaway.

