



Wintergreen Fire and Rescue Standard Administrative Policy	
Subject:	Vehicle Fires
Reference Number:	FIRE 02-006
Effective Date:	22-May-05
Last Revision Date:	30-Jun-22
Signature of Approval	Curtis Sheets, Chief

Purpose:

To provide a means of extinguishing vehicle fires while maintaining appropriate safety thresholds for personnel.

Policy:

These guidelines shall be followed for all vehicle fires.

- Chock wheels on the subject vehicle as soon as possible if applicable and safe to do so.
- When possible, park apparatus uphill and upwind. Determine if additional assistance is needed. Obtain police assistance for traffic control. If the involved vehicle is a “common carrier,” determine the type of cargo.
- When Possible, position apparatus to allow for traffic flow post extinguishment.
- Wear protective clothing as per policy FIRE 02-003.
- Breathing apparatus shall be necessary for operations on all vehicle fires, inside and outside the vehicle.
- Consider the flow of spilled fuel (burning or non-burning).
- Determine type of fuel, which may be involved. Newer vehicles may have pressurized fuel systems.
- Be alert for possible explosion of fuel system, pressurized "energy absorbing" bumpers, and shock absorbers. Batteries may serve as an ignition source, produce electrical shock, or explode. LPG tanks are also of paramount concern.
- The suspension systems on many buses may collapse to within four (4) inches of ground level when exposed to fire.
- Vehicles with un-deployed airbags should be approached with caution. Personnel should not position themselves or tools between the airbag and seat while the air bag system is armed.
- Consider life safety, water supply availability, and the slope of the terrain.
- Ensure that vehicle is in a fire safe condition prior to towing.

Electric Cars

- Read and be familiar with the term, “exothermal reaction” in regard to lithium battery fires.
- Determine if the vehicle is an alternative fuel or all electric vehicle to get full scope of possible hazards.
- Be mindful of the vehicle still having active electrical current.

- Size up and establish priorities such as rescue, extinguishment, extrication, and patient care.
- Quickly immobilize the vehicle, if possible, from forward/rear movement.
- You may use the thermal imaging camera to help determine if the batteries are overheating or burning and to monitor the temperature of the battery cells.
- Full PPE is required for working electric vehicle fires to include SCBA until a minimum of 30-minutes after the fire has been extinguished and lithium batteries have been cooled.
- Assure you have a steady water supply and/or Tanker Shuttle with enough tankers to provide a continuous supply for several hours. You could need up to 3000-8000 gallons of water to extinguish this type of fire. Foam is not recommended.
- Be prepared to continue to apply water for at least 30-45 minutes after the fire has been suppressed.
- Consider lifting one side of vehicle and placing blitz-fire in direction of lithium batteries if there is sufficient water supply.
- Use insulated tools for fire extinguishing and overhaul.
- Consider calling on a Haz-Mat team for removal materials left after extinguishment. The use of hot, warm, and cold zones is highly recommended.
- There must be no fire, smoke, audible popping/hissing, or heating present in the high voltage battery for 45 minutes before the vehicle can be released to secondary responders such as VSP or towing companies. It should be recommended that the vehicle be stored in an open area not less than 50 feet from any exposures. Consider following towing service to where vehicle will be stored in case of reignition.
- Decontaminate all PPE and equipment after the incident.