



Rogers Fire Department Standard Operating Procedures

Policy Title:	Vehicle Fires	Volume:	Tactics
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PURPOSE

The purpose of this policy is to provide guidelines for safe and efficient operations at emergencies involving vehicle fires.

POLICY

Members responding to vehicle fires shall look for indicators to guide them on how to attack the vehicle fire and what tools and/or resources will be required to safely mitigate the situation. In nearly all instances, a quick, aggressive and exposure-aware attack is necessary to bring the fire under control. However, attack strategies will vary based on the size and type of the vehicle, fuel source and exposure concerns.

Vehicle fires will receive an assignment consisting of the two (2) closest fire companies. As with any type of incident, the first arriving company should conduct a thorough size-up of the vehicle and transmit a brief initial radio report of their findings. If there is fire extension into a structure, the incident commander should immediately change the assignment to a building/house fire.

A critical command decision relates to the mode of operation for the incident:

1. **Offensive Strategy** – This strategy involves an exterior and interior attack and related support directed toward quickly bring the fire under control.
2. **Defensive Strategy** – This strategy involves an exterior attack directed to first reduce fire extension and then bring the fire under control.
3. **Non-Intervention Strategy** – This strategy involves continuous monitoring of the vehicle fire to ensure to no threat to exposures or life is generated and allowing the fire to consume the vehicle. This strategy should only be used in exceptional situations when conditions are not safe or possible for conventional firefighting tactics (e.g. insufficient access, insufficient water supply).

Conventional Vehicle Fires

It is anticipated that most fires involving transportation vehicles will be brought under control by using a pre-connected hose line. It is acceptable to use either a booster line or 1 ¾" hose line for extinguishing these fires. In research by the department, a booster line has shown to be effective at extinguishment for fires involving less than 50% of a normal-sized vehicle. During fire suppression operations it is the responsibility of the Fire Equipment Operator to ensure that the scene is also setup to create a safe zone for the firefighter and company officer to operate. This may include the deployment of traffic cones, emergency incident signs and truck positioning. The second-due fire company to vehicle fires should identify a nearby hydrant and prepare to deliver water from the hydrant or nurse from its booster tank, if necessary.

Large Vehicle Fires

Large vehicles are those that transport products that can be dangerous or hazardous, as well as large fire load vehicles like buses, campers, and motor homes. These vehicles may require additional companies beyond the initial assignment to extinguish the fire and safely mitigate the situation. The IC should identify these types of vehicles in the size-up and request additional resources if needed.

Electric and Hybrid Vehicle Fires

Vehicle fires involving electrical systems contain special hazards and may be difficult to extinguish. Engine companies are equipped with fire blankets and specially designed under-carriage nozzles to help with extinguishment. When responding to fires in electric or hybrid vehicles, the first arriving company should identify these types of vehicles in their size-up, if possible, and implement a combined attack using both a quick knockdown using conventional methods, deployment of the fire blanket and use of an under-carriage nozzle. If the fire is small and located in the passenger compartment of the vehicle, normal tactics can be utilized. If the fire appears to be burning from the underside of the vehicle, the tactics mentioned before must be established.

Large quantities of water (10,000 gallons or more) are expected to be necessary for all electric vehicle fires. In addition, prolonged scene times and the rekindling of fires is commonplace. When crews identify these types of vehicles they should request appropriate additional resources, if needed. Batteries in these vehicles should always be treated as energized and responders should use extreme caution when working around the batteries or any of the high voltage components.

Safety Considerations

Fires in vehicles typically are caused by mechanical problems such as leaks and electrical failure. In fires, air bags and air bag canisters should be identified and

treated as a threat. Leaks involving combustible fluids must be anticipated and may require alternative extinguishing methods (e.g. multipurpose extinguisher).