

# VEHICLE FIRES

## A. Purpose:

The purpose of this guideline is to assure the efficient extinguishment of fires involving vehicles while maintaining the highest level of safety for all responding personnel.

## B. Scope:

This guideline shall that are on fire. For the purposes of this guideline, the absence of smoke or flames shall not constitute sufficient evidence that a fire condition does not exist. Understand that in the majority of vehicular fires, the vehicle will be a “total loss” and that PVFD intervention must **never** compromise safety.

## C. Enforcement

The senior officer has full responsibility for assuring compliance with this guideline. Authority to deviate rests solely with the senior officer who bears full responsibility for the results of any deviation. Under no circumstances shall any aspect of safety be sacrificed in order to increase the speed of the operation.

## D. Positioning of Apparatus and POV (Personally Operated Vehicles)

Apparatus responding to a vehicle fire shall be positioned as far as conditions permit:

1. Assure that fire apparatus are positioned in a way to act as a barrier from traffic flow (highest priority) See also: Roadway Operations
2. Uphill from the involved vehicle to prevent burning fuel from running toward the apparatus.
3. Upwind from the involved vehicle to minimize smoke exposure to the apparatus operator.
4. At least 100 feet from the involved vehicle to provide a safety zone around the involved vehicle.

## E. Danger Zone

A safety perimeter shall be established around the involved vehicle. The area of the safety perimeter shall be all area within a 100-foot radius of the vehicle. All personnel operating within the safety perimeter shall be in full protective clothing and self contained breathing apparatus.

## F. Approach

Firefighters approaching the vehicle shall stay clear of UNSAFE AREAS:

1. directly facing the front or rear of the vehicle
2. directly facing the underside of the vehicle when on its side

## G. Safety

Firefighters should anticipate:

1. multiple or auxiliary fuel tanks
2. exploding fuel tanks
3. LPG or CNG fuel cylinders and supply lines
4. exploding drive shafts
5. exploding tires
6. exploding truck wheels (heavy duty pickups)
7. exploding batteries or multiple batteries (especially on diesel vehicles)
8. hazardous contents
9. toxic smoke from burning materials
10. metal fires (engines and wheels)
11. gas shock absorbers
12. air conditioning systems - high pressure hose connected to A/C equipment that may separate or burst releasing oil and pressurized freon gas.
13. lighting components
14. hatchback, trunk or hood lift cylinders

Under NO CONDITIONS should the gasoline filler cap be removed. This would allow heated gasoline vapors to escape thus increasing the danger level.

## H. Attack Apparatus and Appliances

1. A pre-connected 1 3/4" line is the initial attack line and pump pressure is to be set at 150 psi.
2. A booster line is the SECONDARY line used and is to be concentrated on the fuel tank for cooling purposes.

## I. Attack Guidelines (Attack as a Coordinated Team)

1. The primary attack line shall approach from the side and utilize a straight stream to the fuel tank area if fire is impinging on the area.
2. While approaching the burning vehicle, the primary line may be joined by a secondary line. The secondary line shall continue cooling the fuel area. The

primary line shall "open" its pattern for firefighter protection and fire attack. The pattern shall be as wide as possible to achieve both actions.

3. The secondary line crew should be gaining access to the trunk space for extinguishment if necessary. A halligan bar and/or axe can best be used for accessing a taillight assembly for water distribution into the trunk space.
4. The primary line shall extinguish the under hood area and passenger compartment.
  - a. a pickhead axe (or halligan) shall be used to pierce a hole through the hood for "wall-banger" (TFT nozzle) operation.
  - b. water may be sprayed through the radiator/grill area and up under the fenders.
  - c. a combination of coordinated actions with both lines shall extinguish the remaining fire.
  - d. Use extreme caution when opening the passenger, engine compartment, or trunk. Fire may flash outward when the compartment is ventilated. Always have charged hose lines available before the compartment is opened. All personnel should stand to the side when a compartment is open.

#### J. Overhaul-Full Protective Equipment in Place

1. After extinguishment of visible flame, the firefighters should allow the vehicle to clear of smoke and/or steam for some period of time.
2. Only when all smoke has cleared can SCBA be removed.
3. The electrical system should be secured as soon as possible by disconnecting or cutting the battery cables. Always disconnect the negative or ground cable first.

#### K. Traffic Problems

All personnel should be cognizant of the dangers of vehicle fires, as well as the dangers of traffic control, traffic flow, etc. Police assistance is usually required at vehicular fires. The Fire Department should consider traffic safety and flow, and should attempt to clear the scene as soon as feasible. Fire Department personnel may be used to control traffic, but must utilize flares, flashlights etc. and be in bunker gear or a reflective safety vest. Junior firefighters are prohibited from participating in traffic control operations.

#### L. The Incident Report

The fire report shall contain, but not be limited to the following information:

1. "Normal" incident number, times, etc.

2. Address of fire
3. Name and drivers license of owner/operator; obtain DL direct from the license of the individual
4. Address of owner/operator
5. Police officer and/or police incident number
6. Damaged vehicle storage lot and wrecker service name
7. VIN and license plate numbers Make, model, year of production
8. Estimate of value
9. Estimate (dollars or percentage) and or area(s) of loss
10. Possible cause
11. First material ignited
12. Area of ignition
13. Insurance company

#### M. Return to Service

1. All hose and equipment is to be cleaned and repacked
2. Refill the tank at a hydrant near the scene, if possible. This will place the engine in service sooner and also test the hydrant.
3. Replace SCBA with full tanks and refill the empty tanks at the station.
4. All personnel shall respond to the area designated as the clean-up area.