



East Fork Fire and Paramedic Districts
Training and Safety Division

STRUCTURE

TOPIC: VEHICLE FIRE SAFETY

TIME FRAME: 1:00

METHOD: VIDEO

OBJECTIVES:

- Describe new vehicle components
- Describe vehicle fuels and propulsion systems
- List the 10 guidelines for vehicle fire attack
- Discuss EFFPD Vehicle Fire Procedure

MATERIALS NEEDED:

- Video Link
- Vehicle Fire Procedure (Attached)

REFERENCES:

http://www.heinefilm.com/FETN/FETN_VH1_APPROVAL.wmv

ASSIGNMENT:

- Review Vehicle Fire Procedure

SUNPRO CODE:

- STR 14.11

EAST FORK FIRE AND PARAMEDIC DISTRICTS

VEHICLE FIRE PROCEDURE

SCOPE: This policy applies to automobiles, pick-up trucks, and light duty vans reported to be on fire. The absence of obvious smoke or flame shall not constitute sufficient evidence that a fire condition does not exist. This policy is intended for suppression operations only.

PROCEDURE:

SECTION I

Apparatus Approach and Positioning: Apparatus responding to vehicle fires shall be positioned (as conditions permit):

- Uphill from the involved vehicle
- Upwind from the involved vehicle
- At least 100 feet from the involved vehicle
- Between working firefighters and approaching traffic

SECTION II

Safety Perimeter: A 100-foot safety perimeter shall be established around the involved vehicle. The incident commander shall evaluate this area for obvious safety hazards. For instance, power lines, hazardous materials, fuel spills, etc. All personnel operating within the safety perimeter shall be in full protective clothing with self-contained breathing apparatus.

SECTION III

Life Safety: The safety of emergency personnel and the rescue of trapped or threatened public are of primary importance. Hose placement between trapped or threatened people and the fire without undue risk to firefighters shall be of primary concern.

Consideration must be given to the following potential hazards:

- Hazardous materials
- Shock absorbing bumpers
- Pressurized fuel systems, multiple or auxiliary fuel tanks, never open a fuel cap to relieve pressure.
- LPG or LNG fuel tanks
- Sealed drive shafts
- Other pressurized systems, i.e. tires, air conditioning system & hoses
- Multiple batteries
- Hood springs weakened by fire exposure – block them up
- Air bags – cool air bag areas with water spray
- Vehicle movement

EFFPD, VEHICLE FIRE PROCEDURE

Continued

SECTION IV

Incident Stabilization: Exposure protection must be considered. If a vehicle fire is threatening or extending to a structure or wildland, protection of those exposures is the primary fire attack concern. Extinguishment of the vehicle is secondary.

The initial attack shall be made with a line capable of delivering at least 100 GPM. As soon as practical, the initial line shall be backed up with a second line capable of flowing 100 GPM, or the officer shall carry an ABC extinguisher of not less than 20 pounds extinguishing agent.

The vehicle shall be approached from a 45-degree angle so firefighters are not in a direct line with the front or rear bumpers or sealed drive lines. When the involved vehicle is on its side approach should be avoided toward the undercarriage of the vehicle. When approaching a well-involved vehicle a wide fog pattern will provide some protection for firefighters.

When safe to do so, the wheels of the vehicle should be blocked front and rear to prevent movement during fire suppression operations.

Any fire exposing the fuel tank(s) should be controlled first. Exposed fuel tanks should be cooled to minimize internal pressure and possible rupture. **DO NOT OPEN A FUEL CAP TO RELIEVE TANK PRESSURE.**

Use extreme caution when opening engine, passenger, or cargo compartments. The fire may flash outward when the compartment is ventilated. Have a charged hoseline available before the compartment is opened. Personnel should stand to the side upon opening. These compartments shall be opened and inspected for possible fire extension.

The electrical system should be secured as soon as possible by disconnecting battery cables. Cut battery cables only if unable to disconnect them. Disconnect or cut the ground (usually negative) cable first.

SECTION V

Property Conservation: Prior to overhaul, consideration must be given to investigating the cause of the fire. Many vehicle fires are simply explained; however, many vehicle arson crimes go undetected because there was no investigation of the fire cause.

Request an investigation if suspicious circumstances exist, or if the loss is in excess of \$5,000.00.

Like most fires, vehicle fires must be completely extinguished prior to departure of the fire department. It is recommended that fire units remain on scene until the vehicle is secured and towed away. Repositioning of vehicles by tow trucks can cause rekindles. Debris should be cleared from the roadway - usually by the tow truck company.

Acknowledgement is given to the Michigan Fire Service News, March, 1989