

#### 4.04 VEHICLE FIRES

Scope- This procedure is intended to provide guidelines for the extinguishment of vehicle fires. This procedure applies to automobiles, light duty trucks, medium trucks, tractor trailers, campers, buses, trains, construction equipment, motorcycles and other on and off road vehicles. This policy does not apply to vehicles involved in hazardous materials accidents or to vehicle fires inside of structures.

Size-Up- Upon arrival on the scene, the officer in charge shall size up the situation informing the dispatch center of the vehicle type involved and the nature of the problem.

Special attention shall be made to identify any and all placards and/or labels that may provide essential information to the Incident Commander for the safety of all persons involved.

The Truck shall, if possible, position uphill and upwind from the vehicle(s). The Truck shall be positioned approximately 100 feet from the vehicle. On busy roads the Truck may need to be positioned behind the vehicle fire to provide a safe area for fire fighters to work; i.e. other vehicle traffic.

Fire Control- **NEVER APPROACH A BURNING VEHICLE FROM THE FRONT!!!**

Fire Control shall be made with an offensive attack using a 1-1/2 inch hand line with piercing nozzle attached. The attack shall be made from the unburned side of the vehicle. Additional lines shall be used as required for the control of the fire or protection of exposures. Trucks equipped with booster lines; a booster line may be used if limited personnel exist and if the vehicle is not fully involved in fire. Penetrate engine compartment with piercing nozzle either through fender above tire or open side of hood with halogen tool enough to ram piercing nozzle in. Deluge fire with water or foam until engine compartment has cooled to below 250 degrees. Check with thermal camera to verify. Always keep the front of burning vehicles clean of personnel until engine compartment is cooled down.

Depending on the vehicle involved, additional engines may be requested because of limited water supplies on highways or additional manpower. 5371 or 5382 may be requested for the use of specialized equipment if necessary.

At least one hand line shall remain operational until the vehicle is removed from the scene or rendered safe for vehicles that cannot be moved immediately.

Batteries shall be disconnected and other possible ignition sources eliminated to prevent to ignition of flammable vapors or chemicals.

Overhaul- Caution shall be taken during overhaul procedures so that the origin and cause of the fire may be determined. Overhaul shall be performed so that a rekindle of the fire will not occur.

Safety- All persons shall be in full protective clothing including self-contained breathing apparatus. Caution shall always be exercised because of the possibility of hazardous materials.

Fire fighters shall avoid the front and rear bumpers of vehicles as they have been known to explode and travel great distances.

Fire fighters should be aware of possible drive shaft explosions. Drive shafts are more apt

to explode when removed from the vehicle and in storage. The ends of the shafts appear to be the weakest points. The majority of the shafts open up (split) near the ends. An overturned vehicle is less susceptible due to less heat being generated under the shaft.

Be prepared for more than one explosion of a fuel tank. Fire fighters may approach a vehicle, after an explosion has occurred, believing it to be safe. The first explosion may only cause a slight rupture of the tank. If the tank is still rapidly heated, a second explosion may result sometimes more violent than the first.

Hydraulic lines and reservoirs often explode when heated. Flaming hot oil may cause severe burns.

Vehicle batteries are also cause for concern. When heated, the caps may blow off. In some cases, the batteries may split open.

Adequate law enforcement personnel must be present to control traffic hazards. Fire fighters present that are not critical to the operation shall stay out of the roadway in a safe location.