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## Report of the Week REWIND

"Airbag deploys after extinguishment."

5/31/2012

**Report Number:** 06-0000527

Report Date: 10/24/2006 17:27

### Synopsis

Air bag deploys after extinguishment.

### Event Description

Our engine company with 3 personnel responded to a report of a vehicle on fire. Upon arrival, they found a 2005 [make/model deleted] pick-up truck with a well-involved engine compartment fire. There were no occupants and no extension into the passenger compartment. The fire was quickly extinguished with a 1.75" preconnect. Approximately 3-5 minutes after extinguishment, while making entry into the engine compartment, the passenger-side airbag forcefully deployed, and broke the windshield. Fortunately, no firefighters were near the airbag and an injury was avoided.

### Lessons Learned

1. It is extremely important to wear your full PPE.
2. Do not let your guard down simply because the fire has been controlled. Just as in structural firefighting, overhaul of a vehicle fire should be done with caution.
3. Do not assume that just because the fire was confined to the engine compartment that the fire has not adversely affected components of the car in different locations. Remember that the airbag sensors can be located at the front of the vehicle and can be triggered by forcible entry.
4. Remember the "5-10-20 rule" when operating around airbags, be it a fire or an extrication. Maintain a minimum 5" away from side airbags, 10" from driver side airbags, and 20" from passenger side airbags.

### Demographics

Department type: Paid Municipal

Job or rank: Captain

Department shift: 48 hours on - 96 hours off

Age: 34 - 42

Years of fire service experience: 17 - 20

Region: FEMA Region VIII

Service Area: Urban

### Event Information

Event type: Fire emergency event: structure fire, vehicle fire, wildland fire, etc.

Event date and time: 10/19/2006 15:03

Hours into the shift: 9 - 12

Event participation: Told to and submitted by safety officer

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Weather at time of event:

Do you think this will happen again? Yes

What were the contributing factors?

- Other
- Situational Awareness

What do you believe is the loss potential?

- Life threatening injury

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## Report of the Week

Welcome to the May ROTW REWIND, featuring Report [06-527](#) from an October 2006 ROTW.

Auto fires are sometimes the type of call that will lead us down the road of complacency. They may not seem like much, but have the potential to injure or even kill firefighters that are not prepared for the unforeseen dangers. It is extremely important that we always wear our full PPE even when we are "mopping up" the auto fire. You should never let your guard down simply because the fire has been controlled and just like in structural firefighting, overhaul of a vehicle fire should be done with caution. Do not assume that just because the fire was confined to the engine compartment that the fire has not adversely affected components of the car in different locations. As you read this ROTW REWIND, think about what discussions you have had in your organization regarding your approach to auto fires and other related auto emergencies. Post your comments on the near-miss [Facebook page](#).

*"Our engine company with three personnel responded to a report of a vehicle on fire. Upon arrival, they found a 2005 [make/model deleted] pick-up truck with a well involved engine compartment fire. There were no occupants and no extension into the passenger compartment. The fire was quickly extinguished with a 1.75 inch handline. Approximately 3-5 minutes after extinguishment, while making entry into the engine compartment, the passenger-side airbag forcefully deployed and broke the windshield. Fortunately, no firefighters were near the airbag and an injury was avoided."*

Today's vehicles pose many new dangers for emergency responders. Advanced technology has made its way into the vehicles we drive. From dual inflator airbags to vehicles with an excess of 500 volts, automakers are making huge strides in vehicle safety for the occupants that drive them. The very technology that is used to save occupants can place firefighters and EMS providers in harm's way. We must deploy simple and "practiced" strategies to keep ourselves safe when dealing with auto fires and other related auto emergencies. We must consider the auto as an IDLH atmosphere and use the same diligence as other hazardous conditions. Something as simple as the use of the "5-10-20 rule" when operating around airbags can help reduce errors and keep us safe. The rule states to keep a minimum 5 inches away from side airbags, 10 inches from driver side airbags, and 20 inches from passenger side airbags.

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In addition, there has been an increase in the number of electric and hybrid vehicles on the roads. Firefighters/EMTs need to be prepared to respond to incidents involving these vehicles. Many resources are available to responders including NFPA's [Electric Vehicle Safety Training](#) website and the IAFC's free [Hydrogen Response Considerations](#) online course.

### **Discussion Questions:**

Each year there are approximately 400,000 vehicle fires in the United States. Most of these events are handled by a single engine company and possibly an EMS unit. The hazards associated with these incidents are among our most dangerous responses. The focus on vehicle fire safety has concentrated primarily on pressurized vessels in the engine compartment, tires and low speed impact bumpers. We need to continually remember the other hazards like airbags and pressurized and non-pressurized containers that may be found in the passenger compartment and trunk. This week's ROTW REWIND focuses on this new safety hazard. After reading report [06-527](#) consider the following:

1. What is the "safe angle of approach" to a vehicle fire?
2. What is the appropriate level of PPE needed for fighting vehicle fires?
3. What is the minimum size attack line and gpm flow for a vehicle fire?
4. List all the hazards you can think of when it comes to fighting a vehicle fire. What steps do you take to mitigate them?
5. Given the circumstances surrounding this incident, when is the vehicle fire scene "safe"?

### **Related Reports- Topical Relation: Auto Accidents, Air Bags, Auto Fires**

[06-476](#)

[06-382](#)

[06-372](#)

[09-650](#)

[10-1126](#)

[11-176](#)

Submit your report to [www.firefighternearmiss.com](http://www.firefighternearmiss.com) today on a similar call you have run. Remember that the ROTW REWIND will appear the last Thursday of every month. Please email [ROTW@firefighternearmiss.com](mailto:ROTW@firefighternearmiss.com) with your feedback on this new feature, ROTW REWIND.

*Note: The questions posed by the reviewers are designed to generate discussion and thought in the name of promoting firefighter safety. They are not intended to pass judgment on the actions and performance of individuals in the reports.*

*If you would like to subscribe to the ROTW please e-mail [ROTW@firefighternearmiss.com](mailto:ROTW@firefighternearmiss.com) with "Subscribe" in the subject line.*

[Firefighternearmiss.com](http://www.firefighternearmiss.com) is funded by a grant from the U.S. Department of Homeland Security's Assistance to Firefighters Grant program. Founding dollars were also provided by [Fireman's Fund Insurance Company](#). The project is managed by the International Association of Fire Chiefs and supported by [FireFighterCloseCalls.com](http://www.FireFighterCloseCalls.com) in mutual dedication to firefighter safety and survival.

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