

Electric Vehicles

Overview

- **There are no universally accepted tactics**
- **Plan on a long term operations**
- **Plan on relocation**
- **Plan on a storage location**



Electric Vehicles

Electric Vehicle

- **Accident:**
 - Be prepared for fire
 - Hoseline in the street if EV is damaged
 - Secue the vehicle
 - Disable vehicle with emergency plug
 - Evaluate mechanism of damage



Electric Vehicles

Electric Vehicle

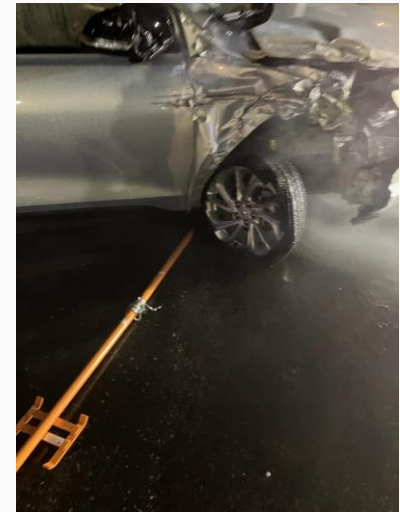
- **Accident:**
 - Be prepared for fire
 - Hoseline in the street if EV is damaged
 - Secue the vehicle
 - Disable vehicle with emergency plug
 - Evaluate mechanism of damage
 - Anticipate firefighting
 - Extrication Operations



Electric Vehicles

Electric Vehicle

- **Vehicle Fire**
 - Extinguishment is with water
 - Foam and extinguishers are ineffective
 - Attack line on vehicle as normal
 - Cooling nozzle underneath on battery
- Allow the vehicle to burn
- Submerge in a dumpster



Electric Vehicles

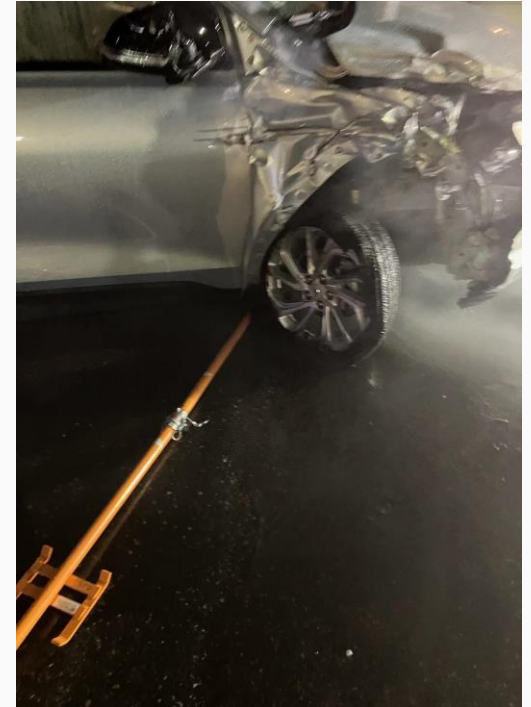
Electric Vehicle

- **Vehicle Fire**
 - Establish a plan
 - Anticipate water needs
 - Anticipate a long term operation
 - Tactical Relocation



Electric Vehicle

- **Location - Garaged**
 - Extinguish visible fire
 - Cover with a fire blanket
 - Continue to apply water on battery until ready to move outside
 - Plan on a vehicle removal operation
 - Underground / Under structure parking
 - Parking garage
 - Residential garage



Electric Vehicles

Electric Vehicle

- **Location - Highway or Major Road**
 - Extinguish visible fire
 - Cover with a fire blanket
 - Continue to apply water on battery until ready to move
 - Plan on a vehicle removal operation
 - Move to an area to complete extinguishment
 - Move to an area with a water supply
 - Re-open the highway



Vehicle Dolly

Mechanics vehicle dollies

Remove from a parking spot

Remove from a garage

Remove from an exposed area



Car Fire Blanket

Fire Blanket

Extinguishment

Exposure Protection

Tow protection



Emergency Plug

Secure the vehicle

Wheel chocks may
not be effective

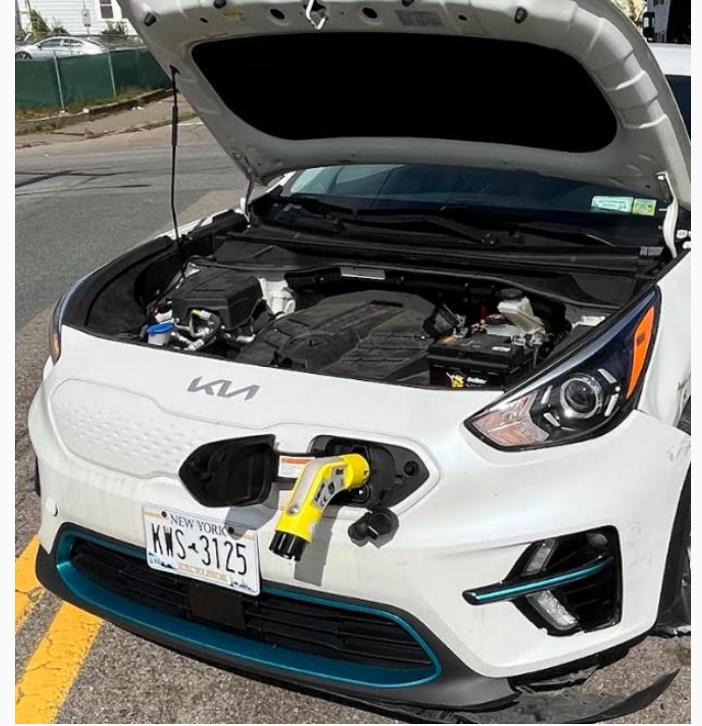


Emergency Plug

Secure the vehicle

Each vehicle manufacturer may operate differently

Wheel chocks may not be effective



Lithium Ion Battery Operations

Towing

- Authority to determine tow company
- Plan
- Qualified to tow
- Approved storage location



Lithium Ion Battery Operations

Towing

- Fire extinguished
- Batteries cooled
- 45 minutes of no fire activity
- Covered in fire blanket



Lithium Ion Battery Operations

Towing

- Batteries unsecured
- Placed in roll-off dumpster



Lithium Ion Battery Operations

Towing

- Police escort
- Fire escort
- Off-Load



EV Fire Nozzle

Placed under the vehicle

Water is applied directly to
where it needs to be

Reduces water supply demand

Reduces runoff

Unmanned



Electric Vehicles

Electric Vehicle Fires

- There are no universally accepted tactics
 - Plan on a long term operations
 - Plan on relocation
 - Plan on a storage location
-
- Have a plan

