

Vehicle Rescue Technician
is being presented by
Bolivar City Fire Department
and
Fire and Rescue Training Institute
MU Extension



Why do extrications go bad?

Auto Accident Statistics:

Leading cause of death in Americans ages 5 to 32.

13% of firefighter deaths result from vehicle accidents.



Reach the Scene Safely



Definitions:

Rescue - Assessing, stabilizing, protecting, and removing a victim from entrapment.

Extrication – Part of Rescue. Safely and efficiently freeing victims from entrapment in vehicles of all types.

Disentanglement – Part of vehicle extrication. Removal and/or manipulation of vehicle components to remove a victim from the vehicle. Also known as removing the vehicle from the victim.

Safe Vehicle Extrication:

- 1) Establish Command / Size Up
- 2) Stabilize the Situation
- 3) Devise Safe Plan to Remove Victims
- 4) Safely Implement the Plan



When does size up start?

Vehicle Dynamics and Mechanism of Injury:

Rescue vs. Recovery

Rescuers First, Victims Second

Vehicle Construction and Crash Dynamics directly influence how victims are trapped and the method to remove them.

Polaroid Camera

What are some scene hazards?

How do we protect ourselves from these hazards?

Framed vs. Unibody Vehicle Construction:



Rails and Cross Members

Crib Frame

Cutting, Bending, & Removal of Body Components usually does not affect stability

Body of Vehicle is Structural Support

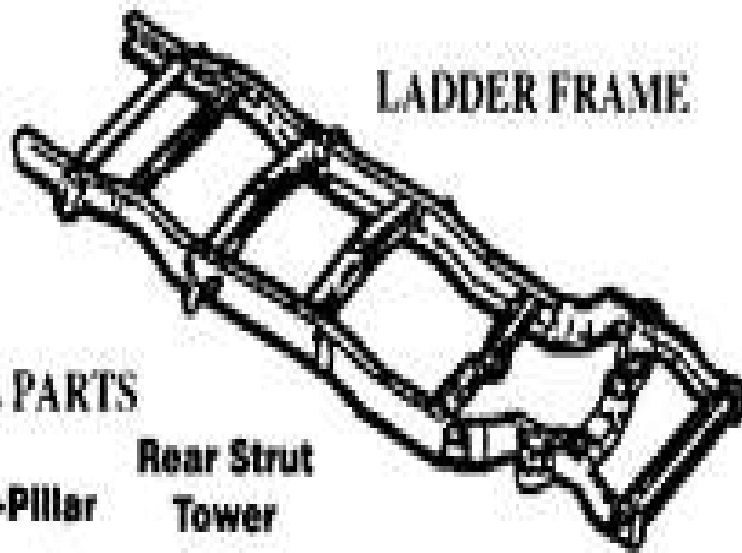
Crib at Strength Points

Checking Cribbing is essential

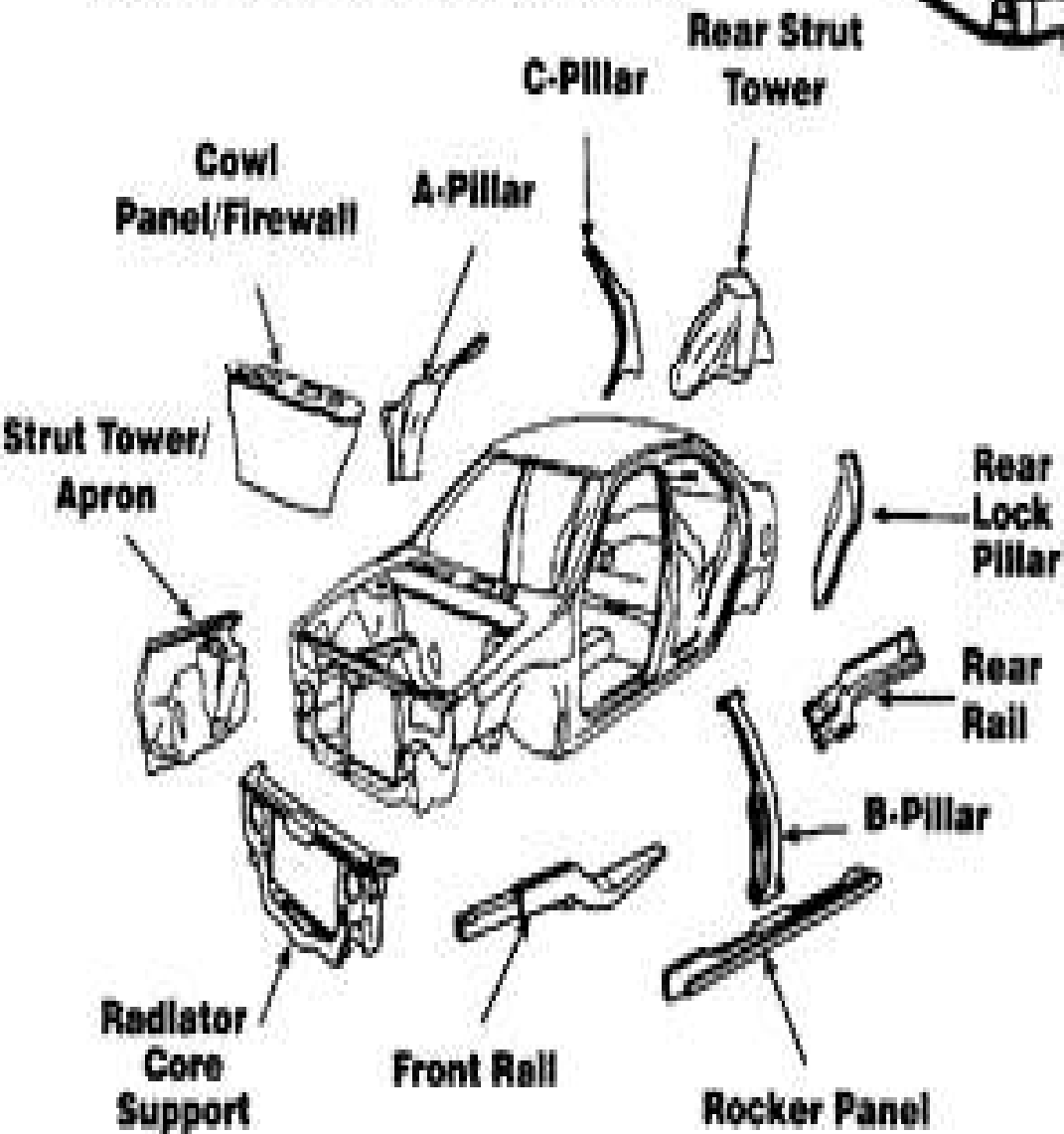
Cutting, Bending, & Removal of Body Components does affect stability and may cause failure



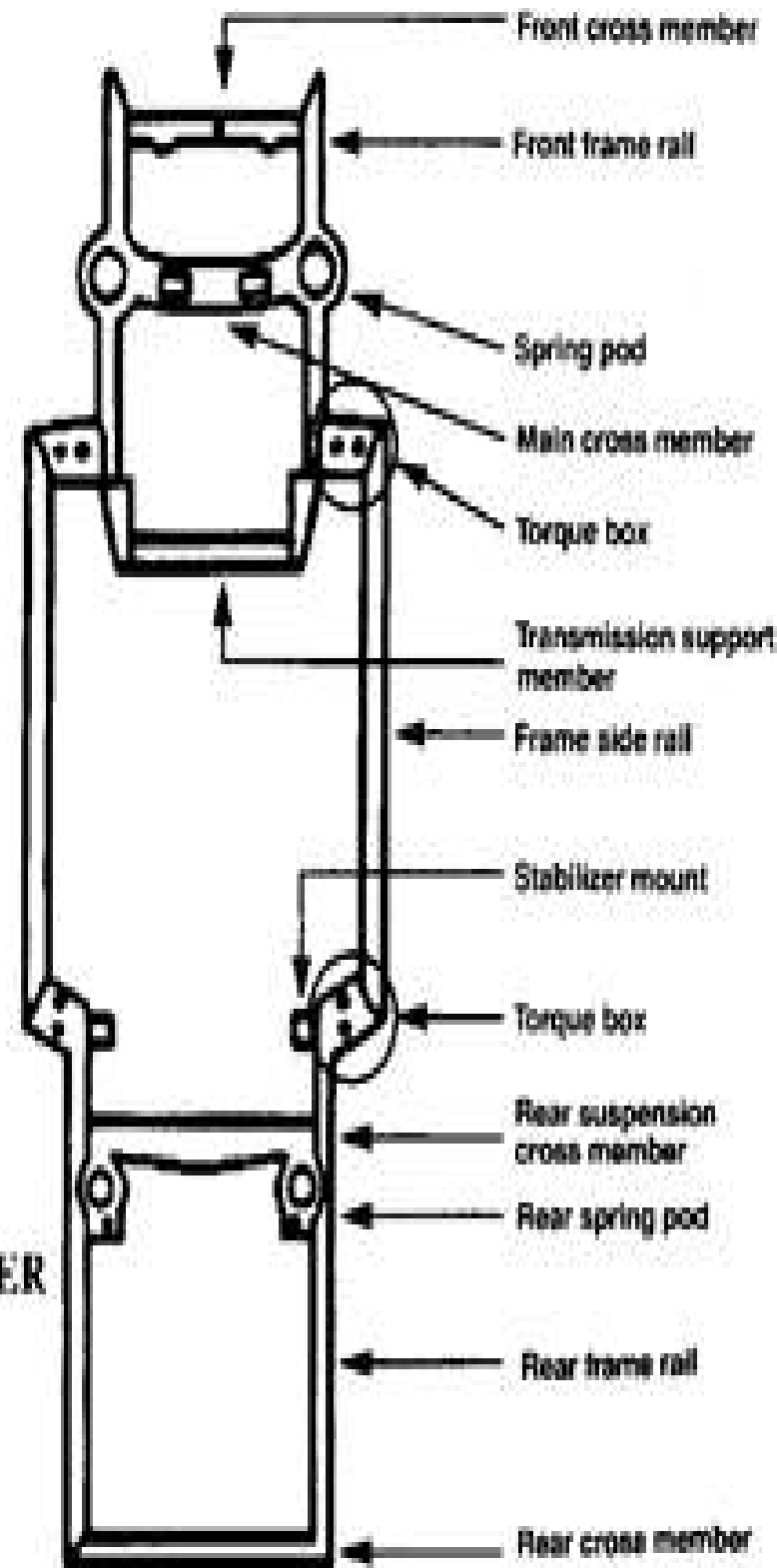
LADDER FRAME



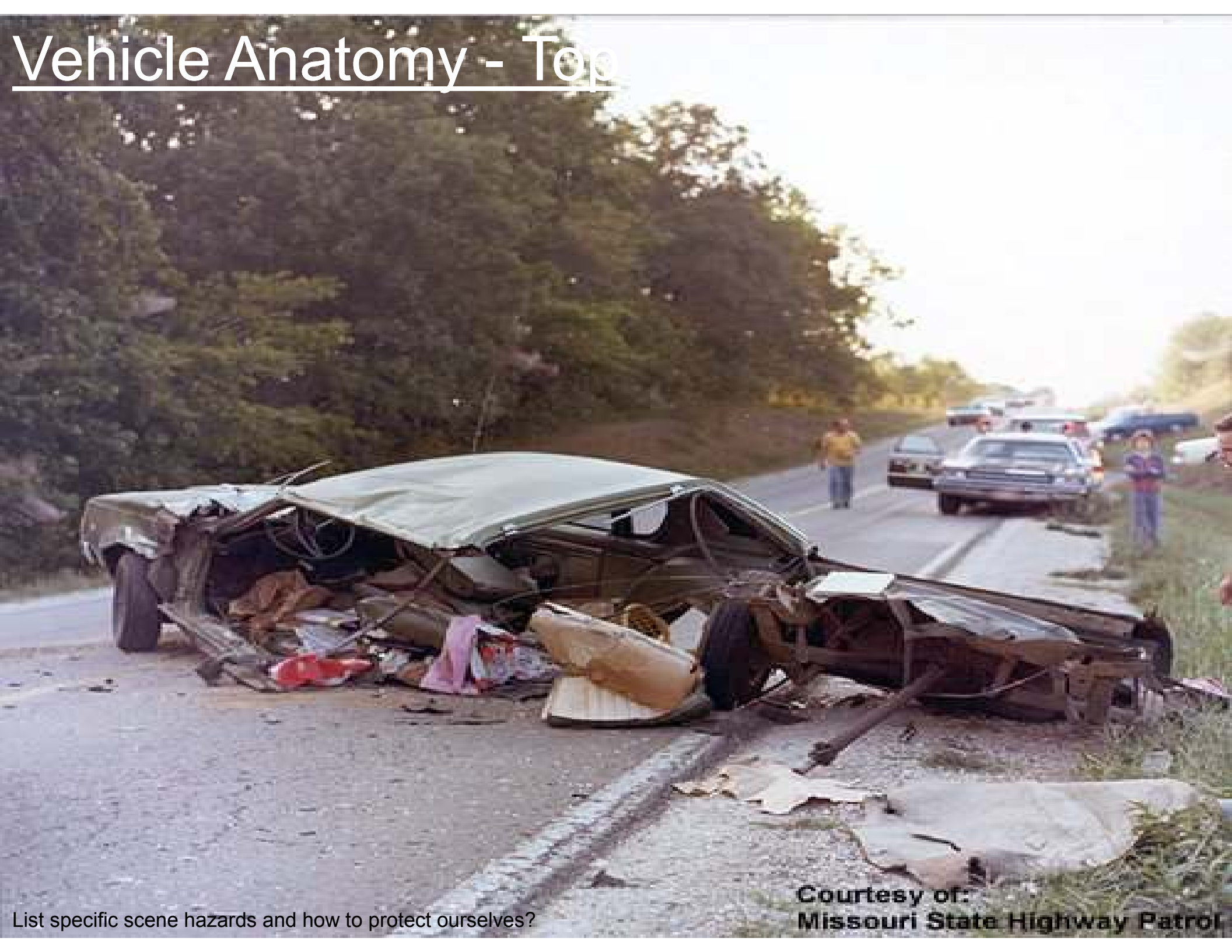
UNIBODY STRUCTURAL PARTS



PERIMETER FRAME



Vehicle Anatomy - Top



Courtesy of:
Missouri State Highway Patrol

List specific scene hazards and how to protect ourselves?

Vehicle Anatomy - Bottom



List specific scene hazards and how to protect ourselves?

Vehicle Anatomy – Driver's Side



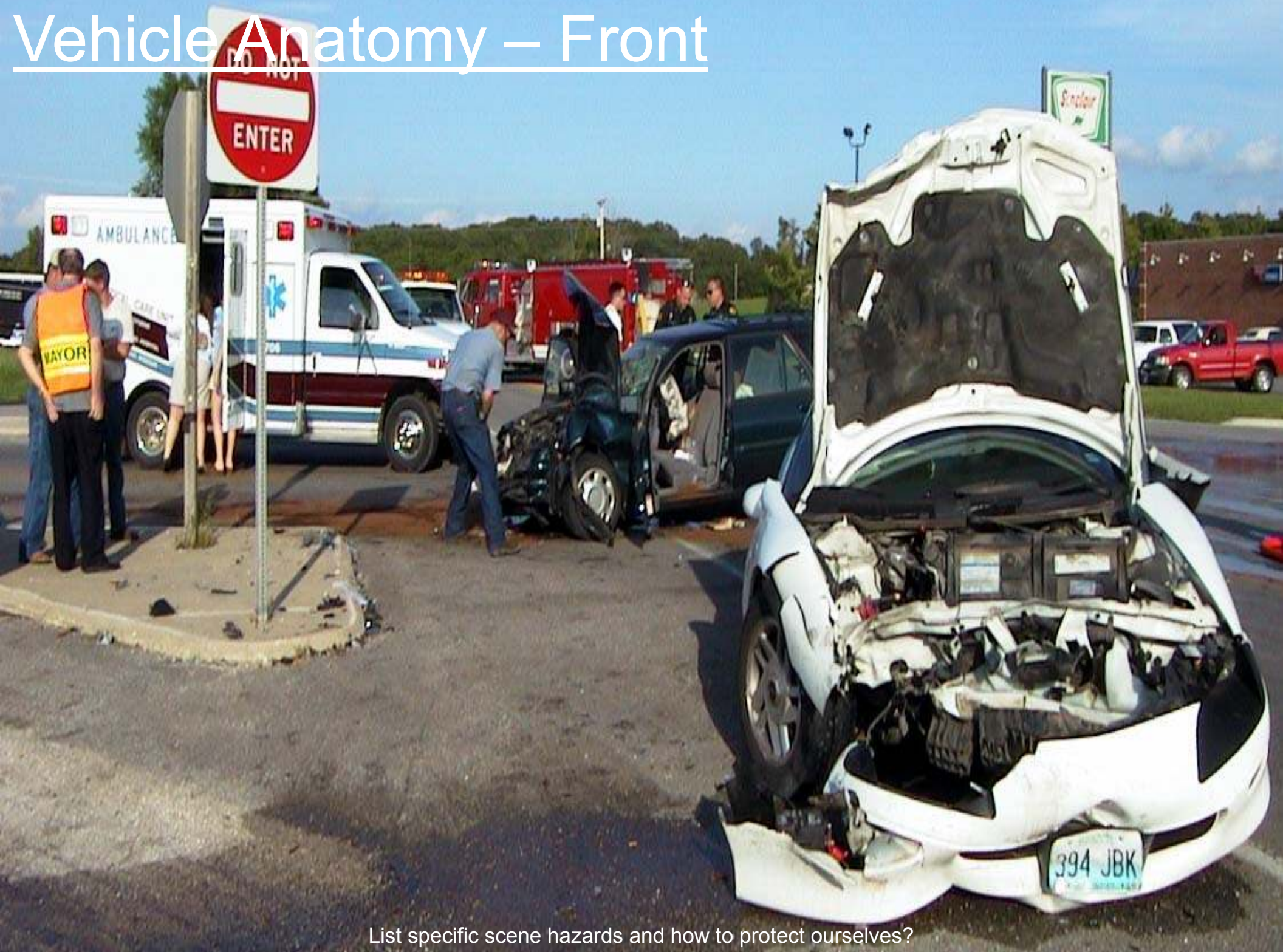
List specific scene hazards and how to protect ourselves?

Vehicle Anatomy – Passenger's Side



List specific scene hazards and how to protect ourselves?

Vehicle Anatomy – Front



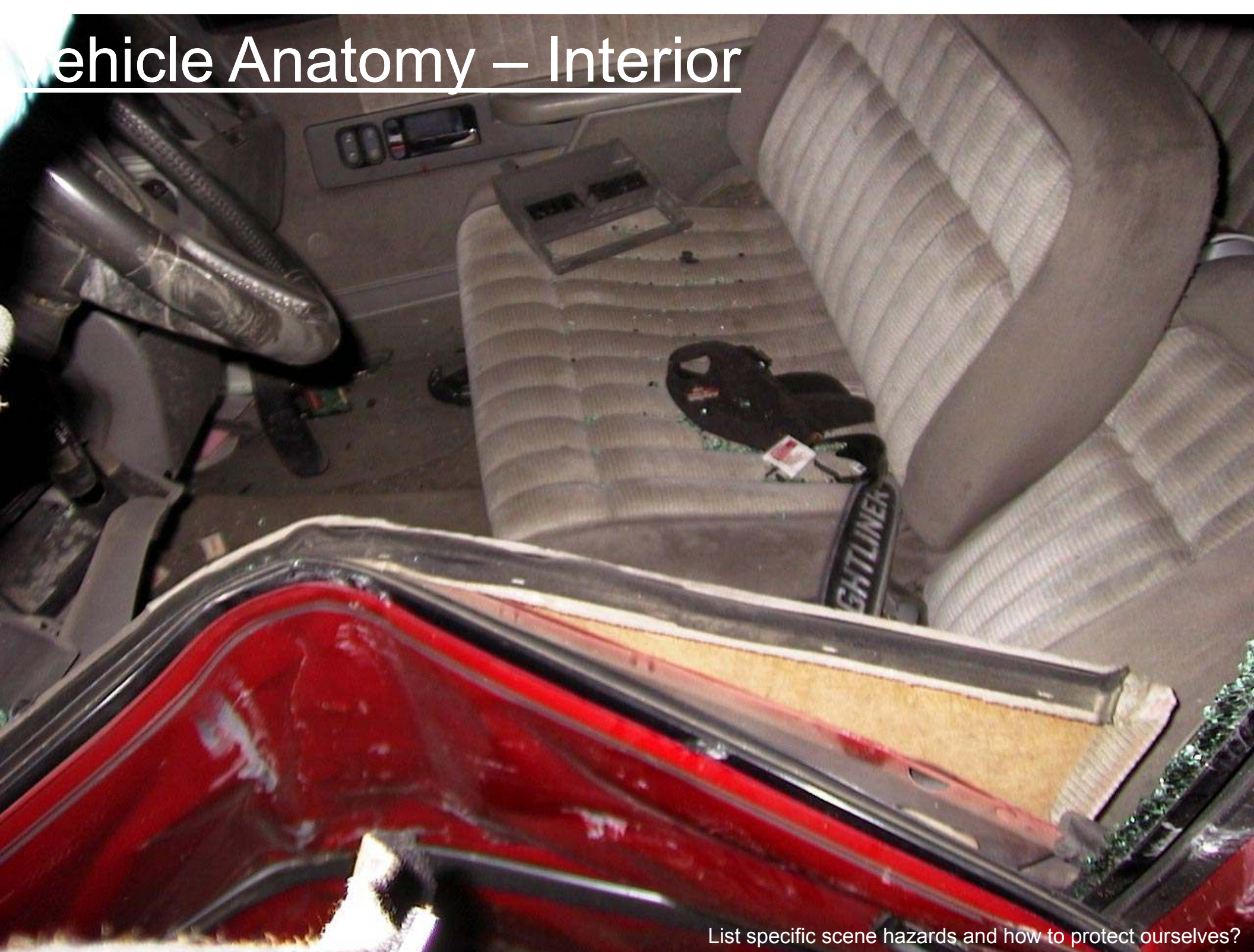
List specific scene hazards and how to protect ourselves?

Vehicle Anatomy – Rear



List specific scene hazards and how to protect ourselves?

Vehicle Anatomy – Interior



List specific scene hazards and how to protect ourselves?

Vehicle Anatomy – Exterior



List specific scene hazards and how to protect ourselves?

Vehicle Anatomy – Additional:

Door / Roof posts – Identified alphabetically, front to back

Quarter Panels – Door to rear bumper

Kick Panels – Lower half of A post

Fenders – Door to front bumper



Hybrid
Vehicles:

Honda Civic



Honda Insight



Toyota Prius

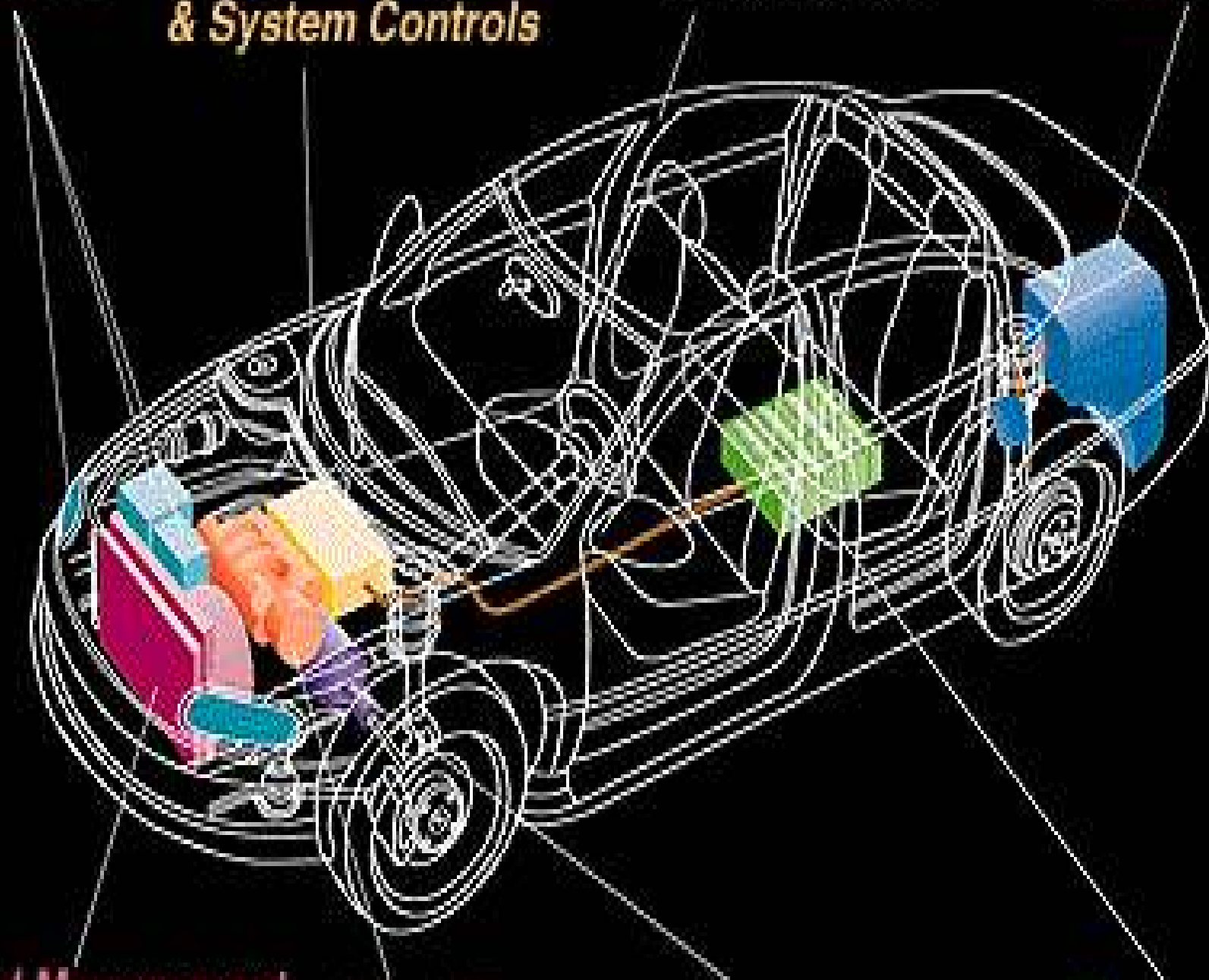


Accessories

*Energy Management
& System Controls*

Body Chassis

Fuel Tank

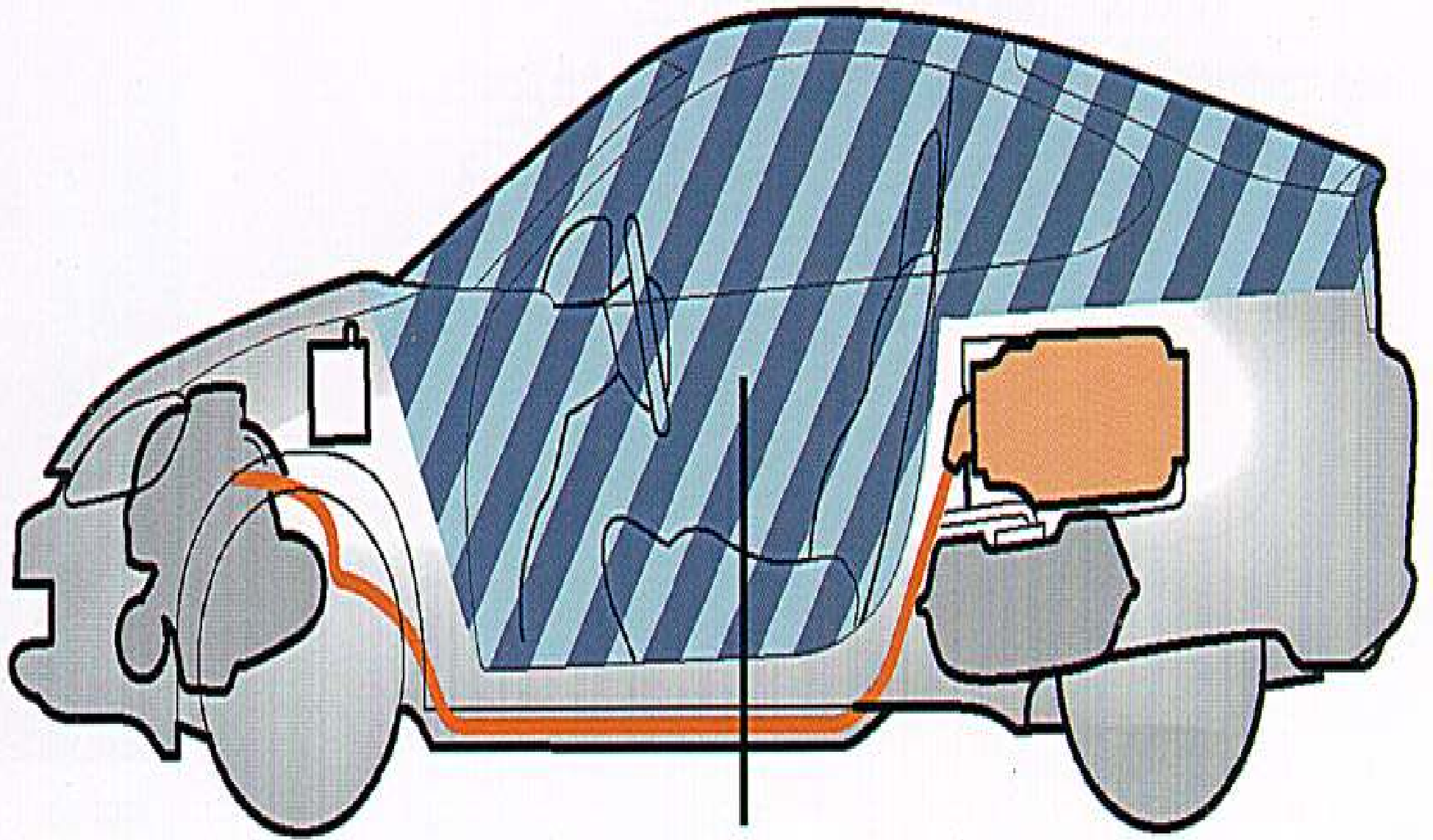


*Thermal Management
System*

*Hybrid Power
Unit*

Traction Motor

*Energy Storage
Unit*



Cut Zone