



This 3 Day Train the Trainer fully Participants to Teach the Latest in Vehicle Extrication

The first and third day of this course are spent studying current and future airbag hazards, advanced steels, patient care, vehicle construction, alternatively fueled vehicles (including hybrids, fully electric, natural gas and hydrogen fuel cells), basic and advanced techniques, techniques for teaching vehicle extrication in the classroom and in the field, and much more (see below for full details). Also included in the classroom portion is a tour of new vehicles that possess the features studied in class. The second day is spent in the field. This provides for plenty of hands on time to learn new skills.

Program Outline

Day 1 of 3 - Presented By Brock Archer

- **0900 – Orientation:** Introductions, etc.
- **1000 - Vehicle Construction:** Changes in vehicle construction, modern vehicle construction challenges, construction materials, push and pull points, directing metal rip, tool vs. material, anatomy, and common terminology will all be covered in this segment.
- **1100 – Instructor Resources:** This segment covers everything instructors need to stay up to date with what's happening with vehicle extrication. NFPA standards, printed and online resources, acquiring tools and vehicles for training, teaching tips, dealing with local facilities, and more will be covered.
- **1200 - Lunch Break**
- **1300 – Emergency Response to Fully Electric Vehicles :** In this module instructor Archer sheds light on current and future electric vehicles. High voltage components are explained and participating instructors are shown the simple steps required to safely interact with EV's at emergency incidents. Battery locations, stabilization considerations, shut down procedures and more are covered.
- **1430 – Extrication Involving Alternatively Fueled Vehicles:** Compressed Natural Gas, Liquid Natural Gas, Electric, Propane, Straight Vegetable Oil, Bio-Diesel, and Hydrogen will be covered in detail.

- **1530 – Basic & Advanced Techniques:** Instructor Archer will shed light on basic extrication techniques with great attention to detail. Causes of the common problems rescuers encounter will be covered so a more consistent result can be achieved. Dash Displacement, Door Removal, Roof Removal, Total Side-Wall, Hood & Trunk Access will all be covered. Then during the advanced techniques section, Brock will cover Dash Displacement Alternatives, Vehicles on Roof and Side, Stacked Vehicles, Under-Rides, Side Impact, Lifting, and various other probable site situations and on scene hazards.

- **1630 – Highway Safety:** PPE, Roadway Anatomy, Responding, Working with Other Agencies, Traffic Control, Apparatus Placement and Parking, Special Situations, and other aspects of what may be faced at scene

- **1700 – Dismissal**

Day 2 of 3 - Presented By Brock Archer

- **0900 to 1700 - Hands on Extrication:** During these two full days of hands on, participants will have plenty of time to practice all of the evolutions discussed in class. Instructors are also encouraged to try any new ideas or evolutions. Instructional demonstrations include: how to wire an airbag for class demonstrations, using older vehicles in advanced steel trainings, and getting the most out of available vehicles. During this segment of the training, participants will use the latest in hydraulic tools, stabilization equipment, and hand tools.

Day 3 of 3 - Presented By Brock Archer

- **0900 - Procedures for Airbag-Equipped Vehicles:** This program presents an instructor's overview of airbag systems including what the basic components are, how the various frontal, side, and interior supplemental restraint systems work, and what systems are currently in place in current model year vehicles. Rescuer-friendly explanations include discussion of airbags that can actually inflate twice, the challenges of the newest 10,000 psi stored gas inflators, and new airbag systems such as the carpet airbag, seatbelt airbag, and pedestrian airbag.

- **1200 - Lunch:** During This Time Participants Will Be Invited to Look Through Several Late Vehicles With Modern Airbags Hazards, Odd Battery Locations and Advanced Steels. Instructor Archer will remain available to answer questions.

- **1300 - Emergency Procedures for Hybrid Vehicles & Fully Electric Vehicles:** The Hybrid & Electric Vehicle Emergency Procedures program discusses the gasoline electric hybrid and fully electric vehicles that are out there and what to do with them at an emergency scene. Toyota and Honda started it all in 2001 and now hybrid vehicles and these vehicles can have a 400volt+ DC battery. This module addresses

a unique Advanced Extrication protocol for safely dealing with these vehicles under emergency situations such as crash, fire, submersion, lockouts, etc. From an instructor's perspective, you will learn about the myths and urban legends that your training program participants might ask you about in your class. Instructors must be prepared for some wild urban legends. Learn what they are now as Brock explains how to teach hybrid vehicle practices and procedures.

- **1430 – Patient Care:** Vehicle Extrication is one of the most challenging tasks that rescuers are asked to perform. It's a discipline where the skills of the rescuer have a significant effect on the outcome of the patient. When an occupant of a vehicle is subject to sudden unexpected trauma, the care that is giving at scene plays an important role in their overall treatment. In this Module Brock will share his experiences in patient care and cover the critical considerations that must be made by rescuers when treating occupant of a vehicle accident. Immobilization, mechanism of injury, basic life support care, rapid extrication, patient comfort, and more are covered in this module.

- **1600 - Extrication Involving Vehicles with Advanced Steels:** A vitally important presentation called Extrication Involving Vehicles with Advanced Steels will cover the challenges of the new structural steels being used in vehicles to increase their crashworthiness. Steels such as Boron are up to eight times stronger than the metal we typically find in vehicles and may be beyond the cutting capability of your rescue tools. Brock will explain what he learned during years of research on these steels and what you can do to prepare for Advanced Steels at your next crash scene. A very important aspect is how instructors can simulate Advanced Steels on older, acquired vehicles. Brock will explain a very unique and effective way to improve your extrication training.

- **1700 - Dismissal**

All participants will take home multiple class handouts and a link to a file containing all of Instructor Archer's presentations and notes, including videos, pictures and Power-Points to be used designedly in the participants' department. Although pictures from the training will be made available, attendants are also encouraged to bring a video and/or still camera to the hands on portion of the class to gather media for their trainings.