

ALTERNATIVE FUEL VEHICLE DAMAGE ANALYSIS

ALTO4e

Alternative fuel vehicles offer many differences from their internal combustion engine counterparts and special considerations need to be made when doing collision repairs. Mastering terminology and knowing different types of electric vehicles are essential to helping ensure a safe and cost-effective repair.

This course will provide an overview of issues and concepts related to electric and hybrid electric vehicle technology and equip technicians with information on important safety measures, as well as information needed for a proper damage analysis.

Course Content

Module 1 – Hybrid-Electirc Vehicle Parts

The course begins by examining the different types of electric and hybrid-electric vehicles. The first module continues by describing the high voltage parts associated with these vehicles, including batteries, motors, inverters, converters, chargers, cables, and more.

Module 2 – Hybrid-Electric and Electric Vehicle Features

As the course continues, specific features of hybrid-electric and electric vehicles are examined. These features include high voltage disabling, regenerative braking, start/stop systems, cooling systems, and special service notes. Information found in this module will assist the student with conducting a thorough damage analysis of a damaged electric vehicle.

Recommendations

This online course covers a variety of topics related to electric and hybrid electric vehicles. It is strongly recommended that students have an understanding of electrical systems prior to taking this course. Courses that are helpful include:

- Basic Electronics Damage Analysis (DAM13e)
- Electrical Circuits and DVOM Usage (ELE01)
- Diagnosis, Testing, and Repair of Common Electrical Loads (ELE02)
- Fault Code Retrieval, Diagnosis, and Testing Electronic Systems (ELE03)
- Hazardous Materials, Personal Safety, and Refinish Safety (WKR01)

Registration

To register for Alternative Fuel Vehicle Damage Analysis (ALTO4e), visit the I-CAR website at www.i-car.com or contact I-CAR Customer Care at 800.422.7872.

Course Highlights

Credit Hours: 1

Estimated Duration: 1 hour

Format: Online instruction with test

Meets I-CAR ProLevel® or annual training requirements for the following roles:

-  ESTIMATOR
-  STEEL STRUCTURAL TECHNICIAN
-  ALUMINUM STRUCTURAL TECHNICIAN
-  NON-STRUCTURAL TECHNICIAN
-  ELECTRICAL/MECHANICAL TECHNICIAN
-  AUTO PHYSICAL DAMAGE APPRAISER

After completing this course, you will be able to:

- Identify electric and alternative fuel vehicles and explain how to take safe measures when working on these vehicles
- Know how to properly care for a high voltage battery prior to and during the repair process

To fulfill Knowledge Area requirements, Alternative Fuel Vehicle Damage Analysis (ALTO4e) and Alternative Fuel Vehicle Safety (ALTO5e) must be completed.



I-CAR Training Support Center
5125 Trillium Blvd.
Hoffman Estates, IL 60192
Phone: 800-422-7872
Fax: 800-590-1215
www.i-car.com