# ALTERNATIVE FUEL VEHICLE SAFETY

ALTO5e

Although electric vehicles have been in existence for over a century, today's vehicles are far more advanced than their predecessors. Understanding how to take safe measures when working on alternative fuel vehicles means understanding safety precautions with other alternative fuel vehicles, namely diesel, compressed natural gas (CNG) and liquid propane gas (LPG).

This course will help prepare collision repair professionals to safely approach and repair alternative fuel vehicles and identify other types of alternative fuel vehicles.

#### **Course Content**

## Module 1 – Approaching a Damaged Electric Vehicle

The beginning of the course is designed specifically with the safety of the collision professional in mind and provides an explanation of how to safely approach a damaged electric vehicle is described in-depth. The course starts with interactivity showing how to identify whether the vehicle being approached is electric. The module continues with information on how to access various information sources and concludes with information on how to avoid hazards specific to electric vehicles.

#### Module 2 - Alternative Fuel Vehicles

The course concludes with details on other types of alternative fuel vehicles and their impact to the collision repair industry. Upon completion of the course, the student will better understand the hazards of diesel-, CNG-, and LPG-fueled vehicles, including unique characteristics for each alternative fuel vehicle type.

### **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 (ELEO1)
- Diagnosis, Testing, and Repair of Common Electrical Loads (ELEO2)
- Fault Code Retrieval, Diagnosis, and Testing Electronic Systems (ELEO3)
- Hazardous Materials, Personal Safety, and Refinish Safety (WKR01)

## Registration

To register for Alternative Fuel Vehicle Safety (ALT05e), visit the I-CAR website at www.i-car.com or contact I-CAR Customer Care at 800.422.7872.

## **Course Highlights**

**Credit Hours: 2** 

**Estimated Duration: 2 hours** 

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:

- Explain how to take safe measures when working on hybrid electric and alternative fuel vehicles
- Identify new applications for hybrid technology and unique hybrid system features
- Know how to properly care for a high voltage battery prior to and during the repair process
- Identify the different types of alternative fuel vehicles currently on the market, as well as concepts in tomorrow's technology

To fulfill Knowledge Area requirements, Alternative Fuel Vehicle Safety (ALT05e) <u>and</u> Alternative Fuel Vehicle Damage Analysis (ALT04e) 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