

UNDERSTANDING HIGH VOLTAGE SAFETY

VT405E01

Course Format: Online training with posttest

I-CAR Credit Hours: 1

I-CAR Points: 0.25

This course helps satisfy ProLevel training requirements for the following roles:



Non-Structural Technician



Estimator



Structural Technician



Assessor



Aluminium Technician



Production Management

Pro Spot i4s—Understanding high voltage safety is a 45 minute course that explains the elements of electricity and the relationship between voltage, current and resistance with high voltage systems. This course describes the effects of electricity on the body and lists the required PPE when working around high voltage. The major parts of an electric vehicle high voltage (HV) system, HV safety measures in a vehicle design, and the methods to reduce shock risks are also introduced and described within the course modules.

Course Content

Module 1—Electricity Basics

- Topic 1—Explains the elements of electricity, and the relationship between voltage, current, and resistance.
- Topic 2—Describes the common parts that are required to make an electrical circuit.
- Topic 3—Discusses the effects of electricity on the body in relation to current, voltage, and resistance.
- Topic 4—Lists the personal protection required when working around high voltage.

Module 2—Electric Vehicle Safety

- Topic 1—Discusses the general safety precautions to observe when preparing to work on a high voltage vehicle.
- Topic 2—Describes the main high voltage systems found in most electric vehicles.
- Topic 3—Explains the safety features that are built into the high voltage floating system.
- Topic 4—Describes the high voltage safety measures that vehicle makers have established with policies and procedures that dictate safety protocols.

Learning Objectives

- Describe the common parts that are required to make an electrical circuit
- Discuss the effects of electricity on the body in relation to current, voltage, and resistance
- Describe the high voltage safety measures that vehicle makers have established with policies and procedures that dictate safety protocols
- Discuss the general safety precautions to observe when preparing to work on a high voltage vehicle
- Describe the main high voltage systems found in most electric vehicles
- Explain the safety features that are built into the high voltage floating system
- Lists the personal protection required when working around high voltage



INTRODUCTION TO ELECTRIC VEHICLES

VT430E01

Course Format: Online training with posttest

I-CAR Credit Hours: 1

I-CAR Points: 0.25

This course helps satisfy ProLevel training requirements for the following roles:



Non-Structural Technician



Estimator



Structural Technician

Introduction to Electric Vehicles (EV) is a 30-minute course that introduces the different types of EVs on the road today. This course identifies the unique parts of an EV and the purpose of those parts. Students are also introduced to the EV specific warning indicators that are displayed on the instrument panel with a description of their meaning. Video is also included to highlight the steps for operating an EV for the first time.

ELECTRIC VEHICLE (EV) INITIAL INSPECTION AND HANDLING

VT450E01

Course Format: Online training with posttest

I-CAR Credit Hours: 1

I-CAR Points: 0.25

This course helps satisfy ProLevel training requirements for the following roles:



Non-Structural Technician



Estimator



Structural Technician

Electric Vehicle (EV) Initial Inspection and Handling is a 30-minute course that discusses initial inspection and safety considerations for EV upon arrival at a repair facility. The initial inspection, before damage analysis, reviews visual and other indicators to be aware of before bringing a vehicle into a building or storing it near other vehicles or structures. Precautions and considerations for high-voltage batteries and systems and vehicle staging/handling of damaged vehicles is also covered.

ELECTRIC VEHICLE (EV) DAMAGE ANALYSIS

VT455E01

Course Format: Online training with posttest

I-CAR Credit Hours: 1

I-CAR Points: 0.25

This course helps satisfy ProLevel training requirements for the following roles:



Non-Structural Technician



Estimator



Structural Technician

The Electric Vehicle (EV) Damage Analysis course is a 30-minute course that reviews necessary safety precautions when working with EVs. It gives a great level of detail on EV's high voltage components, safety precautions and relevant non-high voltage parts. The course also provides damage inspection and estimating considerations for EVs.

INTRODUCTION TO ELECTRIC VEHICLE SERVICE CONSIDERATIONS

VT460E01

Course Format: Online training with posttest

I-CAR Credit Hours: 1

I-CAR Points: 0.25

This course helps satisfy ProLevel training requirements for the following roles:



Non-Structural Technician

Introduction to Electric Vehicle Service Considerations is a 30-minute course that explains the unique considerations for servicing electric vehicle (EV) systems. In addition, students learn how to remove and install (R&I), and remove and replace (R&R), common EV system parts that are associated with collision repairs.