

ELECTRICAL SAFETY

INSTRUCTOR'S GUIDE

MODULE OVERVIEW

This module provides an overview of electrical hazards in collision repair. It presents information on how to identify hazardous situations that can lead to unexpected contact with electricity, and what are the health effects of exposure to electricity. Safe practices and procedures for working with electrical tools and hybrid batteries are highlighted. Students will learn how to inspect a shop for electrical hazards and what to do in case of emergency.

OBJECTIVES

When students have completed this module, they will be able to:

- Determine which items may expose them to electrical hazards.
- Identify hazardous situations that generate exposure to electrical hazards.
- Identify specific health effects that occur after exposure to electrical hazards.
- Explain how to identify and test a GFCI and what is the role of electrical breakers.
- List the steps that must be taken in case of emergency due to exposure to electricity.

CLASSROOM (15 min)

PowerPoint presentation: **Electrical Safety.pptx**

Handout: **Electrical Safety – Handout.pdf**

Instructor Tool Kit: none

LAB (15 min)

Electrical Safety - Lab Activities.pdf – Evaluation of electrical hazards using a checklist. Demonstrate testing of a GFCI outlet. Demonstrate proper procedures for working with hybrid vehicle batteries.

HOMEWORK

- **Electrical Safety - Homework .pdf** – Students read an I-CAR article on insulated rubber gloves and high voltage batteries, and a US National Library of Medicine article on what to do in case of electrical injury.
- **Quiz**

ADDITIONAL RESOURCES

- **“I want to know more” – folder** – case studies on worker deaths due to electrocution

