

# INTRODUCTION TO DIAGNOSTICS AND SCAN TOOLS

VT210E01

Automotive collision diagnostics and scanning tools are going from nice to have to must have. This course is designed to educate those in the collision repair industry on why it is becoming important to do diagnostic scanning and how many of the OEMs are beginning to require it.

Students will be exposed to the differences between certain electrical troubleshooting tools, when OEM scan tools are required, and how they can most effectively handle their diagnostic needs. Students will watch OEM scanning software and a remote diagnostic transmitter being used. They will also be able to perform a virtual vehicle health scan

## Course Content

### Module 1 - Evolving Vehicle Technology

Provides the student with an introduction to the various safety system technologies found on today's cars. This module communicates the importance of performing pre- and post-scans based on the required trouble codes and calibration requirements of each system. Students will be made aware that OEMs will be issuing position statements requiring the pre- and post-scans..

### Module 2 - Diagnostic Overview

Discusses how Standard Operating Procedures (SOP) for diagnostics and scans can be beneficial to a repair facility. This module will supply an SOP that can be used by a facility to ensure a streamlined and repeatable process when performing diagnostics. Examples will be provided to demonstrate how repair facilities have benefitted. Discussion will also explain what the collision advantage is and how it can help identify where electrical damage may be.

### Module 3 - Scan Tool Capabilities

This module will focus on introducing the various scan tools available and what their capabilities are. Comparisons will be made between basic scan tools and advanced aftermarket tools as well as a discussion on why OEM scan tools may be required. Videos are included demonstrating a scan using OEM software on a Lexus and a scan being done using a remote diagnostic transmitter. This module contains an activity where the student will perform a virtual vehicle health scan. A general discussion on OBD II versus OEM codes is also included.

### Module 4 - Options for a Repair Facility

Discusses all of the options for a repair facility as it relates to properly incorporating diagnostics into a repair. This module will provide resources and suggestions on how a repair facility can:

- Keep as much of the diagnostic repairs in house
- Use a remote diagnostic tool
- Work with an independent diagnostic specialist

Also provided are options for MSOs including video interviews with industry experts that have successfully implemented diagnostics into the repair process.

## Registration

To register for Introduction to Diagnostics and Scan Tools (VT210E01), visit the I-CAR website at I-CAR.com or contact I-CAR Customer Care at 800-422-7827.

**Credit Hours:** 1 Hour

**Estimated Duration:** 1 Hour

**Format:** Online training with posttest

**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
-  PRODUCTION MANAGEMENT

## After completing this course, you will be able to:

- List OEMs that require scans and calibrations
- Describe the various safety systems on modern vehicles
- Understand how using standard operating procedures can benefit the entire shop
- Use the collision advantage to help identify hidden electrical damage
- Determine the basic differences between OBD II and OEM codes
- Determine when OEM scan tools are required



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