INTRODUCTION TO DIAGNOSTICS AND SCAN TOOLS

VT210E01

Course Format: Online training with posttest

I-CAR Points: 0.25

Estimated Duration: 1 hour

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

- Non-Structural Technician
- Structural Technician
- Refinish Technician
- Assessor
- Estimator
- Production Management
- Aluminium Technician

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 the OEMs will be issuing position statements requiring the pre and post-scans.

Module 2— Diagnostic Overview

Discuss 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 tools as well as 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.

I-CAR AUSTRALIA

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Learning Objectives

- 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
- Recognise that they can perform diagnostics in-house, have a technician that travels between facilities (MSO), use remote diagnostics with OEM software, or sublet to an independent diagnostics-specialists
- Describe why maintaining good vehicle voltage for scans and troubleshooting is important
- Understand the limitations of electrical system self-diagnostics