Developing OALCF Apprenticeship Tasks for the Competency "Use Digital Tasks" (2014/2015) - Updated 2023 as part of CLO's Skills for Success Initiative

Task Title: Automobile Codes for Troubleshooting

OALCF Cover Sheet – Practitioner Copy

Learner Name:

Date Started (m/d/yyyy):

Date Completed (m/d/yyyy):

Successful Completion: Yes ☐ No ☐

Goal Path: Employment ☑ Apprenticeship ☑

Secondary School ☐ Post Secondary ☐ Independence ☐

Task Description: Understanding diagnostic codes used in automobiles.

Competency: A: Find and Use Information, D: Use Digital Technology

Task Groups: A1: Read continuous text, A2: Interpret documents

Level Indicators:

- A1.1: Read brief texts to locate specific details
- A2.2: Interpret simple documents to locate and connect information
- D2: Perform well-defined, multi-step digital tasks

Embedded Skills for Success:			
Adaptability	☐	Digital	☑
Collaboration	☐	Numeracy	☑
Communication	☐	Problem Solving	☐
Creativity and Innovation	☐	Reading	☑
		Writing	☑

Performance Descriptors: See chart on last page

Materials Required: Computer with Internet access

Learner Information

Most cars today have built-in on-board diagnostics tools (OBD) that can recognize problems and report them using a series of error codes.

Automotive Service Technicians must know how to look up error codes to find out what they mean. There are error code databases and charts that provide descriptions of each error code, and most can be found on the internet.

Look at the Trouble Codes Chart and/or use the internet to complete the tasks that follow.

Trouble Codes Chart

First Character - System	Second Digit - Code Type	Third Digit - Sub-System
P = Powertrain	0 = Generic (used by many manufacturers)	0, 1 and 2 = air/fuel mixture
B = Body	1 = Enhanced (used only by a few Manufacturers)	3 = ignition system
C = Chassis		4 = checking auxiliary emissions
U = Network & Vehicle Integration		5 = engine idling
		6 = onboard computer and ancillary outputs
		7, 8 and 9 = transmission (gearbox)
		A, B and C = hybrid propulsion

Work Sheet

Task 1: Look at the "Trouble Codes Chart" on the previous page. An Infiniti has the trouble code B1049. What do the first three characters and digits in the code represent?

Answer:

Task 2: Open a web browser (eg. Chrome) and go to a search engine (eg. Google). Search for "Infiniti B1049". What does this code indicate as the possible problem?

Answer:

Task 3: Search the internet for the following error codes. What is the problem these codes are reporting?

P0460:

P0169:

P0636:

P0811:

Task 4: Are the codes in Task 4 "Generic" (used by many manufacturers) or "Enhanced" (used only by a few manufacturers)? How do you know?

Answer:

Answers

Task 1: Look at the "Trouble Codes Chart". An Infiniti has the trouble code B1049. What do the first three characters and digits in the code represent?

B = Body

1 = Enhanced (only used by a few Manufactures)

0 = air/fuel mixture

Task 2: Open a web browser (eg. Chrome) and go to a search engine (eg. Google). Search for "Infiniti B1049". What does this code indicate as the possible problem?

Driver Air Bag Module Open

Task 3: Search the internet for the following error codes. What is the problem these codes are reporting?

P0460: Fuel Level Sensor Circuit Malfunction

P0169: Incorrect Fuel Composition

P0636: Power Steering Control Circuit Low

P0811: Excessive Clutch Slippage

Task 4: Are the codes in Task 4 "Generic" (used by many manufacturers) or "Enhanced" (used only by a few manufacturers)? How do you know?

Generic. The second character/digit in the code is a "0".
According to the Trouble Codes Chart, a 0 means generic.

Performance Descriptors 1

Levels	Performance Descriptors	Needs Work	Completes task with support from practitioner	Completes task independently
A1.1	Reads short texts to locate a single piece of information	☐	☐	☐
A1.1	Follows simple, straightforward instructional texts	☐	☐	☐
A2.2	Performs limited searches using one or two search criteria	☐	☐	☐
A2.2	Extracts information from tables and forms	☐	☐	☐
A2.2	Uses layout to locate information	☐	☐	☐
A2.2	Makes low level inferences	☐	☐	☐
D2	Selects and follows appropriate steps to complete tasks	☐	☐	☐
D2	Locates and recognizes functions and commands	☐	☐	☐
D2	Makes low-level inferences to interpret icons and text	☐	☐	☐
D2	Begins to identify sources and evaluate information	☐	☐	☐
D2	Performs simple searches using keywords (e.g. internet, software help menu)	☐	☐	☐

Performance Descriptors 2

This task: Was successfully completed ☐ Needs to be tried again ☐

Learner Comments:

Instructor (print): _____

Learner (print): _____

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