



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: Automotive 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	<input type="checkbox"/>	Digital	<input checked="" type="checkbox"/>
Collaboration	<input type="checkbox"/>	Numeracy	<input checked="" type="checkbox"/>
Communication	<input type="checkbox"/>	Problem Solving	<input type="checkbox"/>
Creativity and Innovation	<input type="checkbox"/>	Reading	<input checked="" type="checkbox"/>
		Writing	<input checked="" type="checkbox"/>

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 Title: AutomotiveCodesforTroubleshooting_EA_A1.1_A2.2_D2

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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A1.1	Follows simple, straightforward instructional texts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A2.2	Performs limited searches using one or two search criteria	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A2.2	Extracts information from tables and forms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A2.2	Uses layout to locate information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A2.2	Makes low level inferences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D2	Selects and follows appropriate steps to complete tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D2	Locates and recognizes functions and commands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D2	Makes low-level inferences to interpret icons and text	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D2	Begins to identify sources and evaluate information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D2	Performs simple searches using keywords (e.g. internet, software help menu)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Task Title: AutomotiveCodesforTroubleshooting_EA_A1.1_A2.2_D2

Performance Descriptors 2

This task: Was successfully completed Needs to be tried again

Learner Comments:

Instructor (print):

Learner (print):
