

Task Title: Automotive Codes for Troubleshooting

OALCF Cover Sheet - Practitioner Copy

Learner Name:		
Date Started:		
Date Completed:		
Successful Completion: Goal Path:	Yes No Employment	Apprenticeship
Secondary School	Post Secondary	Independence

Task Description: Understand diagnostic codes used in automobiles.

Main Competency/Task Group/Level Indicator:

- Find and Use Information/Read continuous text/A1.1
- Find and Use Information/Interpret documents/A2.2
- Use Digital Technology/D.2

Materials Required:

- Pen/pencil and paper
- Computer or digital device

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.

Scan the "Trouble Codes Chart".

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: An Infiniti has the trouble code B1049. What do the first three characters and digits in the code represent?			
Answer:			
Task 2: Open a new page of the web browser of the computer. Search for "Infiniti B1049". What does this code indicate as the possible problem?			
Answer:			
Task 3: Conduct an internet search for the following error codes.			
Describe the problem each code is reporting.			
P0460:			
P0169:			
P0636:			
P0811:			

Answer:

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Task 4: Are the codes in Task 3 "Generic" (used by many
manufacturers) or "Enhanced" (used only by a few manufacturers)?
How do you know?

Answer:

Answers

Task 1: An Infiniti has the trouble code B1049. What do the first three characters and digits in the code represent?

Answer:

B = Body

1 = Enhanced (only used by a few Manufactures)

0 = air/fuel mixture

Task 2: Open a new page of the web browser of the computer. Search for "Infiniti B1049". What does this code indicate as the possible problem?

Answer: Driver Air Bag Module Open

Task 3: Conduct an internet search for the following error codes. Describe the problem each code is reporting.

P0460:

P0169:

P0636:

P0811:

Answer:

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 3 "Generic" (used by many manufacturers) or "Enhanced" (used only by a few manufacturers)? How do you know?

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

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Performance Descriptors

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			
	follows simple, straightforward instructional texts			
A2.2	performs limited searches using one or two search criteria			
	extracts information from tables and forms			
	uses layout to locate information			
	makes low level inferences			
D.2	selects and follows appropriate steps to complete tasks			
	locates and recognizes functions and commands			
	makes low-level inferences to interpret icons and text			
	begins to identify sources and evaluate information			

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Levels	Performance Descriptors	Needs Work	Completes task with support from practitioner	Completes task independently
	performs simple searches using keywords (e.g. internet, software help menu)			
This task: Was successfully completed Needs to be tried again				

This task: Was successfully completed Needs t	o be tried again
_earner Comments:	
Instructor (print):	Learner (print):