



Assessment Criteria for
IMI LEVEL 2 CERTIFICATE IN
AUTOMOTIVE MAINTENANCE
QUALIFICATION I.D: 603/3089/2

*To be used in conjunction with Written Assessments
and Candidate Assessment Summary*



**INSTITUTE
OF THE MOTOR
INDUSTRY**



CENTRE INFORMATION

Please be aware that any legislation referred to in this qualification may be subject to amendment/s during the life of this qualification. Therefore IMI Approved Centres must ensure they are aware of and comply with any amendments, e.g. to health and safety legislation and employment practices.

Please be aware that vehicle technologies referred to in this qualification reflect current practice, but may be subject to amendment/s, updates and replacements during the life of this qualification. Therefore IMI Approved Centres must ensure they are aware of the latest developments and emerging technologies to ensure the currency of this qualification.

Please note: the relevance of the information contained in the **unit content** will vary depending upon the vehicle types being worked upon. The unit content is for guidance only and is not meant to be prescriptive.

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CONTACT SHEET

Learner Name:	
Learner Registration No:	
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Please complete as appropriate:	
Witness Name:	Witness Name:
Witness Job Title:	Witness Job Title:
Witness Signature:	Witness Signature:
Witness Name:	Witness Name:
Witness Job Title:	Witness Job Title:
Witness Signature:	Witness Signature:
Assessor Name:	Assessor Name:
Assessor Signature:	Assessor Signature:
Assessor Name:	
Assessor Signature:	
Internal Verifier Name:	Internal Verifier Name:
Internal Verifier Signature:	Internal Verifier Signature:



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IMI Level 2 Certificate in Automotive Maintenance
Qualification ID: 603/3089/2

In order to achieve this qualification, learners must achieve all assessment outcomes for all units.

Mandatory Units: All units to be completed:

GLH: 153

TQT: 184

Credits: 18

Note: Assessments

The assessments for this qualification combine various assessment styles/methodologies in order to suit the levels of units contained within it.

The table below clarifies what IMI assessments are available for each unit, and whether these assessments are mandatory (M) or optional (O) for the selected unit.

Mandatory Units							
Unit Ref	Unit Title and ID Number	Level	TQT	GLH	Assessments		
					W	P	OLT
L2CAM01	Knowledge Relating to Automotive Engine and Chassis Component Maintenance (J/616/9420)	2	55	51	O		M
L2CAM02	Skills in Maintaining Automotive Engine and Chassis Components (L/616/9421)	2	110	94		M	
L2CAMS	Maintenance Inspection and Condition Reporting of Engine and Chassis Systems ((R/616/9422)	2	19	8	M	M	M



Unit Ref: L2CAM01	Knowledge Relating to Automotive Engine and Chassis Component Maintenance
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Level 2	GLH 51	TQT 55
<p>Overview: This unit enables the learner to develop the knowledge, understanding and principles required when working on automotive engine and chassis systems. It also covers the: health and safety in the workplace, selecting and using appropriate engineering tools, equipment and information that would be typically used in maintaining these systems. Learners will develop the knowledge required to develop and test electrical circuits to include measuring and calculating electrical units of measurement. Typical automotive vehicles could include those used in the following industries: light and heavy vehicle, motorcycle or all-terrain vehicles (ATVs).</p>		

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The Learner will:	The Learner can:
1. Understand housekeeping and health and safety practices within an automotive environment	1.1 Describe the correct protective equipment to be used when working in the automotive environment 1.2 Outline the housekeeping practices that should be followed when working in the automotive environment 1.3 Describe health and safety requirements that should be followed when working in the automotive environment 1.4 Identify risks within the workplace and record the risk management process
2. Understand how automotive engine and chassis systems operate	2.1 Explain how the main engine system components operate to include: <ul style="list-style-type: none"> a. Mechanical system b. Lubrication system c. Liquid cooling system d. Fuel system e. Ignition system (if applicable) f. Air intake and exhaust systems 2.2 Explain how the main chassis systems operate to include: <ul style="list-style-type: none"> a. Steering system b. Suspension system c. Braking system d. Wheels and tyres



	<p>2.3 Explain the construction and operation of electrical circuits to include:</p> <ul style="list-style-type: none">a. ohms lawb. watts lawc. units of measurement
<p>3. Understand how to carry out automotive engine and chassis component maintenance</p>	<p>3.1 Identify the tools and equipment used during automotive engine and chassis component maintenance</p> <p>3.2 Explain how to remove and replace engine and chassis system units and components</p> <p>3.3 Identify common faults and causes associated with engine and chassis systems</p> <p>3.4 Explain the typical types of testing methods used to check the operation of engine and chassis systems and components</p> <p>3.5 Explain how to test and evaluate the performance of replacement units against vehicle specification</p>



Ref: L2CAM02	Skills in Maintaining Automotive Engine and Chassis Components
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Level 2	GLH 94	TQT 110
<p>Overview: This unit enables the learner to develop the skills required when working on automotive engine and chassis systems. It also covers the: health and safety in the workplace, selecting and using appropriate engineering tools, equipment and information that would be typically used in maintaining these systems. Learners will develop the knowledge required to develop and test electrical circuits to include measuring and calculating electrical units of measurement. Typical automotive vehicles could include those used in the following industries: light and heavy vehicle, motorcycle or all-terrain vehicles (ATVs).</p>		

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The Learner will:	The Learner can:
1. Be able to follow health and safety practices within an automotive environment	1.1 Follow the health and safety information and notices in the workplace 1.2 Prepare the workplace and vehicle for safe maintenance activities
2. Be able to use tools, equipment and information when maintaining engine and chassis system components	2.1 Select and safely use appropriate tools and equipment for the task 2.2 Select and use appropriate technical information for the task
3. Be able to remove, inspect and replace engine and chassis system components	3.1 Remove, inspect and replace system components from engine: <ul style="list-style-type: none"> a. Mechanical systems b. Lubrication systems c. Cooling systems d. Fuel systems e. Ignition systems (if appropriate) f. Air intake and exhaust systems 3.2 Remove, inspect and replace system components from chassis: <ul style="list-style-type: none"> a. Steering systems b. Suspension systems c. Braking systems d. Wheels and tyres 3.3 Construct an electrical circuit to include taking measurements in relation to: <ul style="list-style-type: none"> a. ohms law b. watts law 3.4 Use suitable testing methods to evaluate the performance of the reassembled and constructed system



	3.5 Ensure that the reassembled system performs to the vehicle operating specification and meets any legal requirements
4 Be able to record information and make suitable recommendations	<p>4.1 Produce work records that are accurate, complete and passed to the relevant person(s) promptly in the format required</p> <p>4.2 Make suitable recommendations for cost effective repairs</p> <p>4.3 Record and report any additional faults noticed promptly in the format required</p>

Evidence Requirements:
You must produce evidence of completing all of the tasks below:
Task 1 – Engine <ol style="list-style-type: none"> 1. Carry out an engine compression test 2. Carry out a cylinder leakage test
Task 2 – Liquid cooling <ol style="list-style-type: none"> 1. Remove, test, and replace a thermostat 2. Check the cooling system for leaks
Task 3 – Fuel or ignition system <ol style="list-style-type: none"> 1. Change a fuel filter and check fuel system pressure or 2. Change a set of spark plugs and check ignition timing
Task 4 – Air intake and exhaust system <ol style="list-style-type: none"> 1. Remove, inspect clean / replace an air filter 2. Remove and replace an exhaust system component
Task 5 – Steering system <ol style="list-style-type: none"> 1. Remove and replace a steering system component 2. Check and adjust front wheel alignment
Task 6 – Suspension system <ol style="list-style-type: none"> 1. Remove and replace a suspension coil or leaf spring 2. Remove and replace a suspension damper or airbag
Task 7 – Brakes <ol style="list-style-type: none"> 1. Remove, measure for serviceability and replace brake pads and discs
Task 8 – Wheels and tyres <ol style="list-style-type: none"> 1. Remove and replace a road wheel on a vehicle 2. Remove, balance and replace a tyre
Task 9 – Construct and test an operational electrical circuit <ol style="list-style-type: none"> 1. A risk assessment prior to carrying out the task 2. Construction and testing of the operational electrical circuit 3. Identification of any faults

This Qualification is Assessed by a Mandatory Synoptic Assessment

The mandatory synoptic assessment brings together learning from the following two units:

- **L2CAM01** - Knowledge relating to automotive engine and chassis component maintenance
- **L2CAM02** – Knowledge relating to automotive engine and chassis component maintenance

Preparation for Synoptic Assessment

Every opportunity should be provided for Learners to practice the skills required for carrying out automotive related vehicle maintenance, inspection and identification of non-complex faults before completing the synoptic assessment. The **Evidence Requirements** for the **Skills Unit** enables each Learner to practise these essential procedures before being submitted for synoptic assessment.

The Centre's delivery method should be appropriately varied to provide Learners with best opportunity to use a variety of; vehicle types, a range of tools, equipment and consumables to complete the tasks.

Use of interactive teaching and learning materials including videos, simulations and using testing rigs will be effective learning aids to cater for a range of learners needs.

Assessment

Centres should plan carefully and share early on with their Learners when all aspects of the synoptic assessment are to be completed in the academic year. This will allow Learners every opportunity to prepare themselves thoroughly for assessment.

Centres should not permit any learner to complete any part of the synoptic assessment until they are confident that the Learner has acquired the knowledge and skills.

Learners are required to complete and pass, on an individual basis:

- A timed multiple choice on line test which is externally set and marked. This is graded: Refer, Pass, Merit or Distinction.
- An automotive related vehicle inspection and identification of non-complex faults task set and marked as Pass or Refer by the assessor.
- A written report detailing the non-complex faults found during their vehicle inspection and making recommendations for repair. This is graded by the assessor as Refer, Pass, Merit or Distinction.

For the Learner to achieve a specific grade they must ensure they have met all of the specified grading criteria relating to that grade in the grading table within the synoptic assessment guidance document.



Ref: L2CAMS	UNIT TITLE: Maintenance Inspection and Condition Reporting of Engine and Chassis Systems
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Level 2	GLH: 8	TQT: 19
<p>Overview: This unit enables the Learner to demonstrate the knowledge and skills required to inspect and identify non-complex faults on automotive engine and chassis systems; typical vehicle types this unit could relate to include: light and heavy vehicle, motorcycle or all-terrain vehicles (ATVs).</p> <p>This unit also enables the Learner to demonstrate the knowledge and skills required to prepare the work area and produce a report identifying vehicle defects and making recommendations to rectify faults upon the completion of the work activity.</p>		

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The Learner will:	The Learner can:
1. Describe how to inspect and identify non-complex faults within automotive engine and chassis systems	1.1 Explain how to prepare for inspection of engine and chassis systems including selecting the appropriate: <ul style="list-style-type: none"> a. Technical information b. Tools and equipment c. PPE and VPE 1.2 Explain the appropriate methods of inspection required for engine and chassis system components 1.3 Describe how to record and report identified vehicle system faults
2. Be able to inspect and identify non-complex faults within automotive engine and chassis systems	2.1 Prepare the work area for the task by selecting the appropriate: <ul style="list-style-type: none"> a. Technical information b. Tools and equipment c. Consumables d. PPE and VPE 2.2 Work safely whilst carrying out vehicle engine and chassis system inspection using manufacturer's guidelines 2.3 Conduct an engine and chassis system maintenance inspection 2.4 Identify and report on non-complex faults to vehicle engine and chassis systems 2.5 Complete an inspection report identifying system faults



Evidence Requirements
1. You must be observed by your assessor inspecting automotive engine and chassis systems and identifying non-complex faults
2. You must produce a report following completion of the task above which must include identifying non-complex faults and making recommendations for repair.

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