



Assessment Criteria for IMI LEVEL 1 CERTIFICATE IN CARRYING OUT PERIODIC VEHICLE MAINTENANCE AND INSPECTION

QUALIFICATION ID: 603/3088/0

*To be used in conjunction with Assessment Support
Materials and Candidate Assessment Summary*



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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:	
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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:	
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Internal Verifier Name:	Internal Verifier Name:
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For Office Use Only		
Version and date	Change detail	Section/page
01.10.2018 Issue 1	Original	
File route H:\AwardingBody\ABDev\8. Masterdocs\Qualifications\England\Level1\L1 Cert Carry Out Periodic Vehicle Inspection Owner: Product Department		



IMI Level 1 Certificate in Carrying out Periodic Vehicle Maintenance and Inspection

Qualification ID: 603/3088/0

In order to achieve this qualification, Learners must achieve all the mandatory units.

Mandatory Units: All units to be completed:

GLH: 129

TQT: 150

Credits: 15

Note: Assessments

The assessments for this qualification combines various assessment styles and methodologies to suit the levels of the 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 unit.

Mandatory Units							
Unit Ref	Unit Title and ID Number	Level	GLH	TQT	Assessments		OLT
					W	P	
L1CAM01	Knowledge of Carrying out Periodic Vehicle Maintenance and Inspection (T/616/9414)	1	32	34	O		M
L1CAM02	Skills in Carrying Out Periodic Vehicle Maintenance and Inspection (A/616/9415)	1	93	104		M	
L1CAMS	Conduct and Report on Periodic Vehicle Maintenance and Inspection (F/616/9416)	1	4	12	M	M	M



UNIT REF: L1CAM01	Knowledge of Carrying Out Periodic Vehicle Maintenance and Inspection
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Level: 1	GLH: 32	TQT: 34
<p>Overview: This unit introduces Learners to the general principles of vehicle maintenance and inspection including: health and safety in the workplace, selecting and using appropriate engineering tools, equipment and information. The unit uses vehicle maintenance as an example of how to carry-out effective procedures and methods to maintain and inspect machinery to ensure smooth and reliable operation.</p> <p>Learners are also required to understand how to carry-out the following practical engineering skills including:</p> <ul style="list-style-type: none"> • accurately measuring and marking out materials using Computer Aided Design (CAD) drawings • accurately cutting, filing, drilling, tapping steel bar to given tolerances • extracting seized and broken bolts, which are typically expected in carrying out engineering maintenance. <p>Note: Typical maintenance and inspection activities could include vehicles 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. Know the health and safety practices used within an automotive environment	1.1 Identify the health and safety requirements and information used in the workplace 1.2 Identify the safe manual handling techniques that are used in the workplace 1.3 Identify the legislation procedures associated with working in the workplace 1.4 State the fire prevention and emergency procedures used in the workplace 1.5 Know the importance of carrying out risk assessments in the workplace
2. Know the tools, equipment and information used within an automotive environment	2.1 Identify a range of tools and equipment used during periodic vehicle maintenance and inspection 2.2 State how to locate and use technical information to carry out periodic vehicle maintenance and inspections 2.3 Identify the range of consumable materials used in periodic vehicle maintenance and inspection 2.4 Identify the materials and equipment used to tap threads and remove broken studs



<p>3. Know the requirements for carrying out periodic vehicle maintenance and inspections</p>	<p>3.1 Identify vehicle components and systems that require periodic maintenance and inspection</p> <p>3.2 State the correct methods and techniques used when carrying out periodic vehicle maintenance and inspection to:</p> <ul style="list-style-type: none">a. Engine systemsb. Steering systemsc. Suspension systemsd. Braking systemse. Wheels and tyres <p>3.3 State the appropriate engineering methods and fabrication techniques used to repair broken and seized fasteners</p> <p>3.4 State how to prepare the work area to carry out periodic vehicle maintenance inspections</p> <p>3.5 Identify the importance of carrying out periodic vehicle inspections including adjustments</p> <p>3.6 State how to record vehicle defects</p>
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UNIT REF: L1CAM02	Skills in Carrying Out Periodic Vehicle Maintenance and Inspection
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Level 1	GLH: 93	TQT: 104
<p>Overview: This unit introduces Learners to the skills required to carry-out vehicle maintenance and inspection including: health and safety in the workplace, selecting and using appropriate engineering tools, equipment and information. The unit uses vehicle maintenance as an example of how to carry-out effective procedures and methods to maintain and inspect machinery to ensure smooth and reliable operation.</p> <p>Learners are also required to carry-out the following practical engineering skills including:</p> <ul style="list-style-type: none"> • accurately measuring and marking out materials using Computer Aided Design (CAD) drawings • accurately cutting, filing, drilling, tapping a steel bar to given tolerances • extracting seized and broken bolts. <p>Note: Typical maintenance and inspection activities could include vehicles 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 use safe working practices within an automotive environment	1.1 Follow recognised safe working practices in the work environment including: <ul style="list-style-type: none"> a. Health and safety information b. Equipment c. Manual handling
2. Be able to use tools, equipment, consumables and information to carry out periodic vehicle maintenance and inspection	2.1 Select, check and use the tools and equipment used to maintain and inspect vehicles 2.2 Select and use appropriate consumable materials used to maintain and inspect vehicles 2.3 Select and use appropriate information to carry out periodic vehicle maintenance and inspection
3. Be able to carry out periodic vehicle maintenance and inspection	3.1 Prepare the work environment for periodic vehicle maintenance and inspection 3.2 Select and use suitable Personal and Vehicle Protective Equipment (PPE and VPE) to protect self and vehicle 3.3 Work safely whilst carrying out periodic vehicle inspection including adjustments 3.4 Carry out period maintenance and inspection to the following vehicle systems including adjustments to relevant specifications: <ul style="list-style-type: none"> a. Engine / power unit



	<ul style="list-style-type: none"> b. Steering c. Suspension d. Braking e. Wheels and tyres <p>3.5 Use an engineering drawing to thread a hole in a steel bar and remove a stud to given instructions and tolerances</p> <p>3.6 Demonstrate the correct inspection methods to check vehicle components and systems</p> <p>3.7 Complete a vehicle inspection check sheet identifying any defects and any additional work requirements</p> <p>3.8 Clean the work area and leave in a safe condition</p>
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Evidence Requirements
You must produce evidence of completing all of the tasks below:
Task 1 - Engine <ul style="list-style-type: none"> 1. Carry out an engine oil and filter change and check for oil leaks 2. Check and record antifreeze strength 3. Carry out the inspection (and adjustment if necessary) and report of drive belt condition 4. Check a running engine for correct operation
Task 2 Steering <ul style="list-style-type: none"> 1. Inspect steering system and components 2. Measure a vehicle's front wheel alignment (toe)
Task 3 Suspension <ul style="list-style-type: none"> 1. Inspect a suspension damper and check for leaks/damage
Task 4 Braking <ul style="list-style-type: none"> 1. Inspect and measure a set of brake pads for wear 2. Check the brake fluid level and condition
Task 5 Wheels and tyres <ul style="list-style-type: none"> 1. Remove and replace a vehicle wheel and tyre 2. Carry out an inspection of all vehicle wheels and tyres
Task 6 Engineering task <ul style="list-style-type: none"> 1. Use an engineering drawing to thread a hole in a steel bar and remove a stud to given instructions and tolerances



This qualification is assessed by a mandatory synoptic assessment

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

- L1CAM01 - Knowledge of Carrying Out Periodic Vehicle Maintenance and Inspection
- L1CAM02 - Skills in Carrying Out Periodic Vehicle Maintenance and Inspection

Preparation for Synoptic Assessment

Every opportunity should be provided for Learners to practise the skills required for carrying out a periodic vehicle maintenance and inspection 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 the 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 calendar 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 achieve, on an individual basis:

- A timed multiple choice online test which is externally marked and graded: Refer, Pass, Merit or Distinction.
- A periodic vehicle maintenance and inspection task set and marked as Refer or Pass by the assessor.
- A written maintenance and inspection reporting defects, report graded: Refer, Pass, Merit or Distinction by the assessor using the grading matrix as guidance.

Learners are required to undertake the periodic vehicle maintenance and inspection practical activity as specified by the relative IMI vehicle inspection sheet.



UNIT REF: L1CAMS	Conduct and Report on Periodic Vehicle Maintenance and Inspection
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Level 1	GLH: 4	TQT: 12
<p>Overview: This unit enables the Learner to demonstrate the knowledge and skills required to conduct a typical periodic vehicle inspection which includes: replenishment of fluids and basic adjustments to vehicle components and systems. Typical vehicles that this unit relates to could 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 at the completion of the work activity.</p>		

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The Learner will:	The Learner can:
1. Know how to carry out periodic vehicle maintenance and inspections	1.1 Know how to prepare for periodic vehicle maintenance and inspection including selecting: <ol style="list-style-type: none"> a. Relevant technical information b. Tools and equipment c. Consumables 1.2 Know how to carry out periodic vehicle maintenance and inspections 1.3 Know how to record vehicle defects found during periodic vehicle maintenance and inspections
2. Be able to carry out periodic vehicle maintenance and inspection and report defects	2.1 Prepare the work area for the task 2.2 Select and use suitable PPE and vehicle coverings to protect self and vehicle 2.3 Access and use relevant information to carry out the task 2.4 Select and use appropriate tools, equipment and consumables for the task 2.5 Work safely whilst carrying out periodic vehicle maintenance and inspections 2.6 Carry out periodic vehicle maintenance and inspections to relevant specifications 2.7 Complete a vehicle maintenance and inspection report identifying defects on completion of the task



Evidence Requirements
1. You must be observed by your assessor successfully carrying out a periodic vehicle maintenance and inspection on at least 1 vehicle following the vehicle check sheet.
2. You must produce a report following completion of the periodic vehicle maintenance and inspection – this must include identifying the vehicle defects which were found during the inspection.