Pre-Vehicle Testing Assessment (3428-01)

Version 3.3 (September 2018)

Product Handbook

Product at a glance

Subject area	Automotive
City & Guilds number	3428-01
Age group approved	21+
Entry requirements	Technicians must have four years' work experience
Assessment types	Online multiple choice test (graded Pass) Practical tests (graded Pass)
Approvals	Full approval. Automatic approval applies in some cases
Support materials	Centre handbook
Registration and certification	Dates available on Walled Garden

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1 Introduction

This document tells you what you need to do to deliver this product:

Area	Description
Who is this product for?	To be able to become a MOT Tester, a technician needs to have four years' experience and a Level 3 qualification. This product is for Motor Vehicle Technicians who have the experience required to work competently but do not hold a qualification/accreditation scheme to prove it.
What does this product aim to do?	Address the lack of recognition of current competence which doesn't allow technicians without a qualification to progress in their careers and become a MOT Tester. Technicians' competence is benchmarked against National Occupational Standards regarding the following systems: • Brakes • Suspension • Steering • Wheels and tyres • Emissions • Electrics • Body/Chassis.
What opportunities for progression are there?	Successful learners will be able to progress into City & Guilds (3428-02) Level 2 Award in MOT Testing to become MOT Testers.

Structure

Technicians will have to achieve the following two mandatory units to prove their competence at the level expected according to National Occupational Standards:

City & Guilds unit	Unit title
3428-101	Knowledge of pre-vehicle testing
3428-102	Skills in pre-vehicle testing

2 Centre requirements

Approval

To offer this product, new centres will need to gain both centre and qualification approval. Please refer to the Centre Manual - Supporting Customer Excellence available in our website for further information.

If you already offer any of the following qualifications you will have been granted automatic approval:

- **4310-12** SVQ in Light Vehicle Maintenance and Repair at SCQF Level 5 - GC9Y 22
- **4310-42** SVQ in Light Vehicle Maintenance and Repair at SCQF Level 5 - GL83 45
- **4310-34** SVQ in Light Vehicle Maintenance and Repair at SCQF Level 7 - GG6E 23
- **4310-43** SVQ in Light Vehicle Maintenance and Repair at SCQF Level 7 - GL84 47
- **4390-12** Diploma in Light Vehicle Maintenance and Repair Principles at SCQF Level 5 - R171 04
- **4390-13** Diploma in Light Vehicle Maintenance and Repair Principles at SCQF Level 7 - R172 04
- **4390-42** Diploma in Light Vehicle Maintenance and Repair Principles at SCQF Level 5 - R492 04
- **4390-43** Diploma in Light Vehicle Maintenance and Repair Principles at SCQF Level 7 - R493 04
- **4270-12** Level 2 Diploma in Light Vehicle Maintenance and Repair Competence - 500/9975/9
- **4270-13** Level 3 Diploma in Light Vehicle Maintenance and Repair Competence - 501/0017/8
- **4290-12** Level 2 Diploma in Light Vehicle Maintenance and Repair Principles - 500/9707/6
- **4290-13** Level 3 Diploma in Light Vehicle Maintenance and Repair Principles - 501/0019/1

Physical resources and site agreements

Centres must have access to sufficient equipment in the college, training centre or workplace to ensure candidates have the opportunity to cover all of the practical activities.

Vehicles will need to be set up with suitable faults prior to candidates' assessment.

Centre staffing

Staff delivering these qualifications must be able to demonstrate that they meet the following occupational expertise requirements. They should:

- be occupationally competent or technically knowledgeable in the area(s) for which they are delivering training and/or have experience of providing training. This knowledge must be to the same level as the training being delivered
- have recent relevant experience in the specific area they will be assessing
- have credible experience of providing training.

Centre staff may undertake more than one role, eg tutor and assessor or internal verifier, but cannot internally verify their own assessments.

Assessors and verifiers

While the Assessor/Verifier (A/V) units are valued as qualifications for centre staff, they are not currently a requirement for this qualification.

Continuing professional development (CPD)

Centres must support their staff to ensure that they have current knowledge of the occupational area, that delivery, mentoring, training, assessment and verification is in line with best practice, and that it takes account of any national or legislative developments.

Candidates' entry requirements

Centres must ensure that candidates have the potential and opportunity to complete this qualification successfully, as well as four years' work experience as technicians.

Age restrictions

City & Guilds cannot accept any registrations for individuals under 21 as this product is not suitable for anyone under the age of 21.

3 Assessment

Summary of assessment methods

Candidates must successfully complete the following two units:

City & Guilds unit	Unit title	Assessment method
3428-101	Knowledge of pre-vehicle testing	Online Multiple Choice Test
3428-102	Skills in pre-vehicle testing	Practical Skills Tests

Online Multiple Choice Test

A multiple choice test will be used to assess candidates' knowledge across all types of systems.

Duration	60 minutes
Questions	25 items
Pass mark	60%
Grading	Pass / Fail

Practical Skills Tests

The practical assessment consists of part 1 and part 2.

Skills in pre-vehicle testing part 1

Technicians will be required to be assessed against a group of practical tasks, as listed below. The candidates will need to identify the fault and understand how to carry out the inspection.

The systems that will be tested are:

- Brakes
- Suspension
- Steering
- Wheels / Tyres
- Emissions
- Electrical / Electronic
- Body (internal/external)

Candidates will need to complete a job card as the one below, either paper based or digitally, with the following information:

- Vehicle details and classification
- Group Listing (A, B or C)
- Overview of the fault diagnosed
- Reference data information from the manual for all seven faults and their reasons for rejection.

The assessor will ask oral questions relating to the faults diagnosed during the practical skills assessment to confirm the candidate's understanding of the following and award Pass/Fail:

- Related technology
- Method by which the faults are normally corrected

The assessor will then provide short feedback, date and sign the job card.

Candidate Name: _____ **Date:** ___/___/_____

Pre-Vehicle Testing Skills Assessment

1. Vehicle details

Task Information

Vehicle make: _____

Model: _____

VIN: _____

Task group: _____

Classification of vehicle: _____

2. Vehicle system faults identified during practical skills inspection

1	Suspension	
2	Wheels / Tyres	
3	Electrical	
4	Braking	
5	Vehicle body	
6	Engine emissions	
7	Steering	

3. Candidate to provide a brief overview of the method of inspection

1	Suspension	
2	Wheels / Tyres	
3	Electrical	
4	Braking	
5	Vehicle body	
6	Engine emissions	
7	Steering	

4. Assessor underpinning knowledge technology checks

The assessor to ask oral questions related to the vehicle's technology linked to the above 7 faults identified to ensure that the candidate understands the technology and how the faults need to be corrected.

1	Suspension	identified and understands the related technology	*Please circle outcome*	**Pass**	**Fail**
2	Wheels / Tyres	identified and understands the related technology	*Please circle outcome*	**Pass**	**Fail**
3	Electrical	identified and understands the related technology	*Please circle outcome*	**Pass**	**Fail**
4	Brake	identified and understands the related technology	*Please circle outcome*	**Pass**	**Fail**
5	Vehicle body	identified and understands the related technology	*Please circle outcome*	**Pass**	**Fail**
6	Emissions	identified and understands the related technology	*Please circle outcome*	**Pass**	**Fail**
7	Steering	identified and understands the related technology	*Please circle outcome*	**Pass**	**Fail**

5. Assessor feedback comments

Feedback:

Assessor signature _____ Date __/__/___ Candidate signature _____Date__/__/___ IQA signature _____ Date__/__/___

Skills in pre-vehicle testing part 2

The Skills in pre-vehicle testing part 2 supports the diagnostic, removal, replacement and testing of vehicle components and systems.

This links directly to the National Occupational Standards for Light Vehicle Maintenance and Repair.

The objective is that candidates not only have the skills to correctly inspect the components as listed in Part 1, but have the necessary skills to demonstrate the competences to remove, replace and take diagnostic test readings to confirm correct operation.

Technicians will be required to be assessed against **one** of the three groups of practical tasks below.

All range of tasks for one group must be used and not a mix from different group listings.

If candidates fail to complete and pass a practical skills group, they will need to be tested against a completely different practical skills group.

The tasks will need to be completed on complete vehicles and running engines to show that the candidates are able to work at this level and use the necessary tools and test equipment to ensure the systems function correctly after repair work.

Candidates will need to complete a job card as the one below, either paper based or digitally, with the following information:

- Vehicle details and classification
- Task group details
- Overview of the fault diagnosed
- Reference data information from the manual for all seven faults and their reasons for rejection.

The assessor will need to ask oral questions relating to the faults diagnosed during the practical skills assessment to confirm the candidate's understanding of the following and award Pass/Fail:

- Related technology
- Method by which the faults are normally corrected

The assessor will then provide short feedback, date and sign the job card.

Candidate Name: _____ **Date:** ___/___/_____

Pre-Vehicle Testing Skills Assessment	
Vehicle details	**Task Information**
Vehicle make: _____ **Model:** _____ **VIN:** _____	**Task group:** _____ **Task detail:** _____ _____ _____
Equipment used: _____ _____ _____	**Health and safety requirements:** _____ _____ _____

Typical manufacturer or vehicle data	**Test reading taken after task**
Necessary vehicle data for skills task _____ _____ _____	**Data to confirm completion of repair** _____ _____ _____

Assessor to check the following *All components must be completed correctly for a pass*	**Place a × or ✓**
1. Candidate correctly dressed wearing suitable PPE	
2. H&S and risks identified	
3. Component removed correctly in a logical sequence	
4. Component correctly checked for wear and or failure	
5. Replacement component fitted	
6. Suitable diagnostic test readings taken to confirm repair completed correctly	
7. Vehicle left in a clean and tidy order	
8. All equipment and tools cleaned and stored correctly	

Feedback:

Assessor signature _____ Date __/__/___ Candidate signature _____Date__/__/___ IQA signature _____ Date__/__/___

4 Units

Structure of units

These units each have the following:

- City & Guilds reference number
- title
- learning outcomes which comprise a number of assessment criteria
- unit range.

Unit 101 Knowledge of pre-vehicle testing

Aim:	This unit enables the learner to develop an understanding of carrying out a range of inspections on light vehicles using a variety of prescribed testing and inspection methods.

Learning Outcome ***The learner will:***	**Assessment Criteria** ***The learner can:***
01 Inspection methods and systems	01.01 Explain the difference between the various prescribed light vehicle inspection methods, to include: a. pre-work b. post-work c. maintenance inspection 01.02 Identify the different systems to be inspected when using the prescribed inspection methods, to include: engine, transmission, brakes, suspension, steering, wheels and tyres, emissions, electrics, body/chassis
02 Inspection procedures and road worthiness	02.01 Identify the procedures involved in carrying out the systematic inspection of the prescribed inspection methods on light vehicles 02.02 Identify road worthiness of vehicle, systems and condition on light vehicle inspections.
03 Equipment	03.01 Explain the equipment used in carrying out inspections on light vehicles: a. emissions testing b. brake testing c. headlamp alignment d. wheel alignment e. torque setting f. measuring equipment (vernier calipers, micrometer, leak tester, hygrometer)

Learning Outcome *The learner will:*	Assessment Criteria *The learner can:*
04 Post inspection	04.01 Compare test and inspection results against light vehicle specification and legal requirements 04.02 Explain how to record and complete the inspection results in the format required 04.03 Explain the implications of signing workplace documentation and vehicle records 04.04 Identify the recommendations that can be made based on results of the light vehicle inspections 04.05 Explain the implications of failing to carry out light vehicle inspection activities correctly 04.06 Explain the procedure for reporting damage to light vehicle components and units outside normal inspection items.

Unit 101 Knowledge of pre-vehicle testing

Supporting information

Candidates will be assessed on the assessment criteria as specified within the unit. The following information has been included to support centres in terms of teaching and delivery.

Pre and post work vehicle inspections and record findings

a. PPE and vehicle protection relating to:
   i. vehicle body panels
   ii. paint surfaces
   iii. seats
   iv. carpets and floor mats prior to conduction vehicle inspections.

b. Pre and post work vehicle inspection procedures:
   i. aural
   ii. visual and functional assessments on engine
   iii. engine systems
   iv. chassis systems
   v. wheels and tyres
   vi. transmission system
   vii. electrical and electronic systems
   viii. exterior vehicle body
   ix. vehicle interior.

c. The methods for carrying out inspections for: damage, corrosion, fluid leaks, wear, security, mounting security and condition to include:
   i. engines and engine systems
   ii. chassis systems
   iii. brakes
   iv. steering
   v. suspension
   vi. wheels
   vii. tyres
   viii. body panels
   ix. electrical and electronic systems and components
   x. vehicle seating and vehicle interior
   xi. vehicle instrumentation
   xii. driver controls.

d. Check conformity to manufacturer's specifications and legal requirements.

e. Completion of documentation to include:
   i. inspection records
   ii. job cards
   iii. vehicle records.

f. Make recommendations based on results of vehicle inspections.

g. The checks necessary to ensure customer satisfaction for:
   i. vehicle body panels
   ii. paint surfaces
   iii. seats
   iv. carpets and floor mats following pre or post vehicle inspections.

h. Prepare and use appropriate inspection equipment and tools.

i. Inspection procedures following inspection checklists.

Unit 102 Skills in pre-vehicle testing

Aim:	This unit allows the learner to develop skills to carry out a range of light vehicle inspections on vehicles using a variety of prescribed testing and inspection methods.

Learning Outcome ***The learner will:***	**Assessment Criteria** ***The learner can:***
01 Be able to work safely when carrying out light vehicle inspections using prescribed methods	01.01 Use suitable personal protective equipment and vehicle coverings throughout all light vehicle inspection activities 01.02 Work in a way which minimises the risk of damage or injury to the vehicle, people and the environment.
02 Be able to use relevant information to carry out the task	02.01 Select suitable sources of technical information to support light vehicle inspection activities including: a. vehicle technical data b. inspection procedures c. legal requirements 02.02 Use technical information to support light vehicle inspection activities.
03 Be able to use appropriate tools and equipment	03.01 Select the appropriate tools and equipment necessary for carrying out a range of inspections on light vehicle systems 03.02 Ensure that equipment has been calibrated to meet manufacturers' and legal requirements 03.03 Use the correct tools and equipment in the way specified by manufacturers when carrying out a range of inspections on light vehicle systems.

Learning Outcome *The learner will:*	Assessment Criteria *The learner can:*
04 Be able to carry out light vehicle inspections using prescribed methods	04.01 Carry out light vehicle inspections using prescribed methods, adhering to the correct specifications and tolerances for the vehicle and following: a. the manufacturer's approved inspection methods b. recognised researched inspection methods c. health and safety requirements 04.02 Ensure that inspected light vehicle conforms to the vehicle operating specification and any legal requirements 04.03 Ensure any comparison of the vehicle against specification accurately identifies any: a. differences from the vehicle specification b. vehicle appearance and condition faults 04.04 Use suitable testing methods to evaluate the performance of the inspected systems.
05 Be able to record information and make suitable recommendations	05.01 Produce work records that are accurate, complete and passed to the relevant person(s) promptly in the format required 05.02 Make suitable and justifiable recommendations for cost effective repairs 05.03 Record and report any additional faults noticed during the course of their work promptly in the format required.

Appendix Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on **www.cityandguilds.com**.

City & Guilds Centre Manual

This document provides guidance for organisations wishing to become City & Guilds approved centres, as well as information for approved centres delivering City & Guilds qualifications. It covers the centre and qualification approval process as well as providing guidance on delivery, assessment and quality assurance for approved centres.

It also details the City & Guilds requirements for ongoing centre and qualification approval, and provides examples of best practice for centres. Specifically, the document includes sections on:

- the centre and qualification approval process
- assessment, internal quality assurance and examination roles at the centre
- registration and certification of candidates
- non-compliance and malpractice
- complaints and appeals
- equal opportunities
- data protection
- management systems
- maintaining records
- internal quality assurance
- external quality assurance.

Our Quality Assurance Requirements

This document explains the requirements for the delivery, assessment and awarding of our qualifications. All centres working with City & Guilds must adopt and implement these requirements across all of their qualification provision. Specifically, this document:

- specifies the quality assurance and control requirements that apply to all centres
- sets out the basis for securing high standards, for all our qualifications and/or assessments
- details the impact on centres of non-compliance

The **centre homepage** section of the City & Guilds website also contains useful information on

Walled Garden: how to register and certificate candidates on line

Events: dates and information on the latest Centre events

Online assessment: how to register for e-assessments.

Useful contacts

UK learners General qualification information	**E: learnersupport@cityandguilds.com**
International learners General qualification information	**E: intcg@cityandguilds.com**
Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	**E: centresupport@cityandguilds.com**
Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	**E: singlesubjects@cityandguilds.com**
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	**E: intops@cityandguilds.com**
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	**E: walledgarden@cityandguilds.com**
Employer Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	**E: business@cityandguilds.com** T: +44 (0)121 503 8993

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City & Guilds

1 Giltspur Street

London EC1A 9DD

www.cityandguilds.com