

NATIONAL CERTIFICATE MODULE: UNIT SPECIFICATION**STATEMENT OF STANDARDS****UNIT NUMBER:** 2200383**UNIT TITLE:** VEHICLE SERVICING: MOTORCYCLE

Acceptable performance in this unit will be the satisfactory achievement of the standards set out in this part of the specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

OUTCOME (ELEMENT OF COMPETENCE)

1. CARRY OUT SCHEDULED EXAMINATION OF VEHICLE SYSTEMS

PERFORMANCE CRITERIA

- (a) Appropriate protective clothing and coverings are used during the examination.
- (b) Appropriate information is accessed from appropriate source to inform the required examination of vehicle systems.
- (c) Vehicle is examined using approved methods and equipment.
- (d) Vehicle systems are examined according to specifications and tolerances particular to the vehicle.
- (e) Vehicle system requirements outside of the manufacturers' specification are recorded and appropriate action taken promptly in compliance with the customer contract.
- (f) Vehicle examination is conducted in a manner which minimises risk of damage to the vehicle and its system.
- (g) Records relating to the examination are complete, accurate, in the approved format and are passed on to the appropriate person.
- (h) The examination is completed within the approved timescale.
- (i) Where the examination is likely to exceed the approved timescale, the circumstances are reported promptly to an authorised person.
- (j) Examination activities are performed in accordance with statutory and organisational policy and procedures for health and safety.
- (k) Application and understanding of the underpinning knowledge is appropriate to the inspection of vehicle components and systems.

RANGE STATEMENT

Vehicles; motorcycles/mopeds/scooters of the make(s) and types(s) the candidate normally deals with.

Types of inspection: mileage; time; minor; major.

Methods of inspection: aural, visual and functional, (including damage, corrosion, fluid levels, leaks, wear and security).

Types of records: customer; vehicle manufacturer; company.

Sources of information: technical data; schedules of inspection; Department of Transport.

EVIDENCE REQUIREMENTS

Performance evidence:

at least 5 copies of records of vehicle inspections carried out by the candidate and authenticated by the assessor, applied to the make(s) and model(s) of vehicle the candidate normally deals with, and including:

- Minor services
- Intermediate services
- Major services
- Range of vehicle types

Knowledge evidence:

Wherever possible, evidence of underpinning knowledge should be obtained from the candidate's application of knowledge when demonstrating competence. Should that application of underpinning knowledge be insufficient to indicate full understanding of the range of knowledge given below, appropriate oral or written questions should be used to assess the outstanding items.

Evidence of underpinning knowledge of:

Interpretation of Vehicle Data -

- (i) Possible problems resulting from inadequate servicing;
- (ii) General legislative requirements included in a scheduled vehicle examination;
- (iii) Reasons for maintaining records of vehicle examinations and services;
- (iv) Requirements of customer contracts.

All the performance criteria must be met and all items in the range statement covered.

OUTCOME (ELEMENT OF COMPETENCE)

2. CARRY OUT SCHEDULED ADJUSTMENT, REPLACEMENT AND REPLENISHMENT OF OR TO VEHICLE COMPONENTS AND SYSTEMS

PERFORMANCE CRITERIA

- (a) Appropriate protective clothing and coverings are used during the servicing activities.
- (b) Appropriate information is accessed from the appropriate source to inform the required system adjustments/replacements/replenishments.
- (c) Adjustments and replacements of vehicle components are performed in accordance with manufacturers' current specifications for methods, equipment used, intervals and tolerances particular to the vehicle.
- (d) Replenishment of consumable materials is performed in accordance with manufacturers' current specifications for methods and intervals.
- (e) Where system adjustments cannot be made within the manufacturers' specification, details are recorded and appropriate action taken in accordance with customer contract.
- (f) Servicing activities are conducted in a manner which minimises risk of damage to the vehicle and its systems.
- (g) Records relating to the adjustment, replacement and replenishment are complete, accurate, in the approved format and are promptly passed on to the next stage in the process.
- (h) Servicing activities are completed within the approved timescale.
- (i) Where the servicing activities are likely to exceed the approved timescale, the circumstances are reported promptly to an authorised person.
- (j) Servicing activities are performed in accordance with statutory and organisational policy and procedures for health and safety.
- (k) Application and understanding of the underpinning knowledge is appropriate to the adjustment, replacement and replenishment of components and systems.

RANGE STATEMENT

Vehicles: motorcycles/mopeds/scooters of the make(s) and type(s) the candidate normally deals with.

Adjustments: clearances, gaps, settings, alignment, pressures, tensions and speeds (including to valves, ignition, fuel/emissions, brakes, transmission, lights, tyres, steering and frame fittings).

Components and materials: filters; drive belts; chains; brake linings/pads; lubricants and fluids.

Equipment: test instruments; emission testers; wheel/frame alignment equipment; manufacturers' special gauges.

Types of service: mileage; time; minor; major.

Types of records: customer; vehicle manufacturer; company.

Sources of information: technical data; schedules of inspection; Department of Transport.

EVIDENCE REQUIREMENTS

Performance evidence:

At least 5 copies of records of vehicle services carried out by the candidate and authenticated by the assessor, applied the make(s) and model(s) of vehicle the candidate normally deals with, and including:

- minor services
- intermediate services
- major services
- range of vehicle types

Knowledge evidence:

Wherever possible, evidence of underpinning knowledge should be obtained from the candidate's application of knowledge when demonstrating competence. Should that application of underpinning knowledge be insufficient to indicate full understanding of the range of knowledge given below, appropriate oral or written questions should be used to assess the outstanding items.

Evidence of underpinning knowledge of:

- (i) Identification codes for lubricants, materials and parts;
- (ii) Possible effects of incorrect adjustment of components/systems included in a servicing schedule;
- (iii) Reasons for service records;
- (iv) Interpretation of vehicle data.

All the performance criteria must be met and all items in the range statement covered.

ASSESSMENT RECORDS

In order to achieve this unit, candidates are required to present sufficient evidence that they have met all the performance criteria for each outcome within the range specified. Details of these requirements are given for each outcome. The assessment instruments used should follow the general guidance offered by the SQA assessment model and an integrative approach to assessment is encouraged. (See references at the end of support notes).

Accurate records should be made of assessment instruments used showing how evidence is generated for each outcome and giving marking schemes and/or checklists, etc. Records of candidates' achievements should be kept. These records will be available for external verification.

SPECIAL NEEDS

In certain cases, modified outcomes and range statements can be proposed for certification. See references at end of Support Notes.

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NATIONAL CERTIFICATE MODULE: UNIT SPECIFICATION**SUPPORT NOTES****UNIT NUMBER** 2200383**UNIT TITLE** VEHICLE SERVICING: MOTORCYCLE

SUPPORT NOTES: This part of the unit specification is offered as guidance. None of the sections of the support notes is mandatory.

NOTIONAL DESIGN LENGTH: SQA allocates a notional design length to a unit on the basis of time estimated for achievement of the stated standards by a candidate whose starting point is as described in the access statement. The notional design length for this unit is 40 hours. The use of notional design length for programme design and timetabling is advisory only.

PURPOSE This unit is designed to enable the candidate to develop skills and knowledge related to the completion of scheduled motorcycle inspections and services. It is intended for persons working in the retail motorcycle industry, and organisations which inspect and service their own and/or others' motorcycles.

SQA publishes summaries of NC units for easy reference, publicity purposes, centre handbooks, etc. The summary statement for this unit is as follows:

This unit will enable you to acquire the necessary skills and knowledge to carry out scheduled inspections, adjustments, replenishments and replacements to motorcycle systems, in accordance with the manufacturers' recommendations and instructions. You will also learn how to interpret vehicle data, record inspections and services and operate safely in a workshop environment. Your tutor/trainer/assessor will observe and record your progress during the module.

CONTENT/CONTEXT The candidate successfully completing this unit will require underpinning knowledge and skills relating to the reasons for inspecting and servicing motorcycles according to set schedules and the information and work required to carry out scheduled inspections, adjustments, replacements and replenishments.

The unit would be offered to candidates from the retail motorcycle trade and related sectors of industry. The skills are transferable within a range of employment but the unit is intended primarily for candidates who are gaining or have gained experience of motorcycles in a working environment.

The unit should be assessed in the context most suited to the candidate's requirements. The motorcycles used for demonstrations of competence should match the make(s) and type(s) of motorcycles the candidate is normally required to deal with and should be in the condition expected of a motorcycle requiring the type of service to be demonstrated.

Candidates must have full access to all the relevant service schedules, motorcycle data, tools, workshop equipment, materials, test equipment and service/repair records necessary to fully demonstrate competence.

APPROACHES TO GENERATING EVIDENCE Tutors should demonstrate the practical elements step-by-step and introduce the underpinning knowledge at the most appropriate stages of the programme. Safety and the use of safe working practices must be emphasised throughout the instruction and assessment.

ASSESSMENT PROCEDURES Candidates will be able to provide evidence of performance using a number of methods. These will include:

Performance at work (recorded in Candidate Portfolio of Evidence)

Performance in training, most suitable for underpinning knowledge (recorded in Candidate Portfolio of Evidence)

Practical exercises (carried out in accordance with the instructions for acceptable working conditions)

Past achievement/experiences (eg. past certificates, records of previous work, letters of endorsement).

Evidence gathering in the workplace is the preferred method, however there may be situations where this is inappropriate or the evidence available from this source is insufficient.

Where non-workplace conditions are used, and for detailed guidance on assessment, reference should be made to the publications listed at the end of these Support Notes.

Recognition of SQA Certificate as evidence of underpinning knowledge: All or part of the following SQA National Certificate Modules would provide evidence of underpinning knowledge pertaining to this unit. Assessors should evaluate the relevance of such underpinning knowledge in relation to the type of vehicle and work on which the candidate has or will be required to demonstrate competence. Where this evidence of underpinning knowledge is insufficient or not judged to be current, additional assessment should be carried out.

- 64457 Motorcycle Systems: Multi Cylinder Engine Units
- 64513 Motorcycle Systems: Small Engine Maintenance
- 74451 Motorcycle Construction: Frames, Steering and Suspension
- 74452 Motorcycle Construction 2: Wheels, Tyres and Brakes
- 2210022 Motor Vehicle Inspection: Light Vehicles
- 2210460 Scheduled Servicing (x 2)

EXEMPLARS Vehicle manufacturers' schedules for work and times should form the basis for teaching and assessment.

PROGRESSION This unit forms part of the level III SVQ in Motorcycle Mechanical and Electronic Systems, Maintenance and Repair.

Each unit is separate and need not be taken in any prescribed order, although there is a logical sequence to the acquisition of the skills and knowledge concerned.

RECOGNITION Many SQA NC units are recognised for entry/recruitment purposes. For up-to-date information see the SQA guide 'Recognised and Recommended Groupings'.

REFERENCES

1. Guidelines for Module Writers.
2. SQA's National Standards for Assessment and Verification.
3. For a fuller discussion on assessment issues, please refer to SQA's Guide to Assessment.
4. Procedures for special needs statements are set out in SQA's guide 'Students with Special Needs'.
5. MITSC Occupational Standards and Guidance Notes.
6. SQA's guide to Assessing SVQs in the Motor Vehicle Work.

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