

specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority and the Namibia Training Authority on www.nta.com.na

Elements and Performance Criteria

Element 1: Plan and prepare for work

Range

Planning and preparation may include but is not limited to workplace inspection, equipment defect identification, assessment of conditions and hazards and determination of work requirements.

Tools and equipment may include but are not limited to tool set, special tools as required by manufacturer, torque wrench, multimeter, vacuum gauge, dwell angle tester, timing light and tachometer.

Materials may include but are not limited to coil, condenser, leads and cleaning material.

Performance Criteria

- 1.1 Work instructions, including repair order forms, specifications and operational details are obtained, confirmed and applied.
- 1.2 Safety requirements are followed in accordance with safety plans and policies.
- 1.3 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults rectified or reported prior to commencement.
- 1.4 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use.
- 1.5 Environmental protection requirements are identified and applied in line with environmental plans and regulatory obligations.

Element 2: Inspect conventional ignition system components

Range

Conventional ignition system component inspection is to include visual, aural and functional inspection including damage, corrosion, wear, burn and faulty insulation.

Performance Criteria

- 2.1 Warnings in relation to working with high voltage are observed in line with workplace requirements.
- 2.2 Conventional ignition system component inspection is performed in line with workplace procedures and manufacturers' specifications.
- 2.3 Inspection results are checked for compliance with manufacturers' specifications.
- 2.4 Inspection results, along with evidence, supporting information and recommendations are documented in line with workplace requirements.
- 2.5 Inspection report is forwarded to supervisor for action in line with workplace procedures.

Element 3: Test ignition system and components and identify faults

Range

Tests are to include primary and secondary circuit components.

Performance Criteria

- 3.1 Correct information is accessed and correctly interpreted from manufacturers' specifications.
- 3.2 Tests are carried out to determine faults using appropriate tools, equipment and techniques.
- 3.3 Tests are completed without causing damage to vehicle components or systems.
- 3.4 Faults are identified and preferred repair action is determined.
- 3.5 All tests are carried out in line with manufacturers' requirements.

Element 4: Service ignition system and components

Range

Service of conventional ignition system and its components may include but is not be limited to spark plug service (including spark plug appearance and electrode gap setting), high tension leads (including firing order and electrical contact), distributor service (including distributor removal and installation, cap and rotor inspection, static advance mechanisms check, static contact breaker point gap setting, static timing setting) and dynamic timing setting (including contact breaker gap setting, dynamic advance mechanism check).

Performance Criteria

- 4.1 Correct information is accessed and correctly interpreted from manufacturers' specifications.
- 4.2 Service of conventional ignition system and its components is carried out in accordance with manufacturers' specifications.
- 4.3 Service of conventional ignition system and its components is completed without causing damage to vehicle components or systems.
- 4.4 Adjustments are made during the service in line with manufacturers' specifications.
- 4.5 Engine is run and conventional ignition system is tested for correct operation.

Element 5: Repair conventional ignition system components

Range

Repair methods include pre- and post-repair testing, diagnosing and determining faults, conducting repairs including disassembly, assembly, component replacement, adjustments (statically and dynamically) and rechecks, electrical measurements and visual and functional assessment.

Performance Criteria

- 5.1 Correct information is accessed and correctly interpreted from manufacturers' specifications.
- 5.2 Repair, adjustment or component replacement is carried out using appropriate tools, techniques and material.
- 5.3 Ignition system is repaired without causing damage to vehicle components or systems.
- 5.4 Ignition system is tested and results are documented in line with workplace procedures.
- 5.5 Repairs and tests are carried out according to legislative, manufacturers' and workplace requirements.

Element 6: Complete work and clean up

Range

Work completion details may include but are not limited to work schedule or appointment sheet, vehicle drop-off form, repair order form, service record book, service plan form and sign-out form for equipment.

Performance Criteria

- 6.1 Work is completed and appropriate personnel are notified in accordance with workplace procedures.
- 6.2 Work area is cleared of waste, cleaned, restored and secured in accordance with workplace procedures.
- 6.3 Reusable material is collected and stored in accordance with workplace procedures.
- 6.4 Tools and equipment are cleaned, checked, maintained and stored in accordance with workplace procedures.
- 6.5 Work completion details are finalised in accordance with workplace procedures.

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