

8. Carburettor fuel system components may include but are not limited to fuel tank (to include: filler neck, fuel tank cap, fuel tank sender unit, charcoal canister), fuel lines, fuel pumps (mechanical or electrical), fuel filters, fixed venturi carburettor, air cleaner, and intake manifold.

Quality Assurance Requirements

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of 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 are 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, lift (hoist), exhaust gas analyser, vacuum gauge, pressure gauge, tachometer, multimeter, access to fire extinguisher, special tools, compressed air with air gun, glass container with millilitre graduation, safety fuel storage container.

Materials are to include but are not limited to leakage spray, cleaning material, oils and lubricants.

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 carburettor fuel system

Range

Inspection of a carburettor fuel system is to include visual, aural and functional inspection including damage, restrictions, corrosion, foreign particles, fluid levels and leaks, wear and safety aspects.

Performance Criteria

- 2.1 Warnings in relation to working with petrol are observed in line with workplace procedures.
- 2.2 Carburettor fuel system inspection is implemented 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 procedures.
- 2.5 Report is forwarded to supervisor for action in line with workplace procedures.

Element 3: Test carburettor fuel system

Range

Methods for conducting test are to include but are not limited to functional testing, fuel pump tests (pressure test, volume test, vacuum test, and electrical power supply on electrical type) and operation of carburettor accessories (manual and automatic chokes, accelerator pump and fuel cut-off solenoid).

Performance Criteria

- 3.1 Methods for conducting tests are identified, selected and implemented in line with workplace procedures and manufacturers' specifications.
- 3.2 Component test results are checked for compliance with manufacturers' specifications.
- 3.3 Test results, along with evidence, supporting information and recommendations, are documented in line with workplace procedures.
- 3.4 Report is forwarded to supervisor for action in line with workplace procedures.

Element 4: Service carburettor fuel system components

Range

Service of carburettor fuel system components may include but is not limited to fuel filters, fuel tank, charcoal canister, fuel lines, fuel pumps, carburettor and air cleaner.

Performance Criteria

- 4.1 Correct information about service procedures is accessed from manufacturers' specifications and correctly interpreted.
- 4.2 Service of carburettor fuel system components are carried out in line with manufacturers' specifications.
- 4.3 Service of carburettor fuel system components is completed without causing damage to other components or systems.
- 4.4 Adjustments are made during the service in line with manufacturers' specifications.
- 4.5 Engine is run and carburettor fuel system tested for correct operation in line with manufacturers' and workplace requirements.

Element 5: Repair carburettor fuel system components

Range

Repair methods are to include isolation of fault(s), dismantling, evaluation and replacement of components and/or parts, assembly and completion of operational tests and documents.

Adjustments may include but are not limited to fuel pump, carburettor and carburettor accessories.

Performance Criteria

- 5.1 Correct information is accessed and interpreted from manufacturers' specifications.
- 5.2 Repairs and adjustments of carburettor fuel system components are carried out in line with manufacturers' specifications.
- 5.3 Repairs of carburettor fuel system components are completed without causing damage to other components or systems.
- 5.4 Adjustments are made during repair in line with manufacturers' specifications.
- 5.5 Engine is run and carburettor fuel system tested for correct operation in line with manufacturers' and workplace requirements.

Element 6: Overhaul carburettor

Range

Carburettor overhaul is limited to fixed venturi carburettor.

Overhaul methods and sequence are to include complete dismantling of component parts, measuring and evaluation of wear, replacement of carburettor and/or carburettor components, repair, reassembly of carburettor, performance of functional testing and the completion of records.

Performance Criteria

- 6.1 Information is accessed and interpreted from manufacturers' specifications.
- 6.2 Overhaul of carburettor is carried out in line with manufacturers' specifications.
- 6.3 Pre-adjustments are made during overhaul in line with manufacturers' specifications.
- 6.4 Carburettor overhaul is completed without causing damage to other components.
- 6.5 Engine is run and final carburettor adjustments are carried out in line with manufacturers' and workplace requirements.
- 6.6 Carburettor is tested for correct operation.

Element 7: 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

- 7.1 Work is completed and appropriate personnel notified in accordance with workplace procedures.
- 7.2 Work area is cleared of waste, cleaned, restored and secured in accordance with workplace procedures.
- 7.3 Reusable material is collected and stored in accordance with workplace procedures.
- 7.4 Tools and equipment are cleaned, checked, maintained and stored in accordance with workplace procedures.
- 7.5 Work completion details are finalised in accordance with workplace procedures

Registration Data

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