

Assessment Requirements

Unit LV11.3K – Knowledge of Overhauling Light Vehicle Steering and Suspension Units

Content:

How the units and assemblies being overhauled operate

- a. Identify unit components
- b. Understand unit construction
- c. Describe unit operation

How units are dismantled and reassembled

- a. The dismantling procedure.
- b. Tools and equipment used for stripping and rebuilding units and assemblies.
- c. Methods of safe storage for removed components during overhaul activities.
- d. The process for assessing the condition of sub-assemblies including:
 - i. fit
 - ii. tolerances
 - iii. permitted limits
- e. The rebuild procedure for units and assemblies.
- f. Adjustment procedures during re-assembly.

Unit and assembly testing and evaluation procedures

- a. Appropriate testing and evaluation procedures prior to dismantling units.
- b. Appropriate testing and evaluation procedures of components after dismantling units.
- c. How to use overhauling and test equipment for the task.
- d. The cost-benefit relationship between reconditioning, repair and replacement of components within units.
- e. How to test and evaluate the performance of the overhauled units against the operating specification.
- f. How to interpret test results.
- g. Adjustment procedures during final evaluation.

Faults associated with units and assemblies being overhauled

- a. Causes of faults and failures within units and assemblies.
- b. The faults associated with units and assemblies.
- c. How to make adjustments to meet final specification after testing and evaluation of assembled units and assemblies.

The procedures for dismantling, removal and replacement of electrical and electronic units and components

- a. The preparation, testing and use of:
 - i. tools and equipment
 - ii. removal and replacement of electrical and electronic systems and components
- b. Appropriate safety precautions:
 - i. PPE
 - ii. vehicle protection when dismantling
 - iii. removal and replacing electrical and electronic components and systems
- c. The importance of logical and systematic processes.
- d. Preparation of replacement units for re-fitting or replacement electrical and electronic components and systems.
- e. The reasons why replacement components and units must meet the original specifications (OES) – warranty requirements, to maintain performance, safety requirements.

- f. Refitting procedures.
- g. The inspection and testing of units and systems to ensure compliance with manufacturer's, legal and performance requirements.
- h. Inspection and re-instatement of the vehicle following repair to ensure:
 - i. customer satisfaction
 - ii. cleanliness of vehicle interior and exterior
 - iii. security of components and fittings
 - iv. re-instatement of components and fittings
 - v. cancelling of any fault codes and warning lights