

Assessment Requirements

Unit BP24K – Knowledge of Motor Vehicle Body Mechanical Fastening Operations

Content:

- a. The hazards associated with the joining operations (such as handling sheet/fabricated components, using hot metal riveting techniques, handling and using sealants and cleaning agents, dangerous or badly maintained tools and equipment), and how they can be minimised
- b. How to obtain the necessary drawings and joining procedure specifications
- c. How to extract information from engineering drawings and related specifications (to include symbols and conventions to appropriate BS or ISO standards in relation to work undertaken)
- d. The use of manufacturers' specifications for the types of fasteners used
- e. The various joining processes that are used, and the tools and equipment required
- f. The preparations to be carried out on the materials/components prior to joining them (such as materials to be degreased, dry and clean, with holes and flanges de-burred)
- g. How to set up and align the joints prior to fixing, and the tools and methods that can be used (such as clamps, rivet gripping tools, temporary fixings, jacking and supporting devices)
- h. How to produce a secure joint using blind rivets, and the type of riveting tools that are available
- i. The range of bolts and screwed fasteners that are to be used; why it is important to use the correct type of washer; sequence of tightening bolts on flanged joints; and the tools and equipment used to ensure they are tightened to the required torque
- j. Checks to be carried out on the tools and equipment prior to use to ensure that they are in a safe and usable condition (such as condition of plugs and leads on power tools, condition of striking faces on hammers, condition of riveting tools)
- k. Equipment setting, operating and care procedures; why equipment and tools need to be correctly set up and in good condition
- l. The importance of using the tools only for the purpose intended; the care that is required when using the equipment and tools; the proper way of preserving and storing tools and equipment between operations
- m. The things that can go wrong with the joining operations, and how these can be avoided
- n. The extent of your own authority and whom you should report to if you have problems that you cannot resolve
- o. Reporting lines and procedures, line supervision and technical experts