

## Assessment Requirements

### Unit BP17K – Knowledge of Identifying and Rectifying Motor Vehicle Body Misalignment

#### Content:

#### Selection and use of tools and equipment

- a The constraints the type of vehicle places on the choice of repair equipment.
- b How to prepare, test and adjust all equipment required for misalignment rectification.
- c How to install vehicles on misalignment rectification equipment, including the use of lifting equipment.
- d How to use rectification equipment including:
  - i. hand and power tools
  - ii. safety chains
  - iii. hydraulic push and pull
  - iv. body jigs (bracket system and/or measuring system)
- e. The correct use of clamps, restraints and supports to minimise additional damage during repair.

#### Realignment of vehicles

- a. The principle of chassis frame and monocoque vehicle construction.
- b. The principle of damage assessment and identification of direct and indirect damage.
- c. The function of the pulling system and the criteria for selection:
  - i. Vector
  - ii. pull arm
  - iii. tower system
  - iv. floor mounted
  - v. bench mounted.
- d. How to use geometric principles of alignment in the absence of data sheets.
- e. The properties of vehicle body construction materials.
- f. How to find, interpret and use sources of information relevant to the rectification of vehicle misalignment.
- g. How to establish the extent of misalignment using measuring equipment and/or measuring system.
- h. How to realign vehicles to the manufacturers' original specification.
- i. How to work safely avoiding damage to vehicles, personal injury and injury to colleagues.
- j. The importance of following manufacturers' instructions and using their approved methods of working (including use of materials and equipment).
- k. The consequences of failing to follow manufacturers' instructions and data sheets.

#### Rectification activities are: -

- a. Visual examination
- b. Setting up
- c. Measurement in conjunction with alignment measuring equipment
- d. Realignment using pulling equipment