LEVEL 2 AWARD, CERTIFICATE AND DIPLOMA
IN
MOTOR VEHICLE STUDIES

SAMPLE UNIT FROM QUALIFICATION GUIDANCE

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60029663
60029572

When centres are approved to run an ABC qualification, they are given access to a wide range of resources and information in the restricted area of the ABC web site

Each qualification has a Qualification Guide giving providers more details to help with delivery and guidance. Here is a sample unit from the Guide.

Check the ABC website for other resources available to help in the delivery and assessment of ABC qualifications

Unit Details

The sample below is taken from the Qualification Guide with Learning Outcomes / Assessment Criteria and supporting information

The following unit is offered as part of the Certificate and Diploma

Unit Title	**D/601/6171 Knowledge of health, safety and good housekeeping in the automotive environment**
Level	**2**
Credit Value	**3**
Guided Learning Hours	**30**
Unit Summary	This unit enables the learner to develop an understanding of • routine maintenance and cleaning of the automotive environment and using resources economically • health and safety legislation and duties of everyone in the motor vehicle environment. It will provide an appreciation of significant risks in the automotive environment and how to identify and deal with them. Once completed the learner will be able to identify hazards and evaluate and reduce risk
Learning Outcomes (1 to 5) ***The learner will***	**Assessment Criteria (1.1 to 5.2)** ***The learner can***
1. Know the correct personal and vehicle protective equipment to be used within the automotive environment	**1.1** Explain the importance of wearing the types of PPE required for a range automotive repair activities **1.2** Identify vehicle protective equipment for a range of repair activities **1.3** Describe vehicle and personal safety considerations when working at the roadside
2. Know effective housekeeping practices in the automotive environment	**2.1** Describe why the automotive environment should be properly cleaned and maintained **2.2** Describe requirements and systems which may be put in place to ensure a clean automotive environment **2.3** Describe how to minimise waste when using utilities and consumables **2.4** State the procedures and precautions necessary when cleaning and maintaining an automotive environment

	2.5 Describe the selection and use of cleaning equipment when dealing with general cleaning, spillages and leaks in the automotive environment **2.6** Describe procedures for correct disposal of waste materials from an automotive environment **2.7** Describe procedures for starting and ending the working day which ensure effective housekeeping practices are followed
3. Know key health and safety requirements relevant to the automotive environment	**3.1** List the main legislation relating to automotive environment health and safety **3.2** Describe the general legal duties of employers and employees required by current health and safety legislation **3.3** Describe key, current health and safety requirements relating to the automotive environment **3.4** Describe why workplace policies and procedures relating to health and safety are important
4. Know about hazards and potential risks relevant to the automotive environment	**4.1** Identify key hazards and risks in an automotive environment **4.2** Describe policies and procedures for reporting hazards, risks, health and safety matters in the automotive environment **4.3** State precautions and procedures which need to be taken when working with vehicles, associated materials, tools and equipment **4.4** Identify fire extinguishers in common use and which types of fire they should be used on **4.5** Identify key warning signs and their characteristics that are found in the vehicle repair environment. **4.6** State the meaning of common product warning labels used in an automotive environment
5. Recognise personal responsibilities	**5.1** Explain the importance of personal conduct in maintaining the health and safety of the individual and others **5.2** Explain the importance of personal presentation in maintaining health safety and welfare
Mapping to National Occupational Standards Directly mapped to IMI SSC Generic NOS 2010, Units G1 & G2	

SUPPORTING UNIT INFORMATION

D/601/6171 Knowledge of health, safety and good housekeeping in the automotive environment – Level 2

INDICATIVE CONTENT

Economic use of resources

- Consumable materials e.g. grease, oils, split pins, locking and fastening devices etc.

Requirement to maintain work area effectively

- Cleaning tools and equipment to maximise workplace efficiency
- Requirement to carry out the housekeeping activities safely and in a way that minimises inconvenience to customers and staff
- Risks involved when using solvents and detergents
- Advantages of good housekeeping

Spillages, leaks and waste materials

- Relevance of safe systems of work to the storage and disposal of waste materials
- Requirement to store and dispose of waste, used materials and debris correctly
- Safe disposal of special / hazardous waste materials
- Advantages of recycling waste materials
- Dealing with spillages and leaks

Basic legislative requirements

- Provision and Use of Work Equipment Regulations 1992
- Power Presses Regulations 1992
- Pressure Systems and Transportable Gas Containers Regulations 1989
- Electricity at Work Regulations 1989
- Noise at Work Regulations 1989
- Manual Handling Operations Regulations 1992
- Health and Safety (Display Screen Equipment) Regulations 1992
- Abrasive Wheel Regulations
- Safe Working Loads
- Working at Height Regulations (date)

Routine maintenance of the workplace

- Trainees personal responsibilities and limits of their authority with regard to work equipment
- Risk assessment of the workplace activities and work equipment
- Workplace person responsible for training and maintenance of workplace equipment
- When and why safety equipment must be used
- Location of safety equipment
- Particular hazards associated with their work area and equipment
- Prohibited areas
- Plant and machinery that trainees must **not** use or operate
- Why and how faults on unsafe equipment should be reported
- Storing tools, equipment and products safely and appropriately
- Using the correct PPE
- Following manufacturers recommendations
- Location of routine maintenance information e.g. electrical safety check log

Legislation relevant to Health and Safety

- HASAWA
- COSHH
- EPA
- Manual Handling Operations Regulations 1992
- PPE Regulations 1992

General regulations to include an awareness of

- Health and Safety (Display Screen Equipment) Regulations 1992
- Health and Safety (First Aid) Regulations 1981
- Health and Safety (Safety Signs and Signals) Regulations 1996
- Health and Safety (Consultation with Employees) Regulations 1996
- Employers Liability (Compulsory Insurance) Act 1969 and Regulations 1998
- Confined Spaces Regulations 1997
- Noise at Work Regulations 1989
- Electricity at Work Regulations 1989
- Electricity (Safety) Regulations 1994
- Fire Precautions Act 1971
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1985
- Pressure Systems Safety Regulations 2000
- Waste Management 1991
- Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) 2002
- Control of Asbestos at Work Regulations 2002

Legislative duties

- The purpose of a Health and Safety Policy
- The relevance of the Health and Safety Executive
- The relevance of an initial induction to Health and Safety requirements at your workplace
- General employee responsibilities under the HASAWA and the consequences of non-compliance
- General employer responsibilities under the HASAWA and the consequences of non-compliance
- The limits of authority with regard to Heath and Safety within a personal job role
- Workplace procedure to be followed to report Health and Safety matters

Precautions to be taken when working with vehicles, workshop materials, tools and equipment including electrical safety and hydraulics

- Accessing and interpreting safety information
- Seeking advice when needed
- Seeking assistance when required
- Reporting of unsafe equipment
- Storing tools, equipment and products safely and appropriately
- Using the correct PPE
- Following manufacturers recommendations
- Following application procedures e.g. hazardous substances
- The correct selection and use of extraction equipment

PPE to include

- Typical maintenance procedures for PPE equipment to include:
  - typical maintenance log

- cleaning procedures
- filter maintenance
- variation in glove types
- air quality checks

- Choice and fitting procedures for masks and air breathing equipment
- Typical workplace processes which would require the use of PPE to include:
  - welding
  - sanding and grinding
  - filling
  - panel removal and replacement
  - drilling
  - cutting
  - chiselling
  - removal of broken glass
  - removal of rubber seals from fire damaged vehicles
  - removal of hypodermic needles
  - servicing activities
  - roadside recovery
- Unserviceable PPE
- PPE required for a range of automotive repair activities. To include appropriate protection of:
  - eyes
  - ears
  - head
  - skin
  - feet
  - hands
  - lungs

Fire and extinguishers

- Classification of fire types
- Using a fire extinguisher effectively
  Types of extinguishers
  - foam
  - dry powder
  - CO2
  - water
  - fire blanket

Action to be taken in the event of a fire to include

- The procedure as
  - raise the alarm
  - fight fire only if appropriate
  - evacuate building
  - call for assistance

Product warning labels to include

- Reasons for placing warning labels on containers
- Warning labels in common use, to include:
  - toxic
  - corrosive
  - poisonous
  - harmful

- irritant
- flammable
- explosive

Warning signs and notices

- Colours used for warning signs
  - red
  - blue
  - green
- Shapes and meaning of warning signs
  - round
  - triangular
  - square
- The meaning of prohibitive warning signs in common use
- The meaning of mandatory warning signs in common use
- The meaning of warning notices in common use
- General design of safe place warning signs

Hazards and risks to include

- The difference between a risk and a hazard
- Potential risks resulting from:
  - the use and maintenance of machinery or equipment
  - the use of materials or substances
  - accidental breakages and spillages
  - unsafe behaviour
  - working practices that do not conform to laid down policies
  - environmental factors
  - personal presentation
  - unauthorised personal, customers, contractors etc entering your work premises
  - working by the roadside
  - vehicle recovery
- The employee's responsibilities in identifying and reporting risks within their working environment
- The method of reporting risks that are outside your limits of authority
- Potential causes of:
  - fire
  - explosion
  - noise
  - harmful fumes
  - slips
  - trips
  - falling objects
  - accidents whilst dealing with broken down vehicles

Personal responsibilities

- The purpose of workplace polices and procedures on:
  - the use of safe working methods and equipment
  - the safe use of hazardous substances
  - smoking, eating , drinking and drugs
  - emergency procedures
  - personal appearance

- The importance of personal appearance in the control of health and safety

Action to be taken in the event of colleagues suffering accidents

- The typical sequence of events following the discovery of an accident such as:
  - make the area safe
  - remove hazards if appropriate i.e. switch off power
  - administer minor first aid
  - take appropriate action to re-assure the injured party
  - raise the alarm
  - get help
  - report on the accident

- Typical examples of first aid which can be administered by persons at the scene of an accident:
  - check for consciousness
  - stem bleeding
  - keep the injured person's airways free
  - place in the recovery position if injured person is unconscious
  - issue plasters for minor cuts
  - action to prevent shock i.e. keep the injured party warm
  - administer water for minor burns or chemical injuries
  - wash eyes with water to remove dust or ingress of chemicals (battery acid)
  - need to seek professional help for serious injuries

- Examples of bad practice which may result in further injury such as:
  - moving the injured party
  - removing foreign objects from wounds or eyes
  - inducing vomiting
  - straightening deformed limbs

TEACHING STRATEGIES AND LEARNING ACTIVITIES

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place

METHODS OF ASSESSMENT

This unit is internally assessed and internally and externally moderated.

Providers are encouraged to use innovative and stimulating assessment methods and to ensure there is an appropriate and manageable range, balance and volume of assessment across units. A number of units can be assessed via integrative assessment methods but it is essential that the evidence of achievement is clearly signposted and referenced. **Methods of assessment must include practical tasks.**

Sample assessment tasks are provided that may be used or adapted as appropriate. These are available on the ABC website www.abcawards.co.uk. Centres may wish to develop their own assessments for individual units or a number of units.

Minimum requirements when assessing this unit
ABC expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching

EVIDENCE OF ACHIEVEMENT

All evidence must be clearly signposted and made available for the external moderator upon request

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the ABC web site)

Sample evidence checklists are available on the ABC website

The following unit is offered as part of the Certificate and Diploma

Unit Title	**D/601/5456 Skills in removing and replacing exterior motor vehicle body panels including permanently fixed components**
Level	**2**
Credit Value	**5**
Guided Learning Hours	**45**
Unit Summary	This unit will help the learner to develop the skills required to carry out a range of removal and fitting of exterior panels using mechanical fastening, adhesive bonding, welding and joining techniques. It also covers the evaluation of the operation of the components when fitted
Learning Outcomes (1 to 5) ***The learner will***	**Assessment Criteria (1.1 to 5.4)** ***The learner can***
1. Be able to work safely when carrying out removal and replacement of exterior vehicle panels including permanently fixed panels	**1.1** Use suitable personal protective equipment and vehicle coverings throughout all removal and replacement activities **1.2** Work in a way which minimises the risk of damage or injury to the vehicle, people and the environment
2. Be able to use relevant information to carry out the task	**2.1** Select suitable sources of technical information to support motor vehicle removal and fitting activities including • vehicle technical data • removal and fitting procedures • legal requirements **2.2** Use technical information to support motor vehicle removal and fitting activities
3. Be able to use appropriate tools and equipment	**3.1** Select the appropriate tools and equipment necessary for carrying out removal and fitting of exterior body panels including permanently fixed vehicle panels **3.2** Ensure that equipment has been calibrated to meet manufacturers' and legal requirements **3.3** Use the appropriate tools and equipment in the way specified by manufacturers when carrying removal and fitting of exterior body panels including permanently fixed vehicle panels

4. Be able to carry out removal and fitting of exterior vehicle panels including permanently fixed panels	**4.1** Identify prior to working on the vehicle the component materials involved that will be worked on during the repair **4.2** Remove and fit adjacent exterior body panels including those that are permanently fixed **4.3** Carry out removal and fitting of exterior body panels including permanently fixed vehicle panels adhering to specifications and tolerances for the vehicle and following • recognised researched removal and fitting methods • health and safety requirements • workplace procedures **4.4** Use and apply sealants and anti corrosion materials conforming to the manufacturers specification **4.5** Ensure that the replacement panels conform to the vehicle specifications for dimension, material and functional capability **4.6** Ensure the components are realigned correctly in a way which regains their original manufactured tolerance **4.7** Ensure any damage is minimised to mating surfaces. Any damage caused should be correctly reinstated **4.8** Ensure permanently fixed panels are replaced without incurring damage to the vehicle systems **4.9** Ensure all components and panels are stored safely and in the correct location
5. Be able to record information and make suitable recommendations	**5.1** Produce work records that are accurate, complete and passed to the relevant person(s) promptly in the format required **5.2** Make suitable and justifiable recommendations for cost effective repairs **5.3** Record and report any additional auto electrical faults noticed during the course of their work promptly in the format required
Mapping to National Occupational Standards Directly mapped to IMI SSC Accident Repair - Body NOS 2010, unit BP05	

SUPPORTING UNIT INFORMATION

D/601/5456 Skills in removing and replacing exterior motor vehicle body panels including permanently fixed components - Level 2

INDICATIVE CONTENT

You must:

- Produce evidence to show you meet all of the learning outcomes
- Produce performance evidence resulting from work you have carried out in your training workshop as managed and organised by an approved centre
- Be observed by an assessor as defined in the IMI Assessment Strategy
- Produce evidence of carrying out the removal and replacement of vehicle body panels in combinations of 3 or more adjacent panels, one of which should be permanently fixed e.g. welded or bonded. All learning outcomes must be covered.
- Exterior body panels:
  - combinations of 3 or more adjacent panels, one of which should be permanently fixed (Examples include: two doors and a wing, two wings and a bonnet; bonnet, wing and door on the same side; bumper, wing, and bonnet
  - welded panel. (These are front panels; including headlamp panel, bonnet landing panel, lower cross member) and rear panels

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