National Occupational Standards: Accident Repair – SMART Cosmetic

NOS G1 –Contribute to Housekeeping in Motor Vehicle Environments

UNIT OVERVIEW

This unit is about the routine maintenance of the workplace, carrying out basic, non-specialist checks of work tools and equipment, cleaning the work area and using resources economically.

SCOPE OF THIS UNIT:

All of the items listed below form part of this National Occupational Standard

1. **Equipment maintenance** covers

    a. routine checks on work tools and equipment
    b. cleaning work tools and equipment
    c. replacing minor parts
    d. visual inspection of electrical equipment

2. **Housekeeping activities** cover

    a. day to day work area cleaning
    b. clearing away
    c. dealing with spillages
    d. disposal of waste, used materials and debris

3. **Work tools and equipment** are

    a. hand
    b. electrical
    c. mechanical
    d. pneumatic
    e. hydraulic

ESSENTIAL KNOWLEDGE

You need to understand:

Legislative and organisational requirements and procedures

1. the scope of your job responsibilities for the use and maintenance of hand tools, equipment and your work area.
2. workplace policies and schedules for **housekeeping activities** and **equipment maintenance.**
3. the manufacturer's requirements for the cleaning and general, non- specialist maintenance of the tools and equipment for which you are responsible.
4. the regulations and information sources applicable to workshop cleaning and maintenance activities for which you are responsible.
5. the importance of reporting faults quickly to the relevant person.
6. the importance of reporting anticipated delays to the relevant person(s) promptly.

Equipment maintenance

7. how to select and use equipment used for basic hand tool maintenance activities.
8. how to store hand tools safely and accessibly.
9. how to report faulty or damaged **work tools and equipment.**
10. how to work safely when cleaning and maintaining **work tools and equipment**.

General work area housekeeping

11. how to select and use cleaning equipment
12. how to use resources economically.
13. how to use work area cleaning materials and agents.
14. how to clean and maintain the **work tools and equipment** and work areas for which you are responsible.
15. how to dispose of unused cleaning agents, materials and debris.
16. the properties and hazards associated with the use of cleaning agents and materials.
17. the importance of wearing personal protective equipment.
18. the importance of using resources economically and for their intended purpose only.

PERFORMANCE OBJECTIVES

To be competent you must:

a. wear suitable personal protective equipment throughout all **housekeeping** and **equipment maintenance activities**.
b. select and use cleaning equipment which is:

- of the right type
- suitable for the task.

c. use resources economically and for their intended purpose only, following manufacturers' instructions and workplace procedures.

d. follow workplace policies, schedules and manufacturers' instructions when cleaning and maintaining hand tools and equipment.
e. clean the work area(s), for which you are responsible, at the specified time and frequency.
f. carry out **housekeeping activities** safely and in a way which minimises inconvenience to customers and staff.
g. follow the manufacturer's instructions when using cleaning and sanitising agents.
h. ensure your **housekeeping activities** keep your work area clean and free from debris and waste materials.
i. ensure your **equipment maintenance** activities keep your **work tools and equipment** fit for purpose.
j. dispose of used cleaning agents, materials and debris to comply with legal and workplace requirements.
k. store your **work tools and equipment** in a safe manner which permits ease of access and identification for use.
l. report any faulty or damaged tools and equipment to the relevant person(s) clearly and promptly.
m. report any anticipated delays in completion to the relevant person(s) promptly.

NOS G2 – Reduce Risks to Health and Safety in the Motor Vehicle Environment

UNIT OVERVIEW

This unit covers the basic, legally required health and safety duties of everyone in the workplace. It describes the competence required to ensure that:

- your own actions do not create any health and safety risks
- you do not ignore significant risks in your workplace, and
- you take sensible action to put things right, including reporting situations which pose a danger to people in the workplace, and seeking advice from others

This unit does **not** require you to undertake a full Risk Assessment. It is about having an appreciation of significant risks in the workplace and knowing how to identify them and deal with them.

When you have completed this unit, you will have proved you can:

1. Identify hazards and evaluate risks in your workplace
2. Reduce the risks to health and safety in your workplace

SCOPE OF THIS UNIT:

All of the items listed below form part of this National Occupational Standard

1. Risks resulting from

a. the use and maintenance of machinery or equipment
b. the use of materials or substances
c. working practices which do not conform to laid down policies
d. unsafe behaviour
e. accidental breakages and spillages
f. environmental factors
g. working at height
h. lifting operations and manual handling
i. incorrect use of personal protective equipment

2. Workplace policies covering

a. the use of safe working methods and equipment
b. the safe use of hazardous substances
c. smoking, eating, drinking and drugs
d. what to do in the event of an emergency
e. personal presentation
f. personal protective equipment

g. lifting operations and manual handling
h. working at height
i. mobile phones and personal stereo equipment

ESSENTIAL KNOWLEDGE

You need to understand:

Health and Safety Legislation and Workplace Policies

1. your legal duties for health and safety in the workplace as required by the Health and Safety at Work Act 1974, and any other policies or procedures that govern your working practices.

2. your duties for health and safety as defined by any specific legislation covering your job role
3. **agreed workplace policies relating to controlling risks to health and safety**
4. responsibilities for health and safety in your job description

5. the responsible persons to whom you report health and safety matters

Risks to Health and Safety

6. what hazards may exist in your workplace, (eg. Slips, trips and falls).

7. health and safety risks which may be present in your own job role and the precautions you must take

8. the importance of remaining alert to the presence of hazards in the whole workplace
9. how to deal with and report risks
10. the importance of dealing with or promptly reporting risks
11. the requirements and guidance on the precautions
12. the specific workplace policies covering your job role
13. suppliers' and manufacturers' instructions for the safe use of equipment, materials and products
14. safe working practices for your own job role
15. the importance of personal presentation in maintaining health and safety in the workplace
16. the importance of personal conduct in maintaining the health and safety of yourself and others
17. the importance of personal protective equipment, when and where it should be used and the importance of maintaining it correctly.
18. your scope and responsibility for rectifying risks
19. workplace procedures for handling risks which you are unable to deal with

PERFORMANCE OBJECTIVES

To be competent you must:

a carry out your working practices in accordance with legal requirements
b identify the correct personal and vehicle protective equipment required to correctly carry out your workplace practices
c carry out your workplace practices using the correct personal protective equipment
d follow the most recent **workplace policies** for your job role
e rectify health and safety **risks** that are within your capability and scope of your job responsibilities
f pass on any suggestions for reducing **risks** to health and safety within your job role to the responsible persons
g ensure your personal conduct in the workplace does not endanger the health and safety of yourself or other persons
h follow the **workplace policies** and suppliers' or manufacturers' instructions for the safe use of equipment, materials and products
i report any differences between **workplace policies** and suppliers' or manufacturers' instructions as appropriate
j ensure your personal presentation at work:

- ensures the health and safety of yourself and others,
- meets any legal duties, and
- is in accordance with workplace policies

NOS G3 – Maintain Working Relationships in the Motor Vehicle Environment

UNIT OVERVIEW

This unit is about maintaining good working relationships with all colleagues in the working environment by using effective communication and support skills.

SCOPE OF THIS UNIT:

All of the items listed below form part of this National Occupational Standard

1. **Colleagues** are

    a. immediate work colleagues
    b. supervisors and managers

2. **Requests for assistance** covering

    a. technical assistance
    b. personal assistance

ESSENTIAL KNOWLEDGE

You need to understand:

Your responsibilities and constraints

1. your own and your colleague's job role and limits of responsibility for giving advice and support.
2. the operational constraints which may affect interaction with colleagues.
3. lines of communication within your workplace.

Communication skills and working relationships

4. how to use suitable and effective spoken communication skills when responding to and interacting with others.
5. how to adapt written and spoken communication methods to satisfy the needs of colleagues.
6. how to report problems using written and spoken methods of communication.
7. the importance of developing positive working relationships with colleagues – the effect on morale, productivity, and company image.
8. the importance of accepting other peoples' views and opinions.
9. the importance of making and honouring realistic commitments to colleagues.

PERFORMANCE OBJECTIVES

To be competent you must:

a. contribute actively to team working by initiating ideas and co-operating with colleagues.

b. respond promptly and willingly to requests for assistance from **colleagues** which fall within the limits of your own job responsibilities and capabilities.
c. where requests fall outside your responsibility and capability, refer colleagues to the relevant person(s).
d. give colleagues sufficient, accurate information and support to meet their work needs.
e. make **requests for assistance** to **colleagues** clearly and courteously.
f. use methods of communication which meet the needs of colleagues.
g. treat colleagues in a way which shows respect for their views and opinions and promotes goodwill.
h. make and keep achievable commitments to **colleagues**
i.. inform colleagues promptly of any problems or information likely to affect their own work.

NOS G4 – Use of hand tools and equipment in Motor Vehicle Engineering

NOS OVERVIEW

This NOS is about the basic use of tools, materials and fabrications relevant to the Automotive Sector.

This NOS is about:
• interpreting information
• adopting safe and healthy working practices
• selecting materials and equipment

This NOS is those working in technical support roles. It is also appropriate for workshop planners.

ESSENTIAL KNOWLEDGE

You must know and understand:

a. The organisational procedures developed to report and rectify inappropriate information and unsuitable resources, and how they are implemented.
b. The types of information, their source and how they are interpreted.
c. The organisational procedures to solve problems with the information and why it is important they are followed.
d. The level of understanding operatives must have of information for relevant, current legislation and official guidance and how it is applied.
e. What the accident reporting procedures are and who is responsible for making the reports.
f. Why and when personal protective equipment (PPE) should be used.
g. Why disposal of waste should be carried out safely and how it is achieved
h. Demonstrate an understanding of material properties
i. Investigate the use of materials and fabrication
e. how to file, fit, tap, thread, cut and drill plastics and metals
how to select and use gaskets, sealants, seals, fittings and fasteners

PERFORMANCE OBJECTIVES

You must be able to:

1. Interpret the given information relating to the work and resources to confirm its relevance
2. Carry out pre-start preparation inspections on power tools and equipment in accordance with approved procedures
3. Carry out operations using power tools and equipment in accordance with safe working practices to achieve the work outcome
4. Identify problems associated with power tools and equipment which need to be referred to authorised personnel
5. Demonstrate work skills to:
    • measure, mark out, file, fit, tap, thread, cut, drill, finish, position and secure.
6. Use and maintain:

- hand tools
- ancillary equipment
- safety aids

7. Disposal of waste in accordance with legislation to maintain a clean work space
8. Checks carried out in accordance with manufacturer's/operator's guidance, legislation and official guidance and
organisational requirements
9. Demonstrate work skills to select correct materials and fabrication for project

NOS G6 – Enable Learning through Demonstrations and Instruction

(ENTO Unit L11)

UNIT OVERVIEW

This unit is about demonstrating skills and methods to learners and instructing learners in procedures and processes.

KEY WORDS AND PHRASES

Demonstration and instruction activities

These include; demonstrating how equipment is used, showing a learner how to do something, giving learners instructions on what to do or how to carry out a particular activity, deciding when you should use demonstration or instruction to encourage learning, reviewing the potential use of technology-based learning, checking on the progress of learners and giving feedback to learners.

SCOPE OF THIS UNIT:

All of the items listed below form part of this National Occupational Standard

None has been defined for this unit.

ESSENTIAL KNOWLEDGE

You need to understand:

The nature and role of demonstrations and instruction

1. the separate areas of demonstrations which encourage learning
2. which types of learning are best achieved and supported through demonstrations
3. how to identify and use different learning opportunities
4. how to structure demonstrations and instruction sessions
5. how to choose from a range of demonstration techniques

Principles and concepts

6. how to put learners at their ease and encourage them to take part
7. how to choose between demonstration and instruction as learning methods
8. how to identify individual learning needs
9. which factors are likely to prevent learning and how to overcome them
10. how to check learners' understanding and progress
11. how to put information in order and decide whether the language you will be using is appropriate

12. how to choose and prepare appropriate materials, including technology based materials
13. the separate areas of instructional techniques which encourage learning
14. which types of learning are best achieved and supported through instruction

External factors influencing human resource development

15. how to make sure everybody acts in line with health, safety and environmental protection l legislation and best practice.
16. how to analyse and use developments in learning and new ways of delivery, including technology-based learning.

PERFORMANCE OBJECTIVES

1. Demonstrate skills and methods to learners

To be competent you must:

a. base the demonstration on an analysis of the skills needed and the order they must be learned in.
b. ensure that the demonstration is accurate and realistic.
c. structure the demonstration so the learner can get the most out of it.
d. encourage learners to ask questions and get explanation at appropriate stages in the demonstration.
e. give learners the opportunities to practise the skill being demonstrated and give them positive feedback.
f. give extra demonstrations of the skills being taught to reinforce learning.

g. ensure that demonstrations take place in a safe environment and allow learners to see the demonstration clearly.
h. respond to the needs of learners during the demonstration.
i. reduce distractions and disruptions as much as possible.

2. Instruct learners

To be competent you must:

a. match instruction to the needs of the learners.
b. identify which learning outcomes will be achieved through instruction.
c. ensure that the manner, level and speed of the instruction encourages learners to take part.
d. regularly check that learners understand and adapt instruction as appropriate.
e. give learners positive feedback on the learning experience and the outcomes achieved.
f. identify anything that prevents learning and review this with the learners.

NOS G8 – Identify and Agree the Motor Vehicle Customers Needs

UNIT OVERVIEW

This unit is about: gaining information from customers on their perceived needs; giving advice and information and agreeing a course of action; contracting for the agreed work and completing all necessary records and instructions.

ESSENTIAL KNOWLEDGE

You need to understand:

Legislative and organisational requirements and procedures

1. the fundamental legal requirements of current consumer legislation and the consequences of your own actions in respect of this legislation.
2. the content and limitations of company and product warranties for the vehicles dealt with by your company.
3. the limits of your own authority for accepting vehicles.
4. the importance of keeping customers informed of progress.
5. your workplace requirements for the completion of records.
6. how to complete and process all the necessary documentation.

Customer communication and care

7. how to communicate effectively with, and listen to, customers.
8. how to adapt your language when explaining technical matters to non-technical customers.
9. how to use effective questioning techniques.
10. how to care for customers and achieve customer satisfaction.

Company products and services

11. the range of options available to resolve vehicle problems.
12. the range and type of services offered by your company.
13. the effect of resource availability upon the receipt of customer vehicles and the completion work.
14. how to access costing and work completion time information.

PERFORMANCE OBJECTIVES

To be competent you must:

a. obtain sufficient, relevant information from the customer to make an assessment of their own and perceived vehicle needs.
b. provide customers with accurate, current and relevant advice and information on:
    - suitable vehicle inspection, repair and/or service procedures
    - potential courses of action
    - the implications of courses of action
    - the estimated costs.

c. provide advice and information clearly and in a form and manner which the customer will understand.
d. actively encourage customers to ask questions and seek clarification during your conversation.
e. support the accurate identification and clarification of customer and vehicle needs, by referring to:

    - vehicle data
    - operating procedures.

f. before accepting the vehicle, agree with the customer and record:

    - the extent and nature of the work to be undertaken
    - the terms and conditions of acceptance
    - the cost
    - the timescale.

g. confirm your customer's understanding of the agreement you have made.
h. ensure your recording systems are complete, accurate, in the format required and signed by the customer where necessary.
i. pass all completed records to the next person in the process promptly.
j. gain further customer approval where the contracted agreement is likely to be exceeded.

NOS CR07 – Repair Motor Vehicle Exterior Body Panels

UNIT OVERVIEW

This unit is about repairing exterior, cosmetic non-structural body panels and panel sections using a variety of techniques.

SCOPE OF THIS UNIT:

All of the items listed below form part of this National Occupational Standard

1. Repairs include:

a. body filling and finishing of flat areas of a panel
b. repairs to dents that are over 7 cm in diameter in non-structural body panels, including double curvature panels and swage lines
c. repairs to splits and scuffs on plastic exterior trim components

2. Techniques and processes include:

a. plastic repairs
b. panel pulling
c. metal finishing
d. application of filler material
e. panel beating
f. indirect hammering
g. direct hammering
h. spring hammering
i. body filing

3. Tools include:

a. panel hammers
b. dollies
c. body spoons
d. body file
e. dual action sander
f. rubbing down hand blocks
g. beating file
h. abrasives
i. mixing and sanding tools
j. specialist dent removal tools

ESSENTIAL KNOWLEDGE

You need to understand:

Legislative and organisation requirements and procedures

1. the health and safety legislation and workplace procedures relevant to workshop practices and personal and vehicle protection when repairing body panels.

2. the vehicle work specification agreed.
3. the importance of working to agreed timescales and keeping others informed of progress.
4. the relationship between time, cost and profitability.
5. your workplace procedures for the referral of problems.
6. the importance of reporting anticipated delays to the relevant person(s) promptly.
7. the requirements for protecting the vehicle and contents from damage before, during and after minor repair activities.

Tools

8. the principles governing the selection and use of hand tools for metal finishing and plastic filling repairs.
9. how to select the correct tools to carry out reshaping work, including specialist dent removal tools.
10. how to prepare, test, use and maintain the hand and power tools required to prepare damage and reshape damaged areas.

Materials

11. how to mix and apply filler material.
12. the properties and use of metals used to manufacture body panels. (including ultra high strength steels).
13. the properties and safe use of types of filling materials used to repair panels.
14. the different types and grades of abrasive and their use.
15. the techniques for identifying the type of plastics used for manufactured components

Repairing non-structural body panels

16. how to interpret and use sources of information relevant to the removal of body components.
17. how to prepare the vehicle to avoid contamination.
18. how to prepare damaged areas to facilitate repairs.
19. how to repair plastic components using thermal and adhesive techniques.
20. how to rough out and metal finish body panels.
21. how to reshape filling materials to match the original panel contour.
22. how to finish repairs to a suitable condition for handing on to the painting stage.
23. how to work safely avoiding damage to the vehicle and its systems.
24. the techniques for reshaping damaged body panels using hand and specialist tools.

25. the procedures for reinstating anti-corrosion, sealant and sound deadening materials.
26. the procedures for repairing damage to plastic components.
27. the techniques and processes for

    - plastic repairs
    - hot shrinking
    - panel pulling
    - metal finishing
    - application of filler material
    - indirect hammering
    - direct hammering
    - spring hammering
    - body filing

28. the techniques used to regain the contours of repaired plastic components.
29. methods of checking reshaped panel contours for accuracy.
30. standards of finish required to enable the next stage of repairs to proceed.
31. the manufacturer's approved methods of working for the preparation and repair of non-structural body panels.

PERFORMANCE OBJECTIVES

To be competent you must:

a. use the appropriate personal protective equipment when carrying out repairs to non-structural body panels
b. protect the vehicle and its contents and the work area effectively when carrying out repairs to non-structural body panels
c. support the preparation and repair of non-structural body panels by reviewing:

    - technical data
    - repair procedures.

d. prepare and test all the tools required, following manufacturers' instructions, prior to use.
e. carry out repairs to non-structural body panels following:

    - the correct technique and process
    - manufacturer's instructions
    - your workplace procedures
    - health, safety and legal requirements

f. use specialist dent removal tools effectively to relieve all damaged panels.
g. complete repairs to non-structural body panels so they are restored to their original contour using hand tools and filling materials effectively
h. avoid damaging other components, units and panels on the vehicle

i. replace correctly any sealer, anti-corrosion and sound deadening materials which were removed prior to the repair.
j. all plastic repairs regain the strength of the original part.
k. pass on the completed repairs in a suitable condition for painting.
l. complete all repair activities within the agreed timescale.
m. report any anticipated delays in completion to the relevant person(s) promptly.

NOS CR08 – Prepare Motor Vehicle Panels to Accept Foundation and Topcoats

UNIT OVERVIEW

This unit is about preparing a wide variety of different panel and component surfaces to accept foundation materials and paint topcoats. The ability to identify body panel surfaces is required.

SCOPE OF THIS UNIT:

All of the items listed below form part of this National Occupational Standard

1. Surfaces are on

a. electro-coated panels
b. repaired panels
c. original manufacturer's finish
d. plastic components
e. zinc coated panels
f. steel panels
g. aluminium panels
h. previously primed panels

2. Methods and techniques are

a. feathering out
b. de-greasing
c. flatting using guide coats
d. masking for foundation and topcoats
e. plastic preparation
f. tack off

3. Tools and equipment are

a. hand and power sanders
b. masking material dispensers
c. extraction

ESSENTIAL KNOWLEDGE

You need to understand:

Legislative and organisational requirements and procedures

1. the health, safety and legal requirements relating to the preparation of panel surfaces for foundation and topcoats
2. your workplace procedures for:

    - the referral of problems
    - reporting of delays to the completion of work
    - completion of work records
    - personal protection

3. the work that needs to be done and the standard required
4. the importance of reporting anticipated delays to the relevant person(s) promptly
5. the requirements for protecting the vehicle and contents from damage before, during and after foundation and topcoat preparation activities
6. the importance of selecting, using and maintaining the appropriate personal protective equipment when preparing panel surfaces for foundation and topcoats
7. the relationship between time and cost

Tools and equipment

8. how to prepare, test and adjust hand and power sanders and masking material dispensers
9. how to use hand and power sanders, extraction and masking equipment

Foundation and topcoats preparation

10. how to recognise damage to surfaces and ancillary fittings
11. how to recognise substrates
12. how the substrate affects the preparation process
13. how to interpret manufacturer's preparation schedules
14. how to prepare new and repaired panels using feathering out, de-greasing, flatting using guide coats, masking for foundation and topcoats, plastic preparation and tack off techniques
15. how to carry out masking procedures to avoid materials wastage and vehicle contamination for each stage of the preparation process
16. how to prepare panels and parts adjacent to the area being painted
17. the factors governing the choice of panel preparation methods for electro-coated panels, repaired panels, original manufacturer's finish, plastic components, zinc coated panels, steel panels, aluminium panels and previously primed panels
18. the types and grades of available abrasives and the factors governing their use for different substrates.
19. methods of protecting panels and parts adjacent to the areas being painted and the circumstances in which they should be used

20. methods and techniques of masking (including paper and sheet masking) and the circumstances in which they should be used
21. the importance of following manufacturers' instructions and using their approved methods of working (including use of materials and equipment)
22. the consequences of failing to follow manufacturers' instructions
23. the importance of working to agreed timescales and keeping others informed

Health and safety

24. how to work safely avoiding damage to vehicles, personal injury and injury to colleagues
25. how to dispose of waste materials
26. the importance of disposing of waste safely and the consequences of not doing so to others and the environment

PERFORMANCE OBJECTIVES

To be competent you must:

a. use the appropriate personal protective equipment when carrying out all surface preparation activities
b. protect the vehicle and its contents effectively when carrying out all surface preparation activities
c. select and use the correct tools and equipment for the type of surface preparation activities you carrying out
d. ensure that the tools and equipment you require are in a safe working condition
e. identify the body panel surfaces accurately prior to undertaking any preparation work
f. follow the work instructions given for the job correctly
g. clean and protect all surfaces adjacent to those being prepared using the specified method
h. report any unrecorded damage to surfaces and ancillary fittings to the relevant person(s) promptly and accurately
i. remove and store safely any components likely to be affected by the preparation process
j. keep your work area clean and tidy throughout all preparation activities
k. prepare all the panel surfaces required following health and safety requirements and using:

    - suitable materials for the type of surface
    - the approved method and technique
    - the approved tools and equipment

l. leave all the areas prepared free from contamination and ready for the application of foundation and topcoats
m. dispose of waste materials to conform with legal and workplace requirements
n. complete all vehicle preparation activities with the agreed timescale
o. report any anticipated delays in completion to the relevant person(s) promptly

NOS CR09 – Prepare and Apply Foundation Materials to Motor Vehicles

UNIT OVERVIEW

This unit is about identifying substrates including any unrecorded damage, mixing and adjusting the viscosity of fillers and foundation materials, applying fillers and foundation materials

SCOPE OF THIS UNIT:

All of the items listed below form part of this National Occupational Standard

1. Equipment

a. viscosity measuring
b. paint mixing and application equipment
c. paint rollers
d. spray booth
e. heating and drying equipment
f. fume and dust extraction equipment
g. air feed breathing apparatus

2. Foundation materials are:

a. etch primers
b. primer fillers,
c. primer surfacers
d. stoppers
e. anti-stone chip treatments
f. anti-corrosion treatments

3. Materials are:

a. chemical cleaning agents
b. conditioning agents,
c. dilutants and hardeners
d. adhesion promoters

4. Surface defects are:

a. stone chips
b. scratches
c. pin holes

ESSENTIAL KNOWLEDGE

You need to understand:

Legislative and organisational requirements and procedures

1. the health and safety legislation and workplace procedures relevant to workshop practices and personal and vehicle protection.

2. the importance of disposing of waste safely and the consequences of not doing so to others and the environment.
3. the importance of selecting, using and maintaining the appropriate personal protective equipment when preparing and applying foundation materials.
4. the vehicle work specification agreed.
5. your workplace procedures for

    - the referral of problems
    - reporting of delays to the completion of work
    - personal protection

6. the requirements for protecting the vehicle and contents from damage before, during and after preparing and applying foundation materials.
7. the importance of working to agreed timescales and keeping others informed of progress.
8. the relationship between time and cost.
9. the importance of reporting anticipated delays to the relevant person(s) promptly

Equipment

10. how to prepare, test and adjust all the equipment required for the preparation and application of foundation materials.
11. how to use viscosity measuring equipment, paint mixing and application equipment, heating and drying equipment, fume and dust extraction, air supply systems, and air feed breathing apparatus.
12. spray gun faults, their cause and their rectification.

Materials

13. how to prepare foundation materials.
14. the properties of foundation materials.
15. the factors affecting the choice and use of foundation materials.
16. the principles of paint mixing, the importance of the right additive (hardener or thinner) in the correct ratio.
17. the curing and drying recommendations for various fillers and foundation materials.

Preparation and application of foundation materials

18. how to find, interpret and use sources of information relevant to the mixing and application of foundation coatings.
19. how to condition and clean surfaces prior to the application of foundation coats.

20. how to rectify surface defects
21. how to apply foundation coatings.
22. how to avoid application defects.
23. how to dispose of waste materials.
24. how to work safely avoiding damage to vehicles, personal injury and injury to colleagues.
25. the importance of viscosity and its effect on the surface finish.
26. the importance of proper cleaning and using the correct foundation material to ensure adequate adhesion of the paint system.
27. the manufacturer's approved instructions for working when applying foundation materials.

PERFORMANCE OBJECTIVES

To be competent you must:

a. use the appropriate personal protective equipment when carrying out the preparation and application of foundation materials
b. protect the vehicle and its contents effectively when carrying out the preparation and application of foundation materials
c. support the preparation and application activities by reviewing:

- foundation materials data
- work instructions

d. prepare, test and adjust all the equipment required, following manufacturers' instructions, prior to use.
e. when necessary, apply the correct type of fillers and stoppers to rectify surface defects.
f. report any unrecorded damage to surfaces and ancillary equipment to the relevant person(s) promptly and accurately.
g. mix all the foundation materials required following health and safety requirements and using:

- suitable compatible materials
- the approved method
- the approved equipment.

h. apply all the foundation materials required following health and safety requirements and using:

- the approved method
- the approved equipment

i. dry and cure foundation materials following health and safety requirements and using:

- the approved method
- the approved equipment

j. ensure the finished surface is suitable to accept the next process.
k. dispose of waste materials to conform with legal and workplace requirements.
l. leave all application equipment in a clean and serviceable condition.
m. complete all preparation and application activities within the agreed timescale.
n. report any anticipated delays in completion to the relevant person(s) promptly.

NOS CR11 – Carry Out Complete Motor Vehicle Refinishing Operations

UNIT OVERVIEW

This unit is about the ability to undertake the complete vehicle re-painting process, including the preparation and application of foundation materials, on repaired and new vehicle panels

SCOPE OF THIS UNIT:

All of the items listed below form part of this National Occupational Standard

1. Vehicle refinishing operations cover

a. preparation
b. application
c. drying
d. polishing

2. Tools and equipment are

a. polishing machines
b. denibbing blocks
c. flatting equipment
d. masking material dispensers
e. dust extraction
f. paint mixing and application equipment
g. viscosity measuring equipment
h. air supply equipment
i. spray booth
j. drying equipment

3. Refinishing systems and materials are

a. compounds
b. flatting papers
c. polishes
d. etch primers
e. fillers
f. surfacers
g. anti-stone chip treatments
h. anti-corrosion treatments
i. cleaning agents
j. conditioning agents
k. adhesion promoters
l. metallic clear over base paints
m. non-metallic clear over base paints

n. mica clear over base paints
o. dilutants
p. tinters
q. additives
r. hardeners

4. Application techniques are

a. edge to edge
b. fade out
c. blending colour into adjacent panels
d. spot repair

5. Surfaces are

a. electro-coated panels
b. repaired panels
c. original manufacturer's finish
d. plastic components
e. zinc coated panels
f. steel panels
g. aluminium panels
h. previously primed panels

6. Methods and techniques are for

a. de-greasing
b. flatting
c. burnishing
d. removing materials to a sound substrate
e. feathering out
f. masking
g. recoating
f. polishing
g. plastic preparation
h. tack off

ESSENTIAL KNOWLEDGE

You need to understand:

Legislative and organisational requirements and procedures

1. the health and safety and environmental legislative requirements specific to vehicle refinishing operations and why it is important that these are followed.
2. workplace procedures and workshop practices relevant to personal and vehicle protection before, during and after vehicle refinishing operations.

3. the importance of disposing of waste safely and the consequences of not doing so to others and the environment.
4. the vehicle work specification agreed.
5. your workplace procedures for

    - the referral of problems
    - reporting delays to the completion of work
    - personal protection

6. the importance of working to agreed timescales and keeping others informed of progress.
7. the relationship between time, cost and profitability
8. the importance of reporting anticipated delays to the relevant person(s) promptly.

Tools and equipment

9. how to prepare, test, adjust and use all the tools and equipment required for vehicle refinishing operations.
10. spray gun faults, their cause and their rectification.

Materials

11. how to prepare refinishing systems and materials for use.
12. the properties of refinishing systems and materials and the factors affecting their use.

Foundation and topcoats preparation

13. how to recognise damage to surfaces and ancillary fittings
14. how to recognise substrates
15. how the substrate affects the preparation process
16. how to interpret manufacturer's preparation schedules
17. how to prepare new and repaired panels using feathering out, de-greasing, flatting using guide coats, masking for foundation and topcoats, plastic preparation and tack off techniques
18. how to carry out masking procedures to avoid materials wastage and vehicle contamination for each stage of the preparation process
19. how to prepare panels and parts adjacent to the area being painted
20. the factors governing the choice of panel preparation methods for electro- coated panels, repaired panels, original manufacturer's finish, plastic components, zinc coated panels, steel panels, aluminium panels and previously primed panels
21. the types and grades of available abrasives and the factors governing their use for different substrates.
22. methods of protecting panels and parts adjacent to the areas being painted and the circumstances in which they should be used
23. methods and techniques of masking (including paper and sheet masking) and the circumstances in which they should be used

Preparation and application of foundation materials

24. how to find, interpret and use sources of information relevant to the mixing and application of foundation coatings.
25. how to condition and clean surfaces prior to the application of foundation coats.
26. how to rectify surface defects
27. how to apply foundation coatings.
28. how to avoid application defects.
29 how to dispose of waste foundation materials.
30. the importance of viscosity and its effect on the surface finish.
31. the importance of proper cleaning and using the correct foundation material to ensure adequate adhesion of the paint system.
32. the manufacturer's approved instructions for working when applying foundation materials.

Applying top coats

33. how to find, interpret and use sources of information relevant to the refinishing of vehicles.
34. how to apply top coat materials using edge to edge, fade out and blending techniques when applying top coats and undertaking spot repairs, avoiding contamination and defects.
35. how to dry top coats
36. how to assess and evaluate colour match, blending and the final finish
37. how to dispose of waste materials
38. how to work safely avoiding damage to vehicles, personal injury and injury to colleagues.
39. how to minimize the spray area when carrying out spot repairs
40. the effect of the spray environment and natural environment on vehicle finishes.
41. how application can affect colour variation and tone.
42. the importance of following manufacturers' instructions and using their approved methods of working (including the use of refinishing systems and materials and equipment).
43. the consequences of failing to follow manufacturers' instructions.

PERFORMANCE OBJECTIVES

To be competent you must:

a. wear suitable personal protective equipment and use the specified environmental safety equipment throughout all vehicle refinishing operations.
b. support vehicle refinishing operations by reviewing:

- product data
- the vehicle manufacturer's technical data
- colour libraries
- work instructions

c. identify the body panel surfaces accurately prior to undertaking any refinishing work
d. prepare, test and adjust all the tools and equipment required, following manufacturers' instructions, prior to use.

e. prepare all the refinishing systems and materials required following health and safety requirements and using:

- materials which conform to the specification required
- the manufacturer's approved method
- the manufacturer's approved equipment

e. ensure all paints you prepare meet the specification required for colour and viscosity prior to application.

f. apply all refinishing systems and materials using approved tools and equipment and following:

- the manufacturer's instructions
- the correct methods and techniques
- the correct application techniques for managing colour and tone variables
- health and safety requirements

g. dry all refinishing applied materials following health and safety requirements and using:

- the manufacturer's approved method
- the manufacturer's approved equipment

h. ensure the finish produced:

- meets the requirements of the manufacturer's warranty
- meets the refinishing specification required and customer needs
- blends with the existing finish
- is free from contaminants and defects

i. dispose of waste materials to conform with legal and workplace requirements
j. complete all refinishing activities within the agreed timescale
k. report any anticipated delays in completion to the relevant person(s)

NOS CR12 – Mix and Match Motor Vehicle Paint Colours

UNIT OVERVIEW

This unit is about the ability to identify, mix and match vehicle paint colours, including the use of tinters and the preparation of colour test cards.

SCOPE OF THIS UNIT:
All of the items listed below form part of this National Occupational Standard

1. Equipment is

a. paint mixing equipment
b. paint formulation equipment
c. viscosity measuring equipment
d. paint application equipment
e. air supply equipment
f. fume extraction equipment
g. spray booth
h. drying equipment

2. Refinishing systems and materials are

a. textured finishes
b. metallic clear over base paints
c. non-metallic clear over base paints
d. mica clear over base paints
c. dilutants
d. tinters
e. additives
f. hardeners

3. Mixing and matching techniques for

a. colour identification
b. colour mixing
c. colour test card production
d. colour comparison
e. colour adjustment

ESSENTIAL KNOWLEDGE

You need to understand:

Legislative and organisational requirements and procedures

1. the health and safety and environmental legislative requirements specific to mixing and matching vehicle colours and why it is important that these are followed.
2. workplace procedures and workshop practices relevant to personal and vehicle protection before, during and after mixing and matching vehicle colours.

3. the importance of disposing of waste safely and the consequences of not doing so to others and the environment.
4. the vehicle work specification agreed.
5. your workplace procedures for

    - the referral of problems
    - reporting delays to the completion of work

6. the importance of working to agreed timescales and keeping others informed of progress.
7. the relationship between time, cost and profitability
8. the importance of reporting anticipated delays to the relevant person(s) promptly.

Equipment

9. how to prepare, test, adjust and use all the equipment required for mixing and matching vehicle paint colours
10. how spraying equipment adjustments can alter colour
11. spray gun faults, their cause and their rectification

Refinishing systems and materials

12. the properties of refinishing systems and materials and the factors affecting their use

Mixing and matching paint colours

13. how to find, interpret and use sources of information relevant to the mixing and matching of vehicle paint colours
14. the principles of colour, the colour wheel and the effects of light
15. how to compare, mix, test and adjust colour tones and effects, including metallic and mica effects.
16. the consequences of adding too much tinter and the process for correcting and adjusting it
17. the factors affecting colour variation and tone, including the effects of metamerism
18. how to dry test panels and colour test cards and the importance of doing so
19. how to identify the causes of, and rectify, colour mismatch
20. how to assess and evaluate the need for blending techniques to achieve an acceptable colour match

21. the importance of correctly preparing the existing finish for colour matching and checking the match using the correct light source
22. how to identify the paint substrate and the importance of doing so
23. how to dispose of waste materials
24. how to work safely avoiding damage to vehicles, personal injury and injury to colleagues
25. the importance of following manufacturers' instructions and using their approved methods of working, including using of refinishing systems and materials and equipment)
26. the consequences of failing to follow manufacturers' instructions

PERFORMANCE OBJECTIVES

To be competent you must:

a. wear suitable personal protective equipment and use the specified environmental safety equipment throughout all paint mixing and matching activities.

b. support paint mixing and matching activities by reviewing:

- the vehicle manufacturer's technical data
- material manufacturer's data
- colour libraries
- work instructions

c. prepare, test and adjust all the equipment required, following manufacturers' instructions, prior to use.

d. prepare all the refinishing systems and materials required following health and safety requirements and using:

- materials which conform to the specification required
- the manufacturer's approved method
- the manufacturer's approved equipment

e. mix, compare and adjust colour tones and effects correctly using suitable mixing and matching techniques

f. ensure all refinishing systems and materials prepared meet the specification required for colour and viscosity prior to application.

g. apply refinishing systems and materials to colour test cards using approved equipment and following:

- the manufacturer's instructions
- the correct application techniques for managing colour and tone variables
- health and safety requirements

h. dry all colour test cards before checking colour following health and safety requirements and using:

- the manufacturer's approved method
- the manufacturer's approved equipment

i. ensure the colour produced:

- meets the material manufacturer's requirements
- meets the customer's requirements
- is a blendable match to the existing colour

j. dispose of waste materials to conform with legal and workplace requirements
k. complete all mixing and matching activities within the agreed timescale
l. report any anticipated delays in completion to the relevant person(s) promptly

NOS CR13 – Identify and Rectify Motor Vehicle Paint Defects and Faults

UNIT OVERVIEW

This unit is about rectifying a range faults which may often require the removal of materials to a sound substrate in order for rectification to take place. This unit requires the ability to undertake the complete rectification process, including the preparation and application of foundation materials and topcoats.

SCOPE OF THIS UNIT:

All of the items listed below form part of this National Occupational Standard

1. Paint defects and faults are those arising from

a. poor application
b. environmental conditions
c. contamination
d. corrosion
e. wear and tear
f. adverse chemical reactions
g. panel deformation
h. poor preparation

2. Methods and techniques are for

a. de-greasing
b. flatting
c. burnishing
d. removing materials to a sound substrate
e. feathering out
f. masking
g. recoating
f. polishing
g. plastic preparation

3. Tools and equipment are

a. polishing machines
b. denibbing blocks
c. flatting equipment
d. masking material dispensers
e. dust extraction
f. paint mixing and application equipment
g. viscosity measuring equipment
h. air supply equipment

i. spray booth
j. drying equipment

4. Refinishing systems and materials are

a. compounds
b. flatting papers
c. polishes
d. etch primers
e. fillers
f. surfacers
g. anti-stone chip treatments
h. anti-corrosion treatments
i. cleaning agents
j. conditioning agents
k. adhesion promoters
l. metallic clear over base paints
m. non-metallic clear over base paints
n. mica clear over base paints
o. dilutants
p. tinters
q. additives
r. hardeners

5. Surfaces are

a. electro-coated panels
b. repaired panels
c. original manufacturer's finish
d. plastic components
e. zinc coated panels
f. steel panels
g. aluminium panels
h. previously primed panels

ESSENTIAL KNOWLEDGE

You need to understand:

Legislative and organisational requirements and procedures

1. the health and safety legislation and workplace procedures relevant to workshop practices and personal and vehicle protection.
2. the importance of disposing of waste safely and the consequences of not doing so to others and the environment.
3. the importance of selecting, using and maintaining the appropriate personal protective equipment when repairing paint defects and faults
4. the vehicle work specification agreed.
5. your workplace procedures for

- the referral of problems
- reporting of delays to the completion of work
- personal protection

6. the requirements for protecting the vehicle and contents from damage before, during and after repairing paint defects and faults.
7. the importance of working to agreed timescales and keeping others informed of progress.

8. the relationship between time, cost and profitability.
9. the importance of reporting anticipated delays to the relevant person(s) promptly

Tools and equipment

10. how to prepare, test, use and adjust all the refinishing tools and equipment required for the repair of paint defects and faults
12. spray gun faults, their cause and their rectification
13. the types of fault that can be caused by faulty and misused refinishing tools and equipment and how to rectify them

Materials

14. how to select, prepare and use refinishing systems and materials
15. the properties of refinishing systems and materials and the factors affecting their choice and use

Foundation and topcoats preparation

16. how to recognise damage to surfaces and ancillary fittings
17. how to recognise substrates
18. how the substrate affects the preparation process
19. how to interpret manufacturer's preparation schedules
20. how to prepare new and repaired panels using feathering out, de-greasing, flatting using guide coats, masking for foundation and topcoats, plastic preparation techniques
21. how to carry out masking procedures to avoid materials wastage and vehicle contamination for each stage of the preparation process
22. how to prepare panels and parts adjacent to the area being painted
23. the factors governing the choice of panel preparation methods for electro- coated panels, repaired panels, original manufacturer's finish, plastic components, zinc coated panels, steel panels, aluminium panels and previously primed panels
24. the types and grades of available abrasives and the factors governing their use for different substrates.
25. methods of protecting panels and parts adjacent to the areas being painted and the circumstances in which they should be used
26. methods and techniques of masking (including paper and sheet masking) and the circumstances in which they should be used

Preparation and application of foundation materials

27. how to find, interpret and use sources of information relevant to the mixing and application of foundation coatings.
28. how to condition and clean surfaces prior to the application of foundation coats.
29. how to rectify surface defects
30. how to apply foundation coatings.
31. how to avoid application defects.
32. how to dispose of waste foundation materials.
34. the importance of viscosity and its effect on the surface finish.
35. the importance of proper cleaning and using the correct foundation material to ensure adequate adhesion of the paint system.
36. the manufacturer's approved instructions for working when applying foundation materials.

Applying top coats

37. how to find, interpret and use sources of information relevant to the refinishing of vehicles.
38. how to apply top coat materials using edge to edge, fade out and blending techniques when undertaking a complete repaint and spot repairs, avoiding contamination and defects.
39. how to dry top coats
40. how to assess and evaluate colour match, blending and the final finish
41. how to dispose of waste materials
42. how to work safely avoiding damage to vehicles, personal injury and injury to colleagues.
43. how to minimise the spray area when carrying out spot repairs
44. the effect of the spray environment and natural environment on vehicle finishes.
45. how application can affect colour variation and tone.

Rectification of paint faults

46. how to find, interpret and use sources of information relevant to the rectification of paint faults and defects
47. how to identify the existing paint finish on which the defect has occurred
48. how to identify the cause of, and rectify, paint faults arising from poor paint application, environmental conditions, contamination, corrosion, general wear and tear, adverse chemical reactions and panel deformation
49. how to carry out flatting, burnishing, removal of materials to a sound substrate, masking, plastic preparation, tacking off, recoating, and polishing to correct paint faults and defects
50. how to prevent further paint damage during rectification
51. how to dispose of waste materials
52. how to work safely avoiding damage to vehicles, personal injury and injury to colleagues
53. the importance of proper cleaning prior to and after paint rectification work
54. the importance of keeping tools and equipment and materials clean and free from contamination during rectification work
55. the importance of following manufacturers' instructions and using their approved methods of working (including use of materials and equipment)

56. the consequences of failing to follow manufacturers' instructions
57. the importance of working to agreed timescales and keeping others informed

PERFORMANCE OBJECTIVES

To be competent you must:

a. use the appropriate personal protective equipment when carrying out the repair of paint defects and faults
b. protect the vehicle and its contents effectively when carrying out the repair of paint defects and faults
c. support your rectification activities by reviewing:

- product data
- the vehicle manufacturer's technical data
- colour libraries
- work instructions

d. prepare, test and adjust all the tools and equipment required, following manufacturer's instructions prior to use
e. identify the body panel surfaces accurately prior to undertaking any rectification work
f. correct paint defects and faults effectively using the approved tools and equipment and refinishing systems and materials following

- manufacturer's instructions
- the correct methods and techniques
- health and safety requirements

g. ensure the finish produced is free from contamination and defects and meets the required work specification
h. dispose of waste materials to conform with legal and workplace requirements
i. complete all paint repair activities within the agreed timescale
j. report any anticipated delays in completion to the relevant person(s) promptly

NOS CR14 – Repair Motor Vehicle Body Panels

UNIT OVERVIEW

This unit is about repairing complex and difficult to access damage to a range of body panel types using a variety of preparation and reinstatement techniques, including hydraulic reforming and panel beating to regain panel contour.

SCOPE OF THIS UNIT:

All of the items listed below form part of this National Occupational Standard

1. Repair activities are

a. correction of severely distorted panels
b. to difficult to access panel damage
c. to splits on metal panels, using relevant joining technique
d. to fractures to plastic panels

2. Vehicle body panels are

a. non-welded non-structural
b. welded non-structural
c. welded structural panels
d. bonded panels

3. Reinstatement methods are

a. panel beating
b. panel shrinking
c. hydraulic reforming
d. Resistance spot welding
e. MIG/MAG welding
f. MIG brazing
g. body filling operations
h. metal finishing
i. plastic repair
j. specialist dent removal methods

ESSENTIAL KNOWLEDGE

You need to understand:

Legislative and organisational requirements and procedures

1. the health and safety legislation and workplace procedures relevant to workshop practices and personal and vehicle protection when repairing vehicle body panels.
2. the requirements of manufacturer's warranty agreements
3. the vehicle work specification agreed.
4. your workplace procedures for

    - the referral of problems
    - reporting of delays to the completion of work
    - personal protection

5. the requirements for protecting the vehicle and contents from damage before, during and after repairing vehicle body panels
6. the importance of working to agreed timescales and keeping others informed of progress.
7. the relationship between time, cost and profitability.
8. your workplace procedures for the referral of problems.
9. the importance of reporting anticipated delays to the relevant persons(s) promptly.

Tools and equipment

10. the principles governing the selection and use of hand tools for metal finishing and plastic filling repairs.
11. the factors governing the selection and use of panel beating and hydraulic reforming equipment, including specialist pulling systems.
12. how to prepare, test, use and maintain the tools and equipment required to repair vehicle body panels.
13. how to adapt hydraulic push equipment to perform pulling operations.
14. the properties of component materials involved in the construction of the vehicle in the areas that will be worked on during repair
15. the types and selection of filling materials, their preparation and application
16. the properties, types, grades and use of abrasives used in the vehicle body panel repair process
17. the properties and safe use of types of filling materials used to repair panels.
18. how to mix and apply plastic fillers

Repairing vehicle body panels

19. how to prepare the vehicle to avoid contamination
20. how to assess the extent of damage, including corrosion damage.
21. the principles of chassis frame and monocoque vehicle construction
22. the principles of resistance spot welding, gas shielded plug welding and gas shielded brazing.

23. how body panel and component damage can affect other panels and the operation of vehicle systems.
24. the factors determining the use of specific preparation and repair methods.
25. the repair and joining technique implications of working with mild, high and ultra high strength steels, aluminium alloys, galvanised coatings..
26. the consequences of using inappropriate repair methods.
27. the principles associated with hot and cold shrinking of stretched areas.
28. how heat can be used to assist reforming.
29. how heating can affect the properties of steels.
30. the techniques for identifying the type of plastics used for manufactured components
31. the procedures for reinstating anti-corrosion, sealant and sound deadening materials
32. the causes and rectification of distortion resulting from welding.
33. the manufacturer's approved methods of working for the preparation and repair of vehicle body panels and components.
34. the specification for panel shapes, dimensions and tolerances for the vehicles worked upon.
35. the type of quality control checks that can be used to ensure the correct contour and standard of finish
36. how to interpret and use sources of information relevant to the repair of vehicle body panels and components.
37. how to prepare damaged areas to facilitate repairs
38. how to prepare the panel surface prior to filling
39. how to repair corrosion damage.
40. how to remove protective materials.
41. how to repair and reinstate vehicle body panel contours and components using body filling operations, metal finishing, plastic filling, panel beating, panel shrinking, hydraulic reforming, specialist dent removal tools and resistance spot, gas shielded welding and gas shielded brazing methods.
42. the techniques for reshaping damaged vehicle body panels using hand and specialist tools
43. how to check the accuracy of reinstated vehicle body panel shape.
44. how to finish repairs to a suitable condition for handing on to the painting stage.
45. how to work safely avoiding damage to the vehicle and its systems.
46. the pedestrian safety aspects of repairability of vehicles.

PERFORMANCE OBJECTIVES

To be competent you must:

a. prior to working on the vehicle identify component materials involved in the construction of the vehicle in the areas that will be worked on during repair
b. wear suitable personal protective equipment and use vehicle coverings throughout all vehicle body panel repair activities.
c. inspect, prepare and use all the tools and equipment required following manufacturers' instructions prior to use.
d. ensure your methods of preparation leave structural body panels:

- clean
- free from materials likely to hinder repair
- free of surface finishes when required

e. prepare and reinstate vehicle body panels using the equipment recommended and following:

   - the manufacturer's methods/instructions
   - recognised researched repair methods
   - your workplace procedures
   - health, safety and legal requirements.

f. seek guidance from the relevant person(s) promptly where there is the potential for your work to disturb other vehicle systems.
g. ensure all test weld pieces conform to the current British Standard for appearance and penetration.
h. ensure all repaired body panels are reinstated to their original specified shape and dimensions.
i. complete repaired components to a condition ready for refinishing processes.
j. complete all repair activities within the agreed timescale.
k. report any anticipated delays in completion to the relevant person(s) promptly.

NOS BP18 - Remove and Fit Basic Mechanical, Electrical and Trim (MET) Components and Non-Permanently Fixed Vehicle Body Panels

UNIT OVERVIEW

This unit is about the straightforward removal and fitting of basic mechanical, electrical and trim (MET) components to vehicles. It is also about checking the operation of the components fitted.

SCOPE OF THIS UNIT:

All of the items listed below form part of this National Occupational Standard.

1. Basic MET components includes:

a. bumpers
b. headlamp units
c. road wheels
d. batteries
e. bonnet and boot lid trim
f. interior trim components
g. exterior trim components

2. Non permanently attached body panels are

a. wings
b. doors
c. bonnets
d. boot lids and tailgates
e. bumper bars, covers and components

3. Tools and equipment are

a. spanners
b. socket set
c. screwdrivers
d. manufacturer's specified specialist tools
e. pliers and self locking grips
f. power drill and drill bits
g. trolley jack
h. axle stands
i. vehicle lifts
j. torque wrench

ESSENTIAL KNOWLEDGE

You need to understand:

Legislative and organisational requirements and procedures

1. the health, safety and legal requirements relating to the removal and fitting of basic MET components and non welded non-structural body panels

2. your workplace procedures for:

    - the referral of problems
    - reporting of delays to the completion of work
    - completion of work records

3. the work that needs to be done and the standard required
4. the requirements for protecting the vehicle and contents from damage before, during and after removing and fitting activities
5. the importance of selecting, using and maintaining the appropriate personal protective equipment when removing and fitting basic MET components and non welded non-structural body panels

Removing and fitting basic MET components

6. how to find, interpret and use sources of information applicable to the removal and fitting of basic MET components and non welded non-structural body panels
7. how to select, check and use all the tools and equipment required to remove and fit basic MET components and non welded non-structural body panels
8. the correct procedures for removing and fitting basic MET components and non welded non-structural body panels.
9. the correct procedures for working with supplementary safety systems when fitting and removing basic MET components and non welded non-structural body panels.
10. the correct procedures for working with Gas Discharge headlight systems and when fitting and removing basic MET components and non welded non-structural body panels.
11. the methods of storing removed panels and components and the importance of storing them correctly
12. the different types of fastenings and fixings and the reasons for their use
13. the need for correct alignment of panels and components and the correct methods used to achieve this
14. the types of quality checks that can be used to ensure correct alignment and operation of components to manufacturer's specification and their purpose

PERFORMANCE OBJECTIVES

To be competent you must:

a. use the appropriate personal protective equipment when removing and fitting basic MET components and non welded non-structural body panels

b. protect the vehicle and its contents effectively when removing and fitting basic MET components and non welded non-structural body panels
c. select and use the correct tools and equipment for the panels or components you are going to remove or fit
d. ensure that the tools and equipment you require are in a safe working condition
e. remove and fit basic MET components and non welded non-structural body panels following:

- removal and fitting procedures
- manufacturers' instructions
- your workplace procedures
- health, safety and legal requirements

f. avoid damaging other components, units and panels on the vehicle
g. store all removed panels and components safely in the correct location
h. realign the panels and components you have fitted correctly in a way which regains their original manufactured gaps
i. check that the components you have fitted operate correctly following the manufacturer's specification
j. report any additional faults you find during the course of your work to the relevant person(s) promptly
k. report any delays in completing your work to the relevant person(s) promptly
l. remove and fit basic MET components or non welded non-structural body panels within the agreed timescale
m. complete work records accurately, in the format required and pass them to the relevant person(s) promptly

NOS 21 - Deliver Reliable Customer Service

(Imported ICS Unit 21)

Overview

This unit sits within the Customer Service Theme of Delivery. This Theme covers Customer Service behaviours and processes that have most effect on the customer experience during Customer Service delivery

What this unit is about

This Unit is all about how you deliver consistent and reliable service to customers. As well as being good with people, you need to work with your organisation's service systems to meet and, wherever possible, exceed customer expectations.

In your job there will be many examples of how you combine your approach and behaviour with your organisation's systems. You need to prepare for each transaction with a customer, deal with different types of customers in different circumstances and check that what you have done has met customer expectations.

To meet this standard you have to deliver excellent customer service over and over again.

Performance Objectives

When you deliver reliable customer service you must consistently:

1 Prepare to deal with your customers

1.1 keep your knowledge of your organisation's services or products up-to-date
1.2 ensure that the area you work in is tidy, safe and organised efficiently
1.3 prepare and arrange everything you need to deal with your customers before your shift or period of work commences

2 Give consistent service to customers

2.1 make realistic promises to your customers about the delivery of services or products
2.2 ensure that your promises balance the needs of your customer and your organisation
2.3 keep your promises to your customers
2.4 inform your customers if you cannot keep your promises due to unforeseen circumstances
2.5 recognise when your customer's needs or expectations have changed and adapt your service to meet their new requirements
2.6 keep your customer informed if delivery of the service needs to involve passing them on to another person or organisation

3 Check customer service delivery

3.1 check that the service you have given meets your customer's needs and expectations
3.2 identify when you could have given better service to your customer and how your service could have been improved
3.3 share information with colleagues and service partners to maintain and improve your standards of service delivery.

Knowledge and understanding

To be competent at delivering reliable customer service you must know and understand:

a. your organisation's procedures and systems for delivering customer service
b. methods or systems for measuring an organisation's effectiveness in delivering customer service
c. your organisation's procedures and systems for checking service delivery
d. your organisation's requirements for health and safety in your area of work

NOS 37 - Give Customers a Positive Impression of Yourself and Your Organisation

(Imported ICS Unit 37)

Overview

This unit sits within the Customer Service Theme of Development and Improvement. This Theme covers activities and approaches that play a vital part in customer service by seeking and implementing improvements and developments

What this unit is about

Organisations change the way they deliver service to their customers because customer expectations rise and because other organisations improve the services they offer. Often the most important ideas about how to improve customer service come from people dealing directly with customers.

Your job involves delivering customer service. If your organisation has decided to make changes, it is your job to support them and to present them positively to your customers. Also, by listening to customer comments you may have your own ideas about how the service you deliver could be improved.

This unit is all about how you provide support for changes that your organisation has introduced. In addition, it covers how you present your own ideas for improvements to someone in your organisation who can authorise trying out the change.

Performance Objectives

To support customer service improvements you must consistently:

1 Use feedback to identify potential customer service improvements

1.1 gather informal feedback from your customers
1.2 use customer feedback procedures to collect information from your customers
1.3 use the information from your customers to develop a better understanding of their customer service experience
1.4 identify ways the service you give could be improved based on information you have gathered
1.5 share your ideas for improving customer service with colleagues

2 Implement changes in customer service

2.1 identify a possible change that could be made to improve customer service
2.2 present your idea for improving customer service to a colleague with the appropriate authority to approve the change
2.3 carry out changes to customer service procedures based on your own idea or proposed by your organisation

2.4 keep your customers informed of changes to customer service
2.5 give customers a positive impression of changes that have been made
2.6 work positively with others to support customer service changes

3 Assist with the evaluation of changes in customer service

3.1 discuss with others how changes to customer service are working
3.2 work with others to identify any negative effects of changes and how these can be avoided

Knowledge and Understanding

To be competent at supporting customer service improvements you need to know and understand:

a. how customer experience is influenced by the way service is delivered
b. how customer feedback is obtained
c. how to work with others to identify and support change in the way service is delivered
d. why it is important to give a positive impression to your customer about the changes made by your organisation even if you disagree with them