

Auto Body Technician Level 4

QP Code: ASC/Q1405

NSQF Level: 4

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Qualification Pack

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ASC/Q1405: Auto Body Technician Level 4

Brief Job Description

An Auto Body Technician Level 4 is responsible for repair of vehicles by carrying out work on the body and frame of a vehicle because of damage mostly due to major/ minor dent on the body.

Personal Attributes

An individual on this job must have good interpersonal skills in addition to being a team player, as the job requires coordination with other technicians in both the body shop and the workshop. The individual must also have a technical bend of mind to have full knowledge of vehicle structure and function to assist in the overall repairing dents and fabricating, assembling, or disassembling vehicle components. The individual should be methodological and systematic in his way of working to ensure repair of the body parts/ panels in a timely and cost effective manner.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [ASC/N0001: Plan and organise work to meet expected outcomes](#)
2. [ASC/N0002: Work effectively in a team](#)
3. [ASC/N0003: Maintain a healthy, safe and secure working environment](#)
4. [ASC/N1412: Repair and replace vehicle body and chassis components](#)
5. [ASC/N1413: Carry out repairs for metal corrosion on structural panels](#)

Qualification Pack (QP) Parameters

Sector	Automotive
Sub-Sector	Automotive Vehicle Service
Occupation	Technical Service and Repair
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7213.0301

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Minimum Educational Qualification & Experience	10th Class with Not applicable of experience Not applicable OR 10th Class OR 10th Class
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	On the job training: Desirable for ASDC Automotive Body Technician Level 4 Certificate or ITI Diploma Compulsory for all other qualifications
Minimum Job Entry Age	18 Years
Last Reviewed On	10/06/2013
Next Review Date	31/03/2020
NSQC Approval Date	20/07/2015
Version	1.0

Qualification Pack

ASC/N0001: Plan and organise work to meet expected outcomes

Description

This NOS unit is about planning and organising an individuals work in order to complete it to the required standards on time.

Scope

This unit/task covers the following: work requirements including various activities, deliverables or work output required in the given time, maintain set quality standards appropriate use of resources (both material / equipment's and manpower

Elements and Performance Criteria

Work requirements including various activities within the given time and set quality standards

To be competent, the user/individual on the job must be able to:

- PC1.** keep immediate work area clean and tidy
- PC2.** treat confidential information as per the organisations guidelines
- PC3.** work in line with organisations policies and procedures
- PC4.** work within the limits of job role
- PC5.** obtain guidance from appropriate people, where necessary
- PC6.** ensure work meets the agreed requirements

Appropriate use of resources

To be competent, the user/individual on the job must be able to:

- PC7.** establish and agree on work requirements with appropriate people
- PC8.** manage time, materials and cost effectively
- PC9.** use resources in a responsible manner

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organisations policies, procedures and priorities for area of work, role and responsibilities in carrying out that work
- KU2.** the limits of responsibilities and when to involve others
- KU3.** specific work requirements and who these must be agreed with
- KU4.** the importance of having a tidy work area and how to do this
- KU5.** how to prioritize workload according to urgency and importance and the benefits of this
- KU6.** the organisations policies and procedures for dealing with confidential information and the importance of complying with these
- KU7.** the purpose of keeping others updated with the progress of work
- KU8.** who to obtain guidance from and the typical circumstances when this may be required

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- KU9.** the purpose and value of being flexible and adapting work plans
- KU10.** how to complete tasks accurately by following standard procedures
- KU11.** technical resources needed for work and how to obtain and use these

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** write in at least one language
- GS2.** read instructions, guidelines/procedures
- GS3.** ask for clarification and advice from appropriate persons
- GS4.** communicate orally with colleagues
- GS5.** make a decision on a suitable course of action appropriate for accurately completing the task within resources
- GS6.** agree objectives and work requirements
- GS7.** plan and organise work to achieve targets and deadlines
- GS8.** deliver consistent and reliable service to customers
- GS9.** check own work and ensure it meets customer requirements
- GS10.** anomalies to the concerned persons
- GS11.** analyse problems and identify work-arounds taking help from
- GS12.** apply own judgement to identify solutions in different situations

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Work requirements including various activities within the given time and set quality standards</i>	16	47	-	-
PC1. keep immediate work area clean and tidy	2	9	-	-
PC2. treat confidential information as per the organisations guidelines	2	6	-	-
PC3. work in line with organisations policies and procedures	3	8	-	-
PC4. work within the limits of job role	3	6	-	-
PC5. obtain guidance from appropriate people, where necessary	3	7	-	-
PC6. ensure work meets the agreed requirements	3	11	-	-
<i>Appropriate use of resources</i>	9	28	-	-
PC7. establish and agree on work requirements with appropriate people	3	9	-	-
PC8. manage time, materials and cost effectively	3	11	-	-
PC9. use resources in a responsible manner	3	8	-	-
NOS Total	25	75	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	ASC/N0001
NOS Name	Plan and organise work to meet expected outcomes
Sector	Automotive
Sub-Sector	Manufacturing and R&D, Sales and Service, Road Transportation
Occupation	Auto Components /Aggregates Repair
NSQF Level	4
Credits	NA
Version	1.0
Last Reviewed Date	10/06/2013
Next Review Date	10/06/2015
NSQC Clearance Date	20/07/2015

Qualification Pack

ASC/N0002: Work effectively in a team

Description

This NOS unit is about working effectively with colleagues, either in individuals own work group or in other work groups within organisation

Scope

This unit/task covers the following: Colleagues: Superiors Members of own work group People in other work groups within or outside the organisation Communicate: Face-to-face By telephone In writing

Elements and Performance Criteria

Effective communication

To be competent, the user/individual on the job must be able to:

- PC1.** maintain clear communication with colleagues
- PC2.** work with colleagues
- PC3.** pass on information to colleagues in line with organisational requirements
- PC4..** work in ways that show respect for colleagues
- PC5.** carry out commitments made to colleagues
- PC6.** let colleagues know in good time if cannot carry out commitments, explaining the reasons
- PC7.** identify problems in working with colleagues and take the initiative to solve these problems
- PC8.** follow the organisations policies and procedures for working with colleagues
- PC9.** ability to share resources with other members as per priority of tasks

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organisations policies and procedures for working with colleagues, role and responsibilities in relation to this
- KU2.** the importance of effective communication and establishing good working relationships with colleagues
- KU3.** different methods of communication and the circumstances in which it is appropriate to use these
- KU4.** benefits of developing productive working relationships with colleagues
- KU5.** the importance of creating an environment of trust and mutual respect
- KU6.** whether not meeting commitments, will have implications on individuals and the organisation
- KU7.** different types of information that colleagues might need and the importance of providing this information when it is required
- KU8.** the importance of problems, from colleagues perspective and how to provide support, where necessary, to resolve these

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Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** complete well written work with attention to detail
- GS2.** read instructions, guidelines/procedures
- GS3.** listen effectively and orally communicate information
- GS4.** make decisions on a suitable course of action or response
- GS5.** plan and organise work to achieve targets and deadlines
- GS6.** check that the work meets customer requirements
- GS7.** deliver consistent and reliable service to customers
- GS8.** apply problem solving approaches in different situations
- GS9.** apply balanced judgements to different situations
- GS10.** apply good attention to detail
- GS11.** check that the work is complete and free from errors
- GS12.** get work checked by peers
- GS13.** work effectively in a team environment

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Effective communication</i>				
PC1. maintain clear communication with colleagues	4	10	-	-
PC2. work with colleagues	2	7	-	-
PC3. pass on information to colleagues in line with organisational requirements	3	8	-	-
PC4.. work in ways that show respect for colleagues	3	8	-	-
PC5. carry out commitments made to colleagues	2	8	-	-
PC6. let colleagues know in good time if cannot carry out commitments, explaining the reasons	2	8	-	-
PC7. identify problems in working with colleagues and take the initiative to solve these problems	4	9	-	-
PC8. follow the organisations policies and procedures for working with colleagues	3	9	-	-
PC9. ability to share resources with other members as per priority of tasks	2	8	-	-
NOS Total	25	75	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	ASC/N0002
NOS Name	Work effectively in a team
Sector	Automotive
Sub-Sector	Manufacturing and R&D, Sales and Service, Road Transportation
Occupation	Maintenance
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	23/09/2013
Next Review Date	30/09/2015
NSQC Clearance Date	28/09/2015

Qualification Pack

ASC/N0003: Maintain a healthy, safe and secure working environment

Description

This NOS unit is about monitoring the working environment and making sure it meets requirements for health, safety and security

Scope

This unit/task covers the following: Resources (both material & manpower) needed to maintain a safe working environment as per the prevalent norms & government policies including emergency procedures for illness, accidents, fires or any other reason which may involve evacuation of the premises

Elements and Performance Criteria

Resources needed to maintain a safe, secure working environment

To be competent, the user/individual on the job must be able to:

- PC1.** comply with organisations current health, safety and security policies and procedures
- PC2.** report any identified breaches in health, safety, and security policies and procedures to the designated person
- PC3..** Coordinate with other resources at the workplace to achieve the healthy, safe and secure environment for all incorporating all government norms esp. for emergency situations like fires, earthquakes etc.
- PC4.** identify and correct any hazards like illness, accidents, fires or any other natural calamity safely and within the limits of individuals authority
- PC5.** report any hazards outside the individuals authority to the relevant person in line with organisational procedures and warn other people who may be affected
- PC6.** follow organisations emergency procedures for accidents, fires or any other natural calamity
- PC7.** identify and recommend opportunities for improving health, safety, and security to the designated person
- PC8.** complete all health and safety records are updates and procedures well defined

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** legislative requirements and organisations procedures for health, safety and security and individuals role and responsibilities in relation to this
- KU2.** what is meant by a hazard, including the different types of health and safety hazards that can be found in the workplace
- KU3.** how and when to report hazards
- KU4.** the limits of responsibility for dealing with hazards
- KU5.** the organisations emergency procedures for different emergency situations and the importance of following these
- KU6.** the importance of maintaining high standards of health, safety and security

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- KU7.** implications that any non-compliance with health, safety and security may have on individuals and the organisation
- KU8.** different types of breaches in health, safety and security and how and when to report these
- KU9.** evacuation procedures for workers and visitors
- KU10.** how to summon medical assistance and the emergency services, where necessary
- KU11.** how to use the health, safety and accident reporting procedures and the importance of these

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** complete accurate, well written work with attention to detail
- GS2.** read instructions, guidelines/procedures/rules
- GS3.** listen and orally communicate information
- GS4.** make decisions on a suitable course of action or response
- GS5.** plan and organise work to achieve targets and deadlines
- GS6.** build and maintain positive and effective relationships with colleagues and customers
- GS7.** apply problem solving approaches in different situations
- GS8.** analyse data and activities
- GS9.** apply balanced judgements to different situations
- GS10.** apply good attention to detail
- GS11.** check that the work is complete and free from errors
- GS12.** get work checked by peers
- GS13.** work effectively in a team environment

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Resources needed to maintain a safe, secure working environment</i>				
PC1. comply with organisations current health,safety and security policies and procedures	3	9	-	-
PC2. report any identified breaches in health,safety, and security policies and procedures to the designated person	3	10	-	-
PC3.. Coordinate with other resources at the workplace to achieve the healthy, safe and secure environment for all incorporating all government norms esp. for emergency situations like fires,earthquakes etc.	3	10	-	-
PC4. identify and correct any hazards like illness, accidents, fires or any other natural calamity safely and within the limits of individuals authority	5	10	-	-
PC5. report any hazards outside the individuals authority to the relevant person in line with organisational procedures and warn other people who may be affected	3	9	-	-
PC6. follow organisations emergency procedures for accidents, fires or any other natural calamity	3	10	-	-
PC7. identify and recommend opportunities for improving health,safety, and security to the designated person	3	8	-	-
PC8. complete all health and safety records are updates and procedures well defined	2	9	-	-
NOS Total	25	75	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	ASC/N0003
NOS Name	Maintain a healthy, safe and secure working environment
Sector	Automotive
Sub-Sector	Manufacturing and R&D, Sales and Service, Road Transportation
Occupation	Auto Components/Aggregates Repair
NSQF Level	4
Credits	NA
Version	1.0
Last Reviewed Date	10/06/2013
Next Review Date	10/06/2015
NSQC Clearance Date	20/07/2015

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ASC/N1412: Repair and replace vehicle body and chassis components

Description

This NOS unit is about the Automotive Body Technician in assessing the damage to the vehicle chassis and body components and then repairing and replacing the identified vehicle body and chassis components, and identify any additional

Scope

This unit/task covers the following: assess the damage to the vehicle & identify the need for repair or replacement of vehicle chassis or body components repair and refinish automotive vehicle bodies and straighten vehicle frames& identify any additional repair requirements in the vehicle

Elements and Performance Criteria

Assess damage and Repair / replace vehicle body & chassis components

To be competent, the user/individual on the job must be able to:

- PC1..** assess the overall damage to vehicle body and chassis components and identify the need for repair or replacement of various body or chassis components
- PC2. .** read specifications or confer with customer/ Service Advisor or Body Shop Incharge to determine the desired custom modifications for altering the appearance of vehicles
- PC3. .** select, calibrate and use the appropriate tools and equipment for the body component/ chassis repair in the vehicle
- PC4. .** correctly realign the panels and components as per their original position
- PC5. .** remove upholstery, accessories, electrical window-and-seat-operating equipment, and trim to gain access to vehicle bodies and fenders
- PC6. .** repair: body panels minor structural damage major welded panels body components using lead wiping major sectional repair laminated glass chassis/frame and associated components
- PC7..** remove and replace (with assistance of Senior Technicians/ Aggregate Specialists Or Electrician if required): vehicle body panels, panel sections and ancillary fittings protector mouldings, transfers and decals mechanical units/assemblies electrical/electronic units/assemblies
- PC8. .** carry out: vehicle body and underframe alignment vehicle measurement buffing and burnishing trimming of vehicle components
- PC9. .** select and apply trim/fabric materials and adhesives
- PC10. .** carry out minor sewing and trimming repairs and alterations
- PC11. .** remove and install: windscreens laminated glass fixed and movable body glass windows / sunroof installation (in case required)
- PC12..** fit and weld replacement parts into place, using wrenches and welding equipment, and grind down welds to smooth them, using power grinders and other tools
- PC13..** chain or clamp frames and sections to alignment machines that use hydraulic pressure to align damaged components

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- PC14.** . remove damaged sections of vehicles using metal-cutting guns, air grinders and wrenches, and install replacement parts using wrenches or welding equipment
- PC15..** position dolly blocks against surfaces of dented areas and beat opposite surfaces to remove dents, using hammers
- PC16..** mix polyester resins and hardeners to restore damaged areas
- PC17. .** apply heat to plastic panels, using hot-air welding guns or immersion in hot water, and press the softened panels back into shape by hand
- PC18. .** fit and secure windows, vinyl roofs, and metal trim to vehicle bodies, using caulking guns, adhesive brushes, and mallets
- PC19. .** fill small dents that cannot be worked out with plastic or solder
- PC20. .** remove small pits and dimples in body metal using pick hammers and punches
- PC21..** prevent the other components, units and panels on the vehicle from getting damaged
- PC22..** inspect repaired vehicles for proper functioning, completion of work, dimensional accuracy, and test drive vehicles to ensure proper alignment and handling
- PC23. .** ensure that trainings organized by the OEM from time-to-time are attended and knowledge levels are upgraded (esp. in case of newly launched products, product refreshes)

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard operating procedures of the Organisation/ Dealership for inspection and repair of vehicles for the body/ chassis components
- KU2.** standard operating procedures for repair and replacement of Automotive body parts mandated by the OEM
- KU3.** safety requirements for equipment and components (e.g. dealing with inflammable materials, broken glass, fiberglass strips etc.)
- KU4.** standard operating procedures recommended by the dealership/ suppliers/OEM for using tools and equipment to be followed as per the manufacturer instructions (e.g. maintaining safety while using welding and soldering equipment)
- KU5.** documentation requirements for each procedure carried out as part of roles and responsibilities as specified by the organization
- KU6.** organisational and professional code of ethics and standards of practice
- KU7.** safety, health, environmental policies and regulations for the workplace as well as for automotive trade in general (e.g. safe practices while working in pits/ under vehicles)
- KU8.** workplace policies and schedules for housekeeping activities and equipment maintenance

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- KU9.** the kind of tools and procedures required based on the damage sustained by the vehicle including: wrenches and welding equipment power grinders hydraulic pressure machines power tools and hand tools (e.g. hammers) metal-cutting guns air grinders hot-air welding guns air hoses alignment machines pick hammers and punches caulking guns, adhesive brushes, and mallets various clamps, holding jigs, relevant special equipment drills, drill bits, bolts, nuts and washers air compressor, lines, air guns air compressor, lines, air guns safety ventilation equipment special equipment (pressure washers, steam cleaners, spray equipment) power tools, jacks, stands, lifting equipment measuring equipment including: - inside/outside micrometers - vernier calipers - dial gauges - depth gauges - steel rulers - T-squares - flat edges - calipers - dividers and protractors
- KU10.** the different types of polyester resins and hardeners and the procedures for mixing them
- KU11.** welding techniques including: spot welding procedures tungsten arc welding procedures gas metal arc welding procedures manual metal arc welding procedures oxy acetylene, welding, thermal cutting and thermal heating procedures brazing procedures thermo plastic repair procedures soldering techniques
- KU12.** types and application of cleaning agents
- KU13.** procedures for measurement of: length squareness flatness angles roundness depth clearances any measurements that can be taken from analogue or digital devices
- KU14.** procedures for routine adjustment of measuring equipment
- KU15.** the various cleaning agents/sprays (de-waxing, detergents, degreasers, special purpose agents)
- KU16.** how to use storage tabs and racks
- KU17.** how to repair or replace damaged parts based on the damage sustained
- KU18.** the different techniques used to fasten and fix the panels and body structure
- KU19.** how to repair and fix the following non-permanently attached body panels: wings doors bonnets boot lids and tailgates bumper bars, covers and components
- KU20.** how to comply with the instructions mentioned on job card
- KU21.** how to control operations of equipment or systems
- KU22.** the measures to be adopted to protect the vehicle from damage before, during and after removing and fitting activities
- KU23.** appropriate personal and vehicle protection to be used for various procedures

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** record and document the basic details of repairs performed on various body and chassis aggregates/ components
- GS2.** maintain all office records required on the job (e.g. stock records, job cards, repair quotations, personnel records, time sheets, meeting notes etc.)
- GS3.** write in at least one language
- GS4.** read the basic specification of a vehicle or any other component or part
- GS5.** read work orders, specifications etc. related to the job including instructions mentioned on the job card

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- GS6.** read any documentation required (e.g. equipment manuals, service contracts, stock records, job cards, personnel records, supplier invoices/statements, organisation-specific records, invoices/statements, etc.)
- GS7.** read any specific safety related guideline (applicable for CNG/ LPG/ Electric vehicle)
- GS8.** communicate the damage caused to vehicle and its body parts
- GS9.** interact with the customer/ service advisor and senior technicians
- GS10.** specify the corrective measures required to repair/replace the body component
- GS11.** interact with team members including colleagues in the workshop and the painter in the body shop to work efficiently
- GS12.** decide which body components need to be replaced or repaired
- GS13.** plan work according to the required schedule and location
- GS14.** organise the schedule to complete the work on the vehicle timely in case other aggregate repairs/ maintenance work is also required to be done
- GS15.** ensure that customer needs regarding the denting and body/ chassis related jobs are assessed and satisfactory service is provided
- GS16.** suggest to customer in case of damaged body part/ vehicle panel / aggregate whether it is better to repair and then paint it or it is better to just replace it, keeping the cost and durability factor in mind
- GS17.** inspect damaged vehicles and decide repairs and corrective action to be undertaken
- GS18.** inspect equipment to ensure proper working order and take any corrective actions as required
- GS19.** inspect vehicles which do not conform to OEM standards (e.g. customised vehicles) and decide on a service and repair schedule
- GS20.** check the usefulness of shop tools to see if they are suitable for work on new models of vehicles
- GS21.** evaluate the complexity of tasks to determine if they can successfully carry them out
- GS22.** evaluate the total material/ labour costs involved in repairing/ replacing panel/ body component
- GS23.** evaluate the information gathered from the customer report/ job card and assess repairs
- GS24.** evaluate the repair estimate and decide whether to first repair and paint the panel/ body part or just replace it

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Assess damage and Repair / replace vehicle body & chassis components</i>				
PC1.. assess the overall damage to vehicle body and chassis components and identify the need for repair or replacement of various body or chassis components	2	3	-	-
PC2. . read specifications or confer with customer/ Service Advisor or Body Shop Incharge to determine the desired custom modifications for altering the appearance of vehicles	1	3	-	-
PC3. . select, calibrate and use the appropriate tools and equipment for the body component/ chassis repair in the vehicle	1	3	-	-
PC4. . correctly realign the panels and components as per their original position	1	3	-	-
PC5. . remove upholstery, accessories, electrical window-and-seat-operating equipment, and trim to gain access to vehicle bodies and fenders	1	3	-	-
PC6. . repair: body panels minor structural damage major welded panels body components using lead wiping major sectional repair laminated glass chassis/frame and associated components	2	4	-	-
PC7.. remove and replace (with assistance of Senior Technicians/ Aggregate Specialists Or Electrician if required): vehicle body panels, panel sections and ancillary fittings protector mouldings, transfers and decals mechanical units/assemblies electrical/electronic units/assemblies	1	4	-	-
PC8. . carry out: vehicle body and underframe alignment vehicle measurement buffing and burnishing trimming of vehicle components	1	4	-	-
PC9. . select and apply trim/fabric materials and adhesives	1	3	-	-
PC10. . carry out minor sewing and trimming repairs and alterations	1	3	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. . remove and install: windscreens laminated glass fixed and movable body glass windows / sunroof installation (in case required)	1	4	-	-
PC12. .. fit and weld replacement parts into place, using wrenches and welding equipment, and grind down welds to smooth them, using power grinders and other tools	1	4	-	-
PC13. .. chain or clamp frames and sections to alignment machines that use hydraulic pressure to align damaged components	1	4	-	-
PC14. . remove damaged sections of vehicles using metal-cutting guns, air grinders and wrenches, and install replacement parts using wrenches or welding equipment	1	3	-	-
PC15. .. position dolly blocks against surfaces of dented areas and beat opposite surfaces to remove dents, using hammers	1	3	-	-
PC16. .. mix polyester resins and hardeners to restore damaged areas	1	3	-	-
PC17. . apply heat to plastic panels, using hot-air welding guns or immersion in hot water, and press the softened panels back into shape by hand	1	4	-	-
PC18. . fit and secure windows, vinyl roofs, and metal trim to vehicle bodies, using caulking guns, adhesive brushes, and mallets	1	4	-	-
PC19. . fill small dents that cannot be worked out with plastic or solder	1	3	-	-
PC20. . remove small pits and dimples in body metal using pick hammers and punches	1	3	-	-
PC21. .. prevent the other components, units and panels on the vehicle from getting damaged	1	3	-	-
PC22. .. inspect repaired vehicles for proper functioning, completion of work, dimensional accuracy, and test drive vehicles to ensure proper alignment and handling	1	3	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC23. . ensure that trainings organized by the OEM from time-to-time are attended and knowledge levels are upgraded (esp. in case of newly launched products, product refreshes)	1	1	-	-
NOS Total	25	75	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	ASC/N1412
NOS Name	Repair and replace vehicle body and chassis components
Sector	Automotive
Sub-Sector	Automotive Vehicle Service
Occupation	Technical Service & Repair
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	10/06/2013
Next Review Date	10/06/2015
NSQC Clearance Date	20/07/2015

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ASC/N1413: Carry out repairs for metal corrosion on structural panels

Description

This NOS unit is about the Automotive Body Technician carrying out repairs for metal corrosion on structural panels.

Scope

This unit/task covers the following: carrying out repairs for metal corrosion on structural panels

Elements and Performance Criteria

Carry out repairs for metal corrosion on structural panels

To be competent, the user/individual on the job must be able to:

- PC1.** . assess the overall damage to vehicle body and chassis components and identify the need for repair of various body or chassis components as a result of vehicle metal corrosion
- PC2.** . select and use the tools and equipment required to remove and fit components
- PC3.** . check the structural components with the help of corrosion assessment tool
- PC4.** . replace the protective coatings, sound deadener pads, sealers, and foams and perform anti-corrosion procedures
- PC5.** . mix polyester resins and hardeners to restore damaged areas
- PC6.** . refit the parts removed/dismantled to carry out repair
- PC7..** prevent the other components, units and panels on the vehicle from getting damaged
- PC8..** inspect repaired vehicles for proper functioning, completion of work and dimensional accuracy
- PC9..** ensure that trainings organized by the OEM from time-to-time are attended and knowledge levels are upgraded (esp. in case of newly launched products, product refreshes)

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard operating procedures of the Organisation/ Dealership for inspection, servicing and repair of vehicles for the body/ chassis components
- KU2.** standard operating procedures for servicing, repair and replacement of parts mandated by the OEM
- KU3.** safety requirements for equipment and components prescribed by the manufacturer
- KU4.** documentation requirements for each procedure carried out as part of roles and responsibilities as specified by the organization
- KU5.** organisational and professional code of ethics and standards of practice
- KU6.** safety and health policies and regulations for the workplace as well as for automotive trade in general (e.g. safe practices while working in pits/ undervehicles)
- KU7.** workplace policies and schedules for housekeeping activities and equipment maintenance

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- KU8.** whether metal is excessively corroded, or metal treated with filler, emits a duller sound than does unaffected metal
- KU9.** the corrosion is removed without damage to adjacent areas or fittings in accordance with company requirements
- KU10.** the adjacent areas are inspected for corrosion and are free of rust
- KU11.** whether to use heavy impact blows or to use a sharp tool to dig at the structure
- KU12.** the various types of tools required to carry out repairs
- KU13.** the techniques required to repair the structural panels
- KU14.** how to use following tools for carrying out the repair process: pneumatic hammer e.g. air chisels, air hammers, pneumatic hammers, pneumatic smoothing hammers power buffers e.g. buffing machines, machine polishers, portable buffers pullers e.g. pick pull rods, pull rods, slide hammers, t pullers shears e.g. foot shears, hand shears, power shears trim or molding tools e.g. crown spoons, door skin dollies, toe dollies, universal railroad dollies

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** record and document the basic details of repairs performed
- GS2.** maintain all office records required on the job (e.g. stock records, job cards, repair quotations, personnel records, time sheets, meeting notes etc.)
- GS3.** write in at least one language
- GS4.** read work orders, specifications etc. related to the job including instructions mentioned on the job card read any specific safety related guideline (applicable for CNG/ LPG/ Electric vehicle)
- GS5.** communicate the damage caused to vehicle and its body parts
- GS6.** interact with the service advisor and senior technicians
- GS7.** specify the corrective measures required to repair/replace the body componen
- GS8.** interact with team members including colleagues in the workshop to work efficiently
- GS9.** decide which components are to be repaired for the metal corrosion and which needs replacement
- GS10.** follow the correct method of protecting the metal corrosion, to avoid any adverse reaction on the corroded metal parts
- GS11.** plan work according to the required schedule and location
- GS12.** organise the schedule to complete the work on the vehicle timely in case other aggregate repairs/ maintenance work is also required to be done
- GS13.** ensure that customer needs regarding the prevention of the metal parts from corrosion are assessed and satisfactory service is provided
- GS14.** suggest to customer in case of corroded metal part/ structural panel whether it is better to repair and then re-paint them or it is better just to replace it, keeping the cost and durability factor in mind
- GS15.** inspect damaged vehicles and decide repairs and corrective action on the structural panel to be undertaken

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- GS16.** inspect equipment to ensure proper working order and take any corrective actions as required
- GS17.** check the usefulness of shop tools to see if they are suitable for work on new models of vehicles
- GS18.** evaluate the total material/ labour costs involved in repairing/ the metal corrosion on structural panels
- GS19.** evaluate the information gathered from the customer report/ job card and assess repairs
- GS20.** evaluate the repair estimate and decide whether to first repair and paint the structural panel/ body part or just replace it

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Carry out repairs for metal corrosion on structural panels</i>				
PC1. . assess the overall damage to vehicle body and chassis components and identify the need for repair of various body or chassis components as a result of vehicle metal corrosion	3	10	-	-
PC2. . select and use the tools and equipment required to remove and fit components	3	10	-	-
PC3. . check the structural components with the help of corrosion assessment tool	3	9	-	-
PC4. . replace the protective coatings, sound deadener pads, sealers, and foams and perform anti-corrosion procedures	3	11	-	-
PC5. . mix polyester resins and hardeners to restore damaged areas	2	9	-	-
PC6. . refit the parts removed/dismantled to carry out repair	2	9	-	-
PC7. . prevent the other components, units and panels on the vehicle from getting damaged	1	8	-	-
PC8. . inspect repaired vehicles for proper functioning, completion of work and dimensional accuracy	2	8	-	-
PC9. . ensure that trainings organized by the OEM from time-to-time are attended and knowledge levels are upgraded (esp. in case of newly launched products, product refreshes)	1	6	-	-
NOS Total	20	80	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	ASC/N1413
NOS Name	Carry out repairs for metal corrosion on structural panels
Sector	Automotive
Sub-Sector	Automotive Vehicle Service
Occupation	Technical Service & Repair
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	10/06/2013
Next Review Date	10/06/2015
NSQC Clearance Date	20/07/2015

Qualification Pack

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Element/ Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each Element/ PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
6. To pass the Qualification Pack assessment, every trainee should score the Recommended Pass % aggregate for the QP.
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

Recommended Pass % aggregate for QP : 70

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
ASC/N0001.Plan and organise work to meet expected outcomes	25	75	-	-	100	10
ASC/N0002.Work effectively in a team	25	75	-	-	100	10
ASC/N0003.Maintain a healthy,safe and secure working environment	25	75	-	-	100	15

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National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
ASC/N1412.Repair and replace vehicle body and chassis components	25	75	-	-	100	30
ASC/N1413.Carry out repairs for metal corrosion on structural panels	20	80	-	-	100	35
Total	120	380	-	-	500	100

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training

Qualification Pack

Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.

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Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.