

Automotive Skills Development Council



QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR AUTOMOTIVE INDUSTRY

What are Occupational Standards (OS)?

OS describe what individuals need to do, know and understand in order to carry out a particular job role or function

OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

Contact Us:

ASDC, Core 4-B, 5th Floor, India Habitat Centre, Lodhi Road,New Delhi

E-mail: <u>skc@asdc.org.in</u>





Contents

Introduction and Contacts	.P.1
Qualifications Pack	P.2
Glossary of Key Terms	P.4
NOS Units	P.6
Assessment Criterion	P.33

Introduction

Qualifications Pack-Auto Body Repair Technician / Denter Level 4

SECTOR: AUTOMOTIVE

SUB-SECTOR: AUTOMOTIVE VEHICLE SERVICE

OCCUPATION:TECHNICAL SERVICE & REPAIR

JOB ROLE: AUTO BODY REPAIR TECHNICIAN LEVEL 4

REFERENCE ID: ASC/ Q 1405

ALIGNED TO: NCO-2004/7213.30

Auto Body Technician isalso known asDenter, Body Man, Senior Body Technician, Body Repairman, Body Repair Technician and Body Repairer.

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.





Qualifications Pack Code	ASC/ Q 1405		
Job Role	Auto Body Repair Technician Level 4		
Credits(NSQF)	TBD	Version number	1.1
Industry	Automotive	Drafted on	10/06/13
Sub-sector	Automotive Vehicle Service	Last reviewed on	10/06/13
Occupation	Technical Service & Repair	Next review date	10/06/15

Job Role	Automotive Body Repair Technician level 4	
Role Description	Responsible for the repair of vehicles by carrying out work on the body and frame of a vehicle	
NSQF level	4	
Minimum Educational Qualifications	Class X	
Maximum Educational Qualifications	ITI Diploma	
Training (Suggested but not mandatory)	 On the job training: Desirable for ASDC Automotive Body Technician Level 4 Certificate or ITI diploma Compulsory for all other qualifications 	
Experience	Not Applicable	
	Compulsory	
	ASC/ N 1412: Repair and replace vehicle body and chassis components	
	ASC/ N 1413: Carry out repairs for metal corrosion on structural panels	
Occupational Standards (OS)	ASC/ N 0001: Plan and organise work to meet expected outcomes	
	ASC/ N 0002: Work effectively in a team	
	ASC/ N 0003: Maintain a healthy, safe and secure working environment	
	Optional:	
2 Page	N.A.	





Performance Criteria

As described in the relevant NOS units





Keywords /Terms	Description
Core Skills/Generic	Core Skills or Generic Skills are a group of skills that are key to learning
Skills	and working in today's world. These skills are typically needed in any
	work environment. In the context of the NOS, these include
	communication related skills that are applicable to most job roles.
Dealership	A business established or operated under an authorization to sell or
	distribute an automotive company's goods and services
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 NOS they are looking for.
Function	Function is an activity necessary for achieving the key purpose of the
	sector, occupation, or area of work, which can be carried out by a person
	or a group of persons. Functions are identified through functional
	analysis and form the basis of NOS.
Job role	Job role defines a unique set of functions that together form a unique
	employment opportunity in an organisation.
Knowledge and	Knowledge and Understanding are statements which together specify the
Understanding	technical, generic, professional and organisational specific knowledge
	that an individual needs in order to perform to the required standard.
National Occupational	NOS are Occupational Standards which apply uniquely in the Indian
Standards (NOS)	context.
Occupation	Occupation is a set of job roles, which perform similar/related set of
	functions in an industry.
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.
Performance Criteria	Performance Criteria are statements that together specify the standard
	of performance required when carrying out a task.
Qualifications Pack(QP)	Qualifications Pack comprises the set of NOS, together with the
	educational, training and other criteria required to perform a job role. A
	Qualifications Pack is assigned a unique qualification pack code.
Qualifications Pack	Qualifications Pack Code is a unique reference code that identifies a
Code	qualifications pack.
Scope	Scope is the 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 the quality of performance required.
Sector	Sector is a conglomeration of different business operations having similar
	businesses and interests. It may also be defined as a distinct subset of the
	economy whose components share similar characteristics and interests.





Sub-sector is derived from a further breakdown based on the
characteristics and interests of its components.
Sub-functions are sub-activities essential to fulfil the achieving the
objectives of the function.
Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Unit Code is a unique identifier for an NOS unit, which can be denoted with an 'N '.
Unit Title gives a clear overall statement about what the incumbent should be able to do.
Mode of personal transport including 2-wheelers, 3-wheelers and 4-
wheelers (including passenger vehicles and commercial vehicles). This
includes gasoline, petrol, CNG, electrical and hybrid vehicles
Vertical may exist within a sub-sector representing different domain
areas or the client industries served by the industry.
Description
National Occupational Standard(s)
National Occupational Standard(s) National Vocational Education Qualifications Framework
National Vocational Education Qualifications Framework
National Vocational Education Qualifications Framework National Vocational Qualifications Framework
National Vocational Education Qualifications FrameworkNational Vocational Qualifications FrameworkNational Skills Qualifications Framework







National Occupational Standards



Overview

This Occupational Standard describes the knowledge, understanding and skills required of an Auto-Body Technicianto assess the damage to vehicle chassis and body identify the need for repair and replacement of chassis/ body components and then repair and replace the identified vehicle body and chassis components.







Unit Code	Code ASC/ N 1412	
Unit Title (Task)	Repair and replace vehicle body and chassis components	
Description	This NOS unit is about the Automotive Body Technicianin assessing the damage to the vehicle chassis and body components and then repairing and replacing the identifiedvehicle 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 	
Performance Criteria	(PC) w.r.t. the Scope	
Element	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 tovehicle 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/ chassisrepair 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	
	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 Unders	tanding (K) w.r.t. the scope	
Element Knowledge and Understanding		
A. Organisational Context	tional The user/individual on the job needs to know and understand:	
	KA1 standard operating procedures of the Organisation/ Dealership for inspection	
(Knowledge of the Company/ KA1. standard operating procedures of the Organisation/ Dealership for inspectio and repair of vehicles for the body/ chassis components		
• • •	and repair of vehicles for the body/ chassis components	
Organisation and	KA2. standard operating procedures for repair and replacement of Automotive body	
its processes)	parts mandated by the OEM	
	KA3. safety requirements for equipment and components (e.g. dealing with	
	inflammable materials, broken glass, fiberglass strips etc.)	
	KA4. standard operating procedures recommended by the dealership/	
	suppliers/OEM for using tools and equipmentto be followed as per the	
	manufacturer instructions (e.g. maintaining safety while using welding and	



NOS	
National Occupational Standards	



ASC/ N 1	412:Repair and replace vehicle body and chassis components
	 soldering equipment) KA5. documentation requirements for each procedure carried out as part of roles and responsibilities as specified by the organization KA6. organisational and professional code of ethics and standards of practice KA7. 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) KA8. workplace policies and schedules for housekeeping activities and equipment maintenance
Knowledge	 The user/individual on the job needs to know and understand: KB1. 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 gunsair 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 steel rulers T-squares flat edges calipers dividers and protractors K82. the different types of polyester resins and hardeners and the procedures for mixing them K83. welding techniques including: spot welding procedures tungsten arc welding procedures







A3C/	N 1412:Repair and replace vehicle body and chassis components	
	manual metal arc welding procedures	
	 oxy acetylene, welding, thermal cutting and thermal heating 	
	• procedures	
	 brazing procedures 	
	 thermo plastic repair procedures 	
	 soldering techniques 	
	KB4. types and application of cleaning agents	
	KB5. procedures for measurement of:	
	• length	
	• squareness	
	• flatness	
	• angles	
	• roundness	
	• depth	
	• clearances	
	 anymeasurements that can be taken from analogue or digital devices 	
	KB6. procedures for routine adjustment of measuring equipment	
	KB7. the various cleaning agents/sprays (de-waxing, detergents, degreasers, special	
	purpose agents)	
	KB8. how to use storage tabs and racks	
	KB9. how to repair or replace damaged parts based on the damage sustained	
	KB10. the different techniques used to fasten and fix the panels and body structure	
	KB11. how to repair and fix the following non-permanently attached body panels:	
	• wings	
	• doors	
	• bonnets	
	 boot lids and tailgates 	
	bumper bars, covers and components	
	KB12. how to comply with the instructions mentioned on job card	
	KB13. how to control operations of equipment or systems	
	KB14. the measures to be adopted to protect the vehicle from damage before, during	
	and after removing and fitting activities	
	KB15. appropriate personal and vehicle protection to be used for various procedures	
Skills (S) w.r.t. the sco	pe	
Element	Skills	
A. Core Skills/	Writing Skills	
Generic Skills	The user/ individual on the job needs to know and understand how to:	
	SA1. record and document the basic details of repairs performed on various body	
	and chassis aggregates/ components	
	SA2. maintain all office records required on the job (e.g. stock records, job cards,	
	repair quotations, personnel records, time sheets, meeting notes etc.)	
	SA3. write in at least one language	







	Reading skills	
	The user/individual on the job needs to know and understand how to:	
	 SA4. read the basic specification of a vehicle or any other component or part SA5. readwork orders, specifications etc. related to the job including instructions mentioned on the job card SA6. 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.)	
	SA7. read any specific safety related guideline (applicable for CNG/ LPG/ Electric vehicle)	
	Oral Communication (Listening and Speaking skills)	
	The user/individual on the job needs to know and understand how to:	
	SA8. communicate the damage caused to vehicle and its body parts SA9. interact with the customer/ service advisor and senior technicians	
	SA10. specify the corrective measures required to repair/replace the body component	
	SA11. interact with team members including colleagues in the workshop and the painter in the body shop to work efficiently	
B. Professional Skills	Decision making	
The user/individual on the job needs to know and understand how to:		
The user/individual on the job needs to know and understand now to.		
SB1. decidewhich body components need to be replaced or repaired		
	Plan and Organise	
	The user/individual on the job needs to know and understand how to:	
	SB2. plan work according to the required schedule and location	
	SB3. organise the schedule to complete the work on the vehicle timely in case other	
	aggregate repairs/ maintenance work is also required to be done	
	Customer centricity	
	The user/individual on the job needs to know and understand how to:	
	SB4. ensure that customer needs regarding the denting and body/ chassis related	
	jobs are assessed and satisfactory service is provided SB5. 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	
	Problem solving	
	The user/individual on the job needs to know and understand how to:	
	SB6. inspect damaged vehicles and decide repairs and corrective action to be undertaken	
	SB7. inspect equipment to ensure proper working order and take any corrective actions as required	
	SB8. inspect vehicles which do not conform to OEM standards (e.g. customised	
11 P > 0 A		







	vehicles) and decide on a service and repair schedule		
	Analytical thinking		
	The user/individual on the job needs to know and understand how to:		
	SB9. check the usefulness of shop tools to see if they are suitable for work on new models of vehicles		
	SB10. evaluate the complexity of tasks to determine if they can successfully carry them out		
	SB11. evaluate the total material/ labour costs involved in repairing/ replacing panel/ body component		
Critical thinking			
	The user/individual on the job needs to know and understand how to:		
	SB12. evaluate the information gathered from the customer report/ job card and assess repairs		
	SB13. evaluate the repair estimate and decide whether to first repair and paint the panel/ body part or just replace it		









NOS Version Control

NOS Code	ASC/ N 1412		
Credits(NSQF)	TBD	Version number	1
Industry	Automotive	Drafted on	10/06/13
Industry Sub-sector	Automotive Vehicle Service	Last reviewed on	10/06/13
		Next review date	10/06/15









National Occupational Standards



Overview

This Occupational Standard describes the knowledge, understanding and skills required of an Auto-Body Technician forcarrying out repairs for metal corrosion on structural panels.







Unit Code	ASC/ N 1413		
Unit Title (Task)	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		
Performance Criteria (PC)	w.r.t. the Scope		
Element	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 tovehicle body and chassis components and identify the need for repair of various body or chassis components as a result of vehicle metal corrosion PC2. selectand use the tools and equipment required to remove and fitcomponents 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 workand dimensional accuracy PC9. ensure that trainings organized by the OEM from time-to-time are attended 		
	product refreshes)		
Knowledge and Understa	nding (K) w.r.t. the scope		
Element	Knowledge and Understanding		
A. Organisational Context (Knowledge	The user/individual on the job needs to know and understand:		
of the Company/ Organisation and its	KA1. standard operating procedures of the Organisation/ Dealership for inspection, servicing and repair of vehicles for the body/ chassis components		
processes)	KA2. standard operating procedures for servicing, repair and replacement of parts mandated by the OEM		
	KA3. safety requirements for equipment and components prescribed by the manufacturer		
	KA4. documentation requirements for each procedure carried out as part of roles and responsibilities as specified by the organization		
	KA5. organisational and professional code of ethics and standards of practiceKA6. safety and health policies and regulations for the workplaceas well as for		







	 automotive trade in general (e.g. safe practices while working in pits/ under vehicles) KA7. workplace policies and schedules for housekeeping activities and equipment maintenance 		
B. Technical Knowledge	The user/individual on the job needs to know and understand:		
	KB1. whether metal is excessively corroded, or metal treated with filler, emits a duller sound than does unaffected metal		
	KB2. the corrosion is removed without damage to adjacent areas or fittings in accordance with company requirements		
	KB3. the adjacent areas are inspected for corrosion and are free of rust		
	KB4. whether to use heavy impact blows or to use a sharp tool to 'dig' at the structure		
	KB5. the various types of tools required to carry out repairs		
	KB6. the techniques required to repair the structural panels KB7. 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 chapters e.g. fact chapter hand share neuror chapter 		
	 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		
Skills (S) w.r.t. the scope			
Element	Skills		
A. Core Skills/ Generic	Writing skills		
Skills	The user/individual on the job needs to know and understand how to:		
	SA1. record and document the basic details of repairs performed		
	SA2. maintain all office records required on the job (e.g. stock records, job cards,		
	repair quotations, personnel records, time sheets, meeting notes etc.) SA3. write in at least one language		
	Reading skills The user/individual on the job needs to know and understand how to:		
	SA4. 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) Oral Communication (Listening and Speaking skills)		
	The user/individual on the job needs to know and understand how to:		
	SA5. communicate the damage caused to vehicle and its body parts SA6. interact with the service advisor and senior technicians		







-	SA7. specify the corrective measures required to repair/replace the body
	component
	SA8. interact with team members including colleagues in the workshop to work
B. Professional Skills	efficiently Decision making
	The user/individual on the job needs to know and understand how to:
	SB1. decide which components are to be repaired for the metal corrosion and
	which needs replacement
	SB2. follow the correct method of protecting the metal corrosion, to avoid any
	adverse reaction on the corroded metal parts
	Plan and Organise
	The user/individual on the job needs to know and understand how to:
	SB3. plan work according to the required schedule and location
	SB4. organise the schedule to complete the work on the vehicle timely in case
	other aggregate repairs/ maintenance work is also required to be done
	Customer centricity
	The user/individual on the job needs to know and understand how to:
	SB5. ensure that customer needs regarding the prevention of the metal parts from
	corrosion are assessed and satisfactory service is provided
	SB6. 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
	Problem solving
	The user/individual on the job needs to know and understand how to:
	SB7. inspect damaged vehicles and decide repairs and corrective action on the
	structural panel to be undertaken
	SB8. inspect equipment to ensure proper working order and take any corrective
	actions as required
	Analytical thinking
	The user/individual on the job needs to know and understand how to:
	SB9. check the usefulness of shop tools to see if they are suitable for work on new
	models of vehicles
	SB10. evaluate the total material/ labour costs involved in repairing/ the metal
	corrosion on structural panels
	Critical thinking
	The user/individual on the job needs to know and understand how to:
	The decirimation and including to know and understand now to.
	SB11. evaluate the information gathered from the customer report/ job card
	and assess repairs
	SB12. evaluate the repair estimate and decide whether to first repair and
	paint the structural panel/ body part or just replace it







NOS Version Control

NOS Code	ASC/ N 1413		
Credits(NSQF)	TBD Version number 1		
Industry	Automotive	Drafted on	10/06/13
Industry Sub-sector	Automotive Vehicle Service	Last reviewed on	10/06/13
		Next review date	10/06/15









National Occupational Standards



Overview

This unit is about planning and organisingan individual's work in order to complete it to the required standards, on time and within budget in terms of cost and material.







Unit Code	ASC/ N 0001		
Unit Title	Plan and organise work to meet expected outcomes		
(Task)			
Description	This NOS unit is about planning and organisingan individual's 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)		
Performance Criteria (PC) w			
Element	Performance Criteria		
Work requirements	To be competent, the user/individual on the job must be able to:		
including various activities			
within the given time and	PC1. keep immediate work area clean and tidy		
set quality standards	PC2. treat confidential information as per the organisation's guidelines		
	PC3. work in line with organisation's policies and procedures PC4. work within the limits of job role		
	PC4. work within the limits of job role PC5. obtain guidance from appropriate people, where necessary		
	PC5. Obtain guidance from appropriate people, where necessary PC6. ensure work meets the agreed requirements		
Appropriate use of	DC7 establish and areas an used, as a size manter with a surrounder		
resources	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 Understand	ing (K) w.r.t. the scope		
Element	Knowledge and Understanding		
A. Organisational Context	The user/individual on the job needs to know and understand:		
(Knowledge of the			
Company/Organisation	KA1. the organisation's policies, procedures and priorities for area of		
and its processes)	work, role and responsibilities in carrying out that work		
	KA2. the limits of responsibilities and when to involve others		
	KA3. specific work requirements and who these must be agreed with		
	KA4. the importance of having a tidy work area and how to do this		
	KA5. how to prioritize workload according to urgency and importance and the benefits of this		
	KA6. the organisation's policies and procedures for dealing with		
	confidential information and the importance of complying with		
	these		
	KA7. the purpose of keeping others updated with the progress of work		
	KA8. who to obtain guidance from and the typical circumstances whether many her required		
	this may be required KA9. the purpose and value of being flexible and adapting work plans		
	KA9. the purpose and value of being flexible and adapting work plans		







to reflect change				
B. Technical Knowledge	The user/individual on the job needs to know and understand:			
D. Teennear Knowledge	The docivination and job needs to know and and eistand.			
	KB1. how to complete tasks accurately by following standard			
	procedures			
	KB2. technical resources needed for work and how to obtain and use			
	these			
Skills (S) w.r.t. the scope				
Element	Skills			
A. Core Skills/ Generic	Writing Skills			
Skills	The user/individual on the job needs to know and understand how to:			
	SA1. write in at least one language			
	Reading Skills			
	The user/individual on the job needs to know and understand how to:			
	The usery main and an ane job needs to know and and erstand now to.			
	CA2 read instructions, guidelines/presedures			
	SA2. read instructions, guidelines/procedures			
	Oral Communication (Listening and Speaking skills)			
	The user/individual on the job needs to know and understand how to:			
	SA3. ask for clarification and advice from appropriate persons			
	SA4. communicate orally with colleagues			
B. Professional Skills	Decision Making			
	The user/individual on the job needs to know and understand how to:			
	SB1. make a decision on a suitable course of action appropriate for			
	accurately completing the task within resources			
	Plan and Organise			
	The user/individual on the job needs to know and understand how to:			
	The user/individual of the job needs to know and understand now to.			
	CD2 correct chiestives and werk requirements			
	SB2. agree objectives and work requirements			
	SB3. plan and organise work to achieve targets and deadlines			
	CustomerCentricity			
	The user/individual on the job needs to know and understand how to:			
	SB4. deliver consistent and reliable service to customers			
	SB5. check own work and ensure it meets customer requirements			
	Problem Solving			
	The user/individual on the job needs to know and understand how to:			
	The usery manual on the job needs to know and understand how to.			
	SP6 refer anomalies to the concerned persons			
	SB6. refer anomalies to the concerned persons			
	Analytical Thinking			
	The user/individual on the job needs to know and understand how to:			
	SB7. analyse problems and identify work -arounds taking help from			







concerned persons where required	
Critical Thinking	
The user/individual on the job needs to know and understand how to:	
SB8. apply own judgement to identify solutions in different situations	









NOS Version Control

NOS Code	ASC/ N 0001		
Credits(NSQF)	TBD	Version number	1
Industry	Automotive	Drafted on	10/06/13
Industry Sub-sector	NA	Last reviewed on	10/06/13
	2.54	Next review date	10/06/15









National Occupational Standards



Overview

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







Unit Code	ASC/ N 0002		
Unit Title (Task)	Work effectively in a team		
Description	This NOS unit is about working effectively within a team, either in individual's own work group or in other work groups outside theorganisation.		
Scope	 This unit/task covers the following: Colleagues: Interact & communicate effectively with colleagues including member in the own group as well as other groups 		
Performance Criteria (PC) w.r			
Element	Performance Criteria		
Interact & communicate effectively with colleagues including member in the own group as well as other groups	 To be competent, the user/individual on the job must be able to: PC1. maintain clear communication with colleagues (by all means including face-to-face, telephonic as well as written) PC2. work with colleagues to integrate work PC3. pass on information to colleagues in line with organisational requirements both through verbal as well as non-verbal means 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 outcommitments, explaining the reasons PC7. identify problems in working with colleagues and take the initiative to solve these problems PC8. follow the organisation's policies and procedures for working with colleagues 		
Knowledge and Understandir			
Element A. Organisational Context (Knowledge of the Company/Organisation and its processes)	 Knowledge and Understanding The user/individual on the job needs to know and understand: KA1. the organisation's policies and procedures for working with colleagues, role and responsibilities in relation to this KA2. the importance of effective communication and establishing good working relationships with colleagues KA3. different methods of communication and the circumstances in which it is appropriate to use these KA4. the importance of creating an environment of trust and mutual respect KA5. the implications of own work on the work and schedule of others 		
B. Technical Knowledge	KA5. the implications of own work on the work and schedule of others The user/individual on the job needs to know and understand:		







	KB1. different types of information that colleagues might need and the importance of providing this information when it is required			
	KB2. the importance of helping colleagues with problems, in order to meet quality and time standards as a team			
Skills (S)w.r.t. the scope				
Element	Skills			
A. Core Skills/	Writing Skills			
Generic Skills	The user/individual on the job needs to know and understand how to:			
	SA1. complete written work with attention to detail			
	Reading Skills			
	The user/individual on the job needs to know and understand how to:			
	SA2. read instructions, guidelines/procedures			
	Oral Communication (Listening and Speaking skills)			
	The user/individual on the job needs to know and understand how to:			
	SA3. listen effectively and orally communicate information			
	SA4. ask for clarification and advice from the concerned person			
B. Professional Skills	Decision Making			
	The user/individual on the job needs to know and understand how to: SB1. make decisions on a suitable course of action or responsekeeping in view resource utilization while meeting commitments			
	Plan and Organise			
	The user/individual on the job needs to know and understand how to:			
	SB2. plan and organise work to achieve targets and deadlines			
	CustomerCentricity			
	The user/individual on the job needs to know and understand how to:			
	SB3. check that the work meets customer requirements			
	SB4. deliver consistent and reliable service to customers			
	Problem Solving			
	The user/individual on the job needs to know and understand how to:			
	SB5. apply problem solving approaches in different situations			
	Critical Thinking			
	The user/individual on the job needs to know and understand how to:			
	SB6. apply balanced judgements to different situations			







NOS Version Control

NOS Code	ASC/ N 0002		
Credits(NSQF)	TBD	Version number	1
Industry	Automotive	Drafted on	10/06/13
Industry Sub-sector	NA	Last reviewed on	10/06/13
	2-24	Next review date	10/06/15









National Occupational Standards



Overview

This unit is about monitoring work place practices and making sure they meet requirements for health, safety, security and environmental concerns.





Unit Code	ASC/ N 0003
Unit Title	Maintain a healthy, safe and secure working environment
(Task)	Maintain a healthy, sale 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
Performance Criteria (PC) w.	
Element	Performance Criteria
Liement	
Resources needed to	To be competent, the user/individual on the job must be able to:
maintain a safe, secure	
working environment	PC1. comply with organisation's 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 individual's
	authority
	PC5. report any hazards outside the individual's authority to the
	relevant person in line with organisational procedures and warn
	other people who may be affected
	PC6. follow organisation's 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 Understandi	
Element	Knowledge and Understanding
A. Organisational Context	The user/individual on the job needs to know and understand:
(Knowledge of the	· · ·
Company/Organisation	KA1. legislative requirements and organisation's procedures for
and its processes)	health, safety and security and individual's role and
	responsibilities in relation to this
	KA2. what is meant by a hazard, including the different types of
	health and safety hazards that can be found in the workplace
	KA3. how and when to report hazards
	KA4. the limits of responsibility for dealing with hazards







	iviaintain a nealthy, safe and secure working environment
	KA5. the organisation's emergency procedures for different
	emergency situations and the importance of following these
	KA6. the importance of maintaining high standards of health, safety
	and security
	KA7. implications that any non-compliance with health, safety and
	security may have on individuals and the organisation
B. Technical Knowledge	The user/individual on the job needs to know and understand:
b. reclinical knowledge	
	KD1 different types of breaches in bealth, safety and sequrity and have
	KB1. different types of breaches in health, safety and security and how
	and when to report these
	KB2. evacuation procedures for workers and visitors
	KB3. how to summon medical assistance and the emergency
	services, where necessary
	KB4. how to use the health, safety and accident reporting
	Procedures and the importance of these
Skills (S) w.r.t. the scope	
Element	Skills
A. Core Skills/ Generic	Writing Skills
Skills	The user/individual on the job needs to know and understand how to:
Skiiis	The user/individual on the job needs to know and understand now to.
	CA1 complete accurate well written work with attention to detail
	SA1. complete accurate, well written work with attention to detail
	Reading Skills
	The user/individual on the job needs to know and understand how to:
	SA2. read instructions, guidelines/procedures/rules
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to:
	SA3. listen to and orally communicate informationwith all concerned
B. Professional Skills	Decision Making
	The user/individual on the job needs to know and understand how to:
	······································
	SB1. make decisions on a suitable course of action or response
	Plan and Organise
	The user lindividual on the job, needs to know and understand how to
	The user/individual on the job needs to know and understand how to:
	SB2. plan and organise work to achieve targets and deadlines
	SB2. plan and organise work to achieve targets and deadlines CustomerCentricity
	SB2. plan and organise work to achieve targets and deadlines
	SB2. plan and organise work to achieve targets and deadlines CustomerCentricity
	SB2. plan and organise work to achieve targets and deadlines CustomerCentricity
	SB2. plan and organise work to achieve targets and deadlinesCustomerCentricityThe user/individual on the job needs to know and understand how to:SB3. build and maintain positive and effective relationships with
	SB2. plan and organise work to achieve targets and deadlines CustomerCentricity The user/individual on the job needs to know and understand how to: SB3. build and maintain positive and effective relationships with colleagues and customers
	SB2. plan and organise work to achieve targets and deadlines CustomerCentricity The user/individual on the job needs to know and understand how to: SB3. build and maintain positive and effective relationships with colleagues and customers Problem Solving
	SB2. plan and organise work to achieve targets and deadlines CustomerCentricity The user/individual on the job needs to know and understand how to: SB3. build and maintain positive and effective relationships with colleagues and customers
	SB2. plan and organise work to achieve targets and deadlines CustomerCentricity The user/individual on the job needs to know and understand how to: SB3. build and maintain positive and effective relationships with colleagues and customers Problem Solving







	Analytical Thinking		
	The user/individual on the job needs to know and understand how to:		
	SB5. analyse data and activities		
	Critical Thinking		
	The user/individual on the job needs to know and understand how to:		
	SB6. apply balanced judgments to different situations		









NOS Version Control

NOS Code	ASC/ N 0003		
Credits(NSQF)	TBD	Version number	1
Industry	Automotive	Drafted on	10/06/13
Industry Sub-sector	NA	Last reviewed on	10/06/13
	h.c.	Next review date	10/06/15









Criteria for assessment of Trainees			
JOB ROLE	Auto body Repair Technician L4		
Qualification Pack	ASC/Q 1405		
No. Of NOS	2 Role specific ,3 generic		

NOS Title/ NOS Elements	NOS & Performance Criterion Description			Aarks ocation
ASC/N 1412	Repair & replace Chassis & Body parts		Viva	Practical
Assess damage and	To be competent, the user/individual on the job must be			Tractical
Repair / replace vehicle	able to:	100		
body & chassis			0.44	
components	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	A.	10	30
	PC2. read specifications or confer with customer/ Service Advisor or Body Shop In-charge 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		and a second	
	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 panelsminor structural damage			
	 major welded panels body components using lead wiping major sectional repair laminated glass chassis/frame and associated components 		30	50
	 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. ca	arry out:			
•	 vehicle body and underframe alignment 			
	• vehicle measurement			
	 buffing and burnishing 			
	 trimming of vehicle components 		10	30
	elect and apply trim/fabric materials and adhesives			
	carry out minor sewing and trimming repairs and			
	Iterations			
-	remove and install:			
	windscreens			
	 Iaminated glass 	-		
	 fixed and movable body glass 	NY ST -	244	
	 windows / sunroof installation (in case required) fit and world conference to acts into a loss write 	28		
PC12.		S P		
	wrenches and welding equipment, and grind	201		
	down welds to smooth them, using power 🧐	1.0		
DC12	grinders and other tools	A.A.		
PC13.	chain or clamp frames and sections to alignment	Kar	1	
	machines that use hydraulic pressure to align	AKA	1.1	
DC14	damaged components		1	
PC14.	remove damaged sections of vehicles using	1	ñ.,	
	metal-cutting guns, air grinders and wrenches,	¥	1	
	and install replacement parts using wrenches or		10	30
	welding equipment			
PC15.	position dolly blocks against surfaces of dented			
	areas and beat opposite surfaces to remove			
DC16	dents, using hammers			
PC16.	mix polyester resins and hardeners to restore damaged areas			
PC17.	apply heat to plastic panels, using hot-air welding			
1017.	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			
1010.	trim to vehicle bodies, using caulking guns,			
	adhesive brushes, and mallets			
PC19.	fill small dents that cannot be worked out with			
1 0151	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			
	<u> </u>			







	time to time are attended and knowledge levels		
	time-to-time are attended and knowledge levels are upgraded (esp. in case of newly launched products, product refreshes)		
	subtotal	60	140
ASC/N 1413	Carry out repair & maintenance for corrosion on	Viva	Practical
	structural body parts		
Carry out repairs for	To be competent, the user/individual on the job must be		
metal corrosion on	able to:		
structural panels			
	 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. selectand use the tools and equipment required to remove and fitcomponents PC3. check the structural components with the help of corrosion assessment tool 	5	15
	 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 	10	20
	 PC0. Term the parts removed/dismantied 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) 	5	20
	subtotal	20	55
ASC/N 0001	Plan & organize work to meet expected outcome	Viva	Practical
Work requirements	To be competent, the user/individual on the job must be		
including various	able to:		
activities within the	PC1. keep immediate work area clean and tidy		
given time and set	PC2. treat confidential information as per the		
quality standards	organisation's guidelines PC3. work in line with organisation's policies and procedures PC4. work within the limits of job role PC5. obtain guidance from appropriate people, where	15	30







	uunjicutions Fuck joi Auto-bouy kepun Teenniciun E4			
	necessary			
	PC6. ensure work meets the agreed requirements			
Appropriate use of				
resources	PC7. establish and agree on work requirements with		10	20
	appropriate people		10	20
	PC8. manage time, materials and cost effectively			
	PC9. use resources in a responsible manner			
	subtotal		25	50
ASC/N 0002	Work effectively in a team		Viva	Practical
Interact & communicate	To be competent, the user/individual on the job must be			
effectively with	able to:			
colleagues including	PC1. maintain clear communication with colleagues (by	A. S	144	
member in the own	all means including face-to-face, telephonic as	18		
group as well as other	well as written)	20		
groups	PC2. work with colleagues to integrate work	1. ···		
	PC3. pass on information to colleagues in line with	1		
	organisational requirements both through verbal as well as non-verbal means	13		
	PC4. work in ways that show respect for colleagues	R.	1	
	PC5. carry out commitments made to colleagues	AR. L	25	50
			23	50
	PC6. let colleagues know in good time if cannot carry		£	
	outcommitments, explaining the reasons	- X.,	1	
	PC7. identify problems in working with colleagues and			
	take the initiative to solve these problems			
	PC8. follow the organisation's policies and procedures for working with colleagues	>		
	subtotal		25	50
				Practical
ASC/N 0003	Maintain safe , healthy environment friendly workplace		Viva	Practical
Resources needed to	To be competent, the user/individual on the job must be			
maintain a safe, secure	able to:			
	able to:			
working environment				
working environment	PC1. comply with organisation's current health, safety			
working environment				
working environment	PC1. comply with organisation's current health, safety			
working environment	PC1. comply with organisation's current health, safety and security policies and procedures			
working environment	 PC1. comply with organisation's current health, safety and security policies and procedures PC2. report any identified breaches in health, safety, 			
working environment	 PC1. comply with organisation's current health, safety and security policies and procedures PC2. report any identified breaches in health, safety, and security policies and procedures to the 			
working environment	 PC1. comply with organisation's 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 			
working environment	 PC1. comply with organisation's 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 			
working environment	 PC1. comply with organisation's 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 			
working environment	 PC1. comply with organisation's 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 			
working environment	 PC1. comply with organisation's 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, 		20	55
working environment	 PC1. comply with organisation's 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. 		20	55
working environment	 PC1. comply with organisation's 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, 		20	55







	Total	180	150	350
	subtotal		20	55
des PC8. com	ignated person nplete all health and safety records are updates I procedures well defined			
PC7. ider	idents, fires or any other natural calamity ntify and recommend opportunities for proving health, safety, and security to the			
who PC6. follo	o may be affected ow organisation's emergency procedures for			
	hority to the relevant person in line with anisational procedures and warn other people			

