





Four Wheeler Service Assistant

QP Code: ASC/Q1401

Version: 2.0

NSQF Level: 3

Automotive Skills Development Council || 153, Gr Floor, Okhla Industrial Area, Phase - III, Leela Building, New Delhi - 110020





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ASC/Q1401: Four Wheeler Service Assistant

Brief Job Description

A Four Wheeler Service Assistant is responsible for assisting the four wheeler service technician in repair, routine servicing and maintenance (including electrical and mechanical aggregates) of vehicles

Personal Attributes

An individual in this job must have good communication and interpersonal skills. The person should be able to multi-task, organised, team-oriented, customer centric and have the ability to work for long hours in adverse conditions. The individual should be a keen observer and have an eye for detail and quality.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- 1. ASC/N9801: Organize work and resources (Service)
- 2. ASC/N9802: Interact effectively with colleagues, customers and others
- 3. ASC/N1401: Assist in service, maintenance and repair of the vehicle

Qualification Pack (QP) Parameters

Sector	Automotive
Sub-Sector	Automotive Vehicle Service
Occupation	Technical Service & Repair
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/3115.0602
Minimum Educational Qualification & Experience	5th Class pass with 4 years of relevant experience OR 8th Class with 1 year of relevant experience OR 9th Class pass OR Certificate-NSQF (Automotive Washer L2) with 2 years of relevant experience
Minimum Level of Education for Training in School	Not Applicable
NSOC Approved II Automotive Skills Development Council	<u> </u>





Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	22/09/2020
Next Review Date	22/09/2025
NSQC Approval Date	22/09/2020
Version	2.0









ASC/N9801: Organize work and resources (Service)

Description

This NOS unit is about implementing safety, planning work, adopting sustainable practices for optimising use of resources

Scope

The scope covers the following:

- Maintain safe and secure working environment
- Perform work as per quality standards
- Health and hygiene
- Material/energy conservation practices
- Effective waste management practices

Elements and Performance Criteria

Maintain safe and secure working environment

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

- PC1. organise work as per 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. identify the risks and hazards associated with work activities, their causes and prevention

Perform work as per quality standards

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

- PC4. ensure work area is clean and tidy
- PC5. ensure that work is accomplished as per the requirements within the specified timeline
- PC6. ensure team goals are given preference over individual goals

Health and hygiene

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

- PC7. sanitize workstation and equipment regularly
- PC8. clean hands with soap, alcohol-based sanitizer regularly
- PC9. avoid contact with ill people and self-isolate in a similar situation
- PC10. wear and dispose PPEs regularly and appropriately
- PC11. report advanced hygiene and sanitation issues to appropriate authority
- PC12. follow stress and anxiety management techniques

Material/energy conservation practices

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

- PC13. identify ways to optimise usage of material in various tasks/activities/processes
- PC14. use resources, including water, in a responsible manner
- PC15. check for spills/leakages in various tasks/activities/processes

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Oualification Pack



- PC16. plug spills/leakages and escalate to appropriate authority if unable to rectify
- PC17. carry out routine cleaning of tools, machines and equipment
- PC18. check if the equipment/machine is functioning normally before commencing work and rectify wherever required
- PC19. report malfunctioning (fumes/sparks/emission/vibration/noise) and lapse in maintenance of equipment
- PC20. ensure electrical equipment and appliances are properly connected and turned off when not in use

Effective waste management practices

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

- PC21. identify recyclable and non-recyclable, and hazardous waste generated
- PC22. segregate waste into different categories
- PC23. dispose non-recyclable waste appropriately
- PC24. deposit recyclable and reusable material at identified location
- PC25. follow processes specified for disposal of hazardous waste

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** organisation procedures for health, safety and security, and individual role and responsibilities in this context
- **KU2.** the organisations emergency procedures for different emergency situations and the importance of following the same
- KU3. evacuation procedures for workers and visitors
- KU4. how and when to report hazards as well as the limits of responsibility for dealing with hazards
- KU5. potential hazards, risks and threats based on the nature of work
- KU6. the implications of own work on the schedule and work of others
- KU7. efficient utilisation of material and water
- KU8. basics of electricity and prevalent energy efficient devices
- KU9. ways to recognise common electrical problems
- KU10. common practices of conserving electricity
- KU11. common sources of pollution and ways to minimize it
- **KU12.** categorisation of waste into dry, wet, recyclable, non-recyclable and items of single-use plastics
- KU13. usage of different colours of dustbins
- KU14. waste management and methods of waste disposal
- KU15. significance of greening
- KU16. organisation's policies to maintain personal health and hygiene at workplace

Generic Skills (GS)

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





- GS1. read instructions/guidelines/standard operating procedures
- GS2. complete statutory documents relevant to safety and hygiene
- GS3. modify work practices to improve them
- GS4. ask for clarifications from superior about the job requirement
- GS5. work with supervisors/team members to carry out work related tasks
- GS6. complete tasks efficiently and accurately within stipulated time
- GS7. inform/report to concerned person in case of any problem
- GS8. make timely decisions for efficient utilization of resources
- GS9. write in at least one language and complete written work with attention to detail
- GS10. record data on waste disposal at workplace
- GS11. be punctual, utilize time and manage workload efficiently
- **GS12.** evaluate strategies to maintain, enhance or reduce the intensity of heightened emotional response





Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Maintain safe and secure working environment		4	-	3
PC1. organise work as per organisation's current health, safety and security policies and procedures	-	2	-	1
PC2. report any identified breaches in health, safety, and security policies and procedures to the designated person	3	1	-	-
PC3. identify the risks and hazards associated with work activities, their causes and prevention	5	1	-	2
Perform work as per quality standards	12	8	-	6
PC4. ensure work area is clean and tidy	4	2	-	-
PC5. ensure that work is accomplished as per the requirements within the specified timeline	6	4	-	2
PC6. ensure team goals are given preference over individual goals	2	2	-	4
Health and hygiene	12	8	-	5
PC7. sanitize workstation and equipment regularly	2	2	-	2
PC8. clean hands with soap, alcohol-based sanitizer regularly	2	1	-	-
PC9. avoid contact with ill people and self-isolate in a similar situation	2	1	-	-
PC10. wear and dispose PPEs regularly and appropriately	2	2	-	1
PC11. report advanced hygiene and sanitation issues to appropriate authority	2	2	-	2
PC12. follow stress and anxiety management techniques	2	-	-	-
Material/energy conservation practices	10	4	-	3
PC13. identify ways to optimise usage of material in various tasks/activities/processes	2	-	-	1





Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. use resources, including water, in a responsible manner	2	-	-	-
PC15. check for spills/leakages in various tasks/activities/processes	-	1	-	-
PC16. plug spills/leakages and escalate to appropriate authority if unable to rectify	-	1	-	1
PC17. carry out routine cleaning of tools, machines and equipment	2	-	-	-
PC18. check if the equipment/machine is functioning normally before commencing work and rectify wherever required	-	1	-	1
PC19. report malfunctioning (fumes/sparks/emission/vibration/noise) and lapse in maintenance of equipment	2	1	-	-
PC20. ensure electrical equipment and appliances are properly connected and turned off when not in use	2	-	-	-
Effective waste management practices	8	6	-	3
PC21. identify recyclable and non-recyclable, and hazardous waste generated	2	-	-	1
PC22. segregate waste into different categories	-	2	-	-
PC23. dispose non-recyclable waste appropriately	2	2	-	1
PC24. deposit recyclable and reusable material at identified location	2	1	-	-
PC25. follow processes specified for disposal of hazardous waste	2	1	-	1
NOS Total	50	30	-	20





National Occupational Standards (NOS) Parameters

NOS Code	ASC/N9801
NOS Name	Organize work and resources (Service)
Sector	Automotive
Sub-Sector	Generic
Occupation	Generic
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	22/09/2020
Next Review Date	22/09/2025
NSQC Clearance Date	22/09/2020





ASC/N9802: Interact effectively with colleagues, customers and others

Description

This NOS unit is about communicating with customers and colleagues/superiors, either in own work group or in other work groups within organisation.

Scope

The scope covers the following:

- Communicate effectively with colleagues, customers and others
- Interact with supervisor or superior

Elements and Performance Criteria

Communicate effectively with colleagues, customers and others

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

- PC1. maintain clear communication with colleagues, customers and others, wherever needed, through all means i.e. face-to-face, telephonic or written
- PC2. adjust communication styles to reflect gender and persons with disability (PwD) sensitivity
- PC3. work in a way that shows respect for colleagues and others
- PC4. follow the organisation's policies and procedures while working in a team
- PC5. respect personal space of colleagues and customers

Interact with supervisor or superior

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

- PC6. identify work requirements by receiving instructions from reporting supervisor
- PC7. escalate problems to supervisors that cannot be handled including repairs and maintenance of machine
- PC8. report the completed work
- PC9. rectify errors as per feedback

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** the importance of effective communication and establishing good working relationships with colleagues and supervisor
- KU2. different methods of communication as per the circumstances
- KU3. gender based concepts, issues and legislation

Generic Skills (GS)

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





- GS1. read instructions/guidelines/procedures
- GS2. listen effectively and orally communicate information
- GS3. ask for clarification and advice from the concerned person
- GS4. maintain positive and effective relationships with colleagues and customers
- GS5. evaluate the possible solution(s) to the problem
- GS6. deliver consistent and reliable service to customers
- GS7. complete written work with attention to detail
- GS8. check that the work meets customer requirements





Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Communicate effectively with colleagues, customers and others	36	11	-	14
PC1. maintain clear communication with colleagues, customers and others, wherever needed, through all means i.e. face-to-face, telephonic or written	8	-	-	4
PC2. adjust communication styles to reflect gender and persons with disability (PwD) sensitivity	8	-	-	-
PC3. work in a way that shows respect for colleagues and others	7	4	-	3
PC4. follow the organisation's policies and procedures while working in a team	7	4	-	3
PC5. respect personal space of colleagues and customers	6	3	-	4
Interact with supervisor or superior	14	19	-	6
PC6. identify work requirements by receiving instructions from reporting supervisor	7	4	-	-
PC7. escalate problems to supervisors that cannot be handled including repairs and maintenance of machine	-	5	-	3
PC8. report the completed work	7	5	-	-
PC9. rectify errors as per feedback	-	5	-	3
NOS Total	50	30	-	20





National Occupational Standards (NOS) Parameters

NOS Code	ASC/N9802`
NOS Name	Interact effectively with colleagues, customers and others
Sector	Automotive
Sub-Sector	Generic
Occupation	Generic
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	22/09/2020
Next Review Date	22/09/2025
NSQC Clearance Date	22/09/2020





ASC/N1401: Assist in service, maintenance and repair of the vehicle

Description

An Assistant is responsible for assisting the four wheeler service technician in repair, routine servicing and maintenance (including electrical and mechanical aggregates) of 4 wheeler vehicles

Scope

The scope covers the following:

- Assist in preparation for service, maintenance and repair of the vehicle
- Provide assistance for service, maintenance and repair/replacement of vehicle parts or aggregates
- Perform pollution check

Elements and Performance Criteria

Assist in preparation for service, maintenance and repair of the vehicle

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

- PC1. assist in positioning the vehicle on a suitable platform for service, maintenance and repair
- PC2. assist the seniors by running errands such as collecting/fetching the required special service tools, measuring instruments, vehicle parts, gauges, fixtures, workshop supplies, etc.
- PC3. report the malfunctioning, if any, in tools/equipment to the concerned person for rectification
- PC4. report the malfunctions/repairs beyond own scope to the concerned person for rectification
- PC5. prepare the work area by cleaning and placement of tools/equipment in an organised manner

Provide assistance for service, maintenance and repair/replacement of vehicle parts or aggregates

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

- PC6. identify the auto component/aggregate and their specifications
- PC7. assist senior in visual inspection of the vehicle for any external impact/bend/leak/incorrect level/wear & tear
- PC8. work carefully to ensure no damage is caused to any aggregate/component
- **PC9.** comply with the Standard Operating Procedures and vehicle service manuals for repairing, servicing and using workshop tools and equipment
- PC10. maintain documentation of each process as specified by OEM
- PC11. assist senior in performing routine service/maintenance (inspect/correct/adjust/clean/lubricate) in vehicle/aggregate
- PC12. perform routine service/maintenance (change/replenish/top-up lubricants, fluids, coolant, filters etc.) and minor repair/replacement (wheels, wiper, mud flap, brake pad, brake shoes, wheel balancing etc.) in vehicle/aggregate under supervision of senior
- PC13. assist in dismantling aggregate like suspension steering system, cooling system, engine gearbox etc.

Perform pollution check

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

PC14. perform PUC (Pollution Under Control) check as per standard procedure using appropriate software and hardware





- **PC15.** check the reading to confirm if these are within acceptable range and inform the concerned person about discrepancies, if any
- PC16. check the previous PUC certificate for existing record or take data from registration certificate and enter details in software
- PC17. prepare the PUC certificate

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. Complete layout of the workshop
- **KU2.** use of measuring equipment such as feeler gauges, torque wrench, multimeter, engineering rule (scale), battery charger, tester, hydrometer, tachometer etc.
- KU3. use of routine service tools including fuel pressure testers, manifold gauge sets, oil pressure gauges, tire pressure gauges etc., and ball joint separators, bearing pullers, gear puller tools, slide hammers etc.
- KU4. safety requirements for components/aggregates and equipment as prescribed by the OEM
- **KU5.** safety, health and environmental policies and regulations at workplace and of automotive trade in general (e.g. safe practices while working in pits/under vehicles)
- **KU6.** basic functioning of different types of engines such as diesel, petrol, electrical, gas, hybrid etc, drive line or drive train-clutch, gearbox (transmission) or transaxle (manual), propeller shaft, differential, drive axles, wheels, wheel rims and tyres, functioning of systems such as air supply, fuel, cooling, emission and exhaust, ignition, lubrication, steering, suspension, brake
- KU7. identification of workshop tools, equipment, materials and their storage location
- KU8. organisational and professional code of ethics and standards of practice
- KU9. documentation requirements for each procedure
- KU10. standard operating procedures recommended by the OEM for using tools and equipment to be followed as per the manufacturer instructions
- KU11. workplace policies and schedules for housekeeping activities and equipment maintenance
- KU12. functioning of batteries and power storage system, power-generating systems (including charging systems especially for electrical and hybrid vehicles), electrical wire harness, starting, lighting, horn, wiper and air-conditioning systems etc., energy recuperation systems, electronic systems including active and passive safety, media and other systems
- **KU13.** Standard Operating Procedures of the organisation for inspection, servicing and repair of vehicles as per manufacturer's specification
- **KU14.** the type, quality and codification system of components specified by the OEM for use as replacement parts
- **KU15.** manufacturer specifications of components/aggregates and different sections of the vehicle such as dashboard, seat pockets, etc.
- **KU16.** the instructions related to the grade and use of oils/lubricants, grease and other fluids specified by the OEM
- KU17. standard approved procedure and parameters for performing pollution check
- KU18. how to interpret the readings with respect to the approved ranges
- KU19. functioning of the software for preparation of the PUC certificate





Generic Skills (GS)

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

- GS1. communicate effectively at the work place
- GS2. plan and organize work according to the principles of 5S
- GS3. read the service circulars/sign boards placed in the workshop with respect to the overall process to be followed for service, repair and maintenance of the vehicle and safety related guidelines applicable for CNG/LPG/Electric vehicle
- GS4. understand the need of the customer
- **GS5.** analyse, evaluate and apply the information gathered from observation, experience, reasoning or communication to act efficiently
- GS6. write in English/regional language





Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Assist in preparation for service, maintenance and repair of the vehicle	10	14	-	6
PC1. assist in positioning the vehicle on a suitable platform for service, maintenance and repair	2	4	-	-
PC2. assist the seniors by running errands such as collecting/fetching the required special service tools, measuring instruments, vehicle parts, gauges, fixtures, workshop supplies, etc.	-	6	-	4
PC3. report the malfunctioning, if any, in tools/equipment to the concerned person for rectification	2	-	-	-
PC4. report the malfunctions/repairs beyond own scope to the concerned person for rectification	4	-	-	-
PC5. prepare the work area by cleaning and placement of tools/equipment in an organised manner	2	4	-	2
Provide assistance for service, maintenance and repair/replacement of vehicle parts or aggregates	18	22	-	9
PC6. identify the auto component/aggregate and their specifications	4	3	-	-
PC7. assist senior in visual inspection of the vehicle for any external impact/bend/leak/incorrect level/wear & tear	2	5	-	1
PC8. work carefully to ensure no damage is caused to any aggregate/component	4	-	-	-
PC9. comply with the Standard Operating Procedures and vehicle service manuals for repairing, servicing and using workshop tools and equipment	2	-	-	1
PC10. maintain documentation of each process as specified by OEM	2	2	-	1
PC11. assist senior in performing routine service/maintenance (inspect/correct/adjust/clean/lubricate) in vehicle/aggregate	-	6	-	1





Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. perform routine service/maintenance (change/replenish/top-up - lubricants, fluids, coolant, filters etc.) and minor repair/replacement (wheels, wiper, mud flap, brake pad, brake shoes, wheel balancing etc.) in vehicle/aggregate under supervision of senior		-	-	3
PC13. assist in dismantling aggregate like suspension steering system, cooling system, engine gearbox etc.	2	6	-	2
Perform pollution check	2	14	-	5
PC14. perform PUC (Pollution Under Control) check as per standard procedure using appropriate software and hardware	-	5	-	1
PC15. check the reading to confirm if these are within acceptable range and inform the concerned person about discrepancies, if any	2	4	-	2
PC16. check the previous PUC certificate for existing record or take data from registration certificate and enter details in software	-	3	-	-
PC17. prepare the PUC certificate	-	2	-	2
NOS Total	30	50	-	20





National Occupational Standards (NOS) Parameters

NOS Code	ASC/N1401
NOS Name	Assist in service, maintenance and repair of the vehicle
Sector	Automotive
Sub-Sector	Automotive Vehicle Service
Occupation	Technical Service & Repair
NSQF Level	3
Credits	TBD
Version	2.0
Last Reviewed Date	22/09/2020
Next Review Date	22/09/2025
NSQC Clearance Date	22/09/2020





Assessment Guidelines and Assessment Weightage

Assessment Guidelines

- 1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) (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 PC.
- 2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
- 3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below).
- 4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training centre based on these criteria.
- 5. In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.
- 6. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

Recommended Pass %: 65

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
ASC/N9801.Organize work and resources (Service)	50	30	-	20	100	15
ASC/N9802.Interact effectively with colleagues, customers and others	50	30	-	20	100	10
ASC/N1401.Assist in service, maintenance and repair of the vehicle	30	50	-	20	100	75
Total	130	110	-	60	300	100





Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
OEM	Original Equipment Manufacturer
CNG	Compressed Natural Gas
LPG	Liquefied Petroleum Gas
PUC	Pollution Under Control
PwD	Persons with Disability





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.
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.