



Model Curriculum

QP Name: Two Wheeler Service Assistant

QP Code: ASC/Q1423

QP Version: 1.0

NSQF Level: 3

Model Curriculum Version: 1.0

Automotive Skill Development Council
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Training Parameters

Sector	Automotive
Sub-Sector	Automotive Vehicle Service
Occupation	Technical Service and Repair
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7231.0501
Minimum Educational Qualification & Experience	8 th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	22/10/2020
Next Review Date	22/10/2025
NSQC Approval Date	29/01/2021
QP Version	1.0
Model Curriculum Creation Date	22/10/2020
Model Curriculum Valid Up to Date	22/10/2025
Model Curriculum Version	1.0
Minimum Duration of the Course	376 Hours, 0 Minutes
Maximum Duration of the Course	376 Hours, 0 Minutes

Program Overview

This section summarizes the end objectives of the program along with its duration.

Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills.

- Work effectively and efficiently as per schedules and timelines while complying with the health and hygiene
- Implement safety practices.
- Optimize the use of resources to ensure less wastage and maximum conservation.
- Communicate, develop interpersonal skills
- Develop sensitization towards gender and person with disability (PwD)
- Perform servicing maintenance and repair of a two-wheeler under supervision

Compulsory Modules

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
Bridge Module	8:00	0:00			8:00
Module 1- Introduction to the Role of a Two Wheeler Service Assistant	08:00	00:00	-	-	08:00
ASC/N9801 – Organize work and resources (Service) NOS Version No. 1.0 NSQF Level 3	16:00	24:00	-	-	40:00
Module 2- Work effectively and efficiently	08:00	16:00	-	-	24:00
Module 3- Optimize resource utilization	08:00	08:00	-	-	16:00
ASC/N9802 – Interact effectively with colleagues, customers and others NOS Version No. 1.0 NSQF Level 3	16:00	24:00	-	-	40:00
Module 4- Communicate effectively and efficiently	16:00	24:00	-	-	40:00

ASC/N1434 – Assist in service, maintenance and repair of two wheelers NOS Version No. 1.0 NSQF Level 3	128:00	160:00	-	-	288:00
Module 5- Assist in Service, Maintenance and Repair	128:00	160:00	-	-	288:00
Total Duration	168:00	208:00	-	-	376:00

Module Details

Module 1 - Introduction to the Role of a Two Wheeler Service Assistant

Bridge Module

Terminal Outcomes:

- Identify the role, responsibilities of a Two Wheeler Service Assistant

Duration: 08:00	Duration: :00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe the role and responsibilities of a two wheeler service assistant such as identification of parts to be repaired, performing minor repairs etc. • List the SOP to be followed for service and minor repair of two wheelers • Identify the tools, equipment and accessories to be used for service, maintenance and repair of two wheelers • Identify the storage location for tools and equipment • • List the safety, health and environment policy to be followed for the automotive sector • Identify the type, code and quality of components at the time of replacement of parts • List the parameters for performing pollution check 	
Classroom Aids:	
Laptop, white board, marker, projector	
Tools, Equipment and Other Requirements	
Tools, required equipment, service manual, PUC software	

Module 2 - Work Effectively and Efficiently

Mapped to NOS ASC/N9801 v1.0

Terminal Outcomes:

- Employ appropriate ways to maintain a safe and secure working environment.
- Perform work as per the quality standards

Duration: 08:00	Duration: 16:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> ● Outline the organizational structure to be followed to report about health, safety and security breaches to the concerned authorities. ● List the potential workplace related risks and hazards, their causes and preventions. ● State the methods to keep the work area clean and tidy. ● Discuss how to complete the given work within the stipulated time period. ● Explain how to maintain a proper balance between team and individual goals. ● Discuss epidemics and pandemics and their impact on society at large. ● Discuss the significance of conforming to basic hygiene practices such as washing hands, using alcohol-based hand sanitizers. ● Discuss the use of proper PPE for maintaining health and hygiene at workplace and the process of wearing/discarding them. ● Define self-quarantine or self-isolation. ● Discuss the importance of identifying and reporting symptoms to the concerned authorities. ● Explain the significance of following prescribed rules and guidelines during an epidemic or a pandemic. ● Discuss organizational hygiene and sanitation guidelines and ways of reporting breaches/gaps if any. ● Discuss the ways of dealing with stress and anxiety during an epidemic or a pandemic. 	<ul style="list-style-type: none"> ● Perform routine cleaning of tools, equipment and machines. ● Employ various techniques for checking malfunctions in the equipment as per Standard Operating Procedure (SOP). ● Apply basic housekeeping practices to ensure that the work area is clean, such as mopping spills and leaks, cleaning grease stains etc. ● Demonstrate how to evacuate the workplace in case of an emergency. ● Show how to sanitize and disinfect one's work area regularly. ● Demonstrate the correct way of washing hands using soap and water. ● Demonstrate the correct way of sanitizing hands using alcohol-based hand rubs. ● Display the correct way of wearing and removing PPE such as face masks, hand gloves, face shields, PPE suits, etc. ● Demonstrate appropriate social and behavioural etiquette (greeting and meeting people, spitting/coughing/sneezing, etc.). ● Prepare a list of relevant hotline/emergency numbers.
Classroom Aids:	

White board/black board marker/chalk, duster, computer or Laptop attached to LCD projector

Tools, Equipment and Other Requirements

Personal Protection Equipment: safety glasses, head protection, rubber gloves, safety footwear, warning signs and tapes, fire extinguisher and first aid kit

Sanitization kit, disinfectants, alcohol-based sanitizers, different types of face masks, shields, suits, etc.

Module 3 - Optimize Resource Utilization

Mapped to NOS ASC/N9801 v1.0

Terminal Outcomes:

- Use the resources efficiently.
- Apply conservation practices at the workplace.

Duration: 08:00	Duration: 08:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> ● Explain the ways to optimize usage of resources. ● Discuss various methods of waste management and its disposal. ● List the different categories of waste for the purpose of segregation ● Differentiate between recyclable and non-recyclable waste ● State the importance of using appropriate colour dustbins for different types of waste. ● Discuss the common sources of pollution and ways to minimize it. 	<ul style="list-style-type: none"> ● Perform basic checks to identify any spills and leaks and that need to be plugged /stopped. ● Demonstrate different disposal techniques depending upon different types of waste. ● Employ different ways to check if equipment/machines are functioning as per requirements and report malfunctioning, if observed. ● Employ ways for efficient utilization of material and water ● Use energy efficient electrical appliances and devices to ensure energy conservation
Classroom Aids:	
White board/black board marker/chalk, duster, computer or Laptop attached to LCD projector	
Tools, Equipment and Other Requirements	
Different type of waste bins to collect and segregate waste for disposal	

Module 4 - Communicate Effectively and Efficiently

Mapped to NOS ASC/N9802 v1.0

Terminal Outcomes:

- Use effective communication and interpersonal skills.
- Apply sensitivity while interacting with different genders and people with disabilities.

Duration: 16:00	Duration: 24:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> ● Explain the organizational structure for communicating with colleagues, seniors and others. ● Discuss the ways to adjust the communication styles to reflect sensitivity towards gender and persons with disability (PwD). ● Explain the importance of respecting personal space of colleagues and customers. ● State the procedure to receive work instructions and report problems to the supervisor. ● List the various organizational policies and procedures to be followed at the workplace. ● Describe different ways to rectify commonly occurring errors. ● Explain the importance of complying with the instructions/guidelines and procedures while performing tasks related to the job specifications. ● Discuss the importance of PwD and gender sensitization. 	<ul style="list-style-type: none"> ● Employ different means of communication depending upon the requirement while interacting with others. ● Demonstrate using new ways to maintain good relationships with colleagues and supervisor. ● Prepare a sample report to send the work status to the supervisor. ● Demonstrate how to communicate with different genders and persons with disability (PwD) in a sensitive manner.
Classroom Aids:	
White board/black board marker/chalk, duster, computer or Laptop attached to LCD projector	
Tools, Equipment and Other Requirements	
Sample of escalation matrix, organisation structure.	

Module 5 – Assist in Service, Maintenance and Repair

Mapped to NOS ASC/N1434 v1.0

Terminal Outcomes:

- Apply appropriate steps to prepare for service, maintenance and repair of the vehicle.
- Discuss how to assist seniors in repair and maintenance related tasks
- Perform the steps to check the pollution level and prepare the PUC certificate.

Duration: 128:00	Duration: 160:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the auto component manufacturer specifications of various vehicles. • List the various precautions to be taken to avoid any damage to the vehicle/ components. • Recall the types of errors or defects in the tools/equipment. • List various standard operating procedures (SOP)/service manuals to be followed for repairing, servicing, routine maintenance, using workshop tools and equipment etc. • Outline the SOPs related to receiving vehicles, opening job card, allocation of work, vehicle delivery, etc. • Discuss the importance of recording the service and repair activities performed as specified by OEM. • Discuss the various policies related to activities such as disposing off materials/used oils and returning tools/leftovers. • Outline the details of the Automotive industry in India, workshop structure and role and responsibilities of different people in the workshop. • Discuss the safety, health and environmental policies and regulations for the workplace as well as for automotive trade in general. • Identify the right materials for the job such as lubricants, seals, etc. • Explain the basic technology used in and functioning of various components and aggregates of the vehicle. • Outline organisational and professional code of ethics and standards of practice. 	<ul style="list-style-type: none"> • Demonstrate steps to position the vehicle on the platform for service, maintenance/repair. • Show how to inspect and service the vehicle/aggregate. • Perform routine service/maintenance and repairs in the vehicle/aggregate as instructed by technician. • Employ different ways of dismantling components/aggregates such as engine, axles etc. • Perform steps for collecting/fetching required service tools etc. • Use various measuring and servicing tools and equipment like feeler gauge, torque wrench, fuel pressure testers, etc. • Apply basic housekeeping practices to clean the work area and place tools/equipment in an organised manner as per the policies. • Demonstrate how to report malfunction in vehicles, tools and equipment that are beyond one’s scope of work to concerned person. • Use appropriate software and hardware to perform PUC (Pollution Under Control) check as per SOP. • Prepare a report of the PUC readings and compare it with the set standards • Role play on how to escalate any discrepancy in PUC reading to the concerned person. • Prepare a PUC certificate using appropriate software, if required by taking details from previous/existing certificate.

<ul style="list-style-type: none"> List the documentation required for each procedure. 	<ul style="list-style-type: none"> Read the values of measuring instruments such as vernier calliper, multi-meter, pressure indicator etc. as per OEM specification. Demonstrate how to use computers.
<p>Classroom Aids:</p>	
<p>Laptop, white board, marker, projector</p>	
<p>Tools, Equipment and Other Requirements</p>	
<p>Hydraulic ramp, manual operated hydraulic ramp, vehicle washer, spark plug cleaner & tester, PUC monitor, waste oil collection trolley, moisture separator, pneumatic tools, screw driver, wrenches, battery tester, oil dispenser, lubricating machine, garage air compressors etc.</p>	

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
ITI	Mechanic Motor Vehicle	2	Two/Four Wheeler Service	1	Two/Four Wheeler Service	NA
ITI	Mechanic Motor Vehicle	3	Two/Four Wheeler Service	NA	NA	NA
Diploma	Automobile Engineering/ Mechanical Engineering	1	Two/Four Wheeler Service	1	Two/Four Wheeler Service	NA
Diploma	Automobile Engineering/ Mechanical Engineering	2	Two/Four Wheeler Service	NA	NA	NA
Certificate NSQF	(Two/ Four Wheeler Lead Technician) Level-5	2	Two/Four Wheeler Service	1	Two/Four Wheeler Service	NA

Trainer Certification	
Domain Certification	Platform Certification
Certified for Job Role: “Two Wheeler Service Assistant” “ASC/Q1423”, Minimum accepted score is 80%	Recommended that the Trainer is certified for the Job Role: “Trainer”, “MEP/Q2601”, Minimum accepted score is 80%

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
ITI	Mechanic Motor Vehicle	3	Two/Four Wheeler Service	1	Two/Four Wheeler Service	NA
ITI	Mechanic Motor Vehicle	4	Two/Four Wheeler Service	NA	NA	NA
Diploma	Automobile Engineering/ Mechanical Engineering	2	Two/Four Wheeler Service	1	Two/Four Wheeler Service	NA
Diploma	Automobile Engineering/ Mechanical Engineering	3	Two/Four Wheeler Service	NA	NA	NA
Certificate NSQF	(Two/Four Wheeler Lead Technician) level-5	3	Two/Four Wheeler Service	1	Two/Four Wheeler Service	NA

Assessor Certification	
Domain Certification	Platform Certification
Certified for Job Role: “Two Wheeler Service Assistant” “ASC/Q1423”, Minimum accepted score is 80%	Recommended that the Assessor is certified for the Job Role: “Assessor”, “MEP/Q2701”

Assessment Strategy

1. Assessment System Overview:
 - Batches assigned to the assessment agencies for conducting the assessment on SDMS/SIP or email
 - Assessment agencies send the assessment confirmation to VTP/TC looping SSC
 - Assessment agency deploys the ToA certified Assessor for executing the assessment
 - SSC monitors the assessment process & records
2. Testing Environment: The assessor should
 - Confirm that the centre is available at the same address as mentioned on SDMS or SIP
 - Check the duration of the training.
 - Check the Assessment Start and End time to be as 10 a.m. and 5 p.m.
 - If the batch size is more than 30, then there should be 2 Assessors.
 - Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.
 - Check the mode of assessment—Online (TAB/Computer) or Offline (OMR/PP).
 - Confirm the number of TABs on the ground are correct to execute the Assessment smoothly.
 - Check the availability of the Lab Equipment for the particular Job Role.
3. Assessment Quality Assurance levels / Framework:
 - Question papers created by the Subject Matter Experts (SME)
 - Question papers created by the SME verified by the other subject Matter Experts
 - Questions are mapped with NOS and PC
 - Question papers are prepared considering that level 1 to 3 are for the unskilled & semi-skilled individuals, and level 4 and above are for the skilled, supervisor & higher management
 - Assessor must be ToA certified & trainer must be ToT Certified
 - Assessment agency must follow the assessment guidelines to conduct the assessment
4. Types of evidence or evidence-gathering protocol:
 - Time-stamped & geotagged reporting of the assessor from assessment location
 - Centre photographs with signboards and scheme specific branding
 - Biometric or manual attendance sheet (stamped by TP) of the trainees during the training period
 - Time-stamped & geotagged assessment (Theory + Viva + Practical) photographs & videos
5. Method of verification or validation:
 - Surprise visit to the assessment location
 - Random audit of the batch
 - Random audit of any candidate
6. Method for assessment documentation, archiving, and access
 - Hard copies of the documents are stored
 - Soft copies of the documents & photographs of the assessment are uploaded / accessed from Cloud Storage
 - Soft copies of the documents & photographs of the assessment are stored in the Hard Drives

References

Glossary

Term	Description
Declarative Knowledge	Declarative knowledge refers to facts, concepts and principles that need to be known and/or understood in order to accomplish a task or to solve a problem.
Key Learning Outcome	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
OJT (M)	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on site
OJT (R)	On-the-job training (Recommended); trainees are recommended the specified hours of training on site
Procedural Knowledge	Procedural knowledge addresses how to do something, or how to perform a task. It is the ability to work, or produce a tangible work output by applying cognitive, affective or psychomotor skills.
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.
Terminal Outcome	Terminal outcome is a statement of what a learner will know, understand and be able to do upon the completion of a module. A set of terminal outcomes help to achieve the training outcome.

Acronyms and Abbreviations

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