



Skill India
कौशल भारत - कुशल भारत



सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP



N · S · D · C
National
Skill Development
Corporation

Transforming the skill landscape



Facilitator Guide



Sector
Automotive

Sub-Sector
Automotive Vehicle Service

Occupation
Technical Service & Repair

Reference ID: ASC/Q1423
NSQF LEVEL: 4 Version: 4

Two Wheeler Service Assistant



Scan this QR Code to access eBook

Developed by:

Automotive Skills Development Council (ASDC)

ASDC Contact Details:

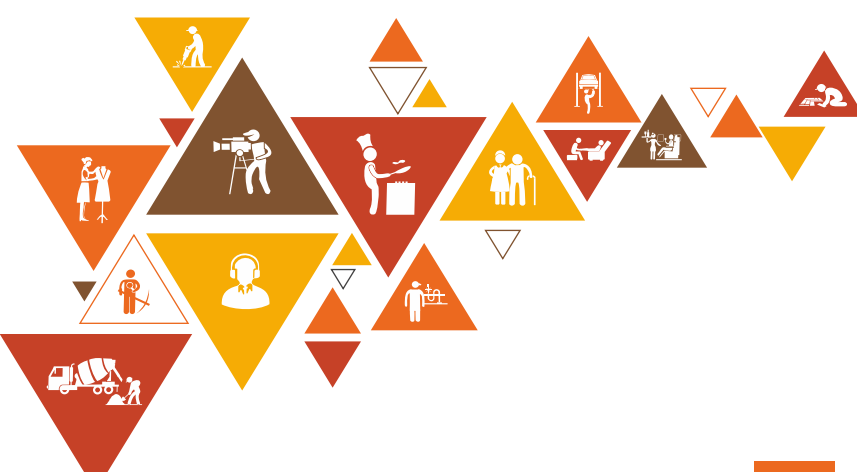
Leela Building, 153 GF, Industrial Area,

New Delhi, Delhi 110020

Email: info@asdc.org.in

Website: www.asdc.org.in

Phone: 011 4186 8090





Shri Narendra Modi
Prime Minister of India

“ Skilling is building a better India.
If we have to move India towards
development then Skill Development
should be our mission. ”

Acknowledgements

Automotive Skill Development Council (ASDC) acknowledges the contribution of all the individuals and organizations who have contributed to the preparation of this “Facilitator Guide.”

Without their contribution it would not have been completed. Sincere appreciation is extended to our industry partners, all experts for providing technical inputs and reviewing the individual modules.

Preparation of this manual would not have been possible without the Automotive Industry’s support. Industry feedback has been extremely encouraging from inception to conclusion and it is with their input that we have tried to bridge the skill gaps existing today in the Industry.

ASDC dedicates this book to the aspiring youth of the country who desire to achieve special skills which will be a lifelong asset for their future endeavours.

About this Guide

The Facilitator Guide is designed for the Trainers to enable training for a specific job role and enhance the quality of executing the training program. This particular Facilitator Guide is designed for enabling the training program for the job role of "Two Wheeler Service Assistance" in the Automotive Sector.

This course is aligned to Qualification Pack, Automotive Wheeler Service Assistance, Reference ID: ASC/Q1423

This Qualification pack is developed by Automotive Skill Development Council (ASDC). This course encompasses all 3 National Occupational Standards (NOS).

Each unit starts with learning objectives, followed by relevant activities and corresponding training methodology. Upon successful completion of this course, the participant will be able to:

1. ASC/N9801: Organize Work and Resources (Service)
2. ASC/N1434: Assist in Service, Maintenance and Repair of Two Wheelers

Besides, it has been endeavored to follow the facilitator guide guidelines prescribed by the National Skill Development Corporation.

Symbols Used



Key Learning Outcomes



Practical



Elaborate



Tips



Notes



Unit Objectives



Do



Explain



Say



Ask



Team Activity



Demonstrate



Observation



Facilitation Notes



Exercise



Activity



Summary



Resources to be Used

Table of Contents

Sl.No	Modules and Units	Page No
1.	Introduction to the Role of a Two Wheeler Service Assistant	1
	Unit 1.1 - Roles and Responsibilities of Two Wheeler Service Assistant	3
	Unit 1.2 - Scope of Work of Two-Wheeler Service Assistant	7
2.	Work Effectively and Efficiently (ASC/N9801)	10
	Unit 2.1 - Safe Working Practices	12
	Unit 2.2 - Emergencies, Rescue and First Aid Procedures	17
	Unit 2.3 - Workplace Quality Standards	25
	Unit 2.4 - Health and Hygiene During an Epidemic and Pandemic	36
3.	Optimize Resource Utilization (ASC/N9801)	40
	Unit 3.1 - Resource Optimization	42
	Unit 3.2 - Waste Management	45
4.	Perform Vehicle Washing and Cleaning (ASC/N1434)	48
	Unit 4.1 - Assist in preparation for service, maintenance and repair	50
	Unit 4.2 - Assist in service, maintenance and repair	55
5.	Employability and Entrepreneurship Skills	63
	The book on New Employability Skills is available at the following location: https://eskillindia.org/NewEmployability	
6.	Annexure	64
	Annexure I : Annexure Codes	65
	Annexure II : Training Delivery Plan	68
	Annexure III : Assessment Criteria	84





Skill India
कौशल भारत - कुशल भारत



सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP



N · S · D · C
National
Skill Development
Corporation

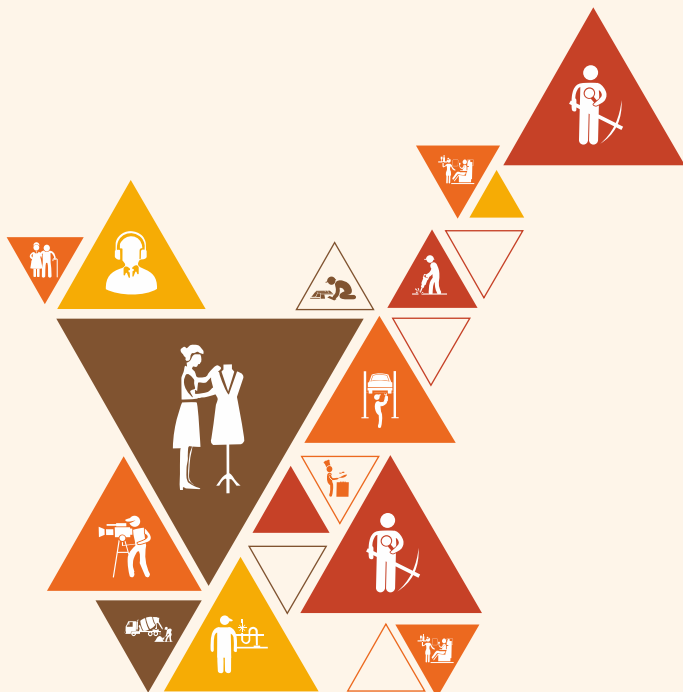
Transforming the skill landscape



1. Introduction to the Role of a Two Wheeler Service Assistant

Unit 1.1 - Roles and Responsibilities of Two Wheeler Service Assistant

Unit 1.2 - Scope of Work of Two-Wheeler Service Assistant



Bridge Module

Key Learning Outcomes

At the end of this module, the trainees will be able to:

1. Identify the role, responsibilities of a Two Wheeler Service Assistant

Unit 1.1 Roles and Responsibilities of a Two-Wheeler Service Assistant

Unit Objectives

At the end of this unit, the trainee will be able to:

1. Describe the role and responsibilities of a two wheeler service assistant such as identification of parts to be repaired, performing minor repairs etc
2. List the safety, health and environment policy to be followed for the automotive sector

Resources to be Used

- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector, Flipchart
- Whiteboard, Marker, and Duster

Do

- Welcome and greet the students.

Say

- Start the class by saying, "This training program is developed to impart specific knowledge and skills relevant to the job required to be performed as a "Two-wheeler Service Assistant", in the "Automotive Sector/Industry."
- Talk about the Qualification Pack (QP), and National Occupational Standards (NOS).
- List the compulsory NOSs to the QP "Two-Wheeler Service Assistant".
- Say, "Before we start the program let's play a small game".

Group Activity

Objective	The purpose of this activity is to Get-to-know- each other
Materials required	Paper, Pen, Bowl
Steps/procedure	<p>Steps</p> <ol style="list-style-type: none"> 1. This is an ice-breaker activity. 2. Ask the participants to write three hints about themselves on a piece of paper. 3. Then instruct them to fold the paper and place it in a bowl. 4. Ask the students to pick each chit from the bowl. 5. Everyone now picks a piece of chit and attempts to identify the person who wrote on it. 6. Students must stand next to the person they choose to be a hint partner. 7. Once they've found their friend, they must bring that individual up ahead of the class and describe what they learned about their friend using the three hints listed on the sheet of paper. 8. Based on the game, the next class winner will be declared. 9. After this, the Facilitator will sum up the activity within 20 minutes.
Conclusion / what has been achieved	This activity will assist participants to understand and connect each other.

Explain

- Explain the background of automotive industry.
- Explain key segments of automotive vehicles with the help of Fig.1.1 given in the Participant Handbook.
- Explain skills required to be a two-wheeler service assistant with the help of Fig. 1.2 given in the Participant Handbook.
- Explain the roles and responsibilities of a two-wheeler service assistant with the help of Fig. 1.3 given in the Participant Handbook.

Elaborate



- Elaborate the following topics:
 - Health and safety policy in the automotive sector
 - Safety measures and precautions to be followed by the automotive workshop staff and workers (Fig. 1.4)

Ask



- List three safety measures precautions to be followed by the automotive workshop staff and workers.
- Can you name any two important skills requires to be a two-wheeler service assistant?
- What is the difference between light vehicle and heavy vehicle?

Notes for Facilitation



- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summarize



- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise



- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 1.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.

- Exercise Hints:
 - Answers to Questions I.
 1. Hint - Refer to section 1.1.1 (fig 1.1)
 2. Hint - Refer to section 1.1.2 (fig 1.2)
 3. Hint – Refer to section 1.1.2 (fig 1.3)
 - Answers to Questions II.
 1. Factories act of 1948
 2. Automotive industry
 3. Two- wheeler service assistant

Unit1.2 Scope of Work of Two-Wheeler Service Assistant

Unit Objectives

At the end of this unit, the trainee will be able to:

1. Identify the tools, equipment and accessories to be used for service, maintenance and repair of two wheelers
2. Identify the storage location for tools and equipment
3. List the SOP to be followed for service and minor repair of two wheelers
4. Identify the type, code and quality of components at the time of replacement of parts
5. List the parameters for performing pollution check

Resources to be Used

- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Say

- “In the last unit, we gained an understanding of the roles and responsibilities of a two-wheeler service assistant”.
- “In today’s session, we will understand the scope of work of two-wheeler service assistant.”

Explain

- Explain the tools and equipment used for servicing and maintaining two-wheeler vehicles with the help of Fig. 1.5 and Fig. 1.6 given in the Participant Handbook.
- Explain the tips for storing tools, equipment, and machinery with the help of Fig.1.7 given in the Participant Handbook.
- Explain the standard operating procedure for vehicle servicing with the help of Fig.1.8 given in the Participant Handbook.

Elaborate



- Elaborate the following topics:
 - Quality standards for auto parts and components
 - Parameters for performing pollution check
 - Information in the PUC certificate (Fig.1.9)

Ask



- What is the purpose of using the paint sprayer, high-pressure water spray, and test light tools on a two-wheeler vehicle?
- What is the definition of standard operating procedure for vehicle servicing?
- What is the AEC-Q100 quality standard for auto parts and components?
- List down the information contained in a PUC certificate

Notes for Facilitation



- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summarize



- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise

- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 1.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
 - Answers to Questions I.
 1. Hint - Refer to section 1.2.1 (fig 1.5)
 2. Hint - Refer to section 1.2.3 (fig 1.8)
 3. Hint – Refer to section 1.2.5
 4. Hint- Refer to section 1.2.4
 - Answers to Questions II.
 1. PUC certification
 2. ACE-Q100
 3. Dry place
 4. High pressure water spray

Scan the QR Code to watch the related video



www.youtube.com/watch?v=PJP7xVBLBL8
Introduction to Automotive Industry



www.youtube.com/watch?v=L2Z78KPPctY
Workshop Standard Operating Procedure



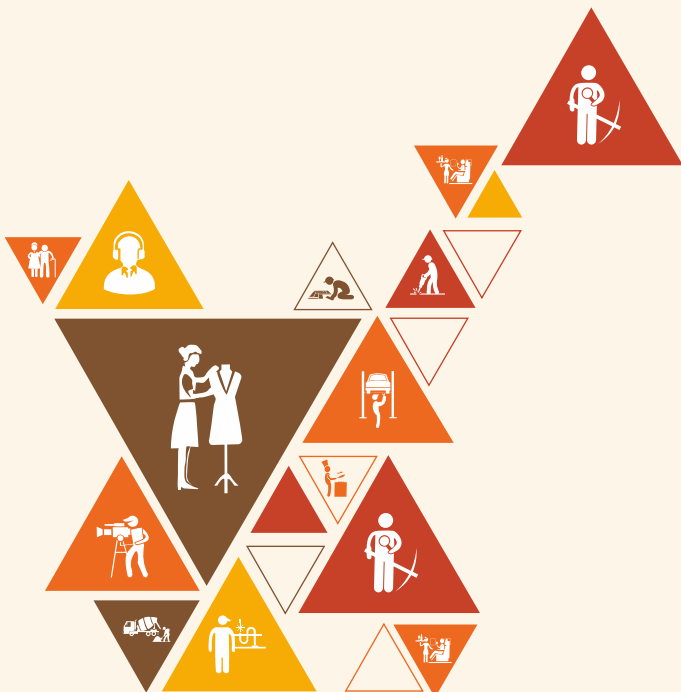
2. Work Effectively and Efficiently

Unit 2.1 - Safe Working Practices

Unit 2.2 - Emergency, Rescue and First-aid Procedures

Unit 2.3 - Workplace Quality Standards

Unit 2.4 - Health and Hygiene During an Epidemic and Pandemic



Key Learning Outcomes

At the end of this module, trainee will be able to:

1. List the potential workplace related risks and hazards, their causes and preventions
2. Identify safety measures during work
3. Display the correct way of wearing and removing PPE such as face masks, hand gloves, face shields, PPE suits, etc.
4. Show how to deal with a fire accident
5. Demonstrate how to evacuate the workplace in case of an emergency
6. Demonstrate basic first aid techniques during electric shock, burns and choking
7. State the methods to keep the work area clean and tidy
8. Perform routine cleaning of tools, equipment and machines
9. Apply basic housekeeping practices to ensure that the work area is clean, such as mopping spills and leaks, cleaning grease stains etc
10. Discuss how to complete the given work within the stipulated time period
11. Discuss ways to maintain a proper balance between team and individual goals
12. Discuss epidemics and pandemics and their impact on society at large
13. Explain the significance of following prescribed rules and guidelines during an epidemic or a pandemic
14. Discuss the significance of conforming to basic hygiene practices such as washing hands, using alcohol-based hand sanitizers
15. Show how to sanitize and disinfect one's work area regularly
16. Demonstrate the correct way of washing hands using soap and water
17. Demonstrate the correct way of sanitizing hands
18. Demonstrate appropriate social and behavioural etiquette (greeting and meeting people, spitting/ coughing/sneezing, etc.)
19. Discuss the ways of dealing with stress and anxiety during an epidemic or a pandemic

Unit 2.1 Safe Working Practices

Unit Objectives

At the end of this unit, the trainee will be able to:

1. Elaborate importance of safety at workplace
2. List the potential workplace related risks and hazards, their causes and preventions
3. Identify safety measures during work
4. Display the correct way of wearing and removing PPE such as face masks, hand gloves, face shields, PPE suits, etc.

Resources to be Used

- Available objects such as white board, marker pens, duster, PPE.
- PC with LCD Projector or Flip Chart
- Participant Handbook

Do

- Welcome and greet the participants.
- Revise the learnings of the previous sessions and ask them if they have any doubts.

Say

- Start the session by saying, "The health and safety of employees are crucial since it affects economic and social factors. "Workplace safety plays an important role in the organization as it boosts productivity."
- "If the workers in the organization feel safe, they can work with their full capabilities and potential, and it also reflects positivism in the working environment."
- "Measures need to be taken to eliminate risks at work and ensure a safe and comfortable environment for the employees."

Ask 

- What are the important aspects of safety in automobile industry?
- List essential elements necessary for safety.
- What are the good safety practices?
- What they think about safety in automobile service industry?

Notes for Facilitation 

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate 

- Elaborate the following topics:
 - Importance of safe & secure working place
 - The condition of the work place environment e.g., means of access, physical safety, housekeeping, and safe place of work etc.
 - The training and competence of the employees which include ability to understand apply and respond to safe systems of work
 - Preventative procedures need to follow
 - Responsibilities of the employers and employees for maintaining safe workplace

Say 

- “A hazard is something that has the potential to cause injury, disease, or death in a workplace.”
- “Aspects for the development of a safe workplace environment are development policies, the consultative process, hazard identification, and control.”
- “Always follow the safety signage to ensure safety at the workplace and ensure the control measures.”

Ask 

- List different types of hazards.
- Can anyone name three hazard warning signs?
- What are the most common hazards in a vehicle service and repair workshop?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate

- Elaborate on the following topics:
 - Hazard
 - Categories of hazard
- Types of hazards
 - Physical hazard
 - Chemical hazard
 - Biological hazard
 - Psychological hazard
 - Electrical hazard
 - Common causes of hazard

Do

- Conduct a group activity in the class to learn all about hazard warning sign and their differences with help of signage chart or given in the Participant Handbook.
- Ask the various techniques to avoid and control from hazards.
- Give trainees some time to think about effects of hazard on our body.

Activity

Objective	The purpose of this activity is to learn about hazards signage and its importance at workplace.
Materials required	Hazard signage chart
Steps / procedure	<ol style="list-style-type: none"> 1. Divide the participants into groups of 4-5. 2. Ask the students to assemble together. 3. Explain the hazard and the types of hazards. 4. Show the hazard signage chart to trainees and tell them to identify hazard signage one by one.

Steps / procedure	<p>5. Call each student one by one and ask him/her to identify the name of hazard sign showing on the chart.</p> <p>6. The Facilitator will sum up the activity within 20 minutes.</p>
Conclusion / what has been achieved	This activity will help them to identify different hazard signage placed at their workplace.

Say

- “There are safe practices that need to be considered for avoiding general workshop hazards.”
- “Use of personal protective equipment is the first step towards safety.”
- “Personal protective equipment serves as the last resort for controlling hazards and is one, but not the only, ancillary or temporary measure.”

Ask

- What are the safe practices for avoiding general shop hazards?
- List type of PPE is required for a vehicle servicing technician?
- What are the benefits of PPE at workplace?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate

- Elaborate the following topics:
 - Safe practices to avoid automobile workshop hazards
 - Safe practices while using tools and power tools
 - Personal protective equipment and their use with the help of Fig.2.1.1.

Do 

- Show them the PPE.
- Demonstrate the use and requirement of PPE.

Field Visit 

- Plan a visit in the industry and show PPE used and safe working practices followed in the industry.

Summarize 

- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

Unit 2.2 Emergencies, Rescue and First Aid Procedures

Unit Objectives

At the end of this unit, the trainee will be able to:

1. Discuss the causes of the fire on the shop floor
2. Demonstrate steps of emergency procedures
3. Demonstrate steps to evacuate in an emergency situation
4. Demonstrate basic first aid techniques

Resources to be Used

- Available objects such as white board, marker pens, duster, different types of fire extinguisher, fire alarm, PPE, sample emergency plan and first-aid kit
- PC with LCD Projector or Flip Chart
- Participant Manual

Do

- Welcome and greet the participants.
- Revise the learnings of the previous sessions and ask them if they have any doubts.

Say

- “Fire is defined as a self-sustaining combustion process in which a substance (fuel) combines with oxygen in the air to produce immense heat and light.”
- “Fire hazards pose threats to life and property.”
- “There are four classes of fire, i.e., Class A, Class B, Class C, and Class D.”
- “A fire extinguisher is an active fire protection device used to extinguish or control small fires, often in emergencies.”

Ask

- What is fire?
- What are the common types of fire safety equipment used in industry?
- What is fire extinguisher and how you can use it?

Explain

- Explain fire and types of fire.
- Explain the ways and effects of fire hazard.
- Explain emergency instructions in case of fire.

Elaborate

- Elaborate the following topics:
 - Ways for fire prevention
 - Fire-fighting equipment and fire extinguisher
 - Types of fire extinguisher, their color codification and classification according to classes of fire
 - Use of fire extinguisher

Do

- Tell them about the fire-fighting equipment.
- Show them the equipment and explain their use.
- Demonstrate them the use of fire extinguisher.
- Explain them about different types of fire extinguishers.

Field Visit

- Take the trainees into the workshop.

Demonstrate

- Demonstrate the steps of using fire extinguisher with the help of Fig.2.2.1.

Activity

Objective	The purpose of this activity is to understand how a fire extinguisher works.
Materials required	Fire extinguisher, PPE
Steps / procedure	<ol style="list-style-type: none"> 1. This is a class practical activity. 2. Divide the participants into groups of 4-5. 3. Provide each group of participants with a body suit (PPE) one by one. 4. Explain the working of a fire extinguisher and safety measures and guild lines to be followed by using a fire extinguisher. 5. Demonstrate the different types of extinguishers classified by the types of fires (green, red, blue, orange, black). 6. Ask each group to come forward one by one and perform the practical. 7. Support them in using a fire extinguisher properly. 8. Go around and make sure they are doing it properly. 9. Each team had to demonstrate the use of fire extinguishers one by one. 10. After this, the facilitator will sum up the activity by summarizing the fire extinguisher how to use an extinguisher.
Conclusion / what has been achieved	This activity will help them to learn about the use of fire extinguishers.

Say

- “Every workplace has an emergency plan for dealing with emergencies. You should be instructed about plan through refresher trainings or fire drills time to time.”

Elaborate

- Elaborate the following topics:
 - Emergency plan during emergencies
 - Emergency service number
 - Medical emergency procedures
 - Evacuation procedures for workers & visitors in case of emergency

Explain



- Explain how to follow emergency procedures during an emergency.
- Explain the need of attending trainings or fire drills organized by organization.

Do/Demonstrate



- Take the trainees into the workshop and demonstrate how to follow emergency and evacuation procedures during an emergency.

Activity



Objective	The purpose of this activity is to understand emergency procedures during accidents and hazards.
Materials required	Fire extinguisher, PPE
Steps / procedure	<ol style="list-style-type: none"> 1. This is a class activity. 2. Make 5 groups of trainees. 3. Ask the students to assemble together. 4. Give each group a different emergency situation and tell them to do a role play and demonstrate how to follow emergency procedures in it. 5. Support them in preparing the role play. 6. Allow each group one by one to present their play. 7. Praise them after completion of play. 8. After this, the Facilitator will sum up by summarizing the activity.
Conclusion / what has been achieved	This activity will help them to learn about how to follow emergency procedures.

Say

- “It is extremely important to report accidents and incidents right away, no matter how minor they may be.”
- “Reporting of incidents and accidents is required under the Work Health and Safety (WHS) legislation.”
- “Always report an accident to management immediately. There should be a form at each workplace that you (or the person involved) and any witnesses can fill out, where possible; otherwise, it can be completed by a health and safety representative (HSR) if necessary.”

Elaborate

- Elaborate the following topics:
 - Hazard reports can take a number of different forms:
 - The standard hazard report used by workers for all hazards
 - Reports of infections
 - Near-miss incident reports
 - Reports of damage and faulty tools, equipment and machines
 - Routine inspection reports
 - Structure of an accident report:
 - Description of the occurrence
 - Nature of injury or disease
 - Injury or disease happened as a result of the occurrence?
 - First aid, medical treatment or hospital admission
 - Part of the body affected
 - Source of injury
 - Probable cause or causes of injury
 - Investigation
 - Notification checklist
 - Preventative action
 - Witness details

Ask



- What are the areas covered in accident report?
- Why reporting and documentation is necessary?
- What are the important things to remember filling reports and documents?

Notes for Facilitation



- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Activity



Objective	The purpose of this activity is to learn how to report fire accident at workplace.
Materials required	Checklist
Steps / procedure	<ol style="list-style-type: none"> 1. This is a class activity. 2. Ask the students to assemble together. 3. Make pairs of students. 4. Tell them to imagine a fire accident and prepare a fire accident reports. 5. Provide them a fire hazard situation for making report. 6. Go around and make sure they are doing it properly. 7. Share your inputs and insight to encourage the trainees and add onto what they are doing. 8. After this, the Facilitator will sum up by summarizing the activity.
Conclusion / what has been achieved	This activity will help them to prepare a fire accident report at workplace.

Say



- “If you suspect someone has received an electric shock, proceed with extreme caution and administer basic first aid to save the victim's life.”

Ask

- What are the basic steps of first aid?
- What is CPR process?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Do/Demonstrate

- Trainer can make a group of few trainees to demonstrate the steps of first-aid in following situations:
 - Free a person from electrocution
 - Bleeding and Wounds
 - Burns
 - Chemical or Compressed Gas Burns
 - Heat or Electrical Burns
 - Choking
 - Basic techniques of banding
 - Artificial respiration and the CPR Process
 - Correct method to move injured people during an emergency

Activity

Objective	The purpose of this activity is to understand and learn about first-aid practices in workplace.
Materials required	Mannequin, first-aid box
Steps / procedure	<ol style="list-style-type: none"> 1. This is a class activity. 2. Ask the students to assemble together. 3. Tell them to divide into six groups. 4. Tell them to prepare a role play of an accident and demonstrate the first-aid steps need to perform for saving the victim. 5. Support the teams in preparation of role play.

Steps / procedure	<p>5. Praise their effort during the demonstration.</p> <p>6. After this, the Facilitator will sum up by summarizing the activity.</p>
Conclusion / what has been achieved	This activity will create awareness about first-aid practices.

Field Visit

- Plan a visit to any of the industry and show the firefighting equipment.
- With the help of field visit show the trainees where we need to various firefighting equipment and how to use them.
- Show them fire drill session. With the help of field visit explain them the importance of fire drill for safety.

Summarize

- Summarize the main points of the session with the participants.
- Ask them if they have any query pertaining to the topics taught in the session.
- Encourage them to ask questions and answer their queries satisfactorily.

Unit 2.3 Workplace Quality Standards

Unit Objectives

At the end of this unit, the trainee will be able to:

1. State the methods to keep the work area clean and tidy
2. Apply basic housekeeping practices to ensure that the work area is clean, such as mopping spills and leaks, cleaning grease stains etc
3. Perform routine cleaning of tools, equipment and machines
4. Discuss how to complete the given work within the stipulated time period
5. Discuss ways to maintain a proper balance between team and individual goals

Resources to be Used

- Available objects such as white board, marker pens, duster, cleaning equipment
- PC with LCD Projector or Flip Chart

Do

- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.
- Tell them that they will learn about housekeeping practices, organization policies and procedure, time management and team work.

Say

- “Housekeeping includes keeping work areas tidy and arranged; keeping floors free of slip and trip accidents; clearing of waste materials and other fire hazards.”
- “Good housekeeping is a basic step for preventing accidents and fire hazards. Poor housekeeping and hiding hazards can cause frequent accidents, which can cause injuries. The great majority of all work accidents are caused during the handling of goods or materials, and by people falling, being hit by falling objects, or striking against objects in the workplace. All these causes can be reduced by good housekeeping practices.”
- “Examples of housekeeping are excessive material, waste or chips in the working area, congested aisles, tools left on machines, waste containers overflowing, lockers and workrooms in disorder, acids in open containers, broken glass, etc.”

Explain



- Explain the principle of housekeeping.
- Explain the benefits of housekeeping.
- Explain the checklist of housekeeping program.

Elaborate



- Elaborate the following topics:
 - Elements of housekeeping program checklist are:
 - Buildings
 - Floors
 - Aisles
 - Machinery and equipment
 - Stock and material
 - Tools
 - Grounds
 - Waste disposal

Ask



- What are the housekeeping concerns in the automobile industry?
- What are the areas and objects that need to be taken care of under an effective housekeeping program in an industry?

Field Visit



- Arrange a visit to any of the servicing center and show the housekeeping program following there. With the help of field visit you could show the benefits and importance of housekeeping.

Say

- “Most of the organizations usually formulate a set of policies, principles, and guidelines to achieve long-term goals.”
- “The policies and procedures are designed by the organization to control and establish decisions. This helps the organization to take corrective action and activities within the organization take place within the set boundaries.”
- “A policy is a set of procedures which define the guidelines for dealing with human resource management issues in the organization. It communicates an organization's values and the organization's expectations of an employee's behaviors and performance.”

Ask

- What is the need for organizational policies and procedures?
- List general policies and procedures followed in the automobile industry.

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate

- Elaborate the following topics:
 - Benefits of organizational policies & procedure
 - Common workplace policies
 - How to work in line with organization policies & procedures

Say

- “Time management” is the process of planning and practicing control over the time given to a specific task, especially to increase effectiveness, efficiency, and productivity. It is an activity to increase the overall advantage of a set of activities within the limited conditions of a limited time.
- Certain strategies must be considered for better time management. Time management does not mean working harder or for a longer period, but it helps us work smartly so that we can finish our work easily and quickly.
- “In this session, we will learn how to manage time smartly and effectively.”

Ask

- What is the need for time management?
- List factors that need to consider for time management.

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate

- Elaborate the following topics:
 - Benefits of time management
 - Obstacles to effective time management
 - Ways to resolve obstacles

Explain

- Explain various obstacles of effective time management.
- Explain ways to resolve obstacles and manage time effectively.

Say

- “To accomplish many things in your time of office, first you have to define your targets and ensure your struggles are always absorbed toward their accomplishment.”

Ask

- What is the need of time management?
- List factors need to consider for time management.

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate

- Elaborate the following topics:
 - Effective goals should be SMART i.e.
 - Specific
 - Measurable
 - Achievable
 - Realistic
 - Time-based

Explain

- Explain how to set SMART goals.

Say

- “Now, to manage the time you have to prioritize the task. It is always good and safe to clarify that you cannot do everything, thus it is important to make a list of tasks periodically that confront you and prioritize them.”

Ask

- What is the need of prioritizing tasks?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate

- Elaborate the following topics:
 - Techniques for prioritizing tasks are:
 - Do
 - Delegate
 - Delay until another time
 - Delete
 - Ways to prioritize task:
 - Address the urgent
 - Accomplish what you can do early
 - Attach deadlines to things you delay

Explain

- Explain techniques for prioritizing tasks.

Say

- “After prioritizing tasks and setting deadlines, now you have to organize your plans and actions.”
- “Some time we use paper and pencil to organize our plans, now in today's environment we can use planner as it includes calendar and enough space to make notes.”

Ask

- What is the need of organizing tasks?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Explain



- Explain ways to organize tasks and prepare planners.

Say



- "In your daily routine, you have to manage many activities, and you cannot cut yourself from this fact. There is no way around this fact. But you have to keep in mind and concentrate completely on the current task."
- "Concentration can be difficult when you have a lot on your mind. But there are ways we can also manage this."

Elaborate



- Elaborate the following topics:
 - Ways for concentrating on your tasks.
 - How to focus on goals and avoid interruptions.

Activity



Objective	The purpose of this activity is to help you appreciate and educate about time management.
Materials required	Lemon, balloon etc.
Steps / procedure	<ol style="list-style-type: none"> 1. This is an outdoor activity. 2. Ask the students to assemble in groups of 9-10 in ground. 3. Organize a race with multiple stages, such as a lemon race, one-leg race, and balloon race. 4. Ask the team members to decide among themselves who will do what. 5. The team that would be able to complete the task within a time of 4mins/ at the earliest would be the winner. 6. On the basis of the activity, discuss the factors that caused the team members lag behind and which factors enabled them to carry it within the assigned time. 7. Relate it to the wider arena- that is to time management (when more than 1 person is involved) in general sense.

Activity

Steps / procedure	8. After this, the Facilitator will sum up the activity by summarizing the main topic.
Conclusion / what has been achieved	This activity will focus on the importance of time management.

Ask

- What is the need and importance of teamwork?
- List advantages of teamwork.

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Say

- "The current trend of working in an organization is to work in form of teams. While working in an organization they have to support and guide other team members also."
- "A good team is the one that motivates its members to have a positive attitude and perform better."
- "Teamwork is a very important part of working life. They can have a big impact on the profitability of an organization, team and individual performance, company reputation, etc."
- "The three important determinants of teamwork are leadership, and the building of the right kind of groups or teams for better productivity."

Do

- Read the following paragraph to the class and elaborate on the following story:

Say

Lessons from the Geese:

- “At work, teams are far more effective than individuals. Let's look at an example from Mother Nature to learn how an effective team works.”
- “The geese fly in a group on their long flight of migration.”
- “The flapping of the geese that are in front of the formation creates a draught for the geese at the rear, reducing air resistance. This indicates their true sense of responsibility towards their fellow beings.”
- “When the leader of the flock of geese becomes tired, it returns to the rear, and another goose steps forward to lead the flock of geese. So, these geese have no fixed leadership or hierarchy.”
- “No goose wants to fly out of formation because it gets tired quickly. Even if it does fly out of formation, it quickly comes back to its place. So, geese have amazing team sense!”
- “Geese also make a lot of noise while they fly. But it's interesting to note that the noise is not made by the geese leading the formation, but by the geese in the back of the formation, which serve to support and keep everyone going. Isn't that the unique voice of support?”
- If one goose becomes ill and falls out of formation, a few others stay with it until it recovers or dies. Now, that's what we call “team spirit!”
- “Geese are a one-of-a-kind team. The team behaves as a cohesive whole, with a common goal of reaching a particular destination in mind. Team members help each other because they can achieve much more collectively than they can individually. As with the geese, as humans, if we share a common set of directions and have considered our community, we can move quickly and achieve our goal in a shorter period because we move with trust in each other. We are willing to accept help from others and offer our help to others.”
- “It is beneficial to take turns doing difficult tasks and to share leadership. As with geese, people are interdependent on their skills, capabilities, and unique arrangements of gifts, talents, and resources.”
- “We need to make sure we are encouraging each other in the team. In teams where there is encouragement, the production is much higher.”
- “If we have as much sense as geese, we will stand by each other in difficult times as well as when we are strong. Now, what do you say to that?”

Explain

- Explain the following topics:
 - Teamwork checklist need to follow at the workplace.
 - Advantages of teamwork

Activity



Objective	The purpose of this activity is to help the students to understand the importance and educate themselves about time management.
Materials required	Newspaper, gum, cello tapes
Steps / procedure	<ol style="list-style-type: none"> 1. Divide students into teams and give them equal amounts of newspaper, gum, cello tapes – no scissors or blade should be used. Ask them to construct a castle in 30 mins. Best team will be identified based upon the following criteria. <ol style="list-style-type: none"> 1. Which team can build the tallest, structurally-sound castle? 2. Which team can build a castle the fastest? 2. Go around and make sure they are doing it properly. 3. Praise them for their efforts. 4. Examine a student's work. 5. Give feedback based on the student's work.
Conclusion / what has been achieved	This activity will highlight the significance of time management.

Say



- “Conflict can be defined as a serious disagreement or argument.”
- “Conflict exists in almost all organizations and sometimes it is also considered positive as it helps in the healthy exchange of ideas and creativity.”
- “Unsolved problems may lead to increased levels of bitterness and frustration. By deciding not to say something that would make you sound aggressive or frustrated, you can avoid unnecessary conflicts.”
- “Conflicts take place when people are rigid and are not willing to cooperate.”

Elaborate



- Elaborate the following topics:
 - Different steps to use to resolve conflicts in a team
 - Methods for depersonalizing conflicts
 - Do's and don'ts to resolve complaints
 - Do's and don'ts to respond to a Transactional Crisis

Notes for Facilitation

- Select a student at random and ask them to describe an event in which they had a dispute with a buddy that caused more issues at school and became a source of emotional stress.

Explain

- Explain the importance of resolving conflicts for a person's mental peace, maintaining order, and a healthy environment in the workplace.

Summarize

- Summarize the main points of the session with the participants.
- Ask them if they have any query pertaining to the topics taught in the session.
- Encourage them to ask questions and answer their queries satisfactorily.

Unit 2.4 Health and Hygiene During an Epidemic and Pandemic

Unit Objectives

At the end of this unit, the trainees will be able to:

1. Discuss epidemics and pandemics and their impact on society at large
2. Elaborate the significance of following prescribed rules and guidelines during an epidemic or a pandemic
3. Discuss the significance of conforming to basic hygiene practices such as washing hands, using alcohol-based hand sanitizers
4. Show how to sanitize and disinfect one's work area regularly
5. Demonstrate the correct way of washing hands using soap and water
6. Demonstrate the correct way of sanitizing hands
7. Demonstrate appropriate social and behavioural etiquette (greeting and meeting people, spitting/ coughing/sneezing, etc.)
8. Discuss the ways of dealing with stress and anxiety during an epidemic or a pandemic

Resources to be Used

- Available objects such as white board, marker pens, soap, sanitizer, water etc.
- PC with LCD Projector or Flip Chart

Do

- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.

Say

- “As we are all facing a pandemic of coronavirus, we need to follow certain procedures while working in the workshop for the safety of ourselves and others.”
- “In this session, we will discuss safety procedures related to health and hygiene to keep everyone safe and secure and manage stress during an epidemic and pandemic.”

Ask

- What are an epidemic and pandemics?
- What are the safety practices that need to follow during an epidemic and pandemic?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate

- Elaborate the following topics:
 - Difference between epidemic and pandemic
 - Safety protocols during an epidemic and pandemic at workplace
 - Workplace hygiene
 - Importance of hygiene at workplace
 - How to maintain hygiene in the workplace
 - Personal grooming
 - Differentiate between hygiene and sanitization
 - Workplace and personal sanitization

Do

- Show how to follow safety protocols during an epidemic or pandemic.
- Give some tips to maintain personal hygiene at workplace.
- Give some tips to slow the spread of germs specifically through cleaning and disinfecting.
- Show how to maintain personal sanitization.
- Show how to clean hands properly by soap or sanitizer.

Say

- “During an epidemic or pandemic, mostly people face mental problems due to Fear and worry about their health and the health of their loved ones, financial situation or job, or loss of support services you rely on.”
- “So, there are some ways which can support us in managing mental stress during an epidemic or pandemic.”

Elaborate

- Elaborate the following topics:
 - Effect of stress on our mental health and daily life
 - Ways to handle stress

Notes for Facilitation

- Select a few trainees at random.
- Ask them to describe instances of the coronavirus pandemic that have caused them emotional stress and how it has affected their lives.
- Look for additional similar incidents in their life.

Explain

- Explain the importance and ways of managing stress for mental peace, maintaining order and healthy environment in workplace on the basis of their experiences shared in activity.

Summarize

- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

Exercise

- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 5.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
 - Answers to Question I
 1. a
 2. a
 3. b
 4. a
 5. d
 6. d
 7. b
 8. b
 9. b
 10. b
 11. a
 12. c
 13. c
 14. b
 15. b
 16. True
 17. As discussed during training
 18. As discussed during training

Scan the QR Code to watch the related video



www.youtube.com/watch?v=88PGRvB-Scs
Workplace etiquettes



www.youtube.com/watch?v=QGHBq5OEsBM
Effective communication at workplace

Key Learning Outcomes

At the end of this module, trainee will be able to:

1. List the ways to optimize usage of resources. Identify safety measures during work
2. Employ ways for efficient utilization of material and water
3. Use energy efficient electrical appliances and devices to ensure energy conservation
4. Discuss various methods of waste management and its disposal
5. List the different categories of waste for the purpose of segregation
6. Differentiate between recyclable and non-recyclable waste
7. State the importance of using appropriate colour dustbins for different types of waste
8. Demonstrate different disposal techniques depending upon different types of waste

Unit 3.1 Resource Optimization

Unit Objectives

At the end of this unit, the trainee will be able to:

1. List the ways to optimize usage of resources
2. Employ ways for efficient utilization of material and water
3. Use energy efficient electrical appliances and devices to ensure energy conservation

Resources to be Used

- Available objects such as white board, marker pens, duster
- PC with LCD Projector or Flip Chart
- Participant Manual

Do

- Welcome and greet the participants.
- Revise the learnings of the previous sessions and ask them if they have any doubts.

Say

- "In today's world, every automobile organization is aiming to reduce production costs without any change in the quality of the product, customer satisfaction, and safety of the passengers in their automobiles."
- "Energy efficiency is crucial to reduce pollutant emissions into the atmosphere, and automakers find it challenging to increase the output of their products by adhering to energy efficiency practices."

Ask

- What do you understand by term energy??
- What is energy conservation?
- What is the need for energy conservation?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate

- Elaborate the following topics:
 - Energy conservation
 - Ways of conserving energy
 - Energy management programs and systems followed in industry
 - Efficient HVAC measures to conserve energy
 - Need and ways of maintenance check
 - Environment friendly design and structure of automobile
 - Ways to leaks in equipment, compressor and pipes
 - Need of upgrading equipment
 - Need of installation of energy-efficient lighting
 - Need of reducing power consumption by the equipment
 - Improvement in process heating

Say

- “Like energy conservation, it is also necessary to conserve water to avoid a water crisis in the future.”

Elaborate

- Elaborate the following topics:
 - Water conservation
 - Need of water conservation
 - Ways of water conservation

Explain



- Explain the need and ways of energy conservation and water conservation to avoid crisis of energy and water in future.

Field Visit



- Arrange a visit to any of the automobile industry and show them the ways implemented by them to conserve energy and water.
- With the help of field visit you could show the benefits and importance of energy and water conservation.

Summarize



- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

Unit 3.2 Waste Management

Unit Objectives

At the end of this unit, trainees will be able to:

1. Discuss various methods of waste management and its disposal
2. List the different categories of waste for the purpose of segregation
3. Differentiate between recyclable and non-recyclable waste
4. State the importance of using appropriate colour dustbins for different types of waste
5. Demonstrate different disposal techniques depending upon different types of waste

Resources to be Used

- Available objects such as white board, marker pens, duster
- PC with LCD Projector or Flip Chart

Do

- Welcome and greet the participants. Revise the learnings of the previous sessions and ask them if they have any doubts.

Say

- “Waste management is the collection, transport, processing, recycling or disposal of waste materials.”
- “Waste may be classified as garbage, rubbish, industrial wastes, mining wastes etc.”
- “Industrial waste can be of the following types: liquid waste, solid waste, organic waste, recyclable rubbish, and hazardous waste.”

Ask

- What are the elements of waste management strategy?
- What are the different methods of waste management?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Explain

- Explain different types of industrial waste.
- Explain different methods of waste management segregation, composting, landfill and recycling.

Field Visit

- Arrange a visit to any of the automobile industry and show the waste management system and how they do the segregation of waste.

Summarize

- Summarize the main points.
- Ask participants if they have any doubts.
- Share your inputs and insight to encourage the trainees.
- Wrap the session up after summarizing the key points and answering questions.

Exercise

- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 5.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
 - Answers to Question I
 1. Using stair case
 2. c
 3. True
 4. b
 5. c
 6. b

Scan the QR Code to watch the related video



www.youtube.com/watch?v=42UHIRVwxec

Waste management and its disposal



Skill India
कौशल भारत - कुशल भारत



सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP



N · S · D · C
National
Skill Development
Corporation

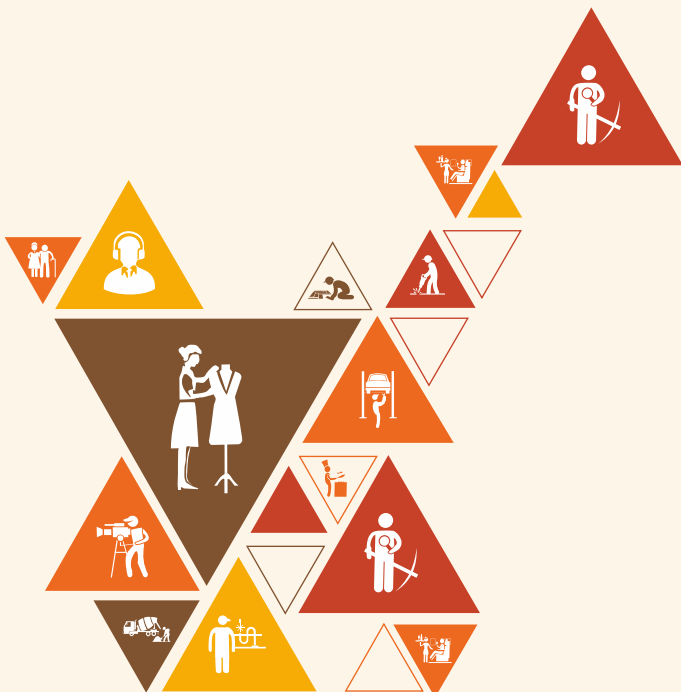
Transforming the skill landscape



4. Perform Vehicle Washing and Cleaning

Unit4.1 Assist in preparation for service, maintenance and repair

Unit4.2 Assist in service, maintenance and repair



ASC/N1434

Key Learning Outcomes

At the end of this unit, the trainee will be able to:

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

Unit4.1 Assist in Preparation for Service, Maintenance, Repair

Unit Objectives

At the end of this unit, the trainee will be able to:

1. Outline the details of the Automotive industry in India, workshop structure and role and responsibilities of different people in the workshop
2. Discuss the auto component manufacturer specifications of various vehicles
3. Identify the right materials for the job such as lubricants, seals, etc
4. Explain the basic technology used in and functioning of various components and aggregates of the vehicle
5. Recall the types of errors of defects in the tools/ equipment

Resources to be Used

- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Say

- “In the last unit, we have covered inclusive work environment, sensitivity towards PWD and opposite genders
- “Now, we will try to understand about the automotive industry in India.”
- “The Automotive industry is one of the largest industries and adds considerable revenue towards the world’s economy. It has evolved a lot from steam vehicles to motor vehicles and electric and automatic vehicles.”
- “Let’s study in detail.”

Explain



- Explain the automotive industry and leading automotive manufacturers in India with the help of Fig. 5.1 in the Participant Handbook.
- Explain the growth of the automotive industry between 2018 to 2020 with the help of Fig.4.2 in the Participant Handbook.
- Explain different types of automotive vehicles in India with the help of Fig. 4.3 in the Participant Handbook.

Elaborate



- **Elaborate the following topics:**
 - Basic technology & types of two-wheeler vehicle(Fig.4.4)
 - Basic auto system and aggregates of two-wheeler vehicle (Fig.4.5)
 - Auto components and their functions of two-wheeler vehicles (Table.4.1)

Do/Demonstrate



- Demonstrate the various equipment, tools, and materials used in automotive workshops. Refer to the following link:
 - <https://www.youtube.com/watch?v=cZxuO75jsG8>

Ask



- Can you name any three leading automobile manufacturers in India?
- Name the basic categories of two-wheeler vehicles in India.
- What is the purpose of the pistons, handlebars, and frame auto components for two-wheeler vehicles?
- What is the difference between gearbox and clutch?

Group Activity



Objective	The purpose of this activity is to learn about different tools and equipment used in two-wheeler vehicles.
Materials required	Tools/equipment chart
Steps/procedure	<ol style="list-style-type: none"> 1. Instruct the students to form a circle. 2. Explain the tools found in two-wheeler vehicles. 3. Show the tools and equipment to trainees and tell them to identify tools one by one. 4. Call each student one by one and ask him/her to identify the names of tools shown on the chart. 5. The Facilitator will sum up the activity within 20 minutes.
Conclusion / what has been achieved	This activity will help them identify different tools and equipment used in two-wheeler vehicles.

Notes for Facilitation



- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Explain



- Explain technical terms and terminology used in engine specification of two-wheeler vehicles with the help of Table. 4.2 given in the Participant Handbook.
- Explain engine parameters with the help of Fig.4.6 given in the Participant Handbook.
- Explain the classification of two-wheeler engines:
 - Two-stroke engine (Fig.4.8 and Fig.4.9)
 - Four-stroke engine(Fig.4.10)
- Explain workshop structure & various job roles/responsibilities with the help of Fig. 4.11 and Fig. 4.14 given in the Participant Handbook.
- Explain the key features of the automotive workshop with the help of Fig 4.13 given in the Participant Handbook.

Elaborate



- Elaborate the following topics:
 - Various tools and materials used in the automotive workshop (Table.4.3)
 - Various hand tools and equipment used in the automotive workshop (Fig.4.15)
 - Types of errors or defects in the tools/equipment (Fig.4.20)

Ask



- Can you name any three tools used in automotive workshop?
- What is the difference between two-stroke engine and four-stroke engine of two-wheeler vehicle?
- What is the purpose of the following hand tools?
 - Wrenches & Allen key set
 - Chisels & Mallet
- Can you name three technical terms used in engine specifications?

Notes for Facilitation



- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summarize



- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise

- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 4.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
 - Answers to Questions I.
 1. Hint - Refer to section 4.1.8
 2. Hint - Refer to section 4.1.7
 3. Hint- Refer to section 4.1.1
 - Answers to Questions II.
 1. Faulty
 2. Funnel
 3. Kickstand
 4. Equipment
 5. Speedometer

Unit4.2 Assist in Service, Maintenance and Repair

Unit Objectives

At the end of this unit, the trainee will be able to:

1. Outline the SOPs related to receiving vehicles, opening job card, allocation of work, vehicle delivery, etc
2. List the documentation required for each procedure
3. Discuss the importance of recording the service and repair activities performed as specified by OEM
4. List various standard opening procedures (SOP)/service manuals to be followed for repairing, servicing, routine maintenance using workshop tools and equipment etc
5. List the various precautions to be taken to avoid any damage to the vehicle/ components
6. Discuss the various policies related to activities such as disposing off materials/ used oils and returning tools/ leftovers
7. Discuss the safety, health and environmental policies and regulations for the workplace as well as for automotive trade in general
8. Outline organizational and professional code of ethics and standards of practice

Resources to be Used

- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Say

- "In the previous session, we have covered details of the automotive industry in India, workshop structure and role and responsibilities of different people in the workshop, auto component manufacturer specifications of various vehicles."
- "Let's start today's session, with work allocation in the workshop".
- "It is important to allocate the work for proper operation and productivity in the workshop. It is the responsibility of the supervisor to assign tasks to each person in the team."
- "Let us study in detail."

Explain



- Explain the criteria of work allocation in workshop with the help of Fig.4.21 given in the Participant Handbook.
- Explain the standard procedures of work allocation with the help of Fig. 4.22 given in the Participant Handbook.
- Explain the service records and documentation as well as the essential requirements for maintaining good documentation in an organization.
- Explain the common types of documents required for each procedure maintained in automotive workshops and service stations with the help of Fig.4.23 given in the Participant Handbook.
- Explain the standard procedure for vehicle receiving in an auto repair workshop with the help of Fig. 4.24 given in the Participant Handbook.
- Explain the significance of the job card and details that need to be recorded on the job card with the help of Fig. 4.25 given in the Participant Handbook.

Group Activity



Objective	The purpose of this activity is to understand how to fill the job card
Materials required	Pen and paper
Steps / procedure	<ul style="list-style-type: none"> • This is a skill practice activity. • Ask the participants to use the sample template to document the servicing and repairing record which is available in the Participant Handbook (Fig 5.26). • Give 5-10 minutes to complete the activity. • Ask the participants to show their answers to the class.
Conclusion / what has been achieved	This activity will help them to learn how to fill out job cards to document the two-wheeler service record.

Ask



- What is the standard procedure of work allocation in a workshop?
- Name three common types of documents required for each procedure maintained in automotive workshops and service stations.

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate

- **Elaborate the following topics:**
 - Significance to update the history of two-wheeler vehicle service (Fig. 4.27)
 - Importance of recording the service and repair activities (Fig.4.28)
 - Various kind of service technicians involved in the automotive repair and maintenance department (Fig. 4.29)
 - Various categories of services available in the workshop (Fig. 4.30)
 - Various repair and maintenance services are available in an automotive workshop (Fig.4.31)
 - Standard procedure for two-wheeler vehicle servicing and routine maintenance(Fig.4.32)
 - Details of the two-wheeler vehicle logbook.
 - Different categories of the maintenance department in the automotive industry
 - Ignition system
 - Starting system
 - Charging system
 - Lighting systems

Ask

- Can you name three repair and maintenance services in an automotive workshop?
- What is the difference between basic service and free service?
- What do you understand by ignition system of two-wheeler vehicle?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate



- **Elaborate SOPs for the following maintenance jobs:**

- a) Air filter element cleaning
- b) Engine oil replacement
- c) Silencer tail pipe cleaning process
- d) Servicing drive chain of motorcycle
- e) Removing and refitting wheels
- f) Battery voltage checking

Do/Demonstrate



- Demonstrate the engine oil replacement of a two-wheeler vehicle. Refer to the following link:

- <https://www.youtube.com/watch?v=tKwG4uh3e0Q>

Elaborate



- **Elaborate SOPs for the following maintenance jobs:**

- g) Battery electrolyte gravity checking
- h) Battery charging
- i) Replacing battery
- j) Replacing brake shoes (drum brakes)
- k) Replacing brake pads (disc brakes)
- l) Replacing headlight

Do/Demonstrate



- Demonstrate replacing the headlight of a two-wheeler vehicle. Refer to the following link:

- <https://www.youtube.com/watch?v=sQVZExVEeIQ>

Ask 

- What is the difference between brake pads and a battery?
- What is the purpose of the headlight?

Notes for Facilitation 

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate 

- **Elaborate SOPs for the following maintenance jobs:**
 - o) Replacing accelerator cable
 - p) Replacing clutch cable
 - q) Replacing brake fluid
 - r) Replacing tappet
 - s) Replacing spark plug

Do/Demonstrate 

- Demonstrate replacing the clutch cable of a two-wheeler vehicle. Refer to the following link:
 - <https://www.youtube.com/watch?v=CecXPKmsimM>

Ask 

- What do you understand by accelerator cable?
- What is the difference between the spark plug and the clutch cable?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Say

- “We have learned about SOPs for several types of two-wheeler vehicle maintenance.”
- “Let us look more closely at two-wheeler vehicle delivery.”

Explain

- Explain the standard procedure for vehicle delivery after the completion of repair or maintenance services with the help of Fig. 4.34 given in the Participant Handbook.
- Explain the various precautions and safety measures when working with tools and equipment with the help of Fig.4.35 given in the Participant Handbook.
- Explain the potential hazards and risks in an auto-workshop with the help of Fig.4.36 given in the Participant Handbook.
- Explain the safety measures to be followed by all the auto repair and service workshop staff and workers with the help of Fig. 4.37 given in the Participant Handbook.

Elaborate

- **Elaborate the following topics:**
 - Rules and guidelines for safe waste disposal(Fig.4.38)
 - Standard practice and professional code of ethics (Fig.4.39)
 - Two-wheeler pollution check
 - Significance of PUC certificate(Fig.4.40)

Ask

- What is the significance of a PUC certificate?
- Can you name a few standard practices and professional codes of ethics followed in every organization?
- What are the safety measures to be followed by all the auto repair and service workshop staff and workers?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summarize

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise

- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 5.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
 - **Answers to Questions I.**
 1. Hint - Refer to section 4.2.4
 2. Hint -Refer to section 4.2.5.1(a)
 3. Hint- Refer to section 4.2.5.1(f)
 4. Hint – Refer to section 4.2.2
 5. Hint – Refer to section 4.2.10
 - **Answers to Questions II.**
 1. Supervisor
 2. Good documentation
 3. Breakdown maintenance services
 4. Factory Act 1948
 5. Vehicle history

QR Code

Scan the QR Code to watch the related video



youtube.com/watch?v=SJALRLqkjW8

Automotive hand tools and equipment



youtube.com/watch?v=9zU1SVp8ego

Classification of two-wheeler engine



youtube.com/watch?v=C3pipJRwyrk

Maintenance of two-wheeler vehicle



Skill India
कौशल भारत - कुशल भारत



सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP



N · S · D · C
National
Skill Development
Corporation

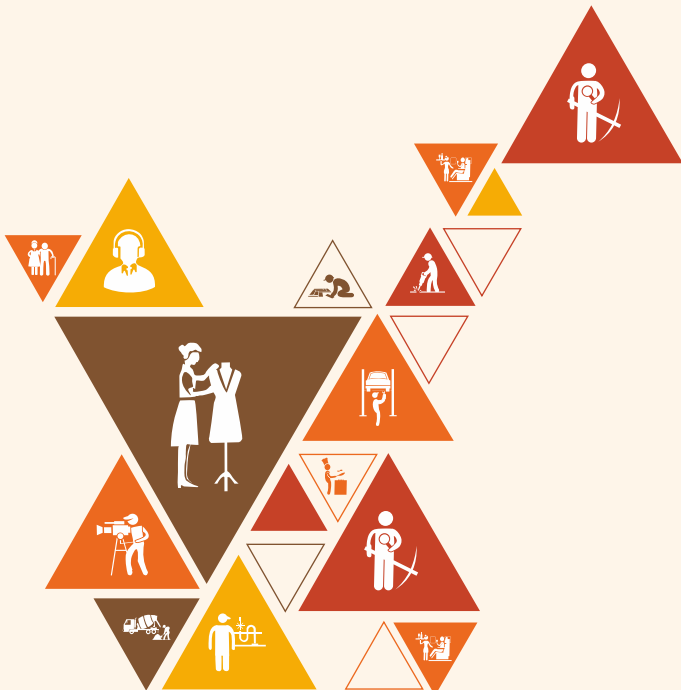
Transforming the skill landscape



5. Employability and Entrepreneurship Skills



<https://eskillindia.org/NewEmployability>





Skill India
कौशल भारत - कुशल भारत



सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP



N · S · D · C
National
Skill Development
Corporation

Transforming the skill landscape

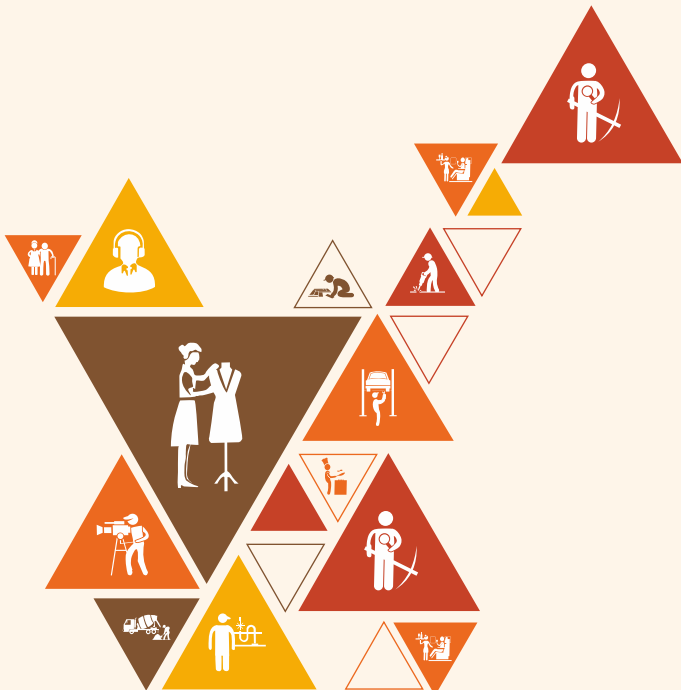


6. Annexures






Annexure I : QR Codes

Annexure I : Training Delivery Plan






Annexure II : Assessment Criteria




Annexure I - QR Code

Serial No.	Module No.	Unit Number	Topic Name	Page No.	URL	QR Code
1.	Introduction to the role of an Automotive Assembly Operator	Unit 1.1 - Introduction to the Automotive Assembly Operator	Introduction to Automotive Industry	09	www.youtube.com/watch?v=PJP7xVBLBL8	
		Unit 1.2 - Scope of Work of Two-Wheeler Service Assistant	Workshop Standard Operating Procedure		www.youtube.com/watch?v=L2Z78KPPctY	
2.	Work Effectively and Efficiently	Workplace etiquettes	Workplace etiquettes	39	www.youtube.com/watch?v=88PGRvB-Scs	
		Effective communication at workplace	Effective communication at workplace		www.youtube.com/watch?v=QGHbq5OEsBM	
3.	Optimize Resource Utilization	Unit 3.2 Waste management	Waste management and its disposal	47	www.youtube.com/watch?v=42UHIRVwxec	

Annexure I - QR Code

Serial No.	Module No.	Unit Number	Topic Name	Page No.	URL	QR Code
4	Perform Vehicle Washing and Cleaning	Unit 4.1 - Assist in Preparation for Service, Maintenance, and Repair	Automotive hand tools and equipment	62	youtube.com/watch?v=SJALRLqkjW8	
		Unit 4.2 - Assist in Service, Maintenance and Repair	Detailed and Deep Cleaning of a vehicle		youtube.com/watch?v=9zU1SVp8ego	
			Maintenance of two-wheeler vehicle		youtube.com/watch?v=C3pipJRwyrk	
5.	Employability and Entrepreneurship Skills		Employability and Entrepreneurship Skills	63	https://eskillindia.org/NewEmployability	
			Effective communication		www.youtube.com/watch?v=I6IAhXM-vps	

Annexure I - QR Code

Serial No.	Module No.	Unit Number	Topic Name	Page No.	URL	QR Code
			Gender sensitivity in workplace		www.youtube.com/watch?v=SsqGxFx9-QE	

Annexure II

Training Delivery Plan

Training Delivery Plan			
Program Name	Two Wheeler Service Assistant		
Qualification Pack, Name and Reference ID	Two Wheeler Service Assistant ASC/Q1423, v4.0		
Version No.	4.0	Version Update Date	17/11/2022
Pre-requisites to Training (If any)	NA		
Training Outcome	<p>After completing this programme, trainee will be able to:</p> <ol style="list-style-type: none"> 1. Work effectively and efficiently as per schedules and timelines and specified health and hygiene norms. 2. Implement safety practices. 3. Optimize the use of resources to ensure less wastage and maximum conservation. 4. Communicate, develop interpersonal skills 5. Develop sensitization towards gender and person with disability (PwD) 6. Perform servicing maintenance and repair of a two-wheeler under supervision 		

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
1.	Introduction to the Role of a Two Wheeler Service Assistant	Introduction to the Role of a Two Wheeler Service Assistant	<ol 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 safety, health and environment policy to be followed for automotive sector 	N/A Bridge Module	Group Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 3 P: 0
		Scope of Work of Two-Wheeler Service Assistant	<ol style="list-style-type: none"> 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 SOP to be followed for service and minor repair of two wheelers Identify the type, code and quality of components at the time of replacement of parts List the parameters for performing pollution check 	N/A	Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 2 P: 0

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
2.	Work Effectively and Efficiently	Safe Working Practices	<ol style="list-style-type: none"> 1. Elaborate importance of safety at workplace 2. List the potential workplace related risks and hazards, their causes and preventions 3. Identify safety measures during work 4. Display the correct way of wearing and removing PPE such as face masks, hand gloves, face shields, PPE suits, etc 	ASC/N9801	Interactive Lecture in the Class, Team Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 2 P: 5
		Emergency, Rescue and First-aid Procedures	<ol style="list-style-type: none"> 1. Discuss the causes of fire at the shop floor; 2. Demonstrate steps of emergency procedures 3. Demonstrate steps to evacuate in emergency situation 4. Demonstrate basic first aid techniques 				T: 2 P: 5

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Workplace Quality Standards	<ol style="list-style-type: none"> 1. Apply basic housekeeping practices to ensure that the work area is clean, such as mopping spills and leaks, cleaning grease stains etc 2. Perform routine cleaning of tools, equipment and machines 3. Discuss how to complete the given work within the stipulated time period 4. Discuss ways to maintain a proper balance between team and individual goals 		Interactive Lecture in the Class, Team Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 3 P: 5
		Health and Hygiene During an Epidemic and Pandemic	<ol style="list-style-type: none"> 1. Discuss epidemics and pandemics and their impact on society at large 2. Discuss the significance of conforming to basic hygiene practices such as washing hands, using alcohol-based hand sanitizers 3. Show how to sanitize and disinfect one's work area regularly 		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 3 P: 5

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Health and Hygiene During an Epidemic and Pandemic	4. Demonstrate appropriate social and behavioural etiquette (greeting and meeting people, spitting/coughing/sneezing, etc.) 5. Discuss the ways of dealing with stress and anxiety during an epidemic or a pandemic		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 3 P: 5
3.	Optimize Resource Utilization	Resource optimization	1. List the ways to optimize usage of resources.	ASC/N9801	Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1 P: 2
		Resource Optimization (Contd.)	2. Employ ways for efficient utilization of material and water		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1 P: 2
		Resource Optimization (Contd.)	3. Use energy efficient electrical appliances and devices to ensure energy conservation		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1 P: 2
		Waste management	1. Discuss various methods of waste management and its disposal		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1.5 P: 2

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Waste management (Contd.)	2. List the different categories of waste for the purpose of segregation		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1.5 P: 2
		Waste management (Contd.)	3. State the importance of using appropriate colour dustbins for different types of waste		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 2 P: 3
		Waste management (Contd.)	4. Demonstrate different disposal techniques depending upon different types of waste		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 2 P: 2
4.	Assist in Service, Maintenance and Repair	Assist in Preparation for Service, Maintenance and Repair	1. Outline the details of the automotive industry in India, workshop structure and role and responsibilities of different people in the workshop	ASC/N1434	Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 3 P: 5
		Assist in Preparation for Service, Maintenance and Repair –(Contd.)					T: 4 P: 4

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Assist in Preparation for Service, Maintenance and Repair –(Contd.)	2. Discuss the auto component manufacturer specification of various vehicles.		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
	Assist in Preparation for Service, Maintenance and Repair –(Contd.)	T: 4 P: 4					
	Assist in Preparation for Service, Maintenance and Repair –(Contd.)	T: 0 P: 4					
		Assist in Preparation for Service, Maintenance and Repair –(Contd.)	3. Identify the right materials for the job such as lubricants, seals, etc		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
	Assist in Preparation for Service, Maintenance and Repair –(Contd.)	T: 4 P: 4					

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Assist in Preparation for Service, Maintenance and Repair –(Contd.)					T: 0 P: 8
		Assist in Preparation for Service, Maintenance and Repair –(Contd.)	4. Explain the basic technology used in and functioning of various components and aggregates of vehicle		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Assist in Preparation for Service, Maintenance and Repair –(Contd.)		T: 4 P: 4			
		Assist in Preparation for Service, Maintenance and Repair –(Contd.)					T: 0 P: 8
		Assist in Preparation for Service, Maintenance and Repair –(Contd.)	5. Recall the types of errors or defects in the tools/equipment		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Assist in Preparation for Service, Maintenance and Repair –(Contd.)					T: 6 P: 2
		Assist in Preparation for Service, Maintenance and Repair –(Contd.)					T: 0 P: 8
		Assist in Service, Maintenance and Repair	1. Outline the SOPs related to receiving vehicles, opening job card, allocation of work, vehicle delivery, etc		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Assist in Service, Maintenance and Repair –(Contd.)		T: 4 P: 4			
		Assist in Service, Maintenance and Repair –(Contd.)		T: 0 P: 8			
		Assist in Service, Maintenance and Repair –(Contd.)					

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Assist in Service, Maintenance and Repair –(Contd.)	2. List the documentation required for each procedure		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
	Assist in Service, Maintenance and Repair –(Contd.)	T: 4 P: 4					
	Assist in Service, Maintenance and Repair –(Contd.)	T: 0 P: 8					
		Assist in Service, Maintenance and Repair –(Contd.)	3. Discuss the importance of recording the service and repair activities performed as specified by OEM		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
	Assist in Service, Maintenance and Repair –(Contd.)	T: 4 P: 4					
	Assist in Service, Maintenance and Repair –(Contd.)	T: 0 P: 8					

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Assist in Service, Maintenance and Repair –(Contd.)	4. List various standard operating procedures (SOP)/service manuals to be followed for repairing, servicing, routine maintenance using workshop tools and equipment etc		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
	Assist in Service, Maintenance and Repair –(Contd.)	T: 4 P: 2					
	Assist in Service, Maintenance and Repair –(Contd.)	T: 0 P: 4					
	Assist in Service, Maintenance and Repair –(Contd.)	5. List various precautions to be taken to avoid any damage to the vehicle/components	T: 4 P: 4				
	Assist in Service, Maintenance and Repair –(Contd.)		T: 4 P: 2				

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Durati on in Hours
		Assist in Service, Maintenance and Repair –(Contd.)					T: 0 P: 4
		Assist in Service, Maintenance and Repair –(Contd.)	6. Discuss the various policies related to activities such as disposing off materials/used oils and returning tools/leftovers				T: 4 P: 4
		Assist in Service, Maintenance and Repair –(Contd.)					T: 4 P: 2
		Assist in Service, Maintenance and Repair –(Contd.)					T: 0 P: 4
		Assist in Service, Maintenance and Repair –(Contd.)	7. Discuss the safety, health and environmental policies and regulations for the workplace as well as for automotive trade in general				T: 4 P: 4
		Assist in Service, Maintenance and Repair –(Contd.)					T: 4 P: 2

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Assist in Service, Maintenance and Repair –(Contd.)					T: 0 P: 4
		Assist in Service, Maintenance and Repair –(Contd.)	8. Outline organisational and professional code of ethics and standards of practice				T: 4 P: 4
		Assist in Service, Maintenance and Repair –(Contd.)					T: 4 P: 2
		Assist in Service, Maintenance and Repair –(Contd.)					T: 0 P: 4
		Assist in Service, Maintenance and Repair –(Contd.)					
5.	Employability Skills (30 hours)	Introduction to Employability Skills	1. Discuss the importance of Employability Skills in meeting the job requirements	DGT/VSQ/N0101	Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0.5 P: 0.5

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Constitutional values - Citizenship	1. Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen.		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0.5 P: 0.5
		Becoming a Professional in the 21st Century	1. Discuss 21st century skills.		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0.5 P: 0.5
		Basic English Skills	1. Discuss need of basic English skills.		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1 P: 1
		Communication Skills	1. Discuss need of communication skills 2. Describe importance of team work		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1.5 P: 2.5
		Diversity & Inclusion	1. Discuss the significance of reporting sexual harassment issues in time		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0.5 P: 0.5

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Financial and Legal Literacy	<ol style="list-style-type: none"> 1. Discuss the significance of using financial products and services safely and securely. 2. Explain the importance of managing expenses, income, and savings. 3. Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws 		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1.5 P: 2.5
		Essential Digital Skills	<ol style="list-style-type: none"> 1. Discuss the significance of using internet for browsing, accessing social media platforms, safely and securely 		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1 P: 2
		Entrepreneurship	<ol style="list-style-type: none"> 1. Discuss the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenge 		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 2.5 P: 4.5

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Customer Service	<ol style="list-style-type: none"> 1. Differentiate between types of customers. 2. Explain the significance of identifying customer needs and addressing them. 3. Discuss the significance of maintaining hygiene and dressing appropriately. 		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1.5 P: 2.5
		Getting ready for apprenticeship & Jobs	<ol style="list-style-type: none"> 1. Discuss the significance of dressing up neatly and maintaining hygiene for an interview 2. Discuss how to search and register for apprenticeship opportunities 		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1 P: 1
Total (In Hours)						Theory	142
						Practical	218
						On-the-Job Training	30
						*Grand Total (in Hours)	390 hours

Annexure III

Assessment Criteria

CRITERIA FOR ASSESSMENT OF TRAINEES

Assessment Criteria for Two-Wheeler Service Assistant	
Job Role	Two-Wheeler Service Assistant
Qualification Pack	ASC/Q1423, v4.0
Sector Skill Council	Automotive

Sr. No.	Guidelines for Assessment
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.

Total Marks:250	Compulsory NOS				
Assessable Outcomes	Assessment criteria for outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
1. ASC/N9801. Organize work and resources (Service)	Maintain safe and secure working environment	8	4	-	3
	PC1. organize work as per organization'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 any 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 cleaned 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

Total Marks:250	Compulsory NOS				
Assessable Outcomes	Assessment criteria for outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	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
	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	-	-

Total Marks:250	Compulsory NOS				
Assessable Outcomes	Assessment criteria for outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	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
2. DGT/VSQ/N0101: Employability Skills (30 Hours)	Introduction to Employability Skills	1	1	-	-
	PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
	Constitutional values – Citizenship	1	1	-	-
	PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
	Becoming a Professional in the 21st Century	1	3	-	-
	PC3. explain 21st Century Skills such as Self- Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
	Basic English Skills	2	3	-	-
	PC4. speak with others using some basic English phrases or sentences	-	-	-	-
	Communication Skills	1	1	-	-

Total Marks:250	Compulsory NOS				
Assessable Outcomes	Assessment criteria for outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	PC5. follow good manners while communicating with others	-	-	-	-
	PC6. work with others in a team	-	-	-	-
	Diversity & Inclusion	1	1	-	-
	PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
	PC8. report any issues related to sexual harassment	-	-	-	-
	Financial and Legal Literacy	3	4	-	-
	PC9. use various financial products and services safely and securely	-	-	-	-
	PC10. calculate income, expenses, savings etc.	-	-	-	-
	PC11. approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
	Essential Digital Skills	4	6	-	-
	PC12. operate digital devices and use its features and applications securely and safely	-	-	-	-
	PC13. use internet and social media platforms securely and safely	-	-	-	-
	Entrepreneurship	3	5	-	-
	PC14. identify and assess opportunities for potential business	-	-	-	-
	PC15. identify sources for arranging money and associated financial and legal challenges	-	-	-	-

Total Marks:250	Compulsory NOS				
Assessable Outcomes	Assessment criteria for outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	Customer Service	2	2	-	-
	PC16. identify different types of customers	-	-	-	-
	PC17. identify customer needs and address them appropriately	-	-	-	-
	PC18. follow appropriate hygiene and grooming standards	-	-	-	-
	Getting ready for apprenticeship & Jobs	1	3	-	-
	PC19. create a basic biodata	-	-	-	-
	PC20. search for suitable jobs and apply	-	-	-	-
	PC21. identify and register apprenticeship opportunities as per requirement	-	-	-	-
	NOS Total	20	30	-	-
ASC/N1434 Assist in service, maintenance and repair of two wheelers	Assist in preparation for service, maintenance and repair	10	15	-	10
	PC1. position the two wheeler on a suitable platform for service, maintenance or repair	-	2	-	1
	PC2. identify the auto component manufacturer specifications related to the various brand/model/variant of vehicle	3	3	-	2
	PC3. assist technician in visual inspection of the two wheeler for any external impact/bend/leak/incorrect level/wear & tear	2	3	-	2
	PC4. assist the technician by running errands such as collecting/fetching the required special service tools, measuring instruments, vehicle parts, gauges, fixtures, workshop supplies, etc.	5	3	-	2

Total Marks:250	Compulsory NOS				
Assessable Outcomes	Assessment criteria for outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	PC5. report the malfunctions if any, in the tools/equipment to the person concerned for rectification	-	2	-	2
	PC6. prepare the work area by cleaning and placing tools/equipment in an organised manner	-	2	-	1
	Assist in service, maintenance and repair	15	25	-	7
	PC7. take precautions to avoid damage to the two wheeler and its components while working on various aggregates	2	3	-	-
	PC8. comply with the Standard Operating Procedures (SOP) and two wheeler's service manuals for repairing, servicing and using workshop tools and equipment	3	5	-	1
	PC9. report the malfunctions/repairs in the two wheeler beyond own scope to the concerned person	-	2	-	2
	PC10. assist technician in performing routine service/maintenance (inspect/correct/adjust/clean/lubricate) in vehicle/aggregate	3	5	-	1
	PC11. perform routine service/maintenance (change/replenish/top-up - lubricants, fluids, coolant, filters etc.) and minor repair/replacement (wheels, mud flap, brake pad, brake shoes, clutch cable, etc.) in vehicle/aggregate under supervision of technician	4	5	-	1
	PC12. assist in dismantling component/aggregates like engine, axles, clutch, self starter etc.	2	3	-	1
	PC13. record each process performed as specified by OEM	-	2	-	-

Total Marks:250	Compulsory NOS				
Assessable Outcomes	Assessment criteria for outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	PC14. assist technician in performing post repair activities such as disposing off materials/used oils/failed parts as per organization's policies and return leftover consumable/parts, tools/equipment to the person concerned	1	-	-	1
	Perform pollution check	5	10	-	3
	PC15. perform PUC (Pollution Under Control) check as per standard procedure using appropriate software and hardware	1	3	-	-
	PC16. check the reading to confirm if these are within acceptable range and inform the concerned person about discrepancies, if any	2	3	-	2
	PC17. check the previous PUC certificate for existing record or take data from registration certificate and enter details in software	2	2	-	1
	PC18. prepare the PUC certificate	-	2	-	-
	NOS Total	30	50	-	20

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.



Skill India
कौशल भारत - कुशल भारत



सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP



N.S.D.C.
National
Skill Development
Corporation
Transforming the skill landscape



Scan this QR Code to access eBook

ASDCTM
AUTOMOTIVE SKILLS DEVELOPMENT COUNCIL

Address: 153, GF, Okhla Industrial Area, Phase - III, Leela Building,
New Delhi 110020
Email: www.asdc.org.in
Web: info@asdc.org.in
Phone: 011 42599800