

National Board for Technical Education

Plot B, Bida Road, P.M.B. 2239, Kaduna, Nigeria



NATIONAL SKILLS QUALIFICATION

AUTO BODY WORKS

(Validated)

LEVEL 1-3

November 2022

CONTENTS

OVERVIEW	3
NOS LEVEL 1: AUTO BODY WORKS	4
GENERAL INFORMATION	5
MANDATORY UNITS	6
UNIT 1: HEALTH, SAFETY AND ENVIRONMENT I	8
UNIT 2: COMMUNICATION AND INTERPERSONAL SKILLS I	10
UNIT 3: TEAM WORK I	12
UNIT 4: INTRODUCTION TO VEHICLE LAYOUT AND WORKSHOP ORGANISATION	14
UNIT 5: INTRODUCTION TO AUTO BODY WORKSHOP	17
 LEVEL 2	 20
NSQ LEVEL 2: GENERAL INFORMATION	21
NSQ LEVEL 2: MANDATORY UNITS	22
UNIT 1: HEALTH, SAFETY AND ENVIRONMENT II	24
UNIT 2: COMMUNICATION AND INTERPERSONAL SKILLS II	28
UNIT 3: TEAM WORK II	31
UNIT 4: APPLICATION OF TOOLS, EQUIPMENT AND MATERIALS.	33
UNIT 5: INTRODUCTION TO AUTO BODY REPAIRS	36
UNIT 6: INTRODUCTION TO SPRAY PAINTING	40
UNIT 7: INTRODUCTION TO AUTO UPHOLSTERY	42
UNIT 8: INTRODUCTION TO LOCKSMITHING	45
 LEVEL 3	 48
GENERAL INFORMATION	49
MANDATORY UNITS	50
UNIT 1: HEALTH, SAFETY AND ENVIRONMENT III	52
UNIT 2: COMMUNICATION AND INTERPERSONAL SKILLS III	57
UNIT 3: TEAM WORK III	59
UNIT 4: MAINTENANCE OF TOOLS AND EQUIPMENT IN AUTO BODY WORKS	62
UNIT 5: REMOVAL AND REFITTING OF AUTO BODY COMPONENTS	65
UNIT 6: BODY DEFECT REPAIRS	68
UNIT 7: VEHICLE REFINISHING (AUTO SPRAY PAINTING)	73
UNIT 8: LOCKSMITHING	76
UNIT 9: AUTO UPHOLSTERY	79

OVERVIEW

This qualification is for those interested in developing a career in Auto body Works for the award of National Skills Qualifications (NSQ). It is aimed at producing specialists in Auto body works at NSQ Levels 1, 2 and 3 with the competencies to repair, amend and refinish auto-bodies professionally. While complying with relevant regulatory requirements, health and safety. This qualification is subject to review as and when the need arises.

NATIONAL SKILLS QUALIFICATION

AUTO BODY WORKS

(Validated)

LEVEL 1

November 2022

**NATIONAL SKILLS QUALIFICATION
NSQ LEVEL 1 – AUTO BODY WORKS
GENERAL INFORMATION**

QUALIFICATION PURPOSE

This qualification is designed for individuals who are interested in developing a career in the Auto body works industry.

QUALIFICATION REQUIREMENTS

Candidates must:

- a. Be at least 15 years of age
- b. Be medically fit (visual acuity, blood pressure and blood sugar)
- c. Be mentally fit
- d. Have achieved all the mandatory units in the qualification

Note:

This is a 140 credit unit qualification. To achieve this qualification; learners are required to achieve all credits units. Each Credit is equivalent to 10 Guided Learning Hours (GLH).

QUALIFICATION OBJECTIVE

At the end of the qualification, the Auto body specialist should be to demonstrate knowledge and skills in:

- a. Health, Safety and Environment I
- b. Communication and Interpersonal Skills I
- c. Team Work I
- d. Introduction to vehicle layout and workshop organisation
- e. Introduction to auto body workshop

Unit assessment requirements/evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out. Simulation is allowed in this unit and level.

Assessment methods to be used include:

- 1. Direct Observation (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Personal statement (PS) or Reflective Practice (RP)
- 5. Recognition of Prior Learning (RPL)
- 6. Work Product (WP)

NATIONAL SKILLS QUALIFICATION AUTOMOBILE SECTOR LEVEL 1: AUTO BODY WORKS**Mandatory Units**

S/ lo /Unit No	Reference Number	NOS Title	Credi Value	Guide d LearnIng Hours	Remark
1	AUT/ABW/001/L1	HEALTH, SAFETY AND ENVIRONMENT I	2	20	Level 1
2	AUT/ABW/002/L1	COMMUNICATION INTERPERSONAL SKILLS I	2	20	Level 1
3					
4	AUT/ABW/003/L1	TEAM WORK I	2	20	Level 1
5					
	AUT/ABW/004/L1	INTRODUCTION TO VEHICLE LAYOUT AND WORK SHOP ORGANISATION	4	40	Level 1
	AUT/ABW/005/L1	INTRODUCTION TO AUTO BODY WORKSHOP	4	40	Level 1
	TOTAL		14	140	

NOTE: This is a 140 credit qualification. To achieve this qualification; Learners are required to achieve 140 Credit from the mandatory units. Each Credit is equivalent to approx. 10 Guided Learning Hours (GLH). The Total Learning Hours will therefore consist of the GLH *plus* the independent learning hours of the candidate, which is generally 50% – 150% of the GLH. ***The actual Total Learning Hours for each Credit will then be a minimum of 15 hours.***

Qualification Purpose: This qualification is aimed at the ability of the learner acquiring sufficient knowledge and skills in the work environment to carry out Auto body and support experienced workers in the industry

Unit title	Provides a clear explanation of the content of the unit.
Unit number	The unique number assigned to the unit
Unit reference	The unique reference number given to each unit at qualification approval by
	NBTE
Unit level	Denotes the level of the unit within the National skills Qualification framework NSQF.
Unit credit value	The value that has been given to the unit based on the expected learning time for an average learner. 1 credit = 10 learning hours
Unit aim	Provides a brief outline of the unit content.
Learning outcome	A statement of what a learner will know, understand or be able to do, as a result of a process of learning.
Assessment criteria	A description of the requirements a learner must achieve to demonstrate that a learning outcome has been met.
Unit assessment guidance	Any additional guidance provided to support the assessment of the unit.
Unit guided learning hours	The average number of hours of supervised or directed study Time or assessment required to achieve a qualification or unit of a qualification.

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 1: AUTO BODY WORKS**

Unit 1: HEALTH, SAFETY AND ENVIRONMENT I

Unit Reference Number: AUT/ABW/001/L1

NSQ Level: 1

Credit Value: 2

Guided Learning Hours: 20

Unit Purpose: This unit specifies the competencies required to demonstrate understanding of safe work practices in the Automotive Industry.

Unit assessment requirements/evidence requirements: Assessment must be carried out in real workplace environment. in which learning and human development is carried out. ***Simulation is allowed*** (where/when necessary) in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Work Product (WP)

Unit 01: HEALTH, SAFETY AND ENVIRONMENT I

LEARNING OBJECTIVE (LO)		PERFORMANCE CRITERIA	Evidence Type				Evidence Ref. Page No.			
The learner will:		The learner can:								
LO 1: Demonstrate Safe working Practices	1.1	Explain safe work practice								
	1.2	Identify safety signs and symbols								
	1.3	Use signs and symbols correctly								
	1.4	Carry out safe work practices								
	1.5	Work in accordance with health and safety best practices								
LO 2: Demonstrate Understanding of Safety, Hazards and Risks.	2.1	Identify work environment hazards								
	2.2	State methods to reduce the risk of these hazards.								
	2.3	Identify Personal Protective Equipment (PPE).								
	2.4	State methods to resolve an occurring environmental hazard.								
LO 3: Possess the ability to take appropriate actions during accident/injury.	3.1	Identify basic first aid equipment.								
	3.2	Demonstrate how to maintain hygienic, safe and secure workplace.								
	3.3	Mention the uses of safety equipment in a workplace.								
	3.4	Demonstrate how to treat injury in a work place.								
LO 4: Demonstrate safe work habit and clean work environment.	4.1	Explain the importance of clean work place environment.								
	4.2	Use safe access and exit routes in the work environment.								
	4.3	Dispose all wastes appropriately to designated waste facilities.								
	4.4	Explain methods of resource conservation (E.g. Water, Energy etc.).								

Learners Signature:**Date:**

Assessors Signature:

Date:

IQA Signature (if sampled)

Date:

EQA Signature (if sampled)**Date:****RESOURCES: Safety Charts, first aid box, first aid materials, PPE, etc.**

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 1: AUTO BODY WORKS**

Unit 2: COMMUNICATION AND INTERPERSONAL SKILLS I**Unit reference number: AUT/ABW/002/L1****QCF level: 1****Credit value: 2****Guided learning hours: 20**

Unit Purpose: This unit specifies the competencies required to demonstrate good communication and interpersonal skills. It involves the ability to read and understand documented instructions and the ability to know how to communicate respectfully.

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Work Product (WP)

UNIT 02: Communications and Interpersonal Skills I

LEARNING OBJECTIVE (LO)		PERFORMANCE CRITERIA	Evidence Type				Evidence Ref. Page No.			
The learner will:		The learner can:								
LO 1: Demonstrate knowledge of the importance of effective communication	1.1	Explain the importance of effective communication.								
	1.2	List ways to communicate effectively.								
	1.3	Exhibit good attitude while communicating with colleagues, managers and clients.								
	1.4	Communicate in a respectful manner.								
	1.5	Use respectful body language.								
	1.6	Interpret verbal communication accurately.								
	1.7	Listen attentively.								
LO 2: Demonstrate ability to document and follow documented instructions	2.1	Read and follow steps in an instruction manual pertaining to any of the units in this course.								
	2.2	Document information in the workplace (e.g. Receipt, Invoices, Reports, and Records etc.).								
	2.3	Document errors, solution processes and reports.								

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

Resources: **Receipt, invoices, reports, records, etc.**

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 1: AUTO BODY WORKS**

Unit 3: TEAM WORK I**Unit reference number: AUT/ABW/003/L1****QCF level: 1****Credit value: 2****Guided learning hours: 20**

Unit Purpose: This unit specifies the competencies required to demonstrate good communication and interpersonal skills. It involves the ability to read and understand documented instructions and to work in a team.

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Work Product (WP)

Unit 3: TEAM WORK I

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type	Evidence Ref. Page No.
LO 1: Understand positive working relationship with colleagues	1.1	Identify the need for developing positive working relationship with Colleagues.		
	1.2	Explain the importance of relating with other people in a way that makes them feel valued and respected.		
	1.3	Assist team members when required.		
	1.4	Report to the supervisor when request for assistance falls outside area of responsibility.		
	1.5	Communicate information to colleagues about own work that might affect others.		
Lo 2: Take responsibility within the team	2.1	Mention own roles and responsibilities within the team.		
	2.2	Perform tasks in line with the team rules and regulations.		
	2.3	Participate effectively in team work.		
Lo 3: Comply with organization Policies.	3.1	Work in line with organizational standard.		
	3.2	Use organization code of practice.		
	3.3	Explain organizational Code of Conduct.		

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Policy document, Organizational charts, etc.

National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 1: AUTO BODY WORKS

Unit 4: INTRODUCTION TO VEHICLE LAYOUT AND WORKSHOP ORGANISATION**Unit Reference Number: AUT/ABW/004/L1****NSQ Level: 1****Credit Value: 4****Guided Learning Hours: 40**

Unit Purpose: The aim of this unit is to equip the learner with understanding of Fundamentals in an automotive workshop.

Unit assessment requirements/evidence requirements: Assessment must be carried out in real workplace environment in which automotive repairs are carried out. ***Simulation is not allowed*** in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Work Product (WP)

UNIT 04: Introduction to Vehicle Layout and Workshop Organisation

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type	Evidence Ref. Page No.
Lo 1: Understand the use of workshop equipment and tools	1.1	Identify hand tools.		
	1.2	Explain the use of hand tools.		
	1.3	Use hand tools.		
	1.4	Identify power tools.		
	1.5	Explain the use power tools.		
	1.6	Use power tools.		
	1.7	Explain the use of equipment in Auto workshop.		
	1.8	Identify the equipment used in the Auto workshop.		
	1.9	Use the equipment in the Auto workshop.		
	1.10	Apply safety procedure in using the tools and equipment in the Auto workshop.		
Lo 2: Understand Vehicle components and composition	2.1	List various vehicle components		
	2.2	Identify various vehicle components		
	2.3	List materials which Vehicle components are made of		
	2.4	Name the types of Chassis		
Lo 3: Understand Automotive workshop organization	3.1	List the sections of an Automotive workshop a) Mechanical b) Electrical c) Body Work		
LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type	Evidence Ref. Page No.
	3.2	Explain the activities of each of the sections in 3.1 above		
	3.3	Explain the uses of the spare parts store and records room		

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Complete toolbox, Two-post lift/hoist, Air compressor, Jack, Axle stand, Practice/Training vehicle, etc.

National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 1: Auto body works

Unit 5: INTRODUCTION TO AUTO BODY WORKSHOP**Unit Reference Number: AUT/ABW/005/L1****NSQ Level: 1****Credit Value: 4****Guided Learning Hours: 40**

Unit Purpose: This unit specifies the competencies required to demonstrate understanding of safe work practices in an Auto body Workshop.

Unit assessment requirements/evidence requirements:

Assessment must be carried out in real workplace environment. In which learning and human development is carried out. ***Simulation is allowed*** (where/when necessary) in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Work Product (WP)

Unit 5: Introduction to Auto body workshop

LEARNING OBJECTIVE (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. Page No.
The learner will be able to:		The learner can:		
LO1: Understand the different units in Auto body workshop	1.1	Explain the activities in panel beating unit.		
	1.2	Explain the activities in spray painting unit.		
	1.3	Explain the activities in upholstery unit.		
	1.4	Explain the activities in locksmithing unit.		
LO2: Know the materials used in Auto body workshop	2.1	List the materials used in panel beating work.		
	2.2	List the materials used in spray painting work.		
	2.3	List the materials used in Upholstery work.		
	2.4	List the materials used in locksmithing work.		
LO3: Know the tools used in Auto body works.	3.1	List the tools used in panel beating work.		
	3.2	List the materials used in spray painting work.		
	3.3	List the materials used in upholstery work.		
	3.4	List the materials used in locksmithing work.		
LO4: Know the equipment used in Auto body workshop	4.1	List the equipment used in panel beating work.		
	4.2	List the equipment used in spray painting work.		
	4.3	List the equipment used in upholstery work.		
	4.4	List the equipment used in locksmithing work.		

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Damaged Dozer, Body spoons, Dolly blocks, Complete panel beating toolbox, Complete locksmithing toolbox, Spray guns, Air Compressor, Sanding machine, Sewing machine, Body files, Oxy-acetylene welding machine, etc.

NATIONAL SKILLS QUALIFICATION

AUTO BODY WORKS

(Validated)

LEVEL 2

November 2022

**NATIONAL SKILLS QUALIFICATION
NSQ LEVEL 2 – AUTO BODY WORKS
GENERAL INFORMATION**

QUALIFICATION PURPOSE

This qualification is designed for individuals who are interested in developing a career in the Auto body works industry.

QUALIFICATION REQUIREMENTS

Candidates must:

- a. Be at least 15 years of age
- b. Be medically fit (visual acuity, blood pressure and blood sugar)
- c. Be mentally fit
- d. Have achieved all the mandatory and optional units in the qualification

Note:

This is a 300 credit unit qualification. To achieve this qualification; learners are required to achieve all credits units. Each Credit is equivalent to 10 Guided Learning Hours (GLH).

There are four (4) optional units, learners are at liberty to pick any optional unit of interest

QUALIFICATION OBJECTIVE

At the end of the qualification, the Auto body specialist should be able to demonstrate knowledge and skills in:

- a. Health, Safety and Environment II
- b. Communication and Interpersonal Skills II
- c. Team Work II
- d. Application of Tools, Equipment and Materials.
- e. Introduction to Auto Body Repairs
- f. Introduction to Spray Painting
- g. Introduction to Auto Upholstery
- h. Introduction to Locksmithing

Unit assessment requirements/evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out. ***Simulation is not allowed in this unit and level.***

Assessment methods to be used include:

- 1. Direct Observation (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Personal statement (PS) or Reflective Practice (RP)
- 5. Recognition of Prior Learning (RPL)
- 6. Work Product (WP)

NATIONAL SKILLS QUALIFICATION AUTOMOBILE SECTOR LEVEL 2: AUTO BODY WORKS**Mandatory Units**

S/No /Unit No	Reference Number	NOS Title	Credit Value	Guided Learning Hours	Remark
1	AUT/ABW/001/L2	HEALTH, SAFETY AND ENVIRONMENT II	2	20	Level 2
2	AUT/ABW/002/L2	COMMUNICATION AND INTERPERSONAL SKILLS II	2	20	Level 2
3	AUT/ABW/003/L2	TEAM WORK II	2	20	Level 2
4	AUT/ABW/004/L2	APPLICATION OF TOOLS, EQUIPMENT AND MATERIALS.	6	60	Level 2
	Total		12	120	

Optional unit

S/No /Unit No	Reference Number	NOS Title	Credit Value	Guided Learning Hours	Remark
1	AUT/ABW/005/L2	INTRODUCTION TO AUTO BODY REPAIRS	6	60	Level 2
2	AUT/ABW/006/L2	INTRODUCTION TO SPRAY PAINTING	4	40	Level 2
3	AUT/ABW/007/L2	INTRODUCTION TO AUTO UPHOLSTERY	4	40	Level 2
4	AUT/ABW/008/L2	INTRODUCTION TO LOCKSMITHING	4	40	Level 2
	Total		18	180	

NOTE: This is a 300 credit qualification. To achieve this qualification; Learners are required to achieve 120 Credit from the mandatory units and 180 from the optional unit. Each Credit is equivalent to approx. 10 Guided Learning Hours (GLH). The Total Learning Hours will therefore be the actual Total Learning Hours for each Credit will then be a minimum of 15 hours.

Qualification Purpose:

This qualification is aimed at the ability of the learner acquiring sufficient knowledge and skills in the work environment to carry out Auto body repairs and support experienced workers in the industry.

Unit title	Provides a clear explanation of the content of the unit.
Unit number	The unique number assigned to the unit.
Unit reference	The unique reference number given to each unit at qualification approval by NBTE.
Unit level	Denotes the level of the unit within the National skills Qualification framework NSQF.
Unit credit value	The value that has been given to the unit based on the expected learning time for an average learner. 1 credit = 10 learning hours
Unit aim	Provides a brief outline of the unit content.
Learning outcome	A statement of what a learner will know, understand or be able to do, as a result of a process of learning.
Assessment criteria	A description of the requirements a learner must achieve to demonstrate that a learning outcome has been met.
Unit assessment guidance	Any additional guidance provided to support the assessment of the unit.
Unit guided learning hours	The average number of hours of supervised or directed study time or assessment required to achieve a qualification or unit of a qualification.

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 2: AUTO BODY WORKS**

Unit 1: HEALTH, SAFETY AND ENVIRONMENT II**Unit Reference Number: AUT/ABW/001/L2****NSQ Level: 2****Credit Value: 2****Guided Learning Hours: 20**

Unit Purpose: The aim of this unit is to equip the learner with the knowledge and understanding of health, safety and environment in Auto Body workshop.

Unit assessment requirements/evidence requirements: Assessment must be carried out in real workplace environment in which Auto bodies are repaired. ***Simulation is not allowed*** in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Work Product (WP)

UNIT 01: HEALTH, SAFETY AND ENVIRONMENT II

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type	Evidence Ref. Page No.
LO 1: Demonstrate personal health and hygiene.	1.1	Wear clean, smart and appropriate Personal Protective Equipment.		
	1.2	Work safely at all times, complying with health and safety regulations.		
	1.3	Report illness, injury and infection promptly to the appropriate personnel.		
	1.4	Mention own responsibility under the health and safety Act as it relates to the work environment.		
	1.5	Explain general rules on hygiene that must be followed.		
	1.6	Identify Personal Protective Equipment such as Head, Foot, Face, eye, Hand and Body protection.		
	1.7	Explain the importance of maintaining good personal Hygiene.		
Lo 2: Understand hygiene, safe and hazard free workplace.	2.1	Explain the importance of working in a healthy, safe and hygienic workplace.		
	2.2	Report any accidents or near accidents promptly to the appropriate personnel.		
	2.3	Observe health, hygiene and safety procedures during work.		
	2.4	Observe emergency procedures during work.		

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type	Evidence Ref. Page No.
	2.5	Observe organizational security procedures.		
	2.6	Describe waste disposal and pollution control with organic and inorganic waste disposal methods.		
	2.7	Describe sound/noise control and protection methods.		

	3.11	Explain the importance of safety rules.																		

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Safety manuals, First aid box, Safety charts, Fire bucket, Fire extinguisher, etc.

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 2: AUTO BODY WORKS**

Unit 2: COMMUNICATION AND INTERPERSONAL SKILLS II**Unit Reference Number: AUT/ABW/002/L2****NSQ Level: 2****Credit Value: 2****Guided Learning Hours: 20**

Unit Purpose: The aim of this unit is to equip the learner with the knowledge, understanding and skills to communicate and relate with colleagues and clients effectively in an Auto Body workshop.

Unit assessment requirements/evidence requirements: Assessment must be carried out in real workplace environment in which Auto bodies are repaired. ***Simulation is not allowed*** in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Work Product (WP)

UNIT 02: Communication and Interpersonal Skills II

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type	Evidence Ref. Page No.
LO 1: Demonstrate non-complex communication system in a work environment	1.1	Use simple verbal means to pass information.		
	1.2	Use non-verbal means to pass information e.g. body language.		
	1.3	Interpret symbols and signs appropriately.		
Lo 2: Understand sources of information in a work environment	2.1	Locate the sources of information in an organization and work environment.		
	2.2	Relate appropriately with sources of information.		
	2.3	Use the various information flow systems in a work environment.		
	2.4	Use information to avoid challenges in a work situation.		
	2.5	Report findings in accordance with procedure in a work environment.		
Lo 3: Know the means of communication in work environment	3.1	Locate communication equipment in the work environment.		
	3.2	Use, effectively, communication equipment in a work environment.		
	3.3	Pass information to the right personnel.		
	3.4	Pass information using Symbols, signs and codes.		
LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type	Evidence Ref. Page No.
	3.5	Obey instructions in line with ethics of the work environment.		

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Organizational organogram, Charts, etc.

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 2: AUTO BODY WORKS**

Unit 3: TEAM WORK II**Unit Reference Number: AUT/ABW/003/L2****NSQ Level: 2****Credit Value: 2****Guided Learning Hours: 20**

Unit Purpose: The aim of this unit is to equip the learner with the knowledge, understanding and skills to be a team player in an Auto Body workshop.

Unit assessment requirements/evidence requirements: Assessment must be carried out in real workplace environment in which Auto bodies are repaired. ***Simulation is not allowed*** in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Work Product (WP)

UNIT 03: Team Work II

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type				Evidence Ref. Page No.			
Lo 1: Know the roles of the teams	1.1	Outline the teams in the work environment.								
	1.2	Discuss the functions of each team.								
	1.3	Discuss the relationship between the teams.								
	1.4	Explain the importance of team work.								
Lo 2: Know the requirement of the teams	3.1	Identify materials and tools required for each team member.								
	3.2	Enumerate the function of tools and equipment required for each team.								
	3.3	Describe the method of carrying out activities for each team.								
Lo 3: Understand team responsibilities	4.1	Describe the sequence of team activities.								
	4.2	Differentiate between time frames of each team activity.								
	4.3	Deliver quality output as a team player.								

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Charts, Manuals, etc.

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 2: AUTO BODY WORKS**

Unit 4: APPLICATION OF TOOLS, EQUIPMENT AND MATERIALS.

Unit Reference Number: AUT/ABW/004/L2

NSQ Level: 2

Credit Value: 6

Guided Learning Hours: 60

Unit Purpose: The aim of this unit is to equip the learner with the knowledge, understanding and skills to use tools, equipment and materials in an Auto body workshop.

Unit assessment requirements/evidence requirements: Assessment must be carried out in real workplace environment in which Auto bodies are repaired. ***Simulation is not allowed*** in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Work Product (WP)

UNIT 04: Application of tools, equipment and materials.

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA learner	Evidence Type	Evidence Ref. Page No.
LO: 1 Demonstrate the use of Auto body tools	1.1	Identify the tools used in panel beating work.		
	1.2	Identify the tools used in spray painting work.		
	1.3	Identify the tools used in upholstery work.		
	1.4	Identify the tools used in locksmithing work.		
	1.5	Select appropriate tools used in 1.1 to 1.4.		
	1.6	Use the tools in panel beating work.		
	1.7	Use the tools in spray painting work.		
	1.8	Use the tools in upholstery work.		
	1.9	Use the tools in locksmithing work.		
	1.10	Observe safety precautions in carrying out 1.6 to 1.9.		
Lo 2: Demonstrate the use of Auto body equipment	2.1	Identify the equipment used in panel beating work		
	2.2	Identify the equipment used in spray painting work		
	2.3	Identify the equipment used in upholstery work		
	2.4	Identify the equipment used in locksmithing work		
	2.5	Use the equipment in panel beating work		
LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA learner	Evidence Type	Evidence Ref. Page No.
	2.6	Use the equipment in spray painting work.		
	2.7	Use the equipment in upholstery work.		
	2.8	Use the equipment in locksmithing work.		

	2.9	Observe safety precautions in 2.5 to 2.8.											
Lo 3: Demonstrate the uses of Auto body materials	3.1	Identify the materials used in panel beating work.											
	3.2	Identify the materials used in spray painting work.											
	3.3	Identify the materials used in upholstery work.											
	3.4	Identify the materials used in locksmithing work.											
	3.5	Use the materials in Auto body repair work.											
	3.6	Use the materials in spray painting work.											
	3.7	Use the materials in upholstery work.											
	3.8	Use the materials in locksmithing work.											
	3.9	Observe safety in 3.5 to 3.8.											

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Panel beating tool kit, Upholstery tool kit, Spray painting tool kit, Locksmithing tool kit, Equipment and Materials used in each of them.

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 2: AUTO BODY WORKS**

Unit 5: INTRODUCTION TO AUTO BODY REPAIRS**Unit Reference Number: AUT/ABW/005/L2****NSQ Level: 2****Credit Value: 6****Guided Learning Hours: 60**

Unit Purpose: The aim of this unit is to equip the learner with the knowledge, understanding and skills to identify, assess and repair Auto body.

Unit assessment requirements/evidence requirements:

Assessment must be carried out in real workplace environment in which Auto body is repaired.

Simulation is not allowed in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Work Product (WP)

UNIT 05: Introduction to Auto body repairs

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. Page No.
The learner will be able to:		The learner can:		
LO: 1 Identify defects on vehicle body panels	1.1	Identify defects on door.		
	1.2	Identify defects on bonnet.		
	1.3	Identify defects on boot.		
	1.4	Identify defects on bumper.		
	1.5	Identify defects on fender.		
	1.6	Identify defects on mirror.		
Lo 2: Assess defects on vehicle body panels	2.1	Observe extent of the defects.		
	2.2	Explain major and minor defects.		
	2.3	Classify the defects in 1.1 to 1.6 above.		
	2.4	Carry out minor repairs.		
Lo 3: Carryout minor repairs on vehicle body panel	3.1	Repair minor dent on body panels mentioned in 1.1 to 1.6 above.		
	3.2	Repair minor bumps on body panels mentioned in 1.1 to 1.6 above.		
	3.3	Repair minor scratches on body panels mentioned in 1.1 to 1.6 above.		
	3.4	Repair minor tears on body panel ; mentioned in 1.1 to 1.6.		
LO 4: Understand Auto body joining	4.1	Define joining.		
	4.2	Define joint.		
	4.3	State the types of joints.		
	4.4	Explain joining methods.		
	5.1	Define welding.		

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. Page No.
The learner will be able to:		The learner can:		
Lo 5: Know the Welding Process	5.2	Mention types of welding.		
	5.3	Mention types of metal.		
	5.4	Explain the types of welding applicable in Auto body works.		

[illegible]

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Riveting gun, Oxy-Acetylene welding equipment, complete tool box, etc.

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 2: AUTO BODY WORKS**

Unit 6: INTRODUCTION TO SPRAY PAINTING**Unit Reference Number: AUT/ABW/006/L2****NSQ Level: 2****Credit Value: 4****Guided Learning Hours: 40**

Unit Purpose: The aim of this unit is to equip the learner with understanding the Fundamentals of Spray Painting.

Unit assessment requirements/evidence requirements: Assessment must be carried out in real workplace environment in which Auto bodies are painted. ***Simulation is not allowed*** in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Work Product (WP)

UNIT 06: Introduction to Spray Painting

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO: 1 Understand paint composition	1.1	Mention the importance of painting.									
	1.2	List the paint components.									
	1.3	Mention the functions of the components listed in 1.2.									
Lo 2: Understand the use of spray painting tools and equipment	2.1	List the tools for spray painting									
	2.2	List the equipment used in spray painting									
	2.3	Mention factors to be considered in selection of an air compressor.									
	2.4	Explain the functions of air transformer.									
	2.5	Carry out routine maintenance on 2.1 and 2.2 above.									
Lo 3: Understand paint mixing	3.1	Define Viscosity.									
	3.2	List the tools necessary in carrying out paint mixing.									
	3.3	Explain paint mixing.									
	3.4	Explain paint mixing ratio.									
	3.5	Carry out paint mixing.									
	3.6	Apply safety precautions in spray painting.									

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Pigment, Solvent, Binder, Additives, Viscosity stand, Viscosity cup, Spray painting tools and equipment, etc.

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 2: AUTO BODY WORKS**

Unit 7: INTRODUCTION TO AUTO UPHOLSTERY**Unit Reference Number: AUT/ABW/007/L2****NSQ Level: 2****Credit Value: 4****Guided Learning Hours: 40**

Unit Purpose: The aim of this unit is to equip the learner with understanding the Fundamentals of Upholstery in Auto body work.

Unit assessment requirements/evidence requirements: Assessment must be carried out in real workplace environment in which Auto bodies are upholstered. ***Simulation is not allowed*** in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Work Product (WP)

UNIT 07: Introduction to Auto Upholstery

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. Page No.
The learner will be able to:		The learner can:		
LO 1: Understand basic design and construction in Auto Upholstery	1.1	List the designs available in Auto upholstery construction.		
	1.2	List the tools used in upholstery.		
	1.3	List the components of carcass in upholstery construction.		
	1.4	Explain stuffing, springing, trimming and sewing in covering carcass.		
	1.5	Define tolerance in respect to 1.3.		
	1.6	Provide tolerance during stuffing, springing, covering carcass construction.		
Lo 2: Understand the method of construction in Auto upholstery	2.1	Discuss the steps in upholstery construction.		
	2.2	Explain the sequence of assembling the carcass of upholstery.		
	2.3	Define webbing.		
	2.4	List the types of materials used in webbing.		
Lo 3: Understand methods of covering and fixing upholstery	3.1	Explain the need for accurate measurement in Auto upholstery.		
	3.2	Explain the need for allowing correct sewing tolerance.		
	3.3	Name the materials used in covering Auto upholstery construction.		
	3.4	Mention the steps of covering upholstery construction.		
	3.5	Describe the fixing process of upholstery fittings.		
LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. Page No.
The learner will be able to:		The learner can:		
	3.6	Apply safety precautions in Auto upholstery.		

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Fabrics, Leather, Sewing Machine, Thread, Scissors, Measuring tape, Foam, etc.

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 2: AUTO BODY WORKS**

Unit 8: INTRODUCTION TO LOCKSMITHING**Unit Reference Number: AUT/ABW/008/L2****NSQ Level: 2****Credit Value: 4****Guided Learning Hours: 40**

Unit Purpose: The aim of this unit is to equip the learner with knowledge and understanding the Fundamentals of Locksmithing.

Unit assessment requirements/evidence requirements: Assessment must be carried out in real workplace environment in which Auto bodies locks are worked on. ***Simulation is not allowed*** in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Work Product (WP)

UNIT 08: Introduction to locksmithing

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. Page No.
The learner will be able to:		The learner can:		
LO 1: Know the basics of locksmithing	1.1	Explain locksmithing in Auto body works.		
	1.2	Identify the following tools: <ul style="list-style-type: none"> Basic locksmithing hand tools. Edge hand tool. Special locksmithing tools. 		
	1.3	Describe the use of the hand tool ; in 1.2.		
	1.4	Describe the use of the Special locksmithing tools.		
	1.5	Carry out routine maintenance in 1.2.		
Lo 2: Understand the operation of power tools.	2.1	Explain power tools.		
	2.2	List the power tools use in locksmithing.		
	2.3	Identify the power tools used in locksmithing.		
	2.4	Describe the operation of the following: <ul style="list-style-type: none"> Jig saw Key cutting machine and kits 		
	2.5	Carry out routine maintenance in 2.4.		
	2.6	Observe safety precautions in locksmithing operation.		
LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. Page No.
The learner will be able to:		The learner can:		
Lo 3: Know types of keys	3.1	Mention types of keys.		
	3.2	Mention the functions of keys.		
	3.3	State the principle of operation of keys.		

Lo 4: Understand vehicle opening	4.1	Identify fundamentals of Automotive door design.										
	4.2	Describe fundamentals of Automotive door design.										
	4.3	Describe the overview of car opening.										
	4.4	Explain the following methods used in opening vehicles: <ul style="list-style-type: none">• Free-play pawl• Vertical lock rod• Horizontal lock rod• Vertical lock button from inside door• Under the glass tool• Plastic strip• Fondue fork• Vent window latch										
	4.5	Read visible key.										
	4.6	Decode visible key.										
	4.7	Apply safety procedures in locksmithing.										

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

Date:

RESOURCES: Locksmithing tools and equipment, assorted keys and locks, etc.

NATIONAL SKILLS QUALIFICATION

AUTO BODY WORKS

(Validated)

LEVEL 3

November 2022

**NATIONAL SKILLS QUALIFICATION
NSQ LEVEL 3 – AUTO BODY WORKS
GENERAL INFORMATION**

QUALIFICATION PURPOSE

This qualification is designed for individuals who are interested in developing a career in the Auto body works industry.

QUALIFICATION REQUIREMENTS

Candidates must:

- e. Be at least 15 years of age
- f. Be medically fit (visual acuity, blood pressure and blood sugar)
- g. Be mentally fit
- h. Have achieved all the mandatory units in the qualification

Note:

This is a 340 credit unit qualification. To achieve this qualification; learners are required to achieve all credits units. Each Credit is equivalent to 10 Guided Learning Hours (GLH).

There are four (4) optional units, learners are at liberty to pick any optional unit of interest

QUALIFICATION OBJECTIVE

At the end of the qualification, the Auto body specialist should be to demonstrate knowledge and skills in:

- a. Health, Safety and The Environment III
- b. Communication and Interpersonal Skills III
- c. Team Work III
- d. Maintenance of Tools and Equipment in Auto Body Works
- e. Body Defect Identification and Repairs
- f. Removal and Refitting of Auto Body Components
- g. Vehicle Refinishing (Auto Spray Painting)
- h. Locksmithing
- i. Auto Upholstery

Unit assessment requirements/evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out. ***Simulation is allowed in this unit and level.***

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal Statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Professional Discussion (PD)
7. Work Product (WP)

NATIONAL SKILLS QUALIFICATION AUTOMOBILE SECTOR LEVEL 3: AUTO BODY WORKS**Mandatory Units**

S/No /Unit No	Reference Number	NOS Title	Credit Value	Guided Learning Hours	Remark
1	AUT/ABW /001/L3	HEALTH, SAFETY AND ENVIRONMENT III	2	20	Level 3
2	AUT/ABW /002/L3	COMMUNICATION AND INTERPERSONAL SKILLS III	2	20	Level 3
3	AUT/ABW /003/L3	TEAM WORK III	2	20	Level 3
4	AUT/ABW /004/L3	MAINTENANCE OF TOOLS AND EQUIPMENT IN AUTO BODY WORKS	2	20	Level 3
5	AUT/ABW /005/L3	REMOVAL AND RE-INSTALLING OF AUTO BODY COMPONENTS	6	60	Level 3
	Total		14	140	

Optional unit

S/No /Unit No	Reference Number	NOS Title	Credit Value	Guided Learning Hours	Remark
1	AUT/ABW /006/L3	BODY DEFECT REPAIRS	5	50	Level 3
2	AUT/ABW /007/L3	VEHICLE FINISHING (AUTO REFINISH SPRAY PAINTING)	5	50	Level 3
3	AUT/ABW /008/L3	LOCKSMITHING	5	50	Level 3
4	AUT/ABW /009/L3	AUTO UPHOLSTERY	5	50	Level 3
	Total		20	50	

NOTE: This is a 340 credit qualification. To achieve this qualification; Learners are required to achieve 140 Credit from the mandatory units. And 200 credit for optional units. Each Credit is equivalent to approx. 10 Guided Learning Hours (GLH). The Total Learning Hours will therefore consist of the GLH *plus* the independent learning hours of the candidate, which is generally 50% – 150% of the GLH. ***The actual Total Learning Hours for each Credit will then be a minimum of 15 hours.***

Qualification Purpose:

This qualification is aimed at the ability of the learner acquiring sufficient knowledge and skills in Auto body works and to carryout operations with experienced workers in the industry.

Unit title	Provides a clear explanation of the content of the unit.
Unit number	The unique number assigned to the unit.
Unit reference	The unique reference number given to each unit at qualification approval by NBTE
Unit level	Denotes the level of the unit within the National Skills Qualification framework NSQF.
Unit credit value	The value that has been given to the unit based on the expected learning time for an average learner. 1 credit = 10 learning hours
Unit aim	Provides a brief outline of the unit content.
Learning outcome	A statement of what a learner will know, understand or be able to do, as a result of a process of learning.
Assessment criteria	A description of the requirements a learner must achieve to demonstrate that a learning outcome has been met.
Unit assessment guidance	Any additional guidance provided to support the assessment of the unit.
Unit guided learning hours	The average number of hours of supervised or directed study time or assessment required to achieve a qualification or unit of a qualification.

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 3: AUTO BODY WORKS**

Unit 1: HEALTH, SAFETY AND ENVIRONMENT III**Unit Reference Number: AUT/ABW/001/L3****NSQ Level: 3****Credit Value: 2****Guided Learning Hours: 20**

Unit Purpose: The aim of this unit is to equip the learner with the knowledge, skills and understanding of Health, Safety and Environment in Auto Body workshop.

Unit assessment requirements/evidence requirements: Assessment must be carried out in real workplace environment in which Auto bodies are repaired. ***Simulation is not allowed*** in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Professional Discussion (PD)
7. Work Product (WP)

UNIT 01: Health, Safety and Environment III

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type				Evidence Ref. Page No.			
LO: 1 Demonstrate Personal health and hygiene	1.1	Wear clean, smart and appropriate Personal Protective Equipment.								
	1.2	Work safely at all times, complying with health and safety regulations.								
	1.3	Report illness, injury and infection promptly to the appropriate personnel.								
	1.4	Mention own responsibility under the health and safety Act as it relates to the work environment.								
	1.5	Guide others on general rules of hygiene.								
	1.6	Supervise the use of Personal Protective Equipment such as Head Protection, Foot Protection, Face Protection, Eye Protection, Hand and Body Protection, etc.								
	1.7	Describe the importance of maintaining good personal Hygiene.								
	1.8	Describe how to treat injuries and why it is important to do so.								
Lo 2: Recognize Hygienic, safe and hazard free Workplace.	2.1	Describe the importance of working in a healthy, safe and hygienic workplace.								
	2.2	Report any accidents or near accidents promptly and accurately to the proper personnel.								

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type				Evidence Ref. Page No.			
	2.3	Promote health, hygiene and safety practices during work.								
	2.4	Practice emergency procedures during work.								
	2.5	Ensure organizational security procedures are followed.								

	2.6	Ensure waste disposal (organic and inorganic methods) and pollution control.																	
	2.7	Encourage sound/noise control and protection.																	
	2.8	Supervise identification of any hazards or potential hazards and deal with these correctly.																	
	2.9	Mention where information about health and safety in your workplace can be obtained.																	
	2.10	Describe the types of hazards in the workplace that may occur and how to deal with them.																	
	2.11	Differentiate between hazards that can be dealt with personally and those that should be reported to appropriate personnel.																	
Lo 3: Understand hazards and accidents in a work environment	3.1	Carry out organizational procedures on how to warn other people about hazards and why this is important.																	

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.				
	3.2	Explain why accidents and near accidents should be reported and who they should be reported to.										
	3.3	Describe the emergencies that may happen in the workplace and how to deal with them.										
	3.4	Locate the first-aid equipment and registered first aider.										
	3.5	Handle materials, tools and equipment in line with work environment procedure.										
	3.6	Mention ways of working safely that are relevant to own position responsibility and their importance.										
	3.7	Describe organizational emergency procedures and how these should be followed.										
	3.8	Mention the possible causes of hazards in the workplace.										

	3.9	Describe how to minimize the possibility of hazards in the workplace.												
	3.10	Locate the alarms and demonstrate how to set them off.												
	3.11	Mention why hazards should never be approached unless it is safe to do so.												
	3.12	State the importance of following safety laws.												
LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type				Evidence Ref. Page No.							
	3.13	Describe organizational security procedures and why these are important.												
	3.14	Mention the importance of reporting accidents or near accidents to the appropriate personnel.												

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Safety manuals, Charts, Fire extinguisher, Fire bucket, First aid box, etc.

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 3: AUTO BODY WORKS**

Unit 3: COMMUNICATION AND INTERPERSONAL SKILLS III

Unit Reference Number: AUT/ABW/002/L3

NSQ Level: 3

Credit Value: 2

Guided Learning Hours: 20

Unit Purpose: The aim of this unit is to equip the learner with the knowledge, understanding and skills to communicate and interact effectively with colleagues and clients in an Auto Body workshop.

Unit assessment requirements/evidence requirements: Assessment must be carried out in real workplace environment in which Auto bodies are repaired. ***Simulation is not allowed*** in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Professional Discussion (PD)
7. Work Product (WP)

UNIT 02: Communication and Interpersonal Skills III

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type				Evidence Ref. Page No.			
LO 1: Understand communication system in a Work Environment	1.1	Describe how to use of audio, electronic, electro-magnetic means to pass information.								
	1.2	Describe simple non-verbal means of communication.								
	1.3	Read symbols and signs correctly.								
	1.4	Interpret symbols and signs correctly.								
Lo 2: Know source of Information in a Work Environment	2.1	Participate in making functional the source of information in work environment.								
	2.2	Access sources of information in work environment.								
	2.3	Relate with the source of information.								
	2.4	Use the various information flow system in work environment to overcome challenges.								
	2.5	Ensure proper documentation and retrieval of information in accordance to procedures in work environment.								
Lo 3: Understand Communication processes	3.1	Ensure the accessibility of the communication equipment in the work environment.								
LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type				Evidence Ref. Page No.			
	3.2	Describe the use of the various communication channels in work environment.								
	3.3	Demonstrate the use of various communication means in work environment.								
	3.4	Ensure effective information flow to the right personnel.								
	3.5	Ensure the effective deployment of the use of symbols, signs and codes.								
	3.6	Ensure that instructions are disseminated and obeyed in line with ethics of the work environment								

Lo 4: Know the maintenance of Communication equipment in work environment	4.1	Ensure that communication equipment are in good working condition											
	4.2	Liaise with the maintenance unit to ensure that communication equipment are maintained as at when due.											
	4.3	Liaise with appropriate authority to replace communication equipment in the event of loss or damage.											
	4.4	Ensure that communication equipment are stored appropriately in work environment.											

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Communication equipment, Charts, Organogram, etc.

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 3: AUTO BODY WORKS**

Unit 3: TEAM WORK III**Unit Reference Number: AUT/ABW/003/L3****NSQ Level: 3****Credit Value: 2****Guided Learning Hours: 20**

Unit Purpose: The aim of this unit is to equip the learner with the knowledge, understanding and skills to be an effective team player in an Auto Body workshop.

Unit assessment requirements/evidence requirements: Assessment must be carried out in real workplace environment in which Auto bodies are repaired. ***Simulation is not allowed*** in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Professional Discussion (PD)
7. Work Product (WP)

UNIT 03: Team Work III

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO 1: Know how to appreciate team work in a work environment	1.1	Identify the teams in a work environment e.g. upholstery, panel beating, etc.									
	1.2	Identify the functions of each team.									
	1.3	Discuss the functions of each team.									
	1.4	Differentiate between the functions of each team.									
Lo 2: Know the requirements of teams	2.1	Select materials and tools required for each team.									
	2.2	Differentiate types of materials, tools and equipment requirements for each team.									
	2.3	Discuss the methods of carrying out activities for each team.									
Lo 3: Understand the Benefits of the various teams.	3.1	Recognize the sequence of team activities.									
	3.2	Differentiate the time frame of each team activity.									
	3.3	Produce quality output as a team player.									
Lo 4: Know how to Communicate with co-workers,	4.1	Communicate work related information/requirements clearly to team members.									
LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
subordinates and superiors.	4.2	Inform co-workers and superiors about any kind of deviation from work Schedule.									
	4.3	Solve problems if need be, and/or report to appropriate personnel.									
	4.4	Collate instructions from superior and respond accordingly.									
	4.5	Communicate to team members/subordinates of the right Work techniques and methods.									
	4.6	Obtain clarification and advice from superiors when necessary.									

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Organogram, Work plan, etc.

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 3: AUTO BODY WORKS**

Unit 04: MAINTENANCE OF TOOLS AND EQUIPMENT IN AUTO BODY WORKS

Unit Reference Number: AUT/ABW/004/L3

NSQ Level: 3

Credit Value: 2

Guided Learning Hours: 20

Unit Purpose: The aim of this unit is to equip the learner with knowledge, understanding and skills of the Fundamentals of Tools and Equipment maintenance in Auto body Works.

Unit assessment requirements/evidence requirements: Assessment must be carried out in real workplace environment in which Auto bodies are repaired. ***Simulation is not allowed*** in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Professional Discussion (PD)
7. Work Product (WP)

UNIT 04: Maintenance of Tools and Equipment in Auto body Works

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type	Evidence Ref. Page No.
Lo 1: Know how to select Auto body work tools and equipment	1.1	Select the correct tools for panel beating operations.		
	1.2	Select the correct tools for spray painting operations.		
	1.3	Select the correct tools for Upholstery operations.		
	1.4	Select the correct tools for Locksmithing operations.		
Lo 2: Know how to use Auto body work tools	2.1	Carry out marking out operations.		
	2.2	Carry out filing operations.		
	2.3	Carry out cutting operations.		
	2.4	Carry out fastening operations.		
	2.5	Loose bolts and nuts with correct tools.		
	2.6	Identify problems associated with the use of incorrect tools.		
	2.7	Observe safety rules in carrying out operations 2.1 to 2.6.		
Lo 3: Know how to maintain auto body work tools and equipment	3.1	Discuss the types of maintenance.		
	3.2	Carry out preventive maintenance of the following tools/equipment: <ul style="list-style-type: none"> • Body jack • Hydraulic jack • Air compressor • Grinding machine 		
LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type	Evidence Ref. Page No.
	3.3	Carry out minor repairs of the following tools/equipment: <ul style="list-style-type: none"> • Body jack • Hydraulic jack • Air compressor • Grinding machine 		
	3.4	Clean used tools before storage.		

	3.5	Store tools as specified by manufacturer's or workshop requirements.												
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Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Body jack, Hydraulic jack, Air compressor, Grinding machine, etc.

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 3: AUTO BODY WORKS**

Unit 05: REMOVAL AND REFITTING OF AUTO BODY COMPONENTS

Unit Reference Number: AUT/ABW/005/L3

NSQ Level: 3

Credit Value: 6

Guided Learning Hours: 60

Unit Purpose: The aim of this unit is to equip the learner with knowledge, understanding and skills to remove, repairs and refit Auto body components.

Unit assessment requirements/evidence requirements: Assessment must be carried out in real workplace environment in which Auto bodies are repaired. ***Simulation is not allowed*** in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Professional Discussion (PD)
7. Work Product (WP)

UNIT 05: REMOVAL AND REFITTING OF AUTO BODY COMPONENTS

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type				Evidence Ref. Page No.			
LO 1: Know how to use tools and equipment.	1.1	Identify the appropriate tools and equipment in carrying out removal and refitting of body panels.								
	1.2	Select the appropriate tools and equipment in carrying out removal and refitting of body panels.								
	1.3	Ensure that the tools/equipment are in good condition.								
	1.4	Ensure that the equipment is calibrated according to manufacturer's specification.								
	1.5	Use tools and equipment as specified by the manufacturer.								
Lo 2: Carry out removal and refitting of vehicle components	2.1	Carry out removal of the following components: <ul style="list-style-type: none"> • Doors • Bonnet • Fenders • Boot • Mirrors • Windscreen • Head light • Door mat • Rear light • Bumper • Seats • Door Chromes 								
	2.2	Carry out refitting of the components mentioned in 2.1.								
LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type				Evidence Ref. Page No.			
	2.3	Ensure that the components are realigned according to manufacturer's specifications.								

Lo 3: Apply safety precautions in carrying out removal and refitting	3.1	Observe safety procedures while carrying out removal of components.									
	3.2	Observe safety procedures while carrying out refitting of components.									
	3.3	Use suitable PPE when carrying out removal and refitting of components									

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Complete tool box, Body jack, Hydraulic jack, Air compressor, Grinding machine, etc.

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 2: AUTO BODY WORKS**

Unit 6: BODY DEFECT REPAIRS**Unit Reference Number: AUT/ABW/006/L3****NSQ Level: 2****Credit Value: 5****Guided Learning Hours: 50**

Unit Purpose: The aim of this unit is to equip the learner with knowledge, understanding and skills to identify, assess and repair defects.

Unit assessment requirements/evidence requirements: Assessment must be carried out in real workplace environment in which Auto bodies are repaired. ***Simulation is not allowed*** in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Professional Discussion (PD)
7. Work Product (WP)

UNIT 06: Body Defect Repairs

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. Page No.
The learner will be able to:		The learner can:		
Lo 1: Know defects and repair procedures	1.1	Identify Auto body defects for repair.		
	1.2	Prepare estimate for repair job.		
	1.3	Communicate repair job and estimate to the customer.		
	1.4	Select the correct materials for the repair job.		
LO 2: Carry out repairs on Auto body panels	2.1	Identify repair procedures.		
	2.2	Select the appropriate repair procedure in 2.1.		
	2.3	Select the right tools/equipment for the specified job.		
	2.4	Carry out repairs on affected panels.		
	2.5	Determine replaceable panels.		
	2.6	Replace the panels in 2.4 using appropriate procedures.		
	2.7	Observe safety procedures during repair and replacement activities.		
Lo 3: Carryout major repairs on vehicle body components	3.1	Identify the types of repairs on the following components: <ul style="list-style-type: none"> • Chassis • Roof • Floor • Exhaust • Running board 		
	3.2	Carry out repairs on defective chassis and frame.		

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. Page No.
The learner will be able to:		The learner can:		
	3.3	Carry out repairs on a roof with the following defects: <ul style="list-style-type: none"> • Leak • Dent 		

[illegible]

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type				Evidence Ref. Page No.			
The learner will be able to:		The learner can:								
	5.4	Demonstrate the welding and coating of metal to ensure that they return to their properties.								
Lo 6: Set-up Oxy-Acetylene welding unit	6.1	Identify the following Oxy-Acetylene welding equipment: <ul style="list-style-type: none"> Flash back arrestor Generator Regulator Blow pipes Nozzles Oxy-Acetylene cylinders 								

[illegible]

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Oxy-Acetylene welding equipment, complete tool box, damaged dozer, Jack, Sample of ferrous and nonferrous metal, Personal Protective Equipment (PPE), etc.

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 3: AUTO BODY WORKS**

Unit 7: VEHICLE REFINISHING (AUTO SPRAY PAINTING)

Unit Reference Number: AUT/ABW/007/L3

NSQ Level: 3

Credit Value: 5

Guided Learning Hours: 50

Unit Purpose: The aim of this unit is to equip the learner with knowledge, understanding and skills in Auto Spray Painting.

Unit assessment requirements/evidence requirements: Assessment must be carried out in real workplace environment in which Auto bodies are refinished. ***Simulation is not allowed*** in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Professional Discussion (PD)
7. Work Product (WP)

UNIT 07: VEHICLE REFINISHING (AUTO SPRAY PAINTING)

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO 1: Understand colour codes	1.1	Identify types of paint.									
	1.2	Identify paints and their colour codes.									
	1.3	Classify auto body paints and their properties.									
	1.4	Differentiate between straight paint and metallic paint.									
Lo 2: Understand tools and equipment in spray painting	2.1	List the types of spray gun.									
	2.2	List the types of spray painting equipment.									
	2.3	Identify the faults associated with the use of spray guns and other spray painting equipment.									
	2.4	Rectify the faults associated with the use of spray guns.									
	2.5	Carry out routine maintenance on the following: <ul style="list-style-type: none"> Air compressor Pipe work Air regulator 									
	2.6	Observe safe practices in the use of spray painting tools and equipment.									
Lo 3: Prepare surface for refinishing	3.1	Select correct tools and equipment for preparing surfaces.									
	3.2	Demonstrate method of preparing surfaces: <ul style="list-style-type: none"> Paint removal 									
LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
		<ul style="list-style-type: none"> Body filling 									
	3.3	Apply body filler on affected surface.									
	3.4	Carry out sanding operation.									
	3.5	Assess sanding operation.									
	3.6	Apply putty filler.									
	3.7	Smooth putty filler.									
	3.8	Assess smoothening of putty filler.									

[illegible]

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Spray guns, Paint, Putty filler, Body filler, spray painting tools and equipment, etc.

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 3: AUTO BODY WORKS**

Unit 08: LOCKSMITHING**Unit Reference Number: AUT/ABW/008/L3****NSQ Level: 3****Credit Value: 5****Guided Learning Hours: 50**

Unit Purpose: The aim of this unit is to equip the learner with knowledge, understanding and skills of Auto Locksmithing.

Unit assessment requirements/evidence requirements:

Assessment must be done in real workplace environment in which Auto Locksmithing is carried out.

Simulation is not allowed in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Professional Discussions (PD)
7. Work Product (WP)

UNIT 08: LOCKSMITHING

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type				Evidence Ref. Page No.			
LO 1: Demonstrate use of tools and equipment in locksmithing	1.1	Use the following tools in locksmithing: <ul style="list-style-type: none"> • Basic Hand tools • Measuring hand tool • Edge hand tool • Special locksmithing tools 								
	1.2	Demonstrate the safe operation of jig saws.								
	1.3	Demonstrate the safe operation of key machines.								
	1.4	Demonstrate the safe operation of die grinder.								
	1.5	Demonstrate the safe operation of power drills								
	1.6	Use a router template.								
	1.7	Observe safety during 1.2 to 1.6.								
Lo 2: Dismantle and assemble locks	2.1	Dismantle the following: <ul style="list-style-type: none"> • Warded lock • Lever lock • Pin tumbler cylinder • Padlock 								
	2.2	Assemble the following: <ul style="list-style-type: none"> • Warded lock • Lever lock • Pin tumbler cylinder • Padlock 								
	2.3	Describe recombination of the following lock mechanisms: <ul style="list-style-type: none"> • Pin tumbler cylinders • Lever locks 								
LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type				Evidence Ref. Page No.			
		<ul style="list-style-type: none"> • Tubular locks • Wafer locks 								
Lo 3:	3.1	Measure keys								
	3.2	Duplicate keys using hand tools								

Demonstrate the method of originating and duplicating keys	3.3	Duplicate keys using key machine									
	3.4	Duplicate broken key									
	3.5	Describe the method of originating a key by: <ul style="list-style-type: none">• Coding• Disassembling• Impressioning• Sighting• Pick and read• Decoding picks									
Lo 4: Demonstrate the installation of locks and key programming	4.1	Describe doors and lock hardware									
	4.2	Install the following: <ul style="list-style-type: none">• Door locks• Cabinet locks• Ignition key assemble									
	4.3	Service the following: <ul style="list-style-type: none">• Door locks• Cabinet locks• Ignition key assemble									
	4.4	Carry out key programming.									
	4.5	Observe safety procedures in locksmithing operation.									

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Jigsaws, Die grinder, Key machine, Power drills, Welded lock, Lever lock, Pin tumbler cylinder, Padlock, etc.

**National Skills Qualification
AUTOMOBILE SECTOR
LEVEL 3: AUTO BODY WORKS**

Unit 9: AUTO UPHOLSTERY**Unit Reference Number: AUT/ABW/009/L3****NSQ Level: 3****Credit Value: 5****Guided Learning Hours: 50**

Unit Purpose: The aim of this unit is to equip the learner with knowledge, understanding and skills in Auto Upholstery.

Unit assessment requirements/evidence requirements: Assessment must be carried out in real workplace environment in which Auto bodies are upholstered. ***Simulation is not allowed*** in this unit and level.

Assessment methods to be used include:

1. Direct Observation (DO)
2. Question and Answer (QA)
3. Witness Testimony (WT)
4. Personal statement (PS) or Reflective Practice (RP)
5. Recognition of Prior Learning (RPL)
6. Professional Discussion (PD)
7. Work Product (WP)

UNIT 09: Auto Upholstery

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type	Evidence Ref. Page No.
LO 1: Carryout measurement and pattern making	1.1	Take accurate measurements.		
	1.2	Record measurements correctly.		
	1.3	Calculate the quantity of materials correctly.		
	1.4	Make patterns for padding and upholstery.		
	1.5	Observe safety procedures in 1.1 to 1.4		
Lo 2: Carryout upholstery work	2.1	Select appropriate tools for the following: <ul style="list-style-type: none"> • Measurement • Marking • Cutting • Sewing • Removal of components • Refitting of components 		
	2.2	Select suitable upholstery materials.		
	2.3	Use tools correctly.		
	2.4	Cut and trim upholstery materials.		
	2.5	Sew upholstery materials.		
	2.6	Fit upholstery materials.		
	2.7	Maintain tolerance during sewing and fitting.		
Lo 3: Carryout repairs on frame structures	3.1	Identify defective frame structures		
	3.2	Remove frame structures safely		
	3.3	Repair defective frame structures		
	3.4	Fix frame structures safely		
LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evidence Type	Evidence Ref. Page No.
	3.5	Adhere to manufacturer's standard.		
Lo 4: Maintain tools and equipment	4.1	Distinguish between corrective and preventive maintenance.		
	4.2	Maintain tools and equipment.		
	4.3	Store tools correctly after use		

	4.4	Observe safety procedures in 4.1 to 4.3.										
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Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

RESOURCES: Measuring, Marking and cutting tools, Sewing machine, Pressing Iron, Wooden tools, Apron, Sewing kits, Press button machine, etc.

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